Decades of cross-cultural advertising research has demonstrated that advertising reflects cultural characteristics to the extent that messages are more readily acceptable and persuasive to consumers within a given culture (e.g., Albers-Miller and Gelb 1996; de Mooij 1998). Despite the importance of understanding and using cultural characteristics in advertising and promotional messages, however, past research has predominantly relied on two kinds of cultural characteristics: Hofstede's (1980) cultural values framework and Hall's (1976) cultural context framework. To extend this research, scholars should incorporate a wider variety of cultural characteristics that fit specific promotional messages. Such characteristics can be drawn from existing theories and applied to cross-cultural advertising research. This suggestion resonates with the requests of Taylor (2005), who called for researchers to move cross-cultural research forward in three ways: first, by expanding the scope of advertising topic and channel; second, by importing more theories from outside cross-cultural research; and third, by testing, rather than simply assuming, specific cultural characteristics reflected in advertising contents across countries.

Responding to Taylor's call, this study examines how cultural characteristics manifest themselves in health promotion Web sites from two culturally distinct countries, the United States and South Korea. Approximately 60 million Americans per year use the Internet to get health or medical information (Doshi et al. 2003). The Internet's explosive growth as an effective promotional medium also provides tremendous opportunities for health promotion researchers and practitioners (Daugherty and Reece 2002; Hwang, McMillan, and Lee 2003; McMillan 1999). In particular, the Internet's border-crossing nature helps boost the recent movement toward global health campaigns (Singh 1999). For these reasons, it is critical to understand whether and to what extent on-line health promotion messages follow cultural difference premises in cross-cultural advertising research, and whether these messages reflect cultural characteristics that can make their messages more readily acceptable to Internet users.

We examine three aspects of cultural characteristics: Hofstede's (1980) individualism/collectivism cultural value dimension, Hall's (1976) high/low cultural context, and culture-bound health promotion strategies. The first two types of cultural characteristics are perhaps most prominent in cross-cultural advertising research, but we want to test whether they are also applicable to the new topic (i.e., health promotion contents) and channel (i.e., Internet). In addition, we incorporate culture-bound health promotional strategies drawn from existing theories in other disciplines: normative influence (i.e., subjective norm, social norm; Ajzen and Fishbein 1980; Prentice and Miller 1993), social learning theory (i.e., modeling; Bandura 2002, 2004), and social support (Albrecht and Goldsmith 2003). Scholars have argued that these theoretical concepts have served as useful guides for effective health promotions, but the extent to which they work varies across sociocultural contexts (Bandura 2002; Heaney and Israel 2002). By comparing different uses of health promotion strategies between two culturally distinct (e.g., individualistic...
versus collectivistic) countries, we can test whether health promotion strategies are indeed culture bound.

We select antismoking Web sites as an interesting test case of health promotion Web sites between the United States and South Korea because smoking has acquired a worldwide topical importance (WHO 2002). It has been a significant social issue in the United States for decades, and antismoking campaigns have been regarded as one of its most representative and successful health campaigns (Paisley 2000). Recently joining the antismoking global movement, South Korea is a country infamous for a high smoking rate among adults. Yet within its own unique sociocultural environment, it has also achieved a stunning success in reducing smoking rates (Kim 2003).

Overall, our simultaneous examination of multiple aspects of cultural characteristics will provide a much richer understanding of the roles that cultural characteristics play in health promotion contexts in general and antismoking Web sites in particular. More specifically, our findings will provide managerial and academic research implications for the following research and professional communities: (1) cross-cultural advertising researchers who wish to advance these areas of research, (2) global marketers who want to expand their promotional efforts worldwide through the Internet, and (3) health promotion practitioners who wish to take advantage of the Internet’s ability to promote health behavior.

ANTISMOKING CONTEXT

Smoking is a serious global health issue. The World Health Organization (WHO) reports that smoking-related diseases kill a person every eight seconds, or four million people every year (2002). In the United States, cigarette smoking accounts for at least 30% of all cancer deaths (ALA 2003). Because of smoking’s potentially fatal health risks, yet also because of its preventable nature, the antismoking movement has spread rapidly worldwide.

In the United States, smoking is the most significant factor causing premature deaths (CDC 2007). According to the CDC (2007), many preventable diseases among Americans—for example, several chronic disorders, chronic obstructive pulmonary disease, atherosclerosis, and heart attacks—are also known to be directly or indirectly related to smoking.

Decades of nationwide antismoking efforts in the United States have been undertaken at various levels. They include key policy initiatives such as public antismoking ordinances, restrictions on the advertising and promotion of tobacco products, and state tobacco control programs supported by cigarette tax revenues (USDHHS 1989). Other antismoking efforts include several legal settlements between state governments and the tobacco industry (see Wakefield et al. 2003). As a part of the $246 billion Master Settlement Agreement (MSA) in 1998, for instance, big tobacco companies agreed to spend $1.5 billion on antismoking efforts over five years. That money funded an educational campaign against smoking that included the American Legacy Foundation’s nationwide “truth” campaign (Wakefield et al. 2003). As a result of such nationwide efforts, the smoking rate among adults has decreased from 41.9% in 1965 to 20.8% in 2004 (NCHS 2006).

On the other hand, South Korea has one of the highest percentages of males aged 15 and over who are daily smokers (KIHASA 2006). According to the Korea Institute for Health and Social Affairs (KIHASA 2006), an estimated 49,000 Koreans die each year of smoking-related diseases, such as lung cancer, bronchial tube cancer, stomach cancer, and cerebral apoplexy. In particular, lung cancer was identified as the country’s number-one cause of mortality in 2002 (Dongailbo 2002).

Like many other Asian countries, South Korea has also been an attractive market for international tobacco companies (WHO 2002). In 2002, South Korea was the eighth largest cigarette market in the world, with an annual volume of 100 billion cigarettes. Approximately 25% of the market was held by foreign tobacco companies (WHO 2002).

The global movement against smoking has penetrated South Korea relatively recently. In 2004, South Korea signed on to the Framework Convention on Tobacco Control (FCTC), and the budget for the antismoking project surged from $.7 million in 1998 to $23.1 million in 2005 (KMHW 2005a). The Korean government has supported antismoking education in schools, workplaces, and the mass media, and it has provided various antismoking programs (KMHW 2005a, 2005b). The results of these antismoking efforts have been stunning: the smoking rate of adult males dropped precipitously, from about 68% in 2000 to 46% in June 2006 (Gallup Korea 2006).

There is little disagreement that this drastic decrease in the smoking rate owes a lot to the highly publicized death of a famous celebrity who succumbed to lung cancer and issued his own testimony against smoking. Jooil Lee, for decades a famous comedian, was diagnosed with lung cancer in 2001. He testified that he contracted it from years of smoking, and he alerted South Korean society about smoking’s serious dangers. The eponymous “Jooil Lee effect” triggered an expansion of the antismoking movement (Dongailbo 2002; Kim 2003). Mass media covered his story extensively (e.g., Hankyoreh 2002; Joongangilbo 2002), and he endorsed several antismoking television campaigns. People also built an antismoking online community that was named after him (Song 2002). For his influence on the antismoking movement, he was awarded a decoration from the Korean government (Ahn 2002).

Overall, these nationwide antismoking efforts in the United States and South Korea illustrate distinct patterns. U.S. antismoking efforts have lasted for decades, with government-led antismoking programs, financial support from the tobacco industry, and prominent antismoking media campaigns (i.e.,
the “truth” campaign). By contrast, South Korea’s antismoking movement has lasted for less than a decade, but it has been accelerated by one famous celebrity’s death from lung cancer and by a corresponding change in social norms against smoking. These distinct patterns of antismoking movements in the two countries provide a unique test case for the ways that cultural characteristics—for example, values, social norms, and a cultural hero—can play different roles in health promotions across countries and cultures. In addition, it is critical to understand whether and to what extent cultural characteristics are manifested in the two countries’ antismoking Web sites. This study attempts to answer these research questions.

In the next section, we discuss the three types of cultural characteristics: Hofstede’s individualism/collectivism cultural value dimension, Hall’s high/low cultural contexts, and “culture-bound” health promotion strategies drawn from well-established theories in other disciplines.

**CULTURAL CHARACTERISTICS IN ANTISMOKING WEB SITES**

**Individualism/Collectivism Cultural Value Dimension**

Cultural values are the deepest manifestations and expressions of culture, and they appear to be relatively stable features of individuals and societies (Hofstede 2001). Values lie at the deep structure of personality, which influences perceptions, attitudes, and behaviors (Pullay 1986). Among cultural values, Hofstede’s individualism/collectivism cultural value dimension (hereafter referred to as “I/C”) is one of the most prevalent in cross-cultural advertising studies between Eastern and Western countries (e.g., Cho et al. 1999; Miracle, Chang, and Taylor 1992; Paek, Nelson, and McLeod 2004).

The I/C cultural dimension can be defined as “people taking care of themselves and their immediate family only in a loosely knit social structure, versus people belonging to in-groups to look after them in a tightly knit social organization” (Hofstede 1980, p. 87). In individualistic cultures, people are “I”-conscious, express private opinions, and emphasize self-actualization. In collectivistic cultures, people are “we”-conscious and identify themselves based on the social system to which they belong (Cha 1994). Ads in individualistic cultures appeal more to individuality, self-reliance, success, and self-benefit, whereas ads in collectivistic cultures typically relate to group belonging, benefits for others, relationships, and group fulfillment (Cho et al. 1999; Han and Shavitt 1994; Miracle, Chang, and Taylor 1992).

But recent studies have departed from the blanket assumption that advertising in Western countries reflects individualism while advertising in Eastern countries reflects collectivism, and they have shown inconsistent results (Cho et al. 1999; Han and Shavitt 1994; Paek, Nelson, and McLeod 2004; Taylor, Miracle, and Wilson 1997). For example, Taylor, Miracle, and Wilson (1997) indicated that the goal of ads in collectivistic cultures like South Korea is to appeal to consumers’ collectivistic nature. By contrast, Cho et al. (1999) found that U.S commercials reflected individualism both in theme and execution, but that South Korean commercials did not reflect significantly more collectivistic appeals. Even more drastically, the cross-cultural study of newspaper ads by Paek, Nelson, and McLeod (2004) found that Korean newspaper ads presented a greater number of individualistic indicators than their U.S. counterparts. A content-analytic study of multinational corporation (MNC) Web sites in Japan, Spain, and the United States also confirmed the findings by Paek and her associates (Okazaki 2004). MNC Web sites in Japan, which represented collectivistic countries, had more individualistic indicators than Spanish and U.S. Web sites. Particularly related to this research context, the value dimension measured with personal value indicators (based on surveys of international IBM employees in 40 countries in the late 1960s; Hofstede 1980) may not be uniformly suited to various topics and channels of promotional contents (Okazaki 2004).

Meanwhile, some cross-cultural advertising studies assumed, rather than tested, this I/C distinction between Eastern (e.g., South Korea) versus Western (e.g., the United States) countries, and they explained differences found in ads across the studied countries accordingly (e.g., Cho and Cheon 2005). But as Taylor (2005) also points out, it is important to measure rather than just assume the pertinent cultural dimensions in the studied messages. Taking account of these inconsistent findings with regard to Hofstede’s I/C cultural value dimension, as well as the relatively new enterprise of examining cultural characteristics in on-line health promotion, we address research questions rather than formulating hypotheses.

**RQ1a:** Will South Korean antismoking Web sites have a greater number of collectivistic indicators than their U.S. counterparts?

**RQ1b:** Will U.S. antismoking Web sites have a greater number of individualistic indicators than their South Korean counterparts?

**High/Low Cultural Context**

The I/C value dimension defines broad differences in values between cultures, particularly Eastern versus Western cultures. By contrast, Hall’s (1976) high/low cultural context (hereafter referred to as high/low CC) focuses on cultural differences in communication processes (Gudykunst 1995). According to Hall (1976), “context” refers to the degree to which a culture’s communication practices are implicit or explicit. In a high CC, communication style is internalized, whereas in a low CC, communication is clearly coded and transmitted.
With various indicators, past cross-cultural advertising studies have employed this cultural context framework to determine differences between Eastern and Western cultures. For example, ads in Western cultures contain more low CC characteristics, such as more informational cues (Cho et al. 1999; Choi, Lee, and Kim 2005; Taylor, Miracle, and Wilson 1997), more direct and confrontational styles (Miracle, Chang, and Taylor 1992), more rhetoric (Caillat and Mueller 1996; Tak, Kaid, and Lee 1997), and more numbers or graphics in television commercials (Cho et al. 1999). On the other hand, advertisements in Eastern cultures demonstrate high-context styles with more emotional appeals (Cho et al. 1999; Taylor, Miracle, and Wilson 1997), more indirect and harmony-seeking appeals (Miracle, Chang, and Taylor 1992), and more focus on images (Tak, Kaid, and Lee 1997).

Overall, past findings seem to support Hall’s high/low CC framework in a more consistent manner across traditional and nontraditional forms of advertising. For example, a recent cross-cultural content analysis of MNC Web sites supported several hypotheses based on the cultural framework. Web sites in Japan and Spain, which are known to be high CC countries, used more high CC indicators such as “symbolic/visual metaphor” than those in the United States (Okazaki and Rivas 2002).

South Korea has been regarded as a high CC country, whereas the United States is considered a low CC country (Gudykunst and Kim 1995; Tak, Kaid, and Lee 1997). Accordingly, we formulate the following set of hypotheses:

H1a: South Korean antismoking Web sites will have a greater number of high CC indicators than U.S. Web sites.

H1b: U.S. antismoking Web sites will have a greater number of low CC indicators than South Korean Web sites.

**Culture-Bound Health Promotion Strategies**

In health behavior and promotion research, some scholars have noted that health promotion strategies are often defined in terms of cultural standards, meanings, and expectations (Albrecht 1994; Albrecht and Goldsmith 2003; Bandura 2002, 2004). The core assumption behind this argument of “culture-bound health promotion strategies” is that people’s (actual or vicarious) interactions with their environments are critical determinants of their health behavior and, in turn, their health outcomes (Lewis 2002). Environments offer resources and sources of influence from which people obtain information, self-confidence (also called self-efficacy), coping skills, and support. Some conceptual and empirical evidence has also suggested that health promotion strategies may work differently across social systems (e.g., tightly knit and collectivistic social system versus individualistic social system) (Bandura 2004). Nevertheless, much of what is known about culture-bound health promotion strategies has not been expanded to a cross-cultural level of comparison (Albrecht and Goldsmith 2003; Penner 2000).

Health promotion strategies that are particularly related to sociocultural contexts may be explained within the theoretical frameworks of normative influence, social learning theory, and social support. In this study, we focus on four concepts that represent culture-bound health promotion strategies: subjective norm, social norm, social support, and modeling.

“Subjective” norm refers to an individual’s normative beliefs that significant others (e.g., family, friends, partners) think that he or she should or should not perform a certain behavior (Ajzen and Fishbein 1980). By contrast, “social” norm refers to the perceived standards of acceptable attitudes and behaviors prevalent among the members of a community (Perkins and Berkowitz 1986). While subjective norm has the limited reach of significant others, social norm more broadly includes anonymous and generalized others. The basic idea behind the two concepts is similar in that individuals’ perceptions of how significant or generalized others think and behave will influence their own attitudes and behavior (Gibbons and Gerrard 1995; Prentice and Miller 1993). For example, Prentice and Miller (1993) found that the more adolescents think that their peers smoke, the more likely they are to form positive attitudes and behaviors regarding smoking.

This normative influence may vary across collectivistic and individualistic countries because people in different cultures may have varying degrees of social bonding, social pressure, perceived influence from others, and socially prevalent norms (Bandura 2002). If we apply this logic to this study’s context, health promotion strategies based on the two types of norms will be more prevalent in South Korean antismoking Web sites than in their U.S. counterparts.

Meanwhile, social support more directly addresses differences of cultural context and levels of social interactions. Heath and Israel (2002) define social support as “aid and assistance exchanged through social relationships and interpersonal transactions” (p. 187). Social support can be given in various ways, such as emotional, instrumental, and informational help (House 1981). This kind of positive social support can reduce the negative consequences of social isolation (Albrecht and Goldsmith 2003) and have a positive impact on health, illness, mortality, and morbidity (Burish 2000). The Internet in particular has been a useful tool for social support strategies, because people who search for health information online may be the ones who look for social support from similar peers or from experts. The degree to which the social support strategy works, however, may vary across cultural contexts that have different levels of group belonging, social ties, and collective fulfillment.

Finally, the concept of modeling originally comes from social learning theory, which has been modified and relabeled as social cognitive theory (Bandura 2002, 2004; Baranowski, Perry, and Parcel 2002). The theory assumes that people learn from one another within a social context by observation, imitation,
and modeling. Although the tendency to learn from others by modeling may be universal, Bandura (2002) argues that different cultural milieus vary the extent to which modeling is used and performed. Accordingly, modeling is one of the important health promotion strategies that are clearly culture bound. Modeling operates not only with an actual model who demonstrates a certain behavior, but also with a symbolic model who is portrayed via mass-mediated communications such as television, video, and computer programs. Numerous health promotions via mass media and the Internet have used this modeling strategy in various health contexts such as physical activity, AIDS, and smoking (e.g., Doshi et al. 2003).

If we apply this concept to cross-cultural advertising, it seems to closely resemble the cultural meaning of a celebrity endorser. In this context, the celebrity endorser is a cultural hero (Hofstede 1991). Cultural heroes are “persons, alive or dead, real or imaginary, who possess characteristics that are highly prized in a society, and thus serve as role models for behavior” (de Mooij 1998, p. 45). At least two cross-cultural studies illustrate that celebrity endorsers are much more frequently used in a collectivistic culture like South Korea than in an individualistic culture like the United States (Choi, Lee, and Kim 2005; Paek 2005). Perhaps the reason is because people in a collectivistic culture are more willing to adopt the cultural meanings that celebrity endorsers transfer to an advertised product (i.e., cultural meaning transfer; McCracken 1989). With respect to the antismoking context, the celebrity comedian Jooil Lee’s powerful impact on reshaping smoking norms and individual Koreans’ smoking attitudes and behavior is only one of many anecdotal examples that suggest that the modeling strategy may work well for people in collectivistic cultures such as South Korea.

Based on the arguments above, it is reasonable to predict that such culture-bound health promotion strategies as subjective norm, social norm, social support, and modeling may be more frequently used in a collectivistic culture such as South Korea. In such a culture, people value social bonding, family orientation, and social integrity more than they do in an individualistic culture such as the United States, where individuality and uniqueness are more valued. Thus, we formulate the following hypothesis:

H2: South Korean antismoking Web sites will use health promotion strategies bound to tightly knit and collectivistic social systems, such as subjective norm (H2a), social norm (H2b), social support (H2c), and modeling (H2d), more frequently than their U.S. counterparts.

METHOD

Sample

Antismoking Web sites in the United States and South Korea were collected during a two-week period between May 24 and June 6, 2006. We wanted to collect these Web sites within a short time because the Web environment is changing fast and researchers need to provide coders with the same content (McMillan 1999, 2000). The Web sites were collected through three major search engines: msn.com/msn.co.kr, yahoo.com/yahoo.co.kr, and google.com/google.co.kr. These three search engines are known to be the most frequently used engines worldwide (CMR 2006). The top three search engines draw approximately 70% of the global market share, and this trend has been stable for several years (Net Applications 2007). This strategy also gains external validity in that most Internet users use search engines to search for health-related information on-line rather than going directly to health-focused sites (Fox 2006).

The key words used to find antismoking Web sites were “antismoking,” “smoking cessation/prevention,” and “no smoking” or the corresponding words in Korean, Keumyeon (translated as “antismoking” or “smoking cessation”) or beoppyeon yebang (smoking prevention). We defined antismoking Web sites based on the conceptual definitions of communication campaign (Rice and Atkin 2002) and social marketing (Andreasen 1995). These two independent but related literatures share the idea that the ultimate goal of health or social-marketing campaigns should be to serve not the interests of marketers but rather the welfare of their target audiences and society in general. Accordingly, we included only Web sites whose purpose was to promote antismoking behavior rather than to sell antismoking products (e.g., nicotine patches, pills that help smoking cessation). We also prioritized stand-alone antismoking Web sites, which are not attached to other sites with multiple slashes because the primary purposes of these sites are not antismoking.

We started looking at Web sites from the top because the search engines tend to list sites in the order of the Web page most visited by users and/or the Web page that corresponds best to the key word (CMR 2006). Although search engines report hundreds of thousands of links as search results, they show only the 1,000 sites visited the most. We made a list of antismoking Web sites from the MSN search engine first, and then added to the list more Web sites that we found from the other two search engines. We sorted out antismoking Web sites that match the operational definitions described above and deleted redundant Web sites (e.g., identical Web sites with different URLs). After this procedure, the final sample size of each country is as follows: South Korea = 22; United States = 67. These Web sites were sponsored by individuals (South Korea = 4.5%; United States = 16.5%), government organizations (South Korea = 22.7%; United States = 11.9%), nonprofit organizations (South Korea = 27.3%; United States = 37.3%), medical professionals (South Korea = 13.6%; United States = 1.5%), tobacco companies (South Korea = 4.5%; United States = 1.5%), and unknown/identifiable source (South Korea = 27.3%; United States = 31.3%).
\(\chi^2\) test indicated no difference between the types of sponsors between the two countries.

**Coding Scheme**

The coding scheme included (1) collectivism/individualism cultural value dimension; (2) high/low cultural context; and (3) culture-bound health promotional strategies, that is, subjective norm, social norm, modeling, and social support. The categories and indicators that comprise each category were adopted from previous content-analytic studies (Cho et al. 1999; Doshi et al. 2003; Han and Shavitt 1994; Paek, Nelson, and McLeod 2004). Table 1 reports operational definitions for each indicator.

**Coding Procedures**

The context unit of analysis was the first page of each Web site. Past studies often noted that the first page serves as a gateway for the rest of the site because it should capture the attention of people and motivate them to stay (Chan-Olmsted and Park 2000; Ha and James 1998). Therefore, each Web site tends to include its most important information on this page.

Three coders, who are bilingual and blind to the hypotheses, independently coded the U.S. and South Korean antismoking Web sites. One coder coded all the U.S. and South Korean Web sites, while the other two coded half of the U.S. and South Korean Web sites, respectively. The three coders were trained through multiple sessions and group discussions, in which each coder shared meanings and nuances about the variables to code. Based on results of pilot testing, a series of training sessions, and discussions, the coding scheme was further developed with more detailed operational definitions of each item (see Table 1).

For intercoder reliability computation, we adopted Perreault and Leigh’s (1989) Index (P/L Index). The P/L Index is appropriate when there are only two coders and items with nominal scales, which is the case for this study. In addition, the index is known to be relatively rigorous and to take chance agreements into account (Rust and Coiol 1994). All reliability coefficients exceeded the rule-of-thumb coefficient size, .75 (Rust and Coiol 1994), ranging from .76 to 1.00. Average intercoder reliability for each country was also acceptable: .85 for South Korean Web sites and .86 for the U.S. Web sites (also see Table 1 for intercoder reliability for each indicator).

**Analytic Strategy**

Research Question 1 and H1a and H1b were tested with independent samples \(t\) tests. The statistical test used the Bonferroni-type correction method, which adopts the most conservative statistical level to guard against type I error (Hochberg 1988). Bonferroni correction applied to four \(t\) tests in terms of I/C cultural value dimension and high/low CC determined an \(\alpha\) level of .013.

To test H2a through H2d, a series of cross-tabulations were analyzed. In addition to the \(\chi^2\) test that is typically employed to determine statistical significance for the associations between categorical variables, we used Fisher exact test for determining statistical significance. Fisher exact test is known to be a more appropriate alternative to the \(\chi^2\) test, especially when the sample size is small and two-by-two tables are highly unbalanced (Fleiss 1981), which is true for our study.

**RESULTS**

**RQ1: I/C Cultural Dimensions**

The first research question asked whether South Korean antismoking Web sites would be more likely than U.S. Web sites to have collectivistic indicators (RQ1a), while the U.S. Web sites would be more likely than South Korean Web sites to have individualistic indicators (RQ1b). As shown in Table 2, the South Korean antismoking Web sites did not have significantly more collectivistic indicators than the U.S. Web sites (South Korea = 2.63, United States = 2.43, \(t(87) = .48, p = n.s.\) [not significant]). To the contrary, the South Korean antismoking Web sites tended to have significantly more individualistic indicators than the U.S. Web sites (South Korea = 1.81, United States = .70, \(t(25.27) = 2.97, p = .006\)).

Closely examined, all indicators that construct the collectivism cultural value dimension seem to be similarly used in the two countries’ Web sites. The group-belonging indicator seemed common in both countries’ Web sites. More than 86% of Korean Web sites and 67% of U.S. Web sites reflected the group-belonging indicator. For example, family is clearly a common subject for addressing collectivistic characteristics (e.g., “protect your family by quitting smoking,” or “your health is not just your concern, but your family’s concern”). Likewise, the cofulfi llment indicator was quite prevalently used in about 59% of South Korean and 66% of U.S. antismoking Web sites (e.g., “let’s accomplish our ‘quitting smoking’ goal together”). By contrast, the conformity and sharing/gift-giving indicators seldom appeared in the Web sites of either country.

Unlike a similar level of use of collectivistic indicators, uses of individualistic indicators clearly differed between the two country Web sites. South Korean antismoking Web sites employed more individuality (68.2%), uniqueness (50%), self-fulfi llment (50%), escape (18.2%), and competition (13.6%) indicators than did the U.S. Web sites (44.6%, 23.9%, 7.5%, 3.0%, and 0%, in that order). For example, the Web sites that refl ect these individualistic indicators included the following messages: “my own unique way of quitting smoking,” “I’ll never succumb to Nicotine,” and “my successful story of quitting smoking.”
TABLE 1
Operational Definitions of Cultural Characteristics

Collectivism
1. Group belonging: Appeals about the integrity of or belonging to family or social groups (South Korea = .76; United States = .81).
2. Conformity: Do what everyone else is doing. Not standing out. Peer pressure (South Korea = .94; United States = .79).
3. Emphasis on harmony: Being together. Friendship, partnership, companionship (South Korea = .76; United States = .78).
4. Sharing, gift-giving: South Korea = .87; United States = .83.
5. Co-fulfillment: Emphasis on the accomplishments of the family or social group (South Korea = .87; United States = .91).
6. Cobenefit: Emphasis on the benefits to families, group members, or others (South Korea = .83; United States = .85).

Individualism
1. Focus on the individuality or status of the consumer (South Korea = .80; United States = .78).
2. Uniqueness, creativity, originality. Focusing on being different or standing out (South Korea = .87; United States = .78).
3. Escape or stay out of the current position (South Korea = .93; United States = .99).
4. Self-indulgence: Excessive or unrestrained gratification of one’s own appetites, desires, or whims. Enjoyment, fun, pleasure, instant gratification (South Korea = .76; United States = .95).
5. Mentioning of ranking, competition, winning, the best, and the most (South Korea = .90; United States = .87).
6. Self-direction or self-reliance. Freedom, choosing own goals, self-esteem (South Korea = .80; United States = .83).
7. Self-fulfillment or self-development (South Korea = .76; United States = .79).
8. Self-benefit (South Korea = .76; United States = .80).

Low context
1. Information: Focus on information and characteristics (South Korea = .93; United States = .93).
2. Direct address: A direct, first/second person address (South Korea = .83; United States = .83).
3. Utilitarian need: Addressing the consumer’s practical, functional, and utilitarian need, including economic benefits (South Korea = .76; United States = .76).
4. Figure: Use of numbers, charts, or graphs. Price, percentage, growth rate, limited time (South Korea = .78; United States = .78).

High context
1. Association: Associating a product (antismoking in our study) with a particular situation, type of person, or lifestyle. Ad format such as testimonial and a slice of life from spokespersons. Use of product-irrelevant celebrities or common people (South Korea = .91; United States = .91).
2. Feeling: Emphasis on feeling, emotion, and mood (South Korea = .93; United States = .93).
3. Indirect address: Indirect, third-person address. Not addressing audience, indicating a specific name (South Korea = .94; United States = .94).
4. Metaphors: Use of metaphors, indirect communication, or aesthetic expressions/visuals. Creative execution (South Korea = .93; United States = .93).
5. Tentative statement: Intuition, ambiguity, generality, vagueness, and bland expressions (South Korea = 1.00; United States = 1.00).
6. Intangible values: Addressing affective, symbolic, or subjective impressions of intangible aspects of a product (South Korea = .97; United States = .97).

Culture-bound health promotional strategy
1. Subjective norm: What the Web users’ significant others (friends, parents, partners, teachers) think the Web users should do (South Korea = .93; United States = .93).
2. Social norm: Perception of what the general public is doing and ought to do (South Korea = .87; United States = .87).
3. Social support: Appraisal, encouragement, and other extrinsic rewards from others (South Korea = .76; United States = .76).
4. Modeling: Learning from what happened to others, including celebrities (South Korea = .85; United States = .85).

Note: Numbers in parentheses for each item indicate the intercoder reliability.

* The four dimensions were measured by summing the respective cultural indicators.

1 The four types of culture-bound health promotional strategies were measured with a binary scale (1 = yes and 0 = no).

H1: High/Low CC

We predicted that South Korean antismoking Web sites would show more high CC indicators than the U.S. Web sites (H1a), whereas U.S. Web sites would have more low CC indicators than the South Korean Web sites (H1b). Only H1a was supported: South Korean Web sites contained a greater number of high CC indicators (South Korea = 1.45, United States = .29, t[33.24] = 4.76, p = .000) than did the U.S. Web sites. About 59% of the South Korean Web sites, compared with only 7.5% of the U.S. Web sites, used an indirect communication style (i.e., not directly addressing audiences, or addressing third...
persons). In a similar fashion, about 64% of the South Korean Web sites used metaphoric styles or aesthetic expressions, compared with only 4% of the U.S. Web sites (e.g., “Smoking is the enemy of health,” “Quitting smoking is a home-run in your life”). The intangible values indicator was also more frequently used in the South Korean Web sites (18.2%) than in the U.S. Web sites (4.5%) (e.g., “Quitting smoking brings happiness to your family”).

In terms of the low CC, however, there was no mean difference between the U.S. and South Korean Web sites (South Korea = 3.45, United States = 3.14, t(87) = 1.35, p = n.s.). In fact, most of both South Korean and U.S. antismoking Web sites mainly employed low CC indicators such as information (100% and 94%), utilitarian need (100% and 82.1%), and figures (54.5% and 47.8%).

**H2: Culture-Bound Health Promotion Strategies**

Hypothesis 2 predicted that the South Korean antismoking Web sites would use such health promotion strategies as subjective norm (H2a), social norm (H2b), social support (H2c), and modeling (H2d) more frequently than their U.S. counterparts, as the strategies are bound to tightly knit and collectivistic culture (see Table 3 for results).

The results indicate that three of the four parts of the hypothesis were supported. South Korean antismoking Web sites employed subjective norm (H2a; p < .05, Fisher exact test), social support (H2c; p < .05, Fisher exact test), and modeling (H2d; p < .001, Fisher exact test) significantly more than did the U.S. Web sites. All of the South Korean antismoking Web sites used the social support strategy, about 68% used the modeling strategy, and about 14% used the subjective norm strategy, compared respectively with 83.6%, 28.4%, and 1.5% of U.S. Web sites. For example, most South Korean Web sites had a “social network” that could be contacted on-line to ask for support or help of any sort, which clearly indicates a social support strategy. South Korean antismoking Web sites also show messages from users or Webmasters that encourage quitters to maintain their quitting behavior, encourage smokers to quit smoking immediately, or advise specific techniques that might help someone in quitting smoking. In addition, examples for the subjective norm strategy include messages that reveal what their own children, spouses, and significant others would think and want from those who are considering quitting smoking (e.g., “think what your children would want,” “an antismoking letter to my Dad”).

For the modeling strategy, individuals’ private experiences were often displayed in South Korean Web sites so that many other users could monitor them and have vicarious experiences (e.g., “no-smoking diary from Mr. Kim”). Another Korean antismoking Web site included antismoking campaign excerpts of the cancer victim Jooil Lee’s memoir.

Meanwhile, H2b regarding the social norm strategy was not supported. The South Korean antismoking Web sites did not use the strategy to a greater extent than their U.S. counterparts.

**DISCUSSION**

In response to the urgent need for moving cross-cultural advertising research forward (Taylor 2005), we examined three cultural characteristics in a new form of promotional message. Those characteristics included cultural values (i.e., Hofstede’s individualism/collectivism), cultural context (i.e., Hall’s high/low cultural context), and culture-bound health promotion strategies (social norm, subjective norm, modeling, and social support). The first two cultural characteristics have served as prominent frameworks in cross-cultural advertising research, while the culture-bound health promotion strategies are drawn from well-established theories in other disciplines.

For the two prominent cultural frameworks, our findings indicate only partial support. Consistent with Hall’s high/low cultural context framework, South Korean antismoking Web sites have a greater number of high cultural context indica-

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**TABLE 2**

| Hofstede’s Cultural Values (1980) and Hall’s Cultural Context Index (1976) |
|:--:|:--:|:--:|:--:|:--:|
| **South Korea** | **United States** | **t value** | **df** | **p value** |
| Collectivism | 2.63 | 2.43 | .48 | 87 | n.s. |
| Individualism | 1.81 | .70 | 2.97 | 25.27 | .006 |
| Low context | 3.45 | 3.14 | 1.35 | 87 | n.s. |
| High context | 1.45 | .29 | 4.76 | 33.24 | .000 |

*Note: n.s. = not significant.*

*Because F was significant in Levene’s test for equality of variances (p < .05), equal variances were not assumed.

*Adjusted critical value at .013 with Bonferroni correction method.*
rors than U.S. Web sites. But in opposition to the predictions of Hofstede’s individualism/collectivism cultural value framework, South Korean Web sites had a greater number of individualism indicators than U.S. Web sites.

High and low context is a cultural dimension that Hall (1976) differentiated on the basis of the communication styles that predominate in a culture (Gudykunst 1995). Past cross-cultural advertising studies have consistently confirmed this cultural context framework in various traditional forms (e.g., Cho et al. 1999; Miracle, Chang, and Taylor 1992; Taylor, Miracle, and Wilson 1997) and nontraditional forms (e.g., multinational corporate Web sites; Okazaki 2004) of advertising. Along with past empirical supports, our findings seem to suggest that this cultural context framework is applicable to one prominent on-line health promotion: antismoking Web sites.

On the other hand, our finding that South Korean antismoking Web sites show more individualistic indicators than U.S. Web sites is not entirely unexpected (see Cho et al. 1999; Okazaki 2004; Okazaki and Rivas 2002; Paek, Nelson, and McLeod 2004; Zhang and Shavitt 2003). One explanation for our finding is related to what de Mooij (1998) terms the “cultural value paradox.” It posits that advertising may reflect desired cultural values rather than those of a country’s actual indigenous culture. Thus, advertising could portray “individuality,” “competition,” and “future orientation” in a collectivistic culture as opposed to “social bonding,” “harmony,” and “past orientation.” In addition, this kind of paradox may appear salient in rapidly developing countries like South Korea and China. Empirical evidence for this claim includes the finding that magazine ads in China actually reflected modern, individualist values rather than traditional, collectivist ones (Zhang and Shavitt 2003; for the South Korean case, see also Paek, Nelson, and McLeod 2004).

Particularly related to this study’s context, at least three more explanations are plausible for our findings. First, the findings may be due to the Internet’s unique nature as a new medium. Despite the fact that a clear boundary like language may exist, the Internet clearly challenges the traditional idea of national borders, since it makes information available to people in the global village. This new feature of the Internet may provide an opportunity for “cultural convergence,” where the idea of an indigenous culture disappears as that of global or universal culture emerges (Okazaki 2004; Okazaki and Rivas 2002). It may also create a “new cultural region,” a place where Hofstede’s cultural value framework, originally measured in the 1960s, may not be applicable (Okazaki 2004).

Second, our findings may be due to the characteristics of the Internet’s major users. Although the Internet has grown explosively within a decade, its major users are more likely to be youth oriented and well educated. The relatively young and well-educated target audiences may be more receptive to Western values, including individuality, uniqueness, self-fulfillment, and competition, as is consistent with previous findings (e.g., Zhang and Shavitt 2003).

Third, cultural value dimensions like Hofstede’s I/C may not be a good fit for on-line health promotion contexts such as antismoking Web sites. This possible misfit requires measures of cultural characteristics that are better suited to the health promotion context. This requirement also provides rationales for our empirical tests of culture-bound health promotion strategies, drawn from well-established theories in other disciplines.

Our findings suggest that these culture-bound health promotion strategies are indeed used differently in the two countries’ antismoking Web sites. That is, South Korean antismoking Web sites used health promotion strategies that reflect collectivistic characteristics (i.e., subjective norm, social support, and modeling) more frequently than their U.S. counterparts. Our findings are supported by previous cross-cultural studies on celebrity endorsement (Choi, Lee, and Kim 2005; Paek 2005) and social phenomena observed in the Korean antismoking context. Since Koreans regard celebrity endorsers as cultural heroes, they may be readier to accept the cultural meanings those endorsers provide. Similarly, the antismoking wave brought on by the publicized, smoking-related sickness and death of the celebrity comedian Joool Lee demonstrates the important role of a cultural hero in this context. Past empirical and anecdotal examples seem closely related to the modeling strategy in health promotion contexts. Similarly, a

<table>
<thead>
<tr>
<th>Culture-Bound Health Promotional Strategies</th>
<th>South Korea</th>
<th>United States</th>
<th>( \chi^2 ) (df)</th>
<th>Fisher exact test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective norm</td>
<td>13.6 (3)</td>
<td>1.5 (1)</td>
<td>5.69 (1)</td>
<td>.045</td>
</tr>
<tr>
<td>Social norm</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Social support</td>
<td>100 (22)</td>
<td>83.6 (56)</td>
<td>4.12 (1)</td>
<td>.035</td>
</tr>
<tr>
<td>Modeling</td>
<td>68.2 (15)</td>
<td>28.4 (19)</td>
<td>11.13 (1)</td>
<td>.001</td>
</tr>
</tbody>
</table>
more frequent use of subjective norm and social support may also reflect cultural characteristics related to Koreans’ tightly knit social relations and their social bonding. Overall, our findings seem to empirically support the premise that some health promotion strategies are culture bound and defined in terms of cultural standards, meanings, and expectations (Albrecht 1994; Albrecht and Goldsmith 2003; Bandura 2002, 2004).

Implications

First, our findings suggest that global advertisers who use Internet Web sites as a promotional tool should pay more attention to characteristics related to communication style (e.g., high/low cultural context). Such characteristics might be more useful and applicable for execution-level strategies and tactics (e.g., copywriting style, emotional appeal). Advertisers should also be cautious, however, about whether the cultural values manifested in promotional contents reflect either the existing indigenous culture or a desired culture (i.e., cultural value paradox). Rigorous pilot testing of certain creative executions to targeted audiences in each market will help the differentiation and selection.

Second, health promotion researchers and practitioners should recognize that on-line health promotion messages are culture bound. Accordingly, they should follow cultural difference premises in cross-cultural advertising research. Thus, as global advertising and marketing scholars have recognized (Albers-Miller and Gelb 1996; Cho and Cheon 2005; de Mooij 1998), culturally congruent health promotion messages may appeal more to consumers in indigenous cultures or subcultures.

Limitations and Directions for Future Research

First and foremost, our sample size is rather small, which may result in lack of sufficient statistical power. The small sample size is partially due to our strict definition of “antismoking Web sites,” which excludes Web sites that promote products related to smoking cessation. This definition was informed by communication campaign and social-marketing literature (e.g., Andreasen 1995; Rice and Atkin 2002). We argue that this stringent sampling is a better way to identify antismoking Web sites exclusively. We also used a more rigorous statistical test that is relatively insensitive to sample size (e.g., Fisher exact test; Fleiss 1981). Future studies should examine smoking-related product Web sites with a larger sample size to test whether the findings in this study hold true for the product Web sites.

Second, our coding strategy of looking mainly at first pages may limit our findings with regard to cultural characteristics manifested in the Web sites as a whole. Although the first page of a Web site serves as a gateway to other pages within the same Web site (Chan-Olmsted and Park 2000; Ha and James 1998), we may have missed more detailed information that might appear in back pages.

Third, we looked at only one type of health promotion Web site. We selected antismoking Web sites as a test case of health promotion Web sites in general because of the topic’s significance and prominence worldwide (Paisley 2000; Singh 1999; WHO 2002). Because the culture-bound health promotion strategies used in this study are well documented in health behavior literatures and have proved empirically applicable to various health contexts (e.g., Albrecht and Goldsmith 2003; Bandura 2002; Doshi et al. 2003), we believe that our findings may be replicable in other health contexts. But rather than overgeneralize our findings, we request future studies to replicate our findings in various health promotion contexts such as weight loss, nutrition, physical activity, and anti-binge drinking.

With these limitations under consideration, a consumer response study should be warranted to investigate whether culturally congruent health promotion Web sites are indeed more effective. Such a study could also identify the types of people who are more receptive to culture-bound health promotion strategies. For example, one interesting empirical question concerns whether people across cultures or those with varying degrees of individualist/collectivist values respond differently to the modeling strategy.

Despite some limitations, this study contributes to expanding the scope and topic of cross-cultural advertising research. It tested multiple kinds of cultural characteristics in a new type of promotional message, and it incorporated culture-bound health promotion strategies from well-established theories in other disciplines. We hope that this study presents a small but important step in moving cross-cultural advertising research forward through understanding roles of cultural characteristics in health promotion contexts.

NOTES

1. Because there is no universally accepted sampling period, we followed the suggestion by McMillan (1999, 2000). In her examination of 19 studies that content-analyzed Web sites, McMillan (2000) found that the sampling period adopted by the 19 studies varied to a great extent, ranging from two days to five months. Because the Web environment changes so rapidly, she suggested adopting a relatively short sampling period (1999, 2000). We do not foresee any reason why the two-week sampling period will affect our generalizability or comparability of our findings in the two countries’ antismoking Web sites. Nevertheless, we appreciate the anonymous reviewer addressing this issue.

2. Because the P/L index as the most appropriate intercoder reliability formula is computed only between two coders, the data that the second and third coders coded were merged to make one complete set of coding data. Later, the two coders coded all the
antismoking Web sites in order to examine whether their coding also achieved reasonable intercoder reliability. Indeed, the P/L index indicates a reasonably good intercoder reliability (average P/L index = .90 for South Korean Web sites and .88 for U.S. Web sites). The intercoder reliability coefficient for each indicator can be obtained on request.

REFERENCES


