The Use of Appeals in Green Printed Advertisements: A Case of Product Orientation and Organizational Image Orientation Ads

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Abstract—Despite the relatively large number of studies that have examined the use of appeals in advertisements, research on the use of appeals in green advertisements is still underdeveloped and needs to be investigated further, as it is definitely a tool for marketers to create illustrious ads. In this study, content analysis was employed to examine the nature of green advertising appeals and to match the appeals with the green advertisements. Two different types of green print advertisings, product orientation and organizational image orientation were used. Thirty highly educated participants with different backgrounds were asked individually to ascertain three appeals out of thirty-four given appeals found among forty real green advertisements. To analyze participant responses and to group them based on common appeals, two-step K-mean clustering is used. The clustering solution indicates that eye-catching graphics and imaginative appeals are highly notable in both types of green ads. Depressed, meaningful and sad appeals are found to be highly used in organizational image orientation ads, whereas, corporate image, informative and natural appeals are found to be essential for product orientation ads.

Keywords—Advertising appeals, green marketing, green advertisement, printed advertisement.

I. INTRODUCTION

ENVIRONMENTAL concerns have been on the increase in recent years as consumers have witnessed many disasters and have begun to wonder about their own environmental impacts. Globally, increasing evidence supports environmental concerns as people and companies are becoming more environmentally responsible. In the United States, the total cost of controlling pollution has gradually increased as a percentage of the gross national product (GNP); it was 1.5 percent in 1971, 2.3 percent in 1990, and is expected to be 5.2 percent of GNP by 2020 [1]. The public and private environmental expenditures are steadily increasing as well as the number of laws and regulations to address environmental issues. The concern over the environment has branched out to mainstream studies in many disciplines including sciences, education, engineering, and business in order to, ultimately, decrease environmental impacts. The need to increase public awareness and high pressure from social and political movements has moved the issue beyond simply addressing waste recycling and composting. Not surprisingly, the environmental concern has brought out some opportunities for

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businesses to increase their competitiveness in the hopes to benefit people and the planet, as well as to make a satisfactory profit. This has largely involved aspects of environmental management, such as in the development of green products, the application of green designs, the utilization of green production, and the implementation of green marketing, in order to keep up with the growing environmental concern [2].

Green marketing has comprised, formulated, and implemented marketing disciplines and marketing activities with environmental features into overall marketing strategy and corporate strategy. The main aim is to satisfy the needs and the wants of the consumers, to create a positive impact on the environment, and to generate revenue for the company. Throughout the years, the idea of making "green" an essential part of marketing strategy has brought conventional marketing into a whole new expanded level which dramatically changed the way of conducting business. Since a vast majority (84%) of U.S. consumers is now buying some green product occasionally [3], there will be a rise correspondingly in environmental advertising accompanying increased consumer interest in the environment [4], [5]. According to [6], advertising has been widely used to support green marketing strategies in various green industries such as automobiles, cleaning products, foods, and home appliances. Green marketing is one of several marketing ideas that focuses on the relationship between the marketing disciplines, environmental and social concerns. With increasing unresolved environmental problems, there is no doubt that firms will continue to use advertising as a means to promote their green approach. For advertisers, identifying predominant appeals and using the 'right' one to create green advertisements for product orientation and organizational image orientation ads will enhance the ads significantly.

A. Advertising Appeals

Advertising appeals are used as specific approaches to communicate how the products and service will satisfy customer wants or needs [7]. Advertising appeals usually carry the specific illustration in various forms depending on the purposes, types of products and services, and cultures. Based on extensive advertising literature, twenty-four appeals were found (see Table I). There were several appeals that have been used commonly in real ads, but have not been studied, namely, aggressive, clever, dirty, exaggerated, hopeless, meaningful, motivate, surreal, unbelievable, and weird. This study

employed all mentioned appeals to be determined which were matched strongly with the given ads.

TABLE I
ADVERTISING APPEALS WITH LITERATURE SUPPORT

Appeals	Authors
Believable	Haytko et al., [8]
Colorful	Gorn et al., [9], and Moore et al., [10]
Corporate image	Belt et al., [11], and Lafferty et al., [12]
Cute	Marcus [13], Mcveigh [14], and Sherman et al., [15]
Depressed	Edell et al., [16], and Havlena et al., [17]
Educational content	Leonidou et al., [18]
Entertaining	Haghirian et al., [19], and Wang et al., [20]
Eye-catching graphics	Li [21]
Fear / Scary	Batra et al., [22], Hastings et al., [23], Havlena et al., [17], Banerjee et al., [24] Ruiter et al., [25], and Pervan et al., [26]
Guilt	Batra et al., [22], Banerjee et al., [24], Lindsay-Hartz, [27], and Weiner et al., [28]
Humor	Banerjee et al., [24], Hatzithomas et al. [29], and Tremblay [30]
Informative	Edell et al., [16], Edell et al., [31], Wang et al., [20]
Imaginative	Edell et al., [16], and Stern [32]
Interesting	Batra et al., [22], and Haytko et al., [33]
Intrusive	Chan et al., [34]
Natural	Banerjee et al., [24], Iyer et al., [35],
Sad	Batra et al., [22], Edell et al., [16], Havlena et al., [17], and Moore et al., [10]
Safe	Hartmann et al., [36]
Sex appeals	Liu et al., [37]
Shame	Batra et al., [22]
Shocking	Dahl et al., [38], and West et al., [39]
Surprise	Batra et al., [22], and Havlena et al., [17]
Unrealistic Optimism	Pornpitakpan et al., [40]

B. Advertising Appeals Used in Green Ads

Reference [41] identified and categorized the types of appeals employed in the ad based on the literature and their own analysis of the green ads. There were five sub-categories, and a few minor categories that were included within each sub-category: Zeitgeist, with a mere statement and 'bandwagon' as a minor category, consisted of appeals exhibiting simple and general climate characteristics dominating at a particular time; Emotional, with 'fear', 'guilt', and 'you make a difference' as minor categories, consisted of appeals exhibiting emotional appeals that stimulated a consumer; Financial, with 'money-off' and 'cause subsidy' as minor categories, consisted of appeals exhibiting the financial aspects and tactics for buying green products; Euphoria, with 'health' and 'natural' as minor categories, consisted of appeals exhibiting sense of well-being, and; Management, with 'control' and 'social responsibility' as minor categories, which consisted of appeals exhibiting corporate commitment or involvement in the green movement. Later on, [35] expanded their work to categorize green television ads and added a sixth category, Catch-all, to define those ads that denoted more than one substantive issue. This, so far, was the only framework that was used to analyze green advertisements.

Reference [42] showed that, during the period 1969-2008, 530 academic articles of green marketing and management were identified, and 7.7 percent were environmental advertising articles. During the years 1999-2008, research in environmental advertising represented only 3.8 percent and consumer attitude and responses to environmental advertising represented only 1.9 percent of all environmentally-related articles. The need to treat appeals found in green advertisements as equal to advertising appeals in general is substantial.

C. Purpose of the Study

The purpose of this research is to examine the advertising appeals that have been used in the existing green advertisements and to determine which green advertising appeals were rated strongly in product and organizational image orientation ads.

II. LITERATURE REVIEW

Although many consumers were familiar with the green ideas and terminology, a majority of people believed that green marketing mainly referred to the advertising of products with environmental characteristics and/or any type of marketing that typically referred to strategies of selling products and services [43]. Reference [44] developed a typology for categorizing misleading/deceptive green ad claims and used this system to determine the frequency of occurrence and to categorize the environmental advertising claims from print ads over a two-year period (1989 -1990). There were a total of five claims including acceptable, vague/ambiguous, omission, false, and a combination of vague/ambiguous, omission, and/or false claim. Under this typology, they claimed that the most significant finding was that a great number of green claims found among the 100 ads were judged to be vague or to contain omissions. Reference [45] conducted another similar study to examine the green ads more closely and carefully. They developed five types of environmental advertising claims and combined them with the typology in their previous study in order to create a matrix that was used to pinpoint problem areas of the green ads [44]. Reference [5] found that the ads that were judged as environmental fact were more acceptable and the ads that were judged as image orientation were more likely to be perceived as misleading/deceptive. Reference [46] compared two types of print advertising for a green laundry detergent. Two ads contained the same information about detergent except for the headline. The differences about the information were that one emphasized the green aspects and the other ad emphasized the non- green aspects such as financial benefits by using different font sizes, boldness, and lower/upper cases. Their results indicated that high involvement with the environment "may be predisposed to purchase green products regardless of the type of appeal used". Interestingly, the low-involvement group "responded to the green appeals significantly more favorably than the financial appeal" because they did not believe that the less expensive green brand was as effective as the leading brand.

Reference [47] examined how environmental claim type may affect the communication effectiveness of green advertising, and how the source country's green image may

moderate the claim type-effectiveness relationship. It had been reported that Chinese consumers' perceptions of Japanese, American and European products were considerably more favorable than their perceptions of domestic products. Reference [48] examined how Chinese consumers perceive and respond to company-sponsored green advertising claims. The study covered some interesting areas of attitude toward the ad, attitude toward the product, intention to purchase, relevance of the advertised product to daily lives, usefulness of the ad in guiding consumers to purchase, and perceived credibility of the claim. The results claimed that all mentioned factors positively affected green purchase intention of Chinese consumers. The framework which presented by [24], [35], obviously, needs to be expanded and investigated more from an individual aspect, as it had been done in conventional advertising appeals. Advertising claims and attitude toward the ad were dominated in green advertising research. Using appeals in green ads needs to be updated to catch up with changes and advancement in present advertisements.

III. RESEARCH METHOD

A. Experimental Stimulus

First, green print advertising images were drawn from the internet using the key words – green print ad, green print ads, green print advertising, green advertisements, sustainable advertising, eco-friendly ads, and environmentally friendly advertising. Overall, these searches resulted in a countless number of green advertisements. It was important to narrow down the number of ads by using the Google search tool, a large size image option, in order to have high resolution images. With this large size image option, an enormous number of ads were still generated, nevertheless, with better quality images and higher resolution than a regular search. With vibrant images, it enhanced the ability of the respondents to decode the messages of the ads clearly.

The potential advertisements were examined based on the links which included many details of the ads, such as, type of the ad, when it was released, where it was launched, name of the advertiser and advertising agency, and so on. To shortlist the potential ads into a manageable set, the ads which did not deliver green messages noticeably and clearly, e.g., unauthorized ads, mock ads, and ads with indistinct environmental claims, were eliminated, as well as those regarded as violent and racist ads. Also a series of ads with two or more similar content were eliminated into just one or two ads. To be more international in this study, the real ads also targeted audiences and consumers from many different countries, Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Ireland, Israel, Malaysia, Singapore, Spain, Switzerland, United Kingdom, United States – and those that were global. However, to simplify the interpretation of the ads, only English-language ads were selected.

To be more updated in the study, the ads were relatively recent. This process resulted in a set of 40 advertisements. Then, forty real green print advertisements were divided into two types based on criteria adapted by [45]. The first type was product/service orientation addressing the green appeals that a product or service possessed and the second type were organizational image orientation addressing the activity to promote a green lifestyle without highlighting a product or service. There were twenty-two product/service orientation ads and eighteen organizational image orientation ads. The reason for the two types of advertisements were that the product/service orientation eventually aimed to sell their products and services while the organizational image orientation aimed to get an audience's attention and ultimately influence them to change their behaviors toward more green behaviors. The aim of dividing into two types was to investigate the similarity and the differences of the appeals the ads shared. The set of forty real ads was printed in color and in full page size to enhance readability. The green ads were put together in one booklet ordered with product orientation first and followed by organizational image. As mentioned earlier, because there were two sets of advertisements, events under the same theme were spread out and randomly sorted with other ads to avoid repetitive judgment.

B. Content Analysis

The next step was to create an exhaustive list of appeals by examining each ad and determining the appeals based on the ads themselves and green advertising and advertising literature. This process resulted in a set of thirty-four appeals in which ten appeals were derived directly by examining the ads without literature support, whereas, twenty-four appeals were derived by examining the ads with marketing literature support. Lastly, the list of thirty-four appeals was compiled into a 2-page evaluation sheet along with the instructions and basic demographic questions.

C. Sample and Matching Green Ads with Appeals Process

This process was employed by thirty highly educated participants with different backgrounds. They were asked individually to select three appeals out of thirty-four found in each forty real advertisement. Based on a psychological process and selective attention, the participants were expected to have an exceptional ability to filter out unwanted appeals. Despite such selective attention, this process allowed individuals to select the wanted or likable appeals while filtering out a range of others. A face-to-face session and snowball sampling were used in this stage. The advantage of meeting in person was that a participant could clearly see the visual material of the green ads and perform the evaluation individually with no time frame so that each participant did not feel any pressure during the task. Because the green advertisements were different from conventional advertisements in terms of messages and coding processes, they needed more time to be decoded and were a slight challenge for the participant to decode in one time period. However, the snowball sampling allowed the study to be determined by highly educated participants as they further referred the appropriate persons throughout their groups to take part in this study.

The summary of the characteristics of the sample is 40% male, 60% female; 16.67% aged less than 25 years, 30% aged 25-30 years, 36.67% aged 30-35 years, and 16.67% aged 35 years and above; 10% did not complete higher education, 10% Bachelor, 20% Master, and 60% Doctoral. The participants also had multinational backgrounds from eleven different nationalities, to better evaluate multinational green advertisements. The participants were handed a 2-page sheet with a list of 34 appeals and a booklet that showed one ad at a time. They were briefed on the purpose and procedures of this study and were instructed to examine and evaluate each of the 40 ads. The task was "in your opinion, please identify three appeals that truly define each ad". Each participant took approximately 40 – 60 minutes to complete the task.

D. Frequency Analysis and Two – Step K-Mean Clustering

Frequency analysis showed which appeals were identified most often by participants as being represented in the advertisements. K-means clustering algorithm [49] is a classification technique in data mining as it partitions a set of objects into groups that objects in the same group are more similar to each another than those in different group based on certain predefined criteria [50]. Afterward, a two–step by k-mean clustering was performed by the Weka statistical program to divide data into the same groups. The data were first divided into two groups, then, the high frequency group was divided again into three groups for better analysis. The above steps were also used for each ad orientation.

TABLE II
K-MEAN CLUSTERING RESULTS

Product Orientation		
Appeals	Frequency	Cluster
Believable	88	1
Colorful	77	1
Corporate image	127	0
Cute	75	1
Educational content	88	1
Eye-catching graphics	122	0
Imaginative	115	2
Informative	145	0
Interesting	107	2
Natural	125	0
Meaningful	87	1

Organizational Image Orientation		
Appeals	Frequency	Cluster
Aggressive	44	2
Clever	72	1
Depressed	90	0
Educational content	63	1
Exaggerated	63	1
Eye-catching graphics	116	0
Guilt	66	1
Imaginative	121	0
Interesting	78	1
Meaningful	95	0
Motivate	77	1
Sad	99	0
Shocking	59	2

IV. RESULTS AND ANALYSIS

For product orientation, the first step K-mean clustering procedure resulted in 11 usable and 23 unusable appeals and for organizational image orientation; there were 13 usable and 21 unusable appeals. The usable appeals were then clustered again into three groups, which are presented in Table II.

Consider from Table II, most frequencies of cluster 1 are lower than the frequencies of cluster 0. Thus, all 8 appeals in cluster 0 illustrated as perceived appeals that participants want to see in the ads. These appeals in both orientations are corporate image, depressed, eye-catching graphics, imaginative, informative, meaningful, natural, and sad.

V. DISCUSSION

Frequency analysis shows which appeals were identified most often by participants as being represented by the advertisements. Based on the results, there were some interesting findings. In product orientation ads, negative appeals such as depressing, dirty, fear, sad and shame appeals were not frequently identified by the participants, in contrast, the same appeals were more widely identified in organizational image orientation ads. Like consumer products, green products are generally for personal, family, or household use and more importantly for physical consumption (eaten, applied e.g. skin-contact). Using negative appeals in the ads may discomfort the consumers to imagine that these sad, depressed, fear/scary, or shocking dummy incidents would happen to them or their family members if they do not use the advertised products.

It could imply that the appeals themselves were not likable, however, for organizational image orientation ads, they actually delivered the messages and the consumers really intended to purchase them.

Interestingly, corporate imaging and informative appeals were very frequently identified for all product orientation ads, in contrast, they were the least identified appeals in organizational image orientation ads. Meaningful appeal was the only one that was identified across all ads. Eye-catching graphics and imaginative were also highly used together in the same ad and in both orientations. In contrast, aggressive, hopeless, intrusive, safe, shame, surprise and surreal appeals were the least identified across all ads. Moreover, this study shows that there was some similarity in appeals, as educational content and informative, guilt and shame, depressed and sad, and, fear and scary was highly identified together in the same ads. K-mean clustering results revealed that eight appeals, corporate image, eye-catching graphics, imaginative, informative, meaningful, natural, and sad, as reported in Table II, are being familiar, likable, attractive, or attended in some sense or another to the participants. The eye-catching graphic appeal was highly selected in both product and organizational image orientation. The literature [51] implied that using an eye-catching graphic appeal not only caught viewers' attention, but also conveyed competence or professionalism. The literature also suggests that the use of eye-catching graphics on the webpage facilitates in presenting

something more appealing and attracts viewers to click on and to read the rest of an article [21]. Clearly, from this study, eye-catching graphics are able to enhance creative ideas into something that would grab immediate attention and enhance recall of the ad.

For product orientation ads, which focus on selling a product or service, corporate image, informative, and natural appeals are also highly selected. Undoubtedly, corporate image has been acknowledged by many researchers as it is believed that a firm's image influences its advertising in positive ways and that the advertising influences the company image as well. Likewise, informative advertising is commonly desirable because it seems rational enough and helps reduce product differentiation when making decisions. Information still plays an important part in the ad as a trustful source of communication. For natural appeal, it highlights a sense of well-being, emphasizing the goodness of natural products and ingredients. When designing a product orientation ad, green marketers should take corporate image, informative, and the natural appeal into consideration so that the overall green message will come through. For organizational image orientation ads, which associates an organization with a green cause or activity for which there is broad-based public support, depressed, imaginative, meaningful, and sad appeals were largely chosen by the participants. Interestingly, depressed appeal had been used briefly in marketing research and rarely used in advertising research as it represented negative emotions to viewers. However, the study of [31] asserted that negative and positive feelings made unique contributions. Similarly, a sad appeal has a strong negative emotional appeal in the ad and evidence was found to be used in green advertising. However, because organizational image orientation advertising associates an organization with a green cause or activity for which there is broad-based public support, these organizations may occasionally come up with the themes of using invasive species, extinct animals, predicted disaster or unimaginable disaster. These unconventional themes may need special appeals to deliver the message; therefore, these two appeals can be other alternative appeals to consider as it showed promising outcomes in this study. On the other hand, backed by [16] in understanding advertising effects, imaginative appeal contributed positively to attitude toward the ad. For green advertisements, consumers might need a little more imagination to help them see why the product or service in the ad is better than a customary one. Lastly, meaningful appeal frequently expresses an emotion or idea without words and sometimes illustrates real importance or value of being green. As environmental concerns have surfaced, the emergence of the world sustainability challenge has brought about changes in consumers around the world in buying intention towards green products. These findings may be useful for green marketers in order to capture a new way of creating successful advertisements.

VI. LIMITATIONS AND FUTURE RESEARCH

Because this study focused on extensive appeals in forty green advertisements, the lack of in-depth literature and investigation for each appeal may omit some important findings. Although this study used international green advertising to assess green consumers in the U.S., it did not showcase enough internationalism in the study. As a result, the findings may not represent a strong enough appeal to be used in green advertisements for green consumers in other countries. This study has a possibility to be additionally examined in an international platform.

In order to help advance green marketing, an emphasis on advertising and related mechanisms is very crucial. Future studies may investigate in greater depth of just one interesting appeal in different types of green products and services. Also, there were countless studies that confirmed the effectiveness in using positive appeals in advertisements, unlike negative appeals, the effectiveness remains contradictory, thus, future studies need to examine to what degree advertisers could go with those appeals to reach a comfortable level without going beyond a comfortable level. Moreover, there is a need to examine how effective each appeal relates to attitude toward the ad, attitude toward the product and purchase intention for a green product, service, and campaign.

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