

A Content Analysis of Green Advertising Claims in Korea

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Abstract

This research examined the use of green advertising claims in Korean print advertisements. A content analysis was done for 18,671 environmental claims made in Korean advertising from 2013 to 2015. Each advertisement was coded according to five categories: green advertising, advertising type, green claim type, advertiser type, and product type. During this period, the study showed that only 0.8% of Korean print advertisements used environmental appeals. Green ad appeals in Korean advertisements were used to promote image, product quality, and public, in that order. The results of the study suggest that even though green issues are increasingly important in Korean society, there has been a lack of green advertising claims in Korean print advertisements. The findings of this research offered researchers a unique view of this field and some directions for future study in the field of green advertising appeals in print advertisements.

Keywords: Advertising in Korea, Advertising Messages, Content Analysis, Environmental Ad Claims, Green Advertising

1. Introduction

As green marketing communications have become a dominant issue for corporations¹, studies on this topic have increased since the 1990s. The Journal of Advertising, one of the major advertising journals, dealt with the topic of green marketing in 1995 and again with a special edition in 2012. While content analysis studies on green advertising have decreased, studies on the effectiveness of green advertising have been increasing since the 1990s. In this study, we examined the characteristics of green advertisements in Korea and compared these characteristics with the results of previous studies.

1.1 The Definition of Green Advertising and Green Claims

The definition of a green ad can vary within the wide scope of what is meant by “green”¹. Banerjee² defined green advertising as any ad that meets one or more of the following criteria: explicitly or implicitly addresses the relationship between a product/service and the biophysical environment; promotes a green lifestyle with

or without highlighting a product/service; or presents a corporate image of environmental responsibility. Based on this definition, green advertising consists of advertising that claims the advertised product or corporation is environmentally friendly, whether the claim is true or not.

There are five categories of environmental advertising claims³. These consist of: the product orientation claims are focused on the environmentally friendly attributes that a product possesses (e.g., ‘This product is biodegradable’); the process orientation claims regard an organization’s internal technology, production technique, and/or disposal method that yields environmental benefits (e.g., ‘Twenty percent of the raw materials used in producing this good are recycled’); the image orientation claims associate an organization with an environmental cause or activity for which there is broad-based public support (e.g., ‘We are committed to preserving our forests’); the environmental fact claims involve an independent statement that is ostensibly factual about the environment at large or its condition (e.g., ‘The world’s rainforests are being destroyed at the rate of two acres per second’); and the combination claims reflect multiple facets¹. Based on

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this study, Chan⁴ used the same categories; Lee and Jeong⁵ used the categories of product, image, and environmental fact; Kim⁶, Son⁷, and Choi⁸ used the categories of substantive and associative. Substantive green ad claims included product-oriented or process-oriented claims that present tangible benefits, whereas associative claims included image-oriented or environmental fact-based claims that were intangible and unrelated to the product or corporation advertised.

1.2 A Content Analysis of Green Advertising

Previous content analysis research on green advertising has focused on the construct of the green elements within their framework. Three major categories have been identified: source characteristics: advertiser or ad goal; message: green claim, green appeal, level of greenness, or green issues; and consumer behavior.

Banerjee, Gulas and Iyer² employed a convenience sample of 173 green print ads and 95 green TV ads. Using content analysis methods, the authors identified the structure of green advertising in three ways: sponsor type (for-profit vs. nonprofit organization); the focus of the ad (advertiser-oriented vs. consumer-oriented); and the depth of the greenness (shallow, moderate, or deep, depending on the extent of the environmental information mentioned). Many advertisers in the sample attempted to project a green corporate image, instead of focusing on the environmental benefits of their products or services.

Iyer⁹ conducted a green content analysis of 173 print advertisements. The results of this study showed that green appeal was more frequently used in corporate image-based ads than in product or service ads. In this study, there were four broad items in the main taxonomy: advertising target, advertising objective, economic chain, and advertising appeal. These are defined as follows: ad target - to identify the target of the ad; ad objective - to identify whether the ad promoted a corporate image or the product/service itself; economic chain - to identify the different activities involved in the closed loop of an economic system; and (4) ad appeal: to categorize the type of appeal employed in the ad.

Carlson³ employed a content analysis of print advertisements to examine environmental advertising claims, and identified the claim type classification system (product, process, image, and environmental fact) and the misleading/deceptive categories (vague/ambiguous,

omissions, false/outright lie, and acceptable). With these two classification schemes, they presented more claims that contained elements that were misleading or deceptive rather than claims that contained elements that were deemed acceptable. The researchers also found that more claims were classified as image enhancing and fewer claims were classified as process-oriented.

Davis¹⁰ examined the characteristics of specific environmental claims. Specific environmental claims present real benefits. The study classified the claims into specific, neutral, and vague categories by level of specificity. The study concluded that consumers were most likely to have a positive response to environmental advertising that presents specific, detailed information on a product's real and meaningful environmental benefit.

There have been three studies of green content analysis in Korea, shown in Table 1.

The present study assumes the matrix of green claims, source type, and product type. We intended to address the following general research questions:

RQ1: What are the frequency and the proportion of green advertising in Korea?

1.1. What is the frequency of green advertisements in Korea?

1.2. What is the frequency of green advertisements by advertising type?

1.3. What is the frequency of green advertisements by advertiser type?

1.4. What is the frequency of green advertisements by product type?

RQ2: What are the frequency and the proportion of green claim types in Korea?

2.1. What is the frequency of green claim types?

2.2. What is the frequency of green claim types by advertising type?

2.3. What is the frequency of green claim types by advertiser type?

2.4. What is the frequency of green claim types by product type?

2. Methods

2.1 Sample

Using the same method as Oh¹¹, we collected samples of printed material published in Korea from the Advertising Information Center (www.ad.co.kr). We decided to focus on print ads for the same reasons as in Iyer⁹. First, the print medium accounts for a larger volume of advertis-

Table 1. The units of analysis

	Unit of analysis		Unit of Coding
Lee (1999)	Type		Product, corporate, not specific, include the word 'green', event
	Goal		Product/service, corporate image, consumer behavior
	Topic		The atmosphere, soil, water pollution, not specific, etc.
	Strategy		Emotional appeal, rational appeal, corporate image appeal
	Specificity		Not specific, common, specific
	Proof		Specific proof, no proof but claim, no proof and no claim
	Visual/Expression		People, animals, plants, graphics, etc.
Oh (2006)	Format	Advertiser type	For-profit corporation, public service institution, retailer, service provider, etc.
		Product type	Groundsill, food/beverage, cosmetics, etc.
		Green position	Product name, visual, headline/copy, product name + visual, etc.
		Message focus	Product/service, corporation, consumer behavior, sponsor
	Content	Topic	The atmosphere, soil, water pollution, energy problem, etc.
		Goal	Product/service attributes, corporate image, public interest, image
		Claim type	Green product, green process, green image, green fact, etc.
		Product lifecycle	Raw, process, distribution, consume
		Visual	Men/women, children, character, animal, product, nature, etc.
		Appeal type	Emotional, rational, CSR, etc.
	Level of expression	Not specific, common, specific	
Lee and Jeong (2012)	Ad type		Corporate image, product, public service
	Product type		IT, fashion/sports, etc.
	Topic		The atmosphere, soil, water pollution, energy problem, etc.
	Ad goal		Product/service attributes, corporate image, public interest, image
	Claim type		Product, process, corporate image, product image, fact
	Visual		Men/women, children, character, animal, product, nature, etc.
	Appeal		Emotional, rational, fear-based, ethical
	Position		Product name, visual, headline/copy, product name + visual, etc.

ing than any other medium, including television, radio, or outdoor. Second, a broader range of advertisers use print ads, including small businesses and local businesses⁹.

The timeframe of the analysis was January 2013 to January 2015. The starting year, 2013, was chosen based on other domestic researchers' dates. Lee¹² collected print medium samples from AD Brain, a monthly print collection magazine, from 1996 to 1997. Oh¹¹ collected print and

television media samples from the Advertising Information Center's online site, from 1970 to 2004 in five-year increments. Lee and Jeong⁵ studied the television medium, using 2011 on air data from the TVCF site. The year 2013 was the right before this study. The end year of the timeframe, 2015, was selected to use the most up-to-date information on Green advertising. We analyzed 18,671 print advertisements from the Advertising Information Center website.

2.2 Analytical Framework and Measurements

To better discern the research questions, we analyzed the units of analysis, as shown in Table 2. Each advertisement was coded according to five categories: green advertising, advertising type, green claim type, advertiser type, and product type.

2.2.1 Green Advertising

Advertising that claims that the advertised product or corporation is environmentally friendly or that their production process conserves resources and energy. Advertisements were classified as a green ad or as a non-green ad, based on this definition.

Table 2. The number of samples in experimental design

Unit of analysis	Coding units	Operational definitions
Green advertising	1. Green ad 2. Non-green ad	1. ad that claims the advertised products are environmentally friendly or that their production process conserves resources or energy 2. all ads exclusive of green ads
Advertising type	1. Product or service ad 2. Corporate image ad 3. Public service	1. ad for product or service 2. ad for corporate image 3. ad for public interest
Green claim type	1. Substantive 2. Associative 3. Combination	1. product and process oriented claims 2. image and environmental information oriented claims 3. mixed
Advertiser type	1. Conglomerate 2. Small or medium-sized enterprise 3. Public service institution	1. two or more corporations under one corporate group 2. personnel numbers below certain limits 3. national institution for public service
Product category	Followed the industry categories	1. groundsill 2. industrial machinery 3. transportation 4. chemistry/energy 5. real estate/architecture 6. finance/insurance 7. service 8. cosmetic/health 9. fashion 10. education/welfare 11. electric 12. IT 13. housewares 14. food 15. distribution 16. pharmaceutical 17. leisure

2.2.2 Advertising Type

Advertisements address different goals of the advertisers. There is advertising that promotes a product or a service, corporate advertising to promote a corporate image, and public service advertising from the government, to increase public interest. Green appeal advertising is categorized in the same fashion. Advertisers highlight the environmental benefits of their products or services to tap the green segment of their consumers. Alternatively, advertisers can strive to portray an image of corporate environmental responsibility as part of their overall company image enhancement². That is, product or service advertising uses green appeal to promote a product or service. Corporate advertising uses green appeal to promote a corporate image of environmental responsibility. In public service advertising, the government uses green appeal to advertising information in the public interest, such as environmental conservation.

2.2.3 Green Claim Type

Regarding previous studies, this study categorized environmental or green claim types into the following categories: substantive environmental claims, associative environmental claims, and combination claims. A substantive claim represents the tangible benefits of using a green product or corporation while an associative claim shows benefits that are intangible and unrelated to the product. A combination claim contains both substantive and associative claims.

2.2.4 Advertiser Type

The advertiser can be categorized according to the size or characteristics of their company. A conglomerate, in which there are two or more corporations under one corporate group, tends to advertise more than small or medium-sized enterprises. This study explored if this concept was also applicable to the use of green appeals. As environmental issues increase, public service institutions do not limit their use of green claims to environmental conservation related campaigns.

2.2. Product Type

We followed the product categories represented on the Advertising Information Center website. It categorized the product, service, or company being advertised into 17 types.

2.3 Coder Reliability

Each green advertisement was coded following the five main categories shown in Table 2. Before the main coding, two trained coders read the protocol and independently examined 50 randomly selected sample advertisements. The two coders were in 92% agreement on the unit of analyzes, except on the definition of green advertisements. The reason for this was the analysis units tended to be objective on the definition of green. To solve this problem, we discussed and specified the definition with the coders. For example, in the case of an environmental claim about organic raw materials, we decided whether or not it is helpful as an environmental solution according to the operational definition in this study. The two coders coded the advertisements on the website, following the coding protocol.

2.4 Statistics Used

To test the research question, frequency and cross-tab analyses were employed with SPSS. Frequency analysis was used to test hypotheses 1.1 and 2.1. Cross-tab analysis was used to test hypotheses 1.2, 1.3, 1.4, 2.2, 2.3, and 2.4.

3. Results

3.1 Test Results

<H1> was intended to discern green advertising by the characteristics of the advertisements, the advertiser, and the product. To test <H1-1>, 18,671 advertisements were examined from the period spanning January 2013 through January 2015. The proportion of green advertisements, <RQ1-1>, was only 0.8%, consisting of 150 green ads and 18,521 non-green ads.

The frequency of green advertising types, <RQ1-2>, was 62 corporate ads (41.3%), 60 product ads (40.0%), and 28 public service ads (18.7%).

<RQ1-3>, the frequency by advertiser type, was conglomerate (n=65, 43.3%), medium or small firm (n=30, 20.0%), public service institution (n=55, 36.7%).

The frequency by product category, <RQ1-4>, was chemistry or energy (n=38, 25.3%), education or welfare (n=23, 15.3%), groundsill (n=14, 9.3%), transport (n=11, 7.3%), real estate (n=10, 6.7%), housewares (n=10, 6.7%), cosmetic or health (n=9, 6.0%), distribution (n=7, 4.7%), electric (n=5, 3.3%), food (n=5, 3.3%), fashion (n=4, 2.7%), finance (n=3, 2.0%), service (n=3, 2.0%), ICT (n=3, 2.0%), pharmaceutical (n=2, 1.3%), leisure (n=2.0, 1.3%), and industrial machinery (n=1, 0.7%).

<H2> was intended to discern green ad claims by the characteristics of the advertisements, advertisers and products. The frequency of green claim types, <RQ2-1>, was 87 substantive (58.0%), 49 associative (32.7%), and 14 combination (9.3%).

Table 3 shows <RQ2-2>, green claim type by ad type ($\chi_2=29.038$, d.f.=4, $p=.000$). While substantive claim type was the prevalent product ad type, associative claim type was used more often for corporate image than for product image.

Table 4 explains <RQ2-3>, the green claim type by advertiser type ($\chi_2=25.808$, d.f.=4, $p=.000$). While public service institutions used all environmental claim types, conglomerates and small or medium corporations used substantive green claims more frequently.

As shown in Table 5, as to <RQ2-4> of claim type by product type ($\chi_2=59.206$, d.f.=32, $p=.002$), the results were as follows: chemistry/energy ($n_{sub}=21$, 14.0%; $n_{ass}=9$, 6.0%; $n_{comb}=8$, 5.3%), education/welfare ($n_{sub}=6$, 4.0%; $n_{ass}=15$, 10.0%; $n_{comb}=2$, 1.3%), groundsill ($n_{sub}=10$, 6.7%; $n_{ass}=3$, 2.0%; $n_{comb}=1$, 0.7%), transport ($n_{sub}=6$, 4.0%; $n_{ass}=5$, 3.3%;

Table 3. Green claim types by ad types

Claim types	Ad types			Total
	Product	Corporate image	Public service	
Substantive	49 (32.7%)	31 (20.7%)	7 (4.7%)	87 (58.0%)
Associative	9 (6.0%)	25 (16.7%)	15 (10%)	49 (32.7%)
Combination	2 (1.3%)	6 (4.0%)	6 (4.0%)	14 (9.3%)
Total	60 (40.0%)	62 (41.3%)	28 (18.7%)	150 (100%)

Table 4. Green claim types by advertiser types

Claim types	Advertiser types			Total
	Conglomerate	Medium or small	Public service	
Substantive	49 (32.7%)	18 (12.0%)	20 (13.3%)	87 (58.0%)
Associative	15 (10.0%)	11 (7.3%)	23 (15.3%)	49 (32.7%)
Combination	1 (0.7%)	1 (0.7%)	12 (8.0%)	14 (9.3%)
Total	65 (43.3%)	30 (20.0%)	55 (36.7%)	150 (100%)

Table 5. Green claim types by product types

Product types	Green claim types			Total
	Substantive	Associative	Combination	
Chemistry/energy	21 (14.0%)	9 (6.0%)	8 (5.3%)	38 (25.3%)
Education/welfare	6 (4.0%)	15 (10.0%)	2 (1.3%)	23 (15.3%)
Groundsill	10 (6.7%)	3 (2.0%)	1 (0.7%)	14 (9.3%)
Transport	6 (4.0%)	5 (3.3%)	0 (0%)	11 (7.3%)
Real estate	9 (6.0%)	1 (0.7%)	0 (0%)	10 (6.7%)
Housewares	8 (5.3%)	2 (1.3%)	0 (0%)	10 (6.7%)
Cosmetic/health	8 (5.3%)	1 (0.7%)	0 (0%)	9 (6.0%)
Distribution	3 (2.0%)	4 (2.7%)	0 (0%)	7 (4.7%)
Electric	5 (3.3%)	0 (0%)	0 (0%)	5 (3.3%)
Food	1 (0.7%)	2 (1.3%)	2 (1.3%)	5 (3.3%)
Fashion	2 (1.3%)	1 (0.7%)	1 (0.7%)	4 (2.7%)
Finance/insurance	0 (0%)	3 (2.0%)	0 (0%)	3 (2.0%)
Service	2 (1.3%)	1 (0.7%)	0 (0%)	3 (2.0%)
ICT	3 (2.0%)	0 (0%)	0 (0%)	3 (2.0%)
Pharmaceutical	2 (1.3%)	0 (0%)	0 (0%)	2 (1.3%)
Travel/leisure	0 (0%)	2 (1.3%)	0 (0%)	2 (1.3%)
Industrial machinery	1 (0.75%)	0 (0%)	0 (0%)	1 (0.7%)
Total	73 (61.3%)	32 (26.9%)	14 (11.8%)	119 (100%)

$n_{comb}=0, 0\%$), real estate ($n_{sub}=9, 6.0\%$; $n_{ass}=1, 0.7\%$; $n_{comb}=0, 0\%$), housewares ($n_{sub}=8, 5.3\%$; $n_{ass}=2, 1.3\%$; $n_{comb}=0, 0\%$), cosmetic/health ($n_{sub}=8, 5.3\%$; $n_{ass}=1, 0.7\%$; $n_{comb}=0, 0\%$), distribution ($n_{sub}=3, 2.0\%$; $n_{ass}=4, 2.7\%$; $n_{comb}=0, 0\%$), electric ($n_{sub}=5, 3.3\%$; $n_{ass}=0, 0\%$; $n_{comb}=0, 0\%$), food ($n_{sub}=1, 0.7\%$; $n_{ass}=2, 1.3\%$; $n_{comb}=2, 1.3\%$), fashion ($n_{sub}=2, 1.3\%$; $n_{ass}=1, 0.7\%$; $n_{comb}=1, 0.7\%$), finance/insurance ($n_{sub}=0, 0\%$; $n_{ass}=3, 2.0\%$; $n_{comb}=0, 0\%$), service ($n_{sub}=2, 1.3\%$; $n_{ass}=1, 0.7\%$; $n_{comb}=0, 0\%$), ICT ($n_{sub}=3, 2.0\%$; $n_{ass}=0, 0\%$; $n_{comb}=0, 0\%$), pharmaceutical ($n_{sub}=2, 1.3\%$; $n_{ass}=0, 0\%$; $n_{comb}=0, 0\%$), industrial machinery ($n_{sub}=1, 0.75\%$; $n_{ass}=0, 0\%$; $n_{comb}=0, 0\%$).

4. Conclusions

This study was an exploratory attempt to categorize green advertisements in Korea. The research questions sought to discern the frequency of green advertisements according to their source, message, and product characteristics. To summarize, our results indicated that green advertise-

ments made up only 0.8% of the total advertisements in Korea. For the characteristics of the advertisements, a green appeal was used to promote image, product, and public, in that order. While the proportion of substantive green claims and associative green claims was similar in corporate image ads, substantive claims were more frequent than other claims in green product advertisements. These results showed that recently, Korean corporations have used green appeal in advertisements not only to promote products but also to promote their corporate image. When companies in the chemistry and energy categories advertise product characteristics of the brands, they frequently used environmental appeals. These advertisers deal with environmental issues and renewable energy products, such as solar energy. As for advertiser characteristics, conglomerates used green appeal more than public service institutions or small or medium-sized corporations.

The implications of this study are summarized as follows: First, there has been a lack of green advertising content analysis in South Korea. Only three studies have been done on this topic in the past. When we consider its widespread use, more studies are needed on environmental advertising. Second, our findings showed the changes in green advertisements compared to the results of previous studies. The data revealed a significant change in the use of green advertising in Korea. That is, while green advertising was used to promote products in previous studies, we found in our study of more recent print advertisements that the green advertising was used more often to promote the corporate image. In product advertising, substantive environmental claims were used more than associative claims.

This research is limited in several ways. First, this study analyzed a limited number of years of green advertisements in Korea. Thus, the results of this study have limitations when generalizing green advertising trends in Korea. In future studies, the time span should be extended to more than 30 years to raise the reliability and the validity of the study. Longitudinal analysis of green advertising content has the potential to uncover ad claims reflected in advertising, a process not captured by general analysis.

Second, this study only involved print advertisements. As such, it does not provide evidence on the generalizability of the results to broadcast advertising or to other types of advertising in the use of green appeals in Korean advertising. Unlike in print advertisements, television advertisements might be especially likely to feature indig-

enous green appeals because television advertising is a more visual medium. If that is the case, then this study on print ads may have underestimated the uses of green appeals in Korean advertising. Therefore, in future studies, it is recommended to extend the types of an advertising medium.

5. References

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