ARTICLE IN PRESS

JBR-07662; No of Pages 7

Iournal of Business Research xxx (2012) xxx-xxx



Contents lists available at SciVerse ScienceDirect

Journal of Business Research



Green marketing' functions in building corporate image in the retail setting

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ARTICLE INFO

Article history:
Received 1 November 2010
Received in revised form 1 July 2011
Accepted 1 September 2011
Available online xxxx

Keywords: Corporate image Green marketing Product image Retailing Korea

ABSTRACT

This study explores the relationship among green marketing, corporate image, and purchase intentions in the retail setting from a consumer perspective. A total of 389 usable questionnaires are obtained from female consumers who are major customer at the selected retailer (e.g., department stores) in Seoul, Korea. Data analysis was conducted using confirmatory factor analysis and structural equation modeling via LISREL 8.8. Findings confirm that corporate images consist of three factors: social responsibility, product image, and corporate reputation. In an estimated model, the green marketing has a direct effect on the social responsibility and product image. In particular, the factor of social responsibility plays an important role as mediator in the effect of green marketing on product or corporate reputation. Of the three factors of corporate image, product image and corporate reputation have a direct effect on purchase intentions, whereas social responsibility has an indirect effect on purchase intentions in the retail setting. This study discusses managerial implications for a strategic marketing performance through building corporate images on a basis of green marketing.

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1. Introduction

Today, the world challenged by the disrupting ecosystem concerns about how to utilize environmental and natural resource for accelerating industries with "green" engine. Accordingly, consumers become more socially responsible to the environment, which leads to socially responsible consumption, such as saving energy, buying eco-labeled products, sorting waste or recycling ("Green marketing", 2010; Haanpää, 2007; Hartmann & Apaolaza-Ibáñez, 2009). As more businesses trade in foreign countries, they see the need to establish their reputation as good citizens in engaged countries (Chapple & Moon, 2005). Further, the increase in global business watchdogs (e.g., NGOs and ethical investment firms) and in standards of business practices has forced companies to be more involved in CSR in the global marketplace (Chapple & Moon, 2005).

Likewise, Korea in Asia is one of the leaders taking the initiative and positioning to capitalize on a shift in policy and growing consumer awareness for green consumption ("Green purchases", 2009). Particularly, Korean government with vision of "green growth" pays a special attention to environmental sustainability, such as energy saving, green or eco-friendly consumption. Given this situation in the market, more companies than ever before, including department stores such

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0148-2963/\$ – see front matter © 2012 Elsevier Inc. All rights reserved. http://dx.doi.org/10.1016/j.jbusres.2012.11.007 as Lotte, Shinsegae, and Hyundae endeavor to initiate their strategic actions in socially responsible manner with emphasis on the eco-friendly products to facilitate green consumption ("Eco-friendly", 2010; "Lotte Department Store", 2009). The pervasive belief among consumers that green consumption is an imperative in everyday life as well as global communities reflects this trend. Therefore, a consumer's perception of green marketing becomes more critical to sustain a corporate image in a favorable way than that of traditional marketing in the consumer market.

Despite the popularity of green marketing as strategic initiative in Korea, little is known about its impact on consumers' reactions in the retail setting. Several researchers and practitioners in Korea focus mainly on economic condition (e.g., GDP) and its relation to energy efficiency, and industrial CO_2 emissions in manufacturers (Jin, 2007; Kim, 2002; Kim & Seol, 2007; Lim, Yoo, & Kwak, 2009; Oh & Lee, 2004; Park & Heo, 2007). They demonstrate that economic growth supports industrial sustainability practice on a macro basis, implying that an energy conservation issue is feasible without compressing economic growth in the long run. Otherwise, many retailers given green marketing are motivated to act in a socially responsible manner not only for their ethnical obligations but also for marketing performance resulting from consumer response to corporate social responsibility (CSR) initiatives in Korea. Therefore, marketers need to understand the function of consumer's perceived effectiveness in mapping strategic marketing in the retail venue.

From a consumer perspective, one stream of corporate social responsibility (CSR) in literatures and in practices is an understanding of the function of consumers' awareness of green marketing, in which the marketing theme affects corporate identity associated with CSR, and in turn buying products or the intentions of using the

The authors thank Charles R. Taylor, John A. Murphy Professor of Marketing, Villanova School of Business, Seigyoung Auh, Ph.D., Global Marketing, Thunderbird School of Global Management, and JBR reviewers for reading and comments of an early version of this article.

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product (Rios, Martinez, Moreno, & Soriano, 2006; Schwepker & Cornwell, 1991; Wan & Schell, 2007; Yoon & Suh, 2003). Identifying consumers with different sensitivity to environmental matters is argued for building strategic marketing performance (Anderson & Cunningham, 1972; do Paço, Raposo, & Filho, 2009; Ha, 1999); subsequent research studies more empirically approaching to understand the value of green marketing and its impact on consumer's perceptual and behavioral disposition toward a retailer, in turn leading to retail sales (Berens, van Riel, & van Bruggen, 2005; Miles & Covin, 2000; Wan & Schell, 2007).

As perceptual focus on retailer's green marketing, this study explores how green marketing can build corporate image from a consumer's perspective in the selected country (e.g., Korea). Specifically, objectives of this study are to identify underlying dimensions of corporate image as perceived by consumers and to estimate structural relationship among the awareness of green marketing, corporate image, and purchase intention in the retail setting. This study can help retailers map a positioning strategy on green business way to promote corporate identity and culture. Also, this study provides an opportunity to identify the potential success applications into cause-related marketing for socially responsible program at the entry level in the global marketplace.

2. Literature review

2.1. A Korean perspective for green marketing

Traditionally, corporate social responsibility (CSR) is an important issue on environments, human right, labor, consumerism, and community (Rhee, Lee, & Cho, 2005; Shim, 2009; Sung, 2003). As a corporate socially responsibility, green marketing refers to "the holistic management process responsible for identifying, anticipating and satisfying the needs of customers and society, in a profitable and sustainable way" (do Paço, et al., 2009, p.18).

In fact, a topic of green business studies rigorously in Western countries but relatively little focuses on Asia. Especially, consumer's awareness and purchase behavior relevant to social responsibility or ethical behavior are barely discussed in Asia assuming that it is Western phenomenon because the emergence of CSR is a function of economic and social development (Chapple & Moon, 2005). Notably, the Korean economy has been in growth mode since the financial crisis in the late 1990s (Bang, Raymond, Taylor, & Moon, 2005). Since Korea has initiated ethical consumption on the health area in 1946, the country is expanding social responsible consumption to environmental (e.g., eco-friendly product for LOHAS) areas ("From health", 2009).

Several literatures support the Korean consumer's awareness; for instance, Cho and Hong (2009) classify CSR types into philanthropic foundation, monetary donation, and voluntary activities by company employees, cause-related marketing and sponsorship. Of them, Korean consumers have higher awareness of monetary donations (39.9%) and cause-related marketing and sponsorships (28.3%) than the others. Especially, Korean consumers tend to have positive attitude toward CSR activities (Cho & Hong, 2009). In Nam and Yeo (2007)'s study, CSR consists of five categories: economic responsibility, social contribution, environmental protection, community/cultural service, and consumer protection. For those categories, the perception of CSR is not different between companies and consumers. However, consumers' priority to CSR categories is more highly scored than in companies' priority.

Socially responsible purchasing in Korea is an underlying theme by "green consumption" on saving energy or resource, recycling products, and eco-friendly products ("Green purchases", 2009; Hwang & Song, 2008; Yoo & Kwak, 2009). Korean consumers are trying to purchase the products which are able to save energy and resources, and choose the store which provides or rents recycled shopping bag ("Green

purchases", 2009). Environmental concerns and the consumer demand for green products are driving forces behind the resurgence of green marketing, reflecting the importance of consumers' perception in a successful green business.

In this connection, many companies in Korea seek to map competitive strategic thinking and survive in the newly emerging concerns in their marketing decision making. For example, Korean steelmaker Posco has its own "ethical day" on date of 6 and 2 in each month, that is, pronounced like "YoonRhi (Ethics)" in Korean, reflecting philosophy of ethical business for positive effects on the company ("Good firm", 2009). In particular, retailers are actively involved in green campaign on "No plastic shopping bag" and "No flyer" and "labeling low CO2 index" at department stores in Korea ("Eco Lady", 2009). For examples, Lotte department store provides "100% recycle shopping bag" and flyer through online or iPhon in order to save paper. Sinsegae also takes action to promote Green Office Movement for no use of disposable cup and printed paper, or collaboration with designer for eco-bags. Other evidence increasingly suggests that department stores using green marketing actions have a competitive advantage in creating their corporate image in the Korean marketplace.

2.2. Green marketing and corporate image

The idea of a corporate image is a continuing topic of interest among researchers and practitioners for the marketing management. Corporate image refers to the net result of knowledge, beliefs, ideas, feelings, or impressions about an organization (Furman, 2010; Wan & Schell, 2007). The corporate image is inherently a composite product of various factors which reflect and communicate the identity of an organization (Karaodmanoglu & Melewar, 2006; Moon, 2007). The corporate image is often interchangeably with "corporate reputation" and "corporate identity" as customers perceive all aspects of a business (Kang & Yang, 2010; Karaodmanoglu & Melewar, 2006; Keh & Xie, 2009). In the context of green marketing, the concept of corporate image is also relevant to corporate association, in which socially responsible programs strongly affect consumers' attributions of corporate image, and in turn corporate outcome (Berens et al., 2005; Ellen, Webb, & Mohr, 2006). Therefore, an important mission of green business is to establish a favorable corporate image construct determined by consumers.

As a social responsible effort, green marketing can be one of the effective tools to reinforce corporate image because it portrays an image of a company as responsive to the needs of the society. According to Environics International CSR Monitor, corporate social responsibility (49%) is the most important factor affecting consumer awareness of corporate image, followed by brand quality and reputation (40%) and company's fundamentals (32%). Academic studies also offer support for their impact on corporate image or reputation as perceived by consumers (Brown & Dacin, 1997; Fombrun & Shanley, 1990; Maignan & Ferrell, 2004; Sen & Bhattacharya, 2001; Wansink, 1989). For instance, CSR practice has a significant effect on corporate identity, such as corporate expertise and corporate social value (David, Kline, & Dai, 2005). Ellen et al. (2006) also suggests that CSR effort is critical to predict corporate reputation when consumers are familiar with the corporate socially responsible actions.

In addition, CSR association positively influence product or brand evaluation of quality attributes, which lead to overall corporate image (Ko, Taylor, Wagner, & Ji, 2008; Lee, Hsu, Han, & Kim, 2010; Moon, 2007). Especially, product quality still remains the highest priority feature of corporate image in customer care and CSR (Crane, 1997; Sudhaman, 2004). For instance, Lee et al. (2010) confirms that quality attributes have a significant impact on overall corporate image. Similarly, Berens et al. (2005) identify that corporate social responsibility influences product quality and reliability.

With respect to green marketing, literatures may ascribe to the three elements of corporate image encompassing "social responsibility,"

"product quality," and "corporate reputation" from a consumer perspective; corporate image is strongly related to green marketing practice. H1: consumer awareness of green marketing affects corporate image, such social responsibility (H1a), product image (H1b), and corporate reputation (H1c) in the retail setting positively.

2.3. Corporate image and behavioral intentions

Behavioral intention is important in predicting actual purchasing behavior. Numerous studies on corporate image indicate a positive relationship between corporate image and purchase behavior or loyalty (David et al., 2005; Kang & Yang, 2010; Keh & Xie, 2009; Lee et al., 2010; Miles & Covin, 2000). For instance, Herbig and Milewicz (1995) suggests that the more the consumer has favorable corporate image, the more the likelihood the consumer evaluates new product positively, suggesting the importance of corporate image in purchase behavior, Also, consumers' attitude toward corporate image exerts main effects on their brand purchase behavior for automobiles (Hsieh, Pan, & Setiono, 2004). Of corporate image factors, corporate reputation affects consumer behavior, such as customer loyalty and worth of mouth behavior. Especially corporate reputation is more highly related to worth of mouth behavior (Walsh, Mitchell, Jackson, & Beatty, 2009). Otherwise, product-related factor of corporate image is a critical predictor of purchase intention for electronics, insurance, stocks, and automobile (Ha, 1999) in which it may reduce the difficulty of purchase decisions.

Consequently, corporate image likely increases a consumer intention to purchase products that a firm provides. H2: corporate image, such as social responsibility (H2a), product image (H2b) and corporate reputation (H2c) has a direct effect on consumers' purchase intentions of the product in the retail setting.

For the consequence of green marketing, researchers focus on the consumers' perception of corporate image in response to corporate social responsibility activities. Drumwright (1994), for example, reveals that corporate reputation regarding environmental protection significantly influences consumers' decision making to purchase a product of the company in a favorable way. Studies show that consumers' awareness of a company's CSR activities is more likely to have a positive attitude toward that company (Jeong, 2006; Sen, Bhattacharya, & Korschun, 2006; Yoon & Suh, 2003). The awareness can cause the consumer to form a more favorable image with the company which then leads to a greater likelihood that the consumer makes a purchase.

Clearly, consumers exercise their socially responsible consumption in favor of the company (Ramasamy & Yeung, 2008), supporting the notion that green marketing activities are effective in a company's business performance in terms of building corporate image and market sales. H3: corporate image mediates the effect of consumer awareness of green marketing on purchase intentions of the product in the retail setting.

3. Method

3.1. Measure

A self-administered questionnaire was developed based on the existing scales in the literatures. Preliminarily, this study selects a department store as a retailer with CSR initiative for several reasons: first, the department store is opened as the first environmental department "sustainability management" in 2003 and actively involves in the green marketing practices; second, the department store is perceived as leading Korean retail distributors with over 200 million visitors a year; finally, the department store is most familiar with female consumers who visit to shop for products.

From a consumer's perspective, a self-administered questionnaire was developed based on the existing scales in the context of retailing

in Korea. The questionnaire focuses on asking about consumers' awareness of green marketing practice with six items regarding environmental sustainability issues (Kim, 2009), ten items of corporate image encompassing the three aspects of product, social responsibility and overall corporate reputation (Ha, 1999; Ko et al., 2008; Winter, 1986), and the three items of purchase intention for ecofriendly products at the department store. All items were measured on five-point rating scale anchored by "very unlikely," (1) and "very likely," (5). In addition, demographics were included for descriptive purpose.

3.2. Sample and data collection

The sample in this study includes female consumers who are primary customers at the department stores due to rationale that females have concerns with the environment and present proenvironmental behavior more so than males (do Paço, et al., 2009). A total 389 usable questionnaires were obtained from Korean female customers who are aged from 20 to 59 years old. With respect to monthly expenditure on fashion items, 44.2% of respondents spent about \$200–\$500 on average. Also, in the frequency of visits in department stores, the highest percent of respondents was more than 5 times (30.6%), and followed by 3 times (23.6%), twice (19.9%), and once (15.0%), and 4 times (10.6%).

4. Results and discussions

4.1. Corporate image factors

An exploratory factor analysis using principal components factor analysis with varimax rotation is employed to identify underlying dimensions of corporate image. The 10 items result in three factors with eigenvalues of 1.0 or higher, accounting for 70.99% of the total variance in corporate images. A confirmatory factor analysis is conducted to verify the factor structure of corporate image derived from the exploratory factor analysis. The result revealed that χ^2 value is 98.37 with 24 degree of freedom. Alternative fit indexes are within the acceptable range (GFI = .94, AGFI = .88, CFI = .97, RMR = .04). The factor loadings of those indicators range from .70 to .84, which are all significant (p<.001), and *Cronbach*'s alpha of the factors are reliable, ranging from .74 to .81. Accordingly, the three proposed factors of corporate image are valid for further analysis.

For the department store, corporate image as Korean consumers perceive consists of three factors: social responsibility, product image, and corporate reputation. The first factor, "social responsibility," consists of four items regarding socially responsible activities for developing national or community economy, environmental protection, and ethical business. The second factor, "product image," includes three items related to product quality or satisfaction. The third factor, "corporate reputation," contains two items regarding corporate overall image with traditional reputation and global competitiveness.

4.2. Measurement and structural models

4.2.1. Measurement model results

With CFA assessing measurement reliability and validity, all observed indicators were set free by standardizing all exogenous and endogenous latent variables. CFA reveals that the χ^2 value is 300.86 with 108 degree of freedom, which is significant (p<.001). Other fit indices are within acceptable ranges (GFI=.90, AGFI=.86, CFI=.97; RMR=.05). The measurement model presented in Table 1 shows the factor loadings for each construct as statistically significant and greater than .60 (i.e., ranging from .67 to .91, p<.001), and internal consistency reliability (Cronbach's alpha) ranging from .74 to .90. The variance extracted by the items exceeded the recommended level of .50 (Hair, Anderson, Tatham, & Black, 1998), indicating an adequate

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level of convergent validity (Bagozzi & Yi, 1988). Therefore, the measurement model is confirmed to be valid and reliable. Table 2 shows the correlations, means, and standard deviations for the scales.

4.2.2. Structural equation modeling

Following confirmation of the reliability and validity of constructs, a single-stage analysis with simultaneous estimation of both measurement and structural models was conducted. In the structural equation model, the one exogenous construct is awareness of green marketing (ξ_1) , and the four endogenous constructs are three factors of corporate image and purchase intention $(\eta_1 - \eta_4)$ (see Fig. 1). The measurement model includes five indicator (x variables) for the exogenous construct of green marketing and twelve indicators (y variables) for endogenous constructs associated with corporate image and purchase intention.

A structural equation model assesses the hypothesized causal relationship among awareness of green marketing, corporate image, and purchase intentions at the department store. Overall, model fit statistics indicate that the χ^2 value is 522.58 with 112 degree of freedom, which is significant (p<.001). Other fit statistics are not within the range to accept the proposed model (GFI = .84, AFGI = .78, CFI = .95, RMR = .13).

To examine the mediating effect of corporate image, two models are estimated for comparison. The first model posit the corporate image factors as the full mediator between awareness of green marketing and purchase intention, while the second model posits the direct effect of green marketing awareness on purchase intention. The first model was nested within the second (Bagozzi & Yi, 1988). A chi-square difference test is performed to determine whether corporate image fully mediated or only partially mediated the influence of green marketing on purchase intentions. The test suggests that the full mediation Model B proves to be acceptable for the data $(\Delta\chi^2_{~(1)} = 3.2, p > .05)$.

4.2.3. Model modifications

However, because other fit statistics are not highly acceptable (GFI=.84; AGFI=.78, RMR=.13), the modification index is considered to improve the proposed model. We first introduced a path

Table 2Correlation matrix and descriptive statistics.

	GM	SR	PI	CR	PIT	Mean	SD
Awareness of green marketing (GM)	1					2.96	0.97
Social responsibility (SR)	.52	1				3.11	0.80
Product image (PI)	.46	.65	1			3.65	0.84
Corporate reputation (CR)	.39	.65	.77	1		3.64	0.93
Purchase intention (PIT)	.36	.52	.76	.71	1	3.82	0.99

from social responsibility factor to product image ($_{21}$) based on maximum modification index. Model C in Table 3 reveals a decreased χ^2 value of 453.27, which suggests that the overall fit of the model is improved. Comparing Model C to Model B shows that a large change in χ^2 compared to the difference in degree of freedom is significant ($\Delta\chi^2 = 69.31$, df=1, p<.001). Other fit indexes are also improved (GFI=.87; AGFI=.82; RMR=.12).

Still, model fit statistics are not within acceptable range, we consider that the second modification index indicates the existence of a causal relationship ($_{32}$) between product image and corporate reputation. The fit of Model D in Table 3 provides a decreased χ^2 value of 321.64 (df=110, p<.001). The difference between Models C and D is significant ($\Delta\chi^2=131.63,~df=1,~p<.001)$, which implies that the final modified Model D is acceptable. In addition, other indexes are within ranges for accepting the model (GFI=.90; AGFI=.86; RMR=.05) based on recommendation level (Hair et al., 1998). Accordingly, the final revised model is acceptable for hypotheses testing. Results for this model appear in Fig. 1 and hypotheses were tested with the model.

4.3. Hypotheses testing

The structural model illustrated in Fig. 1 shows only significant standardized path coefficients. Consumer awareness of green marketing is significantly related to the social responsibility and product image factors, which significantly affects purchase intention. The estimated model accounts for 62 percept of the total variance in purchase intentions in the retail setting.

Table 1 Measurement model results.

Factors and Items	Factor loadings ^a	Reliability (α)	Extracted variance ^b
Awareness of green marketing		.84	.57
This store distributes eco-friendly published fliers.	.83		
This store deals with clothing products with green labels.	.81		
This store increases sales of brands in eco-friendly products	.68		
This store operates eco-shops to sell eco-friendly products	.76		
There is eco-friendly shopping space in this store.	.67		
Social responsibility		.80	.66
This company contributes to national development.	.76		
This company contributes to development of community.	.82		
This company endeavors to protect environments	.75		
This company is on ethical business management.	.69		
Product image		.81	.65
This company makes an effort to improve customer satisfaction	.81		
The quality of products in this company is excellent.	.84		
The products in this company are trustful.	.80		
Corporate reputation		.74	.82
This company is with historical and traditional reputation.	.79		
This company is with global competitiveness.	.82		
Purchase intentions		.89	.57
Above all, I am willing to buy a product at this store if quality and price are similar with other stores.	.90		
I would like to recommend a product of this store to other people.	.91		
I would like to continue to shop at this store more than other competing stores.	.91		

Goodness of fit statistics: $\chi^2 = 300.86$ (df = 108), p<.001; GFI = .90; AGFI = .86; CFI = .97; RMR = .05.

^a All significant at the level of .001.

^b Calculated as \sum std.loadings²/(\sum std.loadings² + \sum indicator measurement error).

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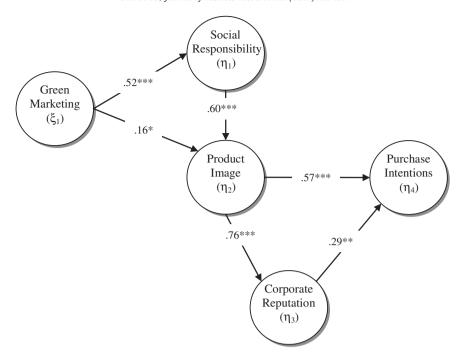


Fig. 1. Structural model for green marketing, corporate image, and purchase intentions. Goodness of fit statistics: $\chi^2 = 306.15$ (df=110, p<.001), GFI=.90, AGFI=.86, CFI=.97; RMR=.04. Note: *p<.05, **p<.01, ***p<.001.

4.3.1. Direct effects

H1 proposes that awareness of green marketing affect corporate image, such as social responsibility (H1a), product image (H1b), and corporate reputation (H1c) positively. As Fig. 1 shows, green marketing has a positive effect on both social responsibility (γ_{11} =.52, t=7.88, p<.001) and product image (γ_{21} =.16, t=2.46, p<.05), whereas the relationship of green marketing to corporate reputation is not significant. Thus, H1a and H1b are supported, suggesting that green marketing practice is more likely to increase corporate image regarding product quality, socially responsible image in a favorable way. Interestingly, awareness of green marketing practice has greater impact on social responsibility than on the other factor.

H2 proposes the effect of corporate image factors on purchase intention for products at the retailer. Of corporate image factors, the factors of product image ($_{41}\!=\!.57,\,t\!=\!5.16,\,p\!<\!.001)$ and corporate reputation ($_{43}\!=\!.29,\,t\!=\!3.06,\,p\!<\!.01)$ significantly affect purchase intentions. Especially, the effect of product is higher than that of corporate reputation on purchase intention. However, the effect of CSR image is not significant on purchase intention. Thus, the findings support H2b and H2c, suggesting the importance of corporate image regarding product quality to encourage purchase intentions in the company.

As Table 4 and Fig. 1 show, green marketing cannot directly drive consumers to purchase a product in the company, but indirectly influences purchase intentions. Rather, positive corporate image formulated by green marketing actions mediates the relationship between green marketing and purchase intention of a product, supporting H3. That is, corporate image plays an important role as mediator in

Table 3Summary of goodness of fit statistics for model modifications.

Model	χ^2	df	$\Delta\chi^2_{(df)}$	GFI	AFGI	RMR
A. Proposed model B. Full mediation C. Model B + 6 ₂₁ D. Model C + 6 ₃₂	525.68*** 522.58*** 453.27*** 321.64***	111 112 111 110	3.2 69.31*** 131.63***	.84 .84 .87 .90	.78 .78 .82 .86	.13 .13 .12 .05

^{***} p<.001.

the relationship between green marketing action and purchase behavior from a consumer perspective.

4.3.2. Total and indirect effects

As Table 4 shows, the final estimated model suggests total and indirect effects of green marketing on corporate image factors. For total effect of green marketing on corporate image, indirect effect of green marketing on product image and corporate reputation is significant. Specifically, the total effect of green marketing on product is .40 (t=7.28, p<.001), but an indirect effect is higher ([$\gamma_{11}X_{21}$]=.36, t=6.27, p<.001) than direct effect (γ_{21} =.16, t=2.46, p<.05) on product image of the company. Considering the total effect of .60 (t=8.15, p<.001) between social responsibility and product image, this result suggests that building CSR image via green marketing is critical to improve a product image of the company.

Also, the findings include a significant indirect effect of green marketing on corporate reputation by the mediating effect of product image and social responsibility image factors ([$\gamma_{21}X_{32}$]+[$\gamma_{11}X_{21}X_{32}$]= .36, t=6.27, p<.001). This finding is consistent with the previous suggestions that customers' perception of CSR actions increases a favorable image of the company (Arnott, 1994; Caudron, 1997; Handelman & Arnold, 1999; Yoon & Suh, 2003). Conclusively, the results emphasize on the great impact of green marketing on building the corporate social responsible image, which eventually leads to increasing corporate product image or corporate reputation.

In total effects on purchase intentions, corporate image factors, such as social responsibility, product image and corporate reputation, are likely to encourage consumers' purchase intentions either in direct or indirect way. Especially, total effect of product image is .79 (t=9.93, p<.001) which is the most great on purchase intentions, followed by the effect of social responsibility image and corporate reputation. Compared with indirect effect, direct effect of product image is more likely to contribute to purchase intention. With respect to social responsibility, indirect effect on purchase intentions via the mediating product image or corporate reputation is significant ([($_{21}$ X $_{42}$) + ($_{21}$ X $_{32}$ X $_{34}$)]=.46, t=7.09, p<.001). This finding indicates that product image is powerful for leading to purchase behavior in favor of the

Table 4Total and indirect effects.

Paths	Total effect (t-value)	Indirect effect (t-value)	Direct effect (t-value)
Green marketing → social responsibility	.52(7.88)***		.52(7.88)***
Green marketing → product image	.46(7.28)***	.31(6.13)***	.16(2.46)*
Green marketing → corporate reputation	.40(6.01)***	.36(6.27)***	.04(0.74)
Green marketing → purchase intention	.36(6.93)***	.36(6.93)***	,
Social responsibility → product image	.60(8.15)***		.60(8.15)***
Social responsibility → corporate reputation	.46(7.09)***	.46(7.09)***	
Product image → corporate reputation	.76(10.30)***		.76(10.30)***
Social responsibility → purchase intention	.43(6.49)***	.47(6.66)***	04(-0.58)
Product image → purchase intention	.79(9.93)***	.22(3.07)**	.57(5.16)***
Corporate reputation → purchase intention	.29(3.06)**		.29(3.06)**

^{*} p<.05.

company, but the factor of social responsibility is crucial to increase perception of product quality or corporate reputation.

5. Conclusions and implications

Within a dynamic environment, corporate social responsibility (CSR) is viewed as an important part of the strategic business actions. This study provides an insight for marketers into mapping an effective marketing strategy by understanding corporate image in conjunction with green marketing performance. This study focuses on green marketing in products and promotions from a consumer perspective. From a Korean perspective, the findings strongly support the concept of corporate image as corporate outcome (Ellen et al., 2006; Melewar, Karasmanoglu, & Paterson, 2005), in which green marketing program is strongly related to corporate images that affect purchase intentions for products in that company. Particularly, green marketing plays an important role in building social responsibility image, suggesting the effectiveness of green marketing actions at the department store to create its CSR image in a favorable way.

In the context of green marketing, corporate image consists of three factors: social responsibility, product image, and corporate reputation. This finding indicates that the consumers perceive corporate image as overall identity in conjunction with product quality and corporate social responsibility aspects. This result supports a concept of Karaodmanoglu and Melewar (2006) that corporate image comprises product of various factors and communicate the identity of an organization. Interestingly, product image is a critical predictor of purchase intention in the retailing setting, supporting that the product-related corporate image makes consumers reduce risks of purchase decision (Ha, 1999; Ramasamy & Yeung, 2008). In addition, corporate reputation strongly affected by product image increases a consumer's purchase intention of the product. Such understanding the effectiveness of green marketing may help consumers have a strong trust toward the company as well as its product quality, ultimately accomplishing business performance in the context of retailing.

From a managerial perspective, this study provides implications for marketers into a strategic application to green marketing in the retail venue (e.g., department store). Although green business is still in infancy in Korea, green marketing program is feasible to be successful in creating corporate image in a positive way. In particular, marketing managers can expect a synergy effect of the CSR image positioning on product quality image, which may be able to promote a "green consumption" and increase retail sale. Thus, marketers should endeavor to reinforce their corporate image or reputations by promoting campaign or events on a basis of social marketing.

Also, socially responsible retailers should make it "green atmosphere" to sustain their existing corporate image or good reputation when selecting supplier or vendor. Considering an optimistic green business with a fashion product in the retailing, especially at the

department store, apparel retailer can develop its brand extension into eco-friendly lifestyle product lines (e.g., recycled clothing, organic cotton, natural dying fabrics, and low CO_2 labeled product), which may create a socially responsible culture in terms of social welfare.

Interpret the findings of this study with caution due to the sampling limitation in a selected country (e.g., Korean, female) in the context of retailing. Researchers should consider quantitative validation testing between multi-groups (male vs. female, experienced vs. inexperienced, consumer vs. retailer) for measuring awareness of green marketing. Future studies are recommended to segment environmental conscious consumers based on demographics and lifestyle over time (do Paço, et al., 2009; Sung & Kincade, 2010). Such studies can expand the hierarchy of CSR business model to improve a strategic marketing performance by considering a word of mouth more than a purchase intention in the marketplaces.

References

Anderson, W. T., & Cunningham, W. H. (1972). The socially conscious consumer. *Journal of Marketing*, 36(3), 23–31.

Anonymous (2009a). Catch "eco lady" ... Distributer's eco-friendly marketing . Kukminilbo. Retrieved Nov. 19, 2009 [Online] Available: http://news.kukinews.com/article/print.asp?arcid=0001557981

Anonymous (2009b). "From health" to environment, evolving good consumption...to society Hani.ac.kr 2009. Retrieved Nov. 19, 2009 [Online] Available at http://hanireporter.co.kr/popups/print.hani?ksn=341285

Anonymous (2009c). Paying premium price for product that "good firm" sell. Nocutnews.co.kr 2009. Retrieved Nov.19, 2009, from http://www.cbs.co.kr/nocut/email/news_print.asp?idx=1300077&gubun=TOP

Anonymous (2009d). Overcome to weather change by "Green purchases" Hwakwang Shinmun 2008. Retrieved Nov. 19, 2009, from http://www.hknews.co.kr/shk01/hk_member/print.asp

Anonymous (2010a). When Korea glance into "eco-friendly" value added fashion. DongA.Com. 2009. Retrieved May 7, 2010 [Online] Available at http://www.donga.com/fbin/output?n=200905190170

Anonymous (2010b). Catch consumers by "green marketing" Sportsseoul. Retrieved May 7, 2010 [Online] Available at http://www.sportsseoul.com/news2/life/social/2010/0411/20100411101050100000000_8189852593.html

Arnott, N. (1994). Marketing with a passion. Sales & Marketing Management, 146(1), 64–68.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94.

Bang, H. K., Raymond, M. A., Taylor, C. R., & Moon, Y. S. (2005). A comparison of service quality dimensions conveyed in advertisements for service providers in the USA and Korea: A content analysis. *International Marketing Review*, 22(3), 309–326.

Berens, G., van Riel, C. B. M., & van Bruggen, G. H. (2005). Corporate associations and consumer product responses: The moderating role of corporate brand dominance. *Journal of Marketing*, 69, 35–48.

Brown, T. J., & Dacin, P. A. (1997). The company and the product: Corporate associations and consumer product responses. *Journal of Marketing*, 61(1), 66–84.

Caudron, S. (1997). Forget image — It's reputation that matters. *Industry Week*, 3(2), 13. Chapple, W., & Moon, J. (2005). Corporate social responsibility (CSR) in Asia: A seven-country study of CSR web site reporting. *Business & Society*, 44(4), 414–441.

Cho, S., & Hong, Y. (2009). Netizens' evaluations of corporate social responsibility: Content analysis of CSR news stories and online readers' comments. *Public Relations Review*, 35(2), 147–149.

Crane, A. (1997). The dynamics of marketing ethical products: A cultural perspective. *Journal of Marketing Management*, 13, 561–577.

^{**} p<.01.

^{***} p<.001.

- David, P., Kline, S., & Dai, Y. (2005). Corporate social responsibility practices, corporate identity, and purchase intention: A dual-process model. *Journal of Public Relations* Research, 17(3), 291–313.
- do Paço, A. M. F., Raposo, M. L. B., & Filho, W. L. (2009). Identifying the green consumer: A segmentation study. *Journal of Targeting, Measuring and Analysis for Marketing*, 17(1) 17–25
- Drumwright, M. E. (1994). Socially responsible organizational buying: Environmental concern as a noneconomic buying criterion. *Journal of Marketing*, 58(3), 1–19.
- Ellen, P. S., Webb, D. J., & Mohr, L. A. (2006). Building corporate associations: Consumer attributions for corporate socially responsible programs. *Journal of the Academy of Marketing Science*, 34(2), 147–157.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. Academy of Management Journal, 33(2), 233–258.
- Furman, D. M. (2010). The development of corporate image: A historiographic approach to a marketing concept. *Corporate Reputation Review*, 13(1), 63–75.
- Ha, B. J. (1999). A study of corporate image factors affecting purchasing intention. Unpublished doctoral dissertation, Kyunghee University, Seoul, Korea.
- Haanpää, L. (2007). Consumers' green commitment: Indication of a postmodern lifestyle? International Journal of Consumer Studies, 31, 478–486.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (4th ed.). New Jersey: Upper Saddle River: Prentice Hall.
- Handelman, J. M., & Arnold, S. J. (1999). The role marketing actions with a social dimension: Appeals to the institutional environment. *Journal of Marketing*, 63(3), 33–38.
- Hartmann, P., & Apaola to the institutorial rivionifierit. Journal of Marketing, 53(3), 53–56.
 Hartmann, P., & Apaolaza-Ibáñez, V. (2009). Green advertising revisted: Conditioning virtual nature experiences. International Journal of Advertising, 28(4), 715–739.
- Herbig, P., & Milewicz, J. (1995). The relationship of reputation and credibility to brand success. *Journal of Consumer Marketing*, 12(4), 5–10.
- Hsieh, M. H., Pan, S. L., & Setiono, R. (2004). Product-, corporate-, and country-image dimensions and purchase behavior: A multicountry analysis. *Journal of the Academy of Marketing Science*, 32(3), 251–270.
- Hwang, E., & Song, S. (2008). Analysis on the current status of CSR activities for consumers: Focusing on the review of sustainability reports in Korea. *Journal of Consumer Studies*, 19(4), 109–133.
- Jeong, K. (2006). A study on the effect of the cultural event on corporate environmental image. Unpublished master theses, Chung-Ang University, Seoul, Korea.
- Jin, S. H. (2007). The effectiveness of energy efficiency improvement in a developing country: Rebound effect of residential electricity use in South Korea. *Energy Policy*, 35(11), 5622–5629.
- Kang, M., & Yang, S. U. (2010). Comparing effects of country reputation and the overall corporate reputations of a country on international consumers' product attitudes and purchase intentions. Corporate Reputation Review, 13(1), 52–62.
- Karaodmanoglu, E., & Melewar, T. C. (2006). Corporate communications, identity and image: A research agenda. Brand Management, 14(1/2), 196–206.
- Keh, H. T., & Xie, Y. (2009). Corporate reputation and customer behavioral intentions: The roles of trust, identification and commitment. *Industrial Marketing Management*, 38, 732–742.
- Kim, J. H. (2002). Changes in consumption patterns and environmental degradation in Korea. Structural Change and Economic Dynamics, 13(1), 1–48.
- Kim, J. H. (2009). A study on green consumptions strategy to make the nature-friendly firm image positioning. Unpublished master theses, Sungkyunkwan University, Seoul, Korea.
- Kim, B. W., & Seol, S. H. (2007). Economic analysis of the introduction of the MVNO system and its major implications for optimal policy decisions in Korea. *Telecommunications* Policy, 31(5), 290–304.
- Ko, E., Taylor, C. R., Wagner, U., & Ji, H. (2008). Relationship among CEO image, corporate image and employment brand value in fashion industry. *Journal of Global Academy of Marketing Science*, 18(4), 311–331.
- Lee, J. S., Hsu, L. T., Han, H., & Kim, Y. (2010). Understanding how consumers view green hotels: How a hotel's green image can influence behavioral intentions. *Journal of Sustainable Tourism*, 18(7), 901–914.
- Lim, H. J., Yoo, S. H., & Kwak, S. J. (2009). Industrial CO₂ emissions from energy use in Korea: A structural decomposition analysis. *Energy Policy*, 37(2), 686–698.

- "Lotte Department Store", various green marketing. MT News 2009. Retrieved May 7, 2010 [Online] Available at http://www.mt.co.kr/view/mtview.php?type=1&no=2009060216584026868&outlink=1.
- Maignan, I., & Ferrell, O. C. (2004). Corporate social responsibility and marketing: An integrative framework. *Journal of the Academy of Marketing Science*, 32(1), 3–19.
- Melewar, T. C., Karasmanoglu, E., & Paterson, D. (2005). Corporate identity: Concept, components and contribution. *Journal of General Management*, 31(1), 59–81.
- Miles, M. P., & Covin, J. G. (2000). Environmental marketing: A source of reputational, competitive, and financial advantage. *Journal of Business Ethics*, 23(3), 299–311.
- Moon, J. (2007). Corporate image effects on consumers' evaluation of brand trust and brand affect. *Journal of Korean Academy of Marketing Science*, 17(3), 21–37.
- Nam, K. H., & Yeo, J. S. (2007). A study on the co-orientation of the perception of corporate social responsibility: Centered on the employees and the consumers at the age of twenties and thirties. *Journal of Consumer Studies*, 18(3), 43–61.
- Oh, W., & Lee, K. (2004). Energy consumption and economic growth in Korea: Testing the causality relation. *Journal of Policy Modeling*, 26(8/9), 973–981.
- Park, H. C., & Heo, E. (2007). The direct and indirect household energy requirements in the Republic of Korea from 1980 to 2000 An input-output analysis. *Energy Policy*, 35(5), 2839–2851.
- Ramasamy, B., & Yeung, M. (2008). Chinese consumers' perception of corporate social responsibility (CSR). *Journal of Business Ethics*, 88, 119–132.
- Rhee, H. C., Lee, K. Y., & Cho, J. (2005). Liberalizing employment of foreign workers in Korea: Public perception and assessment. *Journal of Policy Modeling*, 27(8), 971–987.
- Rios, F., Martinez, T., Moreno, F., & Soriano, P. (2006). Improving attitudes toward brands with environmental associations: An experimental approach. *Journal of Consumer Marketing*, 23(1), 26–34.
- Schwepker, C., & Cornwell, T. (1991). An examination of ecologically concerned consumers and their intention to purchase ecologically packaged products. *Journal of Public Policy and Marketing*, 10(2), 77–101.
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, 38(2), 225–244.
- Sen, S., Bhattacharya, C. B., & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: A field experiment. *Journal of the Academy of Marketing Science*, 34(2), 158–166.
- Shim, Y. (2009). A study on consumer's social responsibility. Journal of Consumer Studies, 20(2), 81–119.
- Sudhaman, A. (2004). Brand quality still key to corporate reputation: Edelman. Asia's Media & Marketing Newspaper, 11/19/2004, p. 8.
- Sung, S. (2003). Women reconciling paid and unpaid work in a Confucian welfare state: The case of South Korea. *Social Policy & Administration*, 37(4), 342–360.
- Sung, H. W., & Kincade, D. H. (2010). Typology of Korean eco-sumers: Based on clothing disposal behaviors. *Journal of Global Academy of Marketing Science*, 20(1), 59–69.
- Walsh, G., Mitchell, V. W., Jackson, P. R., & Beatty, S. E. (2009). Examining the antecedents and consequences of corporate reputation: A customer perspective. *British Academy of Management*, 20, 187–203.
- Wan, H. H., & Schell, R. (2007). Reassessing corporate image An examination of how image bridges symbolic relationships with behavioral relationships. *Journal of Public Relations Research*, 19(1), 25–43.
- Wansink, B. (1989). The impact of source reputation of inferences about unadvertised attributes. *Advances in Consumer Research*, 16, 399–406.
- Winter, L. C. (1986). The effect of brand advertising on company image: Implication for corporate advertising. *Journal of Advertising Research*, 26(2), 54–59.
- Yoo, S. H., & Kwak, S. Y. (2009). Willingness to pay for green electricity in Korea: A contingent valuation study. *Energy Policy*, 37(12), 5408–5416.
- Yoon, K., & Suh, S. (2003). The influence of corporate advertising and social responsibility activities on corporate image and brand attitudes. *Advertising Research*, 61, 47–72.