Intrinsic Characteristics of Health-Related Fear Appeals from Chinese Print OTC Ads: Implications for Fear Message Construction

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Focusing on intrinsic message characteristics, a textual analysis of unique print ads of over-the-counter medicine (OTC) from China suggests cross-cultural validity of the four-component structure — severity, susceptibility, response efficacy, and personal efficacy — for fear-appeal construction. The content and message framing reflect the Chinese cultural values of auspiciousness, family harmony, relational co-dependence, and "face," and also explain the additional feature of "other efficacy" findings. An extended fear message model is proposed to incorporate the targeting approach of self-efficacy, other efficacy, value sensitive threats, and susceptibility portrayal.

Fear appeals are advertising messages that attempt to create anxiety in the targeted audiences to adopt a recommended response to the threat, and are widely used in health-related communication contexts such as health promotional campaigns and social marketing advertising. An abundance of empirical evidence has suggested that fear appeal can work for a variety of persuasion endeavors such as anti-smoking messages (e.g., Henley & Donovan, 2003; Smith & Stutts, 2003; Wright, French, Weinman & Marteau, 2006), AIDS prevention (e.g., Hill, 1988; Smith, Ferrara & Witte, 2007; Noar, 2007), consumer product advertising (e.g., LaTour, Snipes, & Bliss, 1996), and self-examination for disease screening (e.g., Morman, 2000).

The past four decades have seen much research on fear appeal in persuasive communication. A recent key words search, "fear message or appeal," of *PsycINFO, CCSA Sociological Abstracts, Health and Safety Science Abstracts and ComAbstracts* yielded 166 research publications to date. Still, several inadequacies remain, of which we focus our attention on three. First, the majority of the literature is devoted to effect-based fear arousal than fear itself. Fear appeal seems to be about "how much fear" rather than "what fear" (e.g., Cochrane & Quester, 2005; Gore & Campanella Bracken, 2005; Hastings, Stead & Webb, 2004; Hoeken & Geurts; 2005; Horowitz & Gumenik, 1970). Fear arousal was studied in terms of magnitude (e.g., Tay & Watson, 2002), vividness (e.g., Sherer & Rogers, 1984), and presence or absence of imagery (e.g., Shahab, Hall & Marteau, 2007). Hale and Dillard (1995) subtitled their synopsis

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of fear appeal research in health promotion campaigns "Too Much, Too Little, or Just Right?" Frequent usage of fear arousal is accepted on faith as a direct effect of the threat contained in the message.

Consequently, in a state-of-the-art literature review and assessment of experimental persuasive messages, O'Keefe (2003) points out that the effect-based message variable definition offers little insight into understanding the persuasion process and its effects as it shuns the analysis of intrinsic message features. The unresolved question here is how and why persuasive messages have the effects that they do. O'Keefe illustrates this dilemma: ". . . fear researchers would be reduced to telling message designers, 'you should create a message that arouses a lot of fear, but we don't know what sort of fear does that.'" 266)

Closely related to the first, the second inadequacy is the lack of research on fear- appeal themes. Among the 166 articles generated from the data search, only four articles analyzed the content of fear appeal or its related messages. Hanneman and McEwen (1973) coded 85 presentations of 32 different anti-drug abuse messages in terms of such variables as location, sponsor appearance, people depicted, intended audience, and portrayal of social and physical effects. Dillard, Plotnick, Godbold, Freimuth and Edgar's (1996) content analysis of fear appeals in the AIDS PSAs investigated affective outcomes from the absence or presence of elements that aroused other emotions such as empathy and sympathy. Kline and Mattson (2000) content-analyzed breast self-examination pamphlets in terms of the absence or presence of such elements of severity, susceptibility, response efficacy, and self efficacy. Janssens and De Pelsmacker (2005) examined 100 Belgian radio commercials in terms of such characteristics as content type (e.g., humor, eroticism, emotionality) and use of imagery information and of music. The majority of the fear messages were manipulated and designed specifically for these studies. In the end, there has been very little research on intrinsic themes of fear appeals used in natural settings.

The third inadequacy is the individualistic perspective in fear theories and research that we noticed in the literature search. Established fear theories, such as drive model (Hovland, Janis, & Kelley, 1953), parallel response model (Leventhal, 1970), protection motivation theory (Rogers, 1975, 1983), and extended parallel process model (Witte, 1992) all deal with individuals' motivation for action. In relation, the bulk of the empirical fear research has been based on individualistic assumptions and conducted in individualistic cultures, leaving questions unanswered about their applicability across cultures. Our database search returned only one study that actually touched on the collective cultural dimension of fear message research (i.e., Murray-Johnson, Witte, Liu, Hubbell, Sampson, & Morrison, 2001). The other four studies respectively examined differences in message framing in four central European countries (Orth, Koenig & Firbasova, 2007), Hispanic women's preferences for breast health information (Oetzel, DeVargas, Ginossar & Sanchez, 2007), and conditions under which Africans may accept fear appeals (Green & Witte, 2006; Witte, Girma & Girgre, 2002-2003). These four studies, however, did not investigate how cultural values may affect the intrinsic themes of fear appeals.

The current study is an effort to address these three inadequacies. We set out to examine how fear appeals are actually constructed and how they are done in a collectivistic culture, namely, China. The objective is to reveal intrinsic characteristics of actual fear appeals in order to shed some light on fear theory development beyond arousal/drive-based theorizing and to do so in a larger cross-cultural context.

We believe that theory development may be informed by going well beyond the culture-specific approach. Clearly, our intention is based on fear components rather than the techniques of OTC advertising or culture's influence as such.

Fear Appeal Components

Among the existing fear theories, Rogers's original protection motivation theory (1975) is the first to hypothesize that the persuasiveness of a fear message is dependent upon the severity of a threat, the target's vulnerability/susceptibility to the threat, and responsive efficacy. Rogers (1983) later added personal efficacy to the original theory in face of the growing empirical evidence. The four constructs were further integrated in Witte's (1992) extended parallel process model. She points out that an effective fear message must contain a high fear message and a strong efficacious recommendation. These four components are highly relevant to issues related to health.

The four-component structure has served as the primary theoretical model for studies that tested fear message design typified in the absence and presence of one or two of the four components — with fear-arousal research excluded. Earlier fear message studies (e.g., Hass, Bagley & Rogers, 1975; Sherer & Rogers, 1984) were mostly guided by Rogers's (1975, 1983) protection motivation theory. Recently, many fear message studies (e.g., Kline & Mattson, 2000; LaTour & Rotfeld, 1997; Smith, Ferrara, & Witte, 2007) have been guided by Leventhal's parallel process model (1970) and Witte's (1992) extended parallel process model and improved from Rogers's and Leventhal's theories. Theories such as the Elaboration Likelihood Model, the Health Belief model, and the Reasoned Action were used in fear research as moderating or mediating forces for fear effects and are not about fear message construction. Naturally, the four-component model is adopted for the current study in analyzing fear message construction.

The four-component fear-message structure is built on the understanding that the persuasive process of fear appeal includes two basic steps, the appraisal of a threat and that of possible coping. The two steps represent the internal decision making about the acceptance/rejection of a persuasion attempt. Threat appraisal contains evaluation of the severity of threat in general, and the susceptibility of individuals in particular. The result of threat appraisal helps the audience determine the personal relevance of an alluded threat. Coping appraisal consists of response efficacy and personal efficacy. Consideration of possible coping then helps the audience decide if and how they can deal with the threat.

Specifically, severity is the gravity of consequences/harm a threat can cause. For example, the statement that "AIDS is deadly" stresses that the ultimate death is what AIDS can cause. In the health context, severity is about individual physical harm. Susceptibility pertains to personal harm, the degree to which an individual is personally vulnerable to the threat. Susceptibility is a component used to personalize a risk to a target audience member. The probability for an individual to contract a disease and the use of "you" in the message are two examples of susceptibility representation (e.g., "You can get AIDS if you do not use a condom."). Response efficacy pertains to a recommended response or solution to the threat AND how effective that solution is in reducing the threat. Response efficacy depicts the recommended solution in a general manner and justifies the effectiveness of the solution. (Response efficacy example: "The most effective way to prevent AIDS is using a condom. Condoms are 99.9%

reliable.") Personal efficacy, on the other hand, refers to one's ability to adopt the recommended response to the threat, thus self-efficacy. It points out how one is able to carry out the solution. (Personal efficacy examples: "Condoms are easy to use." Or, "Just follow the three-step instructions.")

Severity and susceptibility are grouped together as threat components while response efficacy and personal efficacy are both efficacy components of the message. Hale and Dillard (1995) hold that an effective fear message must contain both threat and efficacy components, and that a message with all four components is more effective in heath promotions than one without. Other researchers (e.g., Kline & Mattson, 2000; Witte & Allen, 2000; Witte, Berkowitz, Cameron, & McKeon, 1998) also call for the use of the four components in fear-appeal message design. Kline and Mattson (2000) ground their content analysis of breast self-examination pamphlets in the four fear constructs, which were found to be useful for understanding and evaluating fear messages.

The four fear components provide a structure, but they have not completely answered the question regarding intrinsic features. For example, what messages can be used to portray severity and susceptibility? What constitutes personal efficacy? The best way to learn about intrinsic characteristics, we argue, is via an examination of how fear appeals are actually constructed in real life settings. We believe findings from such examinations can project insight into the design of effective fear appeals.

Cultural Influence on Threat Appraisal and Coping

Although cultural influence on communication, in general, has long been established (e.g., Condon & Yousef, 1975), knowledge of cultural influence on particular communication practices is still far from adequate in many areas, including fear appeals in persuasive communication. Whereas "problem-solution" seems a rather universal organization of messages, and the fear-efficacy structure may be expected to hold for fear appeals in all cultures; the assumption is an individualistic one with which fear message design is developed. This assumption that a person is predominantly concerned with one's own safety in risk reduction may not bode well with collectivistic cultures where group and family often take precedence over the individual. For example, a recent study (Murray-Johnson, et al., 2001) discovered that collectivistic Hispanic immigrants viewed threats to the family as more frightening than those to self while individualistic African-Americans perceived the contrary. Murray-Johnson et al.,'s finding underscores the need to consider possible cultural influence on intrinsic characteristics of fear-message construction. Naturally, if individuals of a collective culture could be more susceptible to threats to family than those to self, the former are likely to cause a greater alarm in countries such as Mexico, Japan, and China, which are collectivistic in cultural orientation. Messages conveying such threats are likely to be more relevant and effective in fear arousal. Fundamental social values that guide an individuals' way of life can provide insights into the intrinsic features/characteristics of fear messages.

Mindful of the above points and the need for theory to build on a broad empirical base, we decide to tap into the largest collective country in the world, China, for a study of fear-message construction. Our aims are primarily to examine the applicability of the four-component fear structure in a collectivistic context and to explore possible blind spots due to the uniformity of the extant research contexts in individualistic cultures, for theory enrichment. We start with an overview of the fundamental Chinese

values that might explain what Chinese fear the most in their lives. We reason that taking away what is valued most probably constitutes the worst fear.

Relevant Chinese Values

As a prototypical culture high in collectivism (Hofstede, 1980; Triandis, 1989), the Chinese culture is known for its general emphasis on family or familism, and personal relationships or *guanxi*, a tradition that still holds strong in contemporary Chinese societies (e.g., Chen, 2001; Chen, Nadamitsu & Lee, 2001; Chinese Connection, 1987; Hsu, 1953). In general, family remains the anchor of people's lives, the main point of reference in thinking, and an integral part of people's self identity in the contemporary world. Each family member's health and happiness oftentimes are a matter of great concern for the entire family. Specifically, the concerns are to ensure family members' normal physical ability and mobility: for the young, the old and the sick in the family to be well cared for physically and to be free of tangible burdens. In this context, family responsibilities are shared duties for most Chinese.

Consistent to the cultural orientation of collectivism, human relationship is regarded as a direct derivative of family. Personal relationships in Chinese societies are often built on the basis of one's family connection of some sort. Mutual obligations and concerns in a family and an extended family provide a basic motivation for its members to care for each other. When one member has a health problem, others worry and attempt to help. The sick member, on the other hand, worries that he/she may create burdens to others. Thus, many daily worries arise from any individual family member's health issues.

"Face" is another manifestation of the collectivistic cultural orientation (e.g., Hsu, 1953). It is described as "the respectability and/or deference which a person can claim for himself from others, by virtue of the relative position he occupies in his social network" (Ho, 1976, p. 883). In practice, "face" often involves high sensibility toward social perceptions of oneself, including one's family. One would put forth positive social presentation of oneself and one's family to keep up an appearance and maintain a social facade of success. The sick and the disabled, when construed as a stigma or a shameful reflection on the family, are to be concealed from the public eye and not to be revealed, which can be the reasons or further causes for worry. It would be interesting to determine whether and how any of these worries would surface in fear appeals, or if they would be appealed to in fear messages.

In summary, while we did not predict the above Chinese values would surely surface in our findings, these values might serve as plausible explanations for culture-relevant findings that might emerge. The objective is to ensure broad applicability while also taking into consideration probable cultural influences. We are duly aware that the reviewed values are highly regarded in the Chinese culture, but may not be unique or exclusive to that culture.

Research Questions

In researching fear appeals widely used in China, we decided on print over-the-counter medicines (OTC) ads, as newspaper still is a common mass medium in China. OTC ads occur daily in national and regional newspapers and magazines and command a broad exposure from a variety of audiences. OTC

advertising is not quite regulated in China. Many of the ads tend to use fear appeal even though some may not meet the ethic codes in the U.S. or other Western countries. However, our purpose was to understand how fear appeals were constructed in the collective Chinese culture and not to evaluate them based on ethics. We believe our choice of OTC ads would help us achieve our research objectives which we summarize into the following questions.

RQ1:   How do the four fear components hold up structurally in Chinese fear-based print OTC ads?
RQ2a: What types of threats are used in Chinese fear-based print OTC ads?
RQ2b: What types of susceptibility are used in Chinese fear-based print OTC ads?
RQ2c: What types of response efficacy are used in Chinese fear-based print OTC ads?
RQ2d: What types of personal efficacy are used in Chinese fear-based print OTC ads?
RQ3:   What collective cultural values, if any, are reflected in the construction of Chinese fear-based OTC ads?

Methods

Sample

For a one-month period, 33 unique fear-based OTC print ads were collected from a major provincial daily newspaper, *Xian Dai Kuai Bao (i.e., Modern Express)*, which has a circulation of 1.41 million and is well known for health-related information. The criterion for selecting ads was that an ad must contain a threat, the central element of a fear appeal. Among all print ads selected, only one contained a picture depicting a threat.

Twenty-eight out of all 33 advertised products were herb or herbal compound in the forms of pill, capsule, soft gel, sublingual, oral syrup, external lotion and external treatment pad. Herbal medicine has existed in China for thousands of years. As an essential part of the traditional Chinese medicine, it is not regulated the same way Western medicine is by the State Food and Drug Administration (SFDA) in China. Most herbal medicine does not require clinical trials. Thus, there are many more herbal OTCs than Western formulas on the market in China. We counted 33 Chinese products that claimed to treat various forms of diseases and illnesses including arthritis: joint/neck ache/pain (2 ads); high blood pressure (2 ads); prostate infection/cancer (2 ads); urinary disorder (1 ad); stroke (5 ads); asthma (2 ads); skin disease (5 ads); nail fungal inflammation (2 ads); eye disease (2 ads); gynecological disorder/ovary cancer (3 ads); kidney stone (1 ad); body toxin (1 ad), presbyopia; and Parkinson's disease.

Coding Categories and Coding

As we have reviewed, the central elements of a fear appeal are threat components (severity and susceptibility) and efficacy components (response efficacy and personal efficacy). The concept of these four elements is incorporated in major fear theories including the protection motivation theory, health belief model, and the parallel response model. These four elements were selected as the four major coding categories. The definitions of these four elements served as coding instructions. The coding process entailed two rounds, coding for message structure and coding for message content. In the first round of coding, the first researcher divided each ad into two halves, covering threat and coping appraisals

respectively.   "1" was assigned to represent the presence of a threat and "2" for the presence of susceptibility for the first half; "3" for response efficacy and "4" for personal efficacy for the second half. "0" should be entered for each absence of a threat or an efficacy component. Two Chinese students enrolled in a southern university were trained and performed the coding separately. These students arrived from China within the past six months. The presence or absence of each of the categories could reveal whether the four-component structure would apply in a collective culture.

Prior to message content coding, the first researcher previewed the entire sample to generate theme-based sub-categories for each of the four components. To facilitate the classification of the entire data set, she also stipulated coding units with each containing a complete theme, event, story, speech, product function or otherwise a complete meaning. The focus of the second round of coding was on threat (i.e., severity) taxonomies. For severity, seven themes emerged, consisting of physical harm, competitor consequence, sexual pleasure, financial burden, "face threat," relationship damage and family disharmony. All self-explanatory definitions of the themes (i.e., subcategories) were given to the same coders. "Face threat" was the only theme that needed an example for further clarification. Numbers "1" through "7" were assigned to the seven themes, "0" for no theme at all and "100" for other themes not defined for the coders. With the same procedures, three subcategories emerged for susceptibility, ten for response efficacy, and seven for personal efficacy. (See the discussion on the RQ2a findings for details on the taxonomies.)

We believe the 33-ad sample for generating categories in this content analysis was quite adequate for generating themes and message varieties. About 80% of the subcategories under the four fear components were generated with only half of the sample (i.e., 17 ads in a random order), the next 8 ads yielded 3 new subcategories, and the last 8 ads added the final new subcategory. More ads were not justified as very little new information would be expected.

Holsti's method for inter-coder reliability was chosen due to its popularity for descriptive/ exploratory content analysis (e.g., Downs & Adrian, 2004). The coders showed an average inter-coder reliability of .97 for the major four categories and an average of .93 for subcategories or themes under each major category. The first researcher made decisions in case the two coders disagreed. The high inter-coder reliabilities ensured that the first researcher's influence was minimal.

Findings and Discussion

Target Audience/Buyer versus Target Product Consumer

Past studies, mostly in the U.S. contexts, have shown that product ads target end users directly except sometimes when they are young children, then purchasing actions are called upon the consumers, often parents, who are in a position to buy (e.g., Associated Press, 2003; Mcaluso, 2000). In our sample, over one/fourth or nine ads targeted buyers who did not need the product but their family members did (Table 1): three products had children as end users; five products targeted the elderly; one was for students, and one for married women.

Table 1. Products with Target Buyers — Different from End Users

Product Function(s)	Target User	Target Buyer
Lead Detoxifying Syrup	Children	Parents
Herbal Tea for Hypertension	Elderly	Adult Children
Anti Brain Underdevelopment Capsules	Toddlers	Parents
Pills for Nervous Damages Due to Stroke	Elderly	Adult Children
Asthma Syrup	Children & Elderly	Parents/Adult Children
Anti Eye Fatigue Tea	Students	Parents
Lotion for Pelvic Inflammation	Married Women	Husbands
Fungal Skin Infection	Elderly	Adult Relatives
Neck Pain	Elderly	Adult Children

Urging family members to buy OTCs for their loved ones reflects close family ties in the Chinese society. Raising the young and tending to the old have been a strong traditional Chinese value. Household chores in Chinese families are shared as one often buys food, drug, clothing and household items for others. Naturally, medicine is not just the responsibility of an individual who needs it, but that of everyone in the family. Particularly, parents of young children and adult children of the elderly have the main responsibility as the primary caregivers. The discovery of other-targeting, messages that appeal to health decision makers other than the end users, could direct health communication researchers' attention to how effective other-targeting messages are, in a collective society such as China or in individualistic cultures.

Overall Fear Message Structure (RQ1)

As reviewed above, an effective fear appeal message usually contains four components: severe threat, vulnerability/susceptibility of the target to the threat, response efficacy and personal efficacy, and with a problem-solution organization. All print ads used a problem-solution organization (Table 2). All incorporated at least a threat component and an efficacy component. Specifically, all 33 ads included severity and response efficacy while 7 (21%) also had susceptibility, and 16 (49%) had personal efficacy. In other words, all ads contained at least one threat and one efficacy component, which was required of

an effective fear appeal, according to protection motivation theory. Although the existence of all four is said to be most effective, in reality few do. Nicole and Mattson (2000) conducted a textual analysis of breast cancer prevention pamphlets containing fear appeals. They found only 25% included severity messages and 68% susceptibility messages while all had efficacy recommendations. Thus, the message structure of our sample appears to be in line with the extant literature.

Table 2. Ads Containing Each of the Four Fear-Appeal Components

Threat Component	Number of Ads	% of Ads
Threat Severity	33	100%
Vulnerability/Susceptibility	7	21%
Response Efficacy	33	100%
Personal Efficacy	16 (excluding telephone #)	49%

Our results clearly indicate that the four-component structure for fear appeal held quite well in our sample. The threat-efficacy structure appears applicable and popular in the collective Chinese culture. Interestingly, six of the nine ads that had a target buyer who was not the user also contained a few statements atypical of what was previously reported in the literature. These statements called for a helping hand from adult children, parents, and relatives to their respective elderly parents or young children, who were targeted as the end users of the OTCs. For example, an ad for an herbal tea for hypertension asked, "Make sure your (elderly) parents use two tea bags a day and for two-three months to reap the best effects." This could be classified as "other efficacy," since it points to the ability of an "other" to adopt the recommended coping measure to eliminate the threat for someone else, usually a loved one.

In the examination of message structure, the framing issue (not part of the four-component model) emerged. Message framing was then examined to understand the overall tone of a fear appeal to gain a better understanding of the message logic. As Hale and Dillard (1995) write, a fear appeal can be framed either in a "loss" or a "gain" frame. The loss frame presents that the failure to perform the recommended solution leads to lost opportunity or increased negative consequence. The gain frame presents a scenario in which the adoption of the recommended solution leads to positive outcomes. Among the 33 ads, only seven used a loss frame while the rest a gain frame. A careful examination of faming relative to other fear component categories did not show any pattern. The use of a loss frame seemed to be without much of a pattern. Yet the predominant use of a gain frame may be a reflection of Chinese cultural preference of the auspicious (Fong, 1997). Many Chinese display symbols of good luck as

omens of prosperity and good fortune. Conversely, they avoid, sometimes prohibit any mention of the negative, which is regarded as taboo that brings bad luck.

It appears that the overall four-component structure holds in our sample, so do the message framing concepts. Additional elements such as other-targeting and other-efficacy may warrant consideration for the collective Chinese culture in fear message construction.

The Threat Taxonomy and Severity (RQ2a)

Severity is statements or depiction of a threat. Severity is about the degree of a physical harm to an individual. In our Chinese OTC ad sample, all 33 ads contained at least one severity message. Five ads (15%) gave a general statement about the consequences of an illness; eight (24%) cited statistics; 20 ads (60%) evoked description of symptoms or sufferings, sometimes vividly. Clearly, those severity statements in the OTC ads are quite similar to those in health messages in the U.S. as threat to individuals' health is a major concern in various cultures.

However, personal harm was not the only type of threat. Prior to coding, we discovered that an ad did not necessarily contain only one fear theme. An ad could include two or more unique fear themes and became a "double-threat" or "triple-threat." To better understand the intrinsic characteristics of fear messages constructed in the OTC ads, we developed a theme-based typology to serve as the coding scheme. The scheme, describing "what fear" rather than "how much fear," included seven themes: physical harm, competitor consequence, sexual displeasure, "face threat," relationship damage, family disharmony, and financial burden (See Table 3 for examples).

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Table 3: Threat Taxonomies in Chinese OTC Print Ads
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1.   Physical Harm

Example 1 (General Statement): Loss of calcium in the elderly could result in fracture and subsequent paralysis if not treated.

Example 2 (Symptom Description): Pain and loss of energy? Tremor prevents you from moving about freely? Cannot swing arms when walking? Unable to go where you want to? Have a hard time swallowing food? Slurred speech? Depressed? Do not let Parkinson's disease impair your life!

Example 3 (Statistics): More than eight million males in China contract prostate infection which could become cancerous. Prostate Cancer is the No. 2 killer of men next to lung cancer.

2.   Competitor Consequence

Example 1:   Western drugs for hypertension leave kidney and liver damaged and do not cure your condition.

Example 2:   Be alert of cheap OTCs on the market. They may not have a SFDA (State Food and Drug Administration) license number. They likely are fraudulent products that could kill you.

3.   Sexual Displeasure

Example 1:   The wife of a honeymoon couple sleeps on the couch and rejects the husband's advances. The husband is upset and a rift in the couple emerges. The husband eventually finds out that the real problem is her vaginal infection. (The husband buys the advertised product and the problem is solved.)

4.   Face Threat

Example 1:   Jiang Yong had urinary infection for more than a year and secretly tried all kinds of drugs which did not help. He had to go to the restroom so frequently that his co-workers began to laugh at him. He could not bear the disrespect he received.

Example 2:   When our son was eight years old, his elementary teacher told us that he was academically slower than others. He was constantly irritable and displayed strange facial expressions. His grades were poor. We have no "face" in front of our neighbors and colleagues. (Later, the child was diagnosed of lead poisoning.)

5.   Relationship Damage

Example 1:   Would you let your parents suffer dizziness, headache, sleeplessness, and depression when you know Ruicao Tea can effectively help them? Would you disappoint them by not acting quickly?

Example 2:   "Mom and Dad, my grades are dropping no matter how hard I work. I just cannot completely make out what teachers write on the chalkboard. It's blurry. My classmates are drinking Clear Eye and they are making the grades. Please buy me Clear Eye. Or I will never forgive you."

6.   Family Disharmony

Example 1:   Granny has discolored, contagious fungal nails. She cannot hold or get close to her little grandchildren she so loves. They shun her and tell her that they do not want to get the ugly nails like hers. Granny is disheartened by her inability to be a normal loving family member.

Example 2:   Mr. Tang has been paralyzed for 12 years after a stroke. His wife died after 10 years of hard work of tending to him and providing his medical support. Now his adult daughter has quit her job to take care of him. Mr. Tang feels guilty of becoming a burden to his family.

7.   *Financial Burden*

Example 1: Why do you have to empty your years of savings by sticking to ineffective yet expensive imported drugs?

Example 2: Grandpa Li began to feel a neck pain two years ago. He waited and waited without seeking medical attention. Now his upper body is immobile. He has to spend his life-long savings and his children's money to treat his condition. Had he used Xianlin pills at the onset of his illness, he really didn't need to pay for his costly medical treatments that he does now.

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"Physical Harm" naturally was the same feature for severity messages which consisted of three forms: a general statement about the consequences of an illness, a description of undesirable symptoms or sufferings, and statistics.

"Competitor Consequence" focused on negative sides of competing drugs. This perhaps is not an ethical practice by U.S. FCC (Federal Communications Commission) standards. Yet until China's General Administration of Press and Publication and its State Administration of Radio, Film, and Television enact more rigorous communications policy, "competitor bashing" could exist for a long time. We deem this type of threat to be policy-laden rather than social/cultural value based.

"Sexual Displeasure" evoked fear for absence of sexual pleasure, indicating functional deficiency. "Face Threat" dealt with (a) embarrassment and loss of social respect due to inability to control certain undesirable symptoms, and (b) how social undesirability might threaten family members' respectability, or "face."

"Relationship Damage" centered on possible damages to significant interpersonal relationships as a result of failing to help certain significant others who had a health condition.

"Family Disharmony" called attention to the fact that an illness could cause disharmony in a family.

"Financial Burden" pointed out that any illness could cause financial strain on an individual and the family if not treated early or if an effective medicine was not used.

For this typology of seven fear themes, severity or personal physical harm occurred in all ads. As a matter of fact, all 11 (i.e., 30%) single-themed ads contained physical harm only, but not others. This

loans support to the extant fear theories that severity is deemed the central concern in the health context for people of a collective culture as well as in an individualistic culture. For the remaining 22 ads, only one made a triple-threat and the other 21 contained double-threats. Understandably, two or three threats suffice to get a target member's attention while more threats in one fear appeal may become confusing and may possibly trivialize the central message. The lone triple-threat combined physical harm with relationship damage and financial burden. Each double-threat consisted of physical harm and one of other six themes. Specifically, in addition to personal harm (severity), six double-threats included the competitor consequence; five combined relationship damage; three each of "face threat," family disharmonies and financial burden; and two sexual consequences.

Of the seven threat themes, three are personal (physical harm, sexual pleasure, financial burden) and three social/cultural ("face threat," relationship damage, family disharmony) in nature. Among these, physical harm and sexual pleasure are the primary threats while the others are collateral threats, incurred as a result of the primary threat. Thus, RQ2a has been addressed. The findings present a direct response to O'Keefe's (2003) call for work on message features.

Susceptibility (RQ2b)

Only seven (21%) ads contained messages that explicitly conveyed susceptibility. They were statistics (3 ads), vague/general statements (2 ads), and mentions of risk factors (2 ads). The statistics were about the probability of a targeted OTC user's getting the illness. One ad selling an external lotion for arthritis claimed, "90% of the elderly in China have arthritis of varying forms." The vague/general statements simply warned consumers that they could be affected by an illness. One statement pointed out, "Stomach discomfort is a common condition that affects just about everybody." Risk factors specified how one was susceptible to a certain risk due to a health condition he/she experienced. For example, stress was identified as a risk factor for men with a fast-paced work schedule to develop urinary disorders. The way these susceptibility messages were constructed is quite consistent with those in health campaigns discussed in the health communication literature.

Yet, classification of messages word for word did not quite tell the story. About 26 (70%) of the ads contained testimonies about sufferings from various illnesses. These were personalized stories relatable to "someone like me," or an endorser who "looks or sounds just like me." To ascertain validity of our interpretation, five mainland Chinese, aged 30-55 and newly arrived, were asked about their reactions toward these ads. They expressed that they could relate to the characters in the story and the peer endorsers were much like everyday common people. It seems that personal susceptibility can be communicated without direct reference to statistical probability or risk factors. Whether this kind of subtle communication is more acceptable and memorable than direct risk probability statement is a question for future research.

Response Efficacy (RQ2c)

Response efficacy is the ability of the recommended solution to reduce or eliminate the threat to personal harm. In an OTC ad, response efficacy was equivalent to the convinceability that the drug would work. Ten unique themes were discovered. An ad would use one or a combination of these methods:

1.   Celebrities that fit the target audience's demographics and medical experts were used as endorsers;
2.   Personal stories, which might or might not be true in reality, described that the drug worked wonders;
3.   Patient testimonials were given;
4.   Product awards were highlighted;
5.   Scientific research was cited;
6.   Government certification was listed;
7.   Product longevity was emphasized (e.g., on the market for eight years; a 1,000-year-old formula);
8.   Product was also sold overseas was cited;
9.   Clippings of media coverage praising the drug were inserted; and
10   A general statement guaranteeing the treatment effects was provided.

Understandably, all ads contained response efficacy, which in reality is synonymous to guerilla marketing sales pitches. The ten subcategories of response efficacy appeared to be quite universal as they are also widely used in individualistic cultures as a means to boost product credibility as we observe (for a state-of-the-art review, see Perloff, 2003). All response efficacy messages addressed possible concerns over product effectiveness in mitigating illness severity. None tackled social-cultural threats such as relationship damage and family disharmony. Since an illness is the primary threat, the direct cause for collateral cultural threats, it makes sense that these latter consequences are assumed to be mitigated when the illness is cured or controlled.

Personal Efficacy and Other Efficacy (RQ2d)

Personal efficacy, more accurately termed "self efficacy," is the target audience member's perception about his/her ability to follow the recommendation, which is "buy the product and use it properly" for an OTC ad. The presentations of personal efficacy in the 33 OTC ads were quite straightforward. All had telephone numbers for purchasing or further inquiry. Sixteen ads had one, two, or three of the following: 1) information of where the product was sold; 2) product price, some coupled with a sales mention (e.g., buy two and get one free), which was meant to show product affordability; 3) instructions for how to use a product such as dosage, duration for medication/treatment, and medication frequency, and 4) free shipping. Those self efficacy messages are quite common as they serve to persuade consumers that the products, which are easy to use, can be had conveniently and affordably.

An interesting finding relative to personal efficacy is what can be termed "other efficacy." Such newly uncovered efficacy messages obviously targeted OTC users' loved ones for action, purchasing

and/or administering the product. One ad called, "Make sure your (elderly) parents take two pills each time and three times a day after a meal for two months for best effects." Another, "Monitor your child's behavior after two weeks' medication. When improved, cut down the dosage by half." A third, "Your paralyzed parent's recovery depends on the care of the filial son or daughter. Make sure correct medication is properly administered by following the included instructions." There were altogether seven "other efficacy" messages in seven ads. These messages appeared to reflect interdependent relationships among the loved ones in China. "Taking care of the young and the old" is a strong social value that makes treating an illness more than just an individual patient's personal matter but a family responsibility.

Chinese Cultural Values Reflected (RQ3)

Our findings have revealed features of fear message construction attributable to Chinese culture. First, Chinese preference of the auspicious showed up in message framing. Messages with a positive tone outnumbered those with a negative tone by the ratio of approximately 4 to 1. That is, the OTCs seemed to bet that the audience/reader would more likely be lured by a success story of warding off the threat with the adoption of a recommendation, than by an undesirable consequence for failing to take an action or taking the wrong action.

Second, threat types uncovered were equal in number with respect to personal and social/cultural threats. From this, we see a reflection of the collectivistic orientation in Chinese culture, such that threats to one's family and loved ones were considered matters of similar gravity as threats to individuals. So much so that the same value orientation surfaced in proposed coping methods. "Other efficacy" explicitly suggests threat-fighting measures by others were as feasible and effective as what an individual with a health condition could do. Thus, targeting family members became a natural choice in the current OTC sample.

Along the same line is "face threat" as a basis for fear appeal. Clearly, one of the three threats is social/cultural in nature. This type of threat involves the shame and embarrassment brought on by a health condition, which not only inflicts physical and/or mental harm to the ill, but also threatens the family and relatives socially. The underpinning of the fear-appeal to "face want" was again the value of family.

In interpreting Chinese cultural influence, we are cautious that similar influence may also exist in other societies to be investigated cross culturally in the future.

Further Considerations

We set out to examine intrinsic characteristics of fear appeals in a sample of OTC ads from the collective Chinese culture, with the objective to extend fear theory development into a context larger than the norms of an individualistic culture. Our findings lead us to conclude that the four-component for fear message construction likely boasts a high degree of cross-cultural validity. Yet the surfacing of other efficacy and roles of cultural values call for perhaps an incorporation of other elements into the four-component fear appeal model for greater predictive power. We thus challenge ourselves to the task of

developing a model that would account for the impact of possible cultural values and provide insight into intrinsic characteristics of fear appeals.

The Extended Fear Message Model

This model (Figure 1) primarily aims to guide fear message construction in different cultures when central social values in a given culture are taken into consideration. We assert that the structure of a fear appeal is relatively culture-independent while the content (i.e., "what fear," "what to do") may differ somewhat due to divergent social and cultural values. We affirm the four-component structure for fear appeal while we move to expand and refine the model by incorporating "targeting approach," "self efficacy," "other efficacy," "value-sensitive threats," and "susceptibility portrayal." The diagram in Figure 1 shows how these added elements, highlighted in gray, might work together with the original components. Of the five new items, "targeting approach" is a general aspect of consideration in message construction, standing at the same level as the notion of fear appeal. The other four items are sub-categories of the original components of severity (value-sensitive threats), susceptibility (susceptibility portrayal) and personal efficacy (self efficacy, other efficacy). The original efficacy remains unchanged. The following explanation of the model focuses on the added elements.

Figure 1. The Extended Fear Message Model
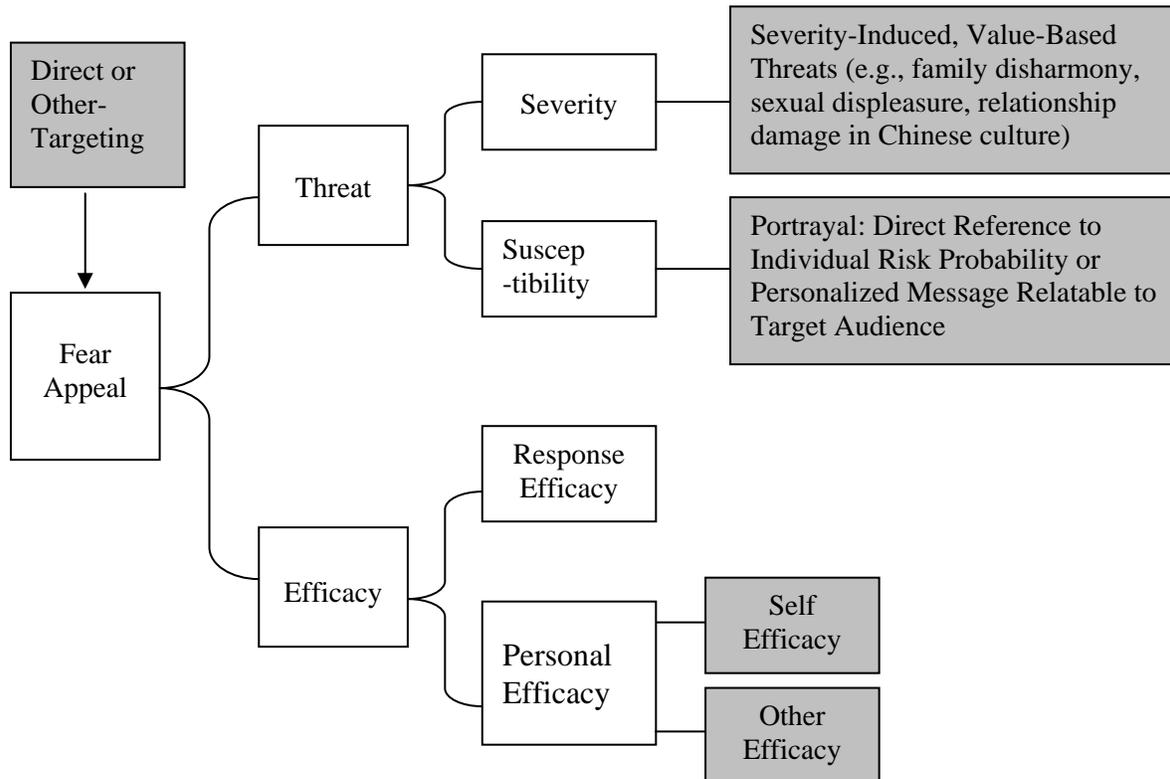
Targeting approach. Initially, to design an effective fear message, we must consider who to target: at-risk individuals or their loved ones, or both? We begin with an analysis of at-risk individuals' efficacy level and their ability to control life. At-risk people with a low efficacy level such as children, the disabled, and the chronically bedridden will need a helping hand. Targeting their able-bodied loved ones as the recipients for fear messages makes logical sense in either an individualistic or a collective culture. Yet the emphasis on family cohesion and interdependence points to possibly a more favorable reception of other-targeting fear messages in a collective society. Thus, collectivistic cultural values are likely to induce more fear appeals to able-bodied family members and relatives even though their at-risk loved ones are capable of controlling own life (see also Murray-Johnson et al., 2001). On the other hand, direct targeting toward at-risk individuals still is, and will be, a dominant approach in individualistic culture that values independence.

Severity-induced, value-based threats. Severity is a concept that emphasizes individual health/safety as the central motivation for at-risk individuals to accept the recommended response to a threat. Yet the ramifications of an illness/health risk go beyond an individual's physical harm. Cultural values shape what these ramifications include. At least in collective China, "face," interpersonal relationships, and family harmony, all are central to members' identity in that culture. When these values are threatened by an illness, an at-risk individual and his/her loved ones are motivated to reduce the risk by adopting a recommended solution. In an individualistic culture, an illness can result in harm to salient individual values such as freedom, independence, physical pleasure and individual dignity as well as social consequences such as relational damage and social image/stigma. Cultural values can help determine what people fear the most. The concept of value-based threats calls for empirical investigations into threat taxonomies that are sensitive to a given context.

Susceptibility portrayal. Susceptibility is commonly defined in the literature as the probability with which an individual is personally susceptible to a threat. A susceptibility message often is a specific statement of probability of an individual's contracting a disease or a general statement that one is susceptible. In our current study, we found that susceptibility could be subtly communicated with personal stories that feature characters similar or relatable to target audiences, which brings home the possibility of risk to a specific, personal level. We propose that a susceptibility message can be constructed via either a matter-of-fact description of probability or subtle personification or both. However, it is yet to be decided which is more effective in helping target audiences rationalize their personal vulnerability, which in part leads to their decision related to adopting a solution.

Other efficacy and self efficacy for personal efficacy. When other-targeting is used, other efficacy measures need to be included in a fear appeal. The essence of an other-efficacy measure is the loved-one's or the caretaker's ability to help the at-risk individual. When direct targeting is chosen, personal efficacy is included. Yet we believe personal and other efficacy can both occur in a fear appeal, communicating something like "You can do it. Your loved ones can help you do better." In an AIDS-prevention study, Sheer (1995) found that male college students were likely to use condoms when they heard the partner say something like, "You can do it. I can help you do it." The challenge ahead of us is identifying the conditions under which personal and other efficacy should be simultaneously used in a fear appeal.

Limitations and Directions for Future Research

Several limitations exist that require future research to amend. Although the sample size was largely adequate for generating qualitative themes, much larger sample size would be needed for generalizing the frequencies gleaned in this study to larger contexts. For insights into cultural impact on fear message design, comparisons between the current findings and that in the relevant extant literature are helpful but impossible at this stage, due to the second inadequacy of the extant literature discussed earlier. Future studies that content-analyze the intrinsic properties, particularly fear themes, are warranted in both individualistic and collective cultures.

The suggested model is preliminary. The added components generate more questions than answers. Yet this model does provide ways to systematically examine fear message construction and test fear appeal effects in various cultures. We identify several research areas that can offer knowledge of the validity of the model and thus improve it. A model improved over the four-component structure can potentially guide effective fear messages design.

In addition to personal harm — a likely universal concern, we would like to further uncover viable thematic taxonomies of threats for individualistic cultures and those for collective cultures. Comparisons are to be made to differentiate fear message construction for different cultural groups. In the current study, we found that a fear appeal would contain one, two, or three threat themes. This finding raises such practical questions as "how many themes should be included in a fear appeal?" and "What are they?" If certain media (e.g., newspaper, magazine, the Internet) offer adequate space for listing more than one fear theme, others (e.g., TV, billboard) prove to be restricting in allowing perhaps only one threat. This begs the question, "Which fear theme should be used, given a set of realistic conditions?"

In the absence of a conventional probability statement specifying the chance of a target audience member personally contracting a disease, some OTC ads personalized a story in which a similar other had the health condition. A future direction is to find out the conditions under which direct probability statement works better than personalization and vice versa. Another area of exploration concerns personal efficacy represented in self-efficacy and other efficacy. The task is to identify which of the two works well in a collective culture, and then which does better in an individualistic culture. Moreover, researchers may question, "Under what conditions, both personal and other efficacy messages are warranted in a fear appeal?" Lastly, the model provides a new direction of study: an investigation of both direct and other-targeting, the situations and conditions for effective use.

In conclusion, the current study uncovered some previously unreported aspects of fear appeals in health-related persuasive messages. These findings shed light on the intrinsic nature of fear-appeal messages and may help advance our understanding of the persuasion process. On the basis of the findings, an extended model is proposed to further explore message design involving fear. More studies are warranted along that line.

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