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Impacts of “Green Movement” Cues of a Lodging Website on Customers’ Emotions and Their Behaviors

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Abstract
Along with increased concerns about the green movement in society and academia, this study conceptually discovers how green movement cues influence customers’ emotions, cognitions, brand attitudes, and further their behavior intentions by applying a well-developed advertising processing model in an online environment—the modified Affect Transfer Hypothesis (ATH) model. In addition, this study aims to investigate how two different green movement indicators might influence customers’ emotions, as well as cognitions towards website advertising, brand attitudes, and further their behavior intentions differently in the context of lodging websites. Implications for academia, industry, and public policy-makers are provided at the end.

Key Words: Green movement, consumers’ emotions, involvement, behavioral intentions, and brand attitudes.

Introduction
Sustaining a healthy environment has been a key issue in every field of today’s industries, due to the dramatic deterioration caused by harsh industrial development of our only one ‘earth’. A variety of forms for the environmental movement are undertaken by both private and not-for-profit organizations, including an increasing number of media exposure, more pro-environmental group activities, rigorous regulated legislations nationally, as well as internationally, and more public voices on critical environmental issues. Along with these movements, consumers are becoming major advocates for saving the environment by participating in everyday environmental practices, such as recycling paper and cans, carpooling, saving water, and less electricity usage. McGougall (1993) asserted consumers’ changing attitudes toward the environment would definitely influence the development of the green movement vigorously. As consumers place priority on protecting our environment, so do many companies strive to enhance their environmental activities, when promoting their products or services (Kalafatis, Pollard, East, & Tsogas, 1999).

These industry-wide environmental movements and awareness can lead to an increasing number of individuals, who proactively engage in environmentally friendly activities in their everyday lives by changing their views towards the environment (Kalafatis et al., 1999). To target these consumer groups, the pro-environmental market segment, the lodging industry has launched a new marketing strategy—green marketing—to capture these emerging market segments, as well as to position its property distinctively in competitive markets. In particular, many lodging companies are actively involved in green marketing efforts on their websites as an interactive and dynamic communication mode between customers and hotels. However, little research has documented identification of how hotel customers react to these online green marketing efforts from their perspectives. Therefore, this study aims to investigate how customers perceive exposure of the green movement on hotels’ websites (i.e., functional vs. emotional green movement cues). Even though environmental and psychological research has heavily focused on investigating customers’ pro-environmental (or ecological) behaviors (Stern, 2000), the importance of customers’ emotional behaviors has not been well examined in ecological behavior studies (Vining, 1992). Since it is believed that understanding customers’ psychological aspects (i.e., affection and cognition) toward green movement cues is important to assess the effectiveness of online green advertisement—
their decision-making processes (Damasio, 1998) and their brand attitudes (Batra & Ray, 1985), this study investigates the relationships among online green movement cues (i.e., functional vs. emotional), customers’ emotions, cognitions, brand attitudes, and behavioral intentions (i.e., recommendation) in the context of a lodging website. In addition, this study proposes that customers’ environmental involvement moderates the relationship between green movement cues and customers’ emotions and cognitions. This study will be based on the modified Affect Transfer Hypothesis (ATH) model, which explains customers’ attitudes toward brand formations in the online environment, as a theoretical background (Sicilia, Ruiz, & Reynolds, 2006).

Review of Literature
Green movement in the lodging industry
Along with the exponential development of green marketing in both manufacturing and service industries, the green movement (marketing) is also emerging in operational activities in the lodging industry. According to Foster, Sampson, and Dunn (2000), the hospitality industry is forced to become more environmentally friendly for the following reasons: 1) increasing customers’ demands, 2) heightened environmental regulations, 3) increased concerns on ethical, managerial practices, 4) fulfilling customer satisfaction, and 5) maintaining operational issues (i.e., prolong physical facilities). Green marketing in the lodging industry can be considered an emerging niche market as well because this growing movement not only provides a distinctive position, compared to similar non-green lodging properties, but also meets the need to save the environment (earth), enhancing the image of the property (Han, Hue, & Lee, 2009). International Hotels Environmental Initiatives (IHEI), an ecological movement, was initiated in 1993. Since this initiation, the lodging industry has made tremendous efforts to improve new ways of completing business, aiming to reduce environmental harm (i.e., energy, waste, water consumption, durable goods, and air pollution) (Yim & Penny, 2007). In the lodging industry, many hotels identify themselves as green hotels, which refers to “the environmentally-friendly properties whose manager is eager to institute programs that save water, save energy, and reduce solid waste, while saving money to help protect our one and only earth” (GHA). Based upon the objectives of green hotels, they promote their ecological activities through traditional advertising medium, as well as online communication channels (i.e., websites). These promotional activities, as well as their actual ecological performance, can satisfy pro-environmental customer market segments and maintain a higher market position among competitors.

A theoretical framework for investigating the green movement on a lodging website
By applying cognitive responses, ad attitudes, brand attitudes, and behavioral intentions as major constructs, the dual mediation hypothesis (DMH) model implies that ad-induced cognition affects attitudes toward advertisement, as well as brand, and further, behavior intentions (MacKenzie, Lutz, & Belch, 1986). Based upon the DMH model, the ATH model was proposed because the DMH model does not capture consumers’ low involvement and the ATH model better explains consumers’ attitude formation, as well as the advertising process in the online environment. Using the ATH model, this study will modify its framework to fit the context of lodging websites, focusing on the pro-environmental cues as a substitute for advertising cues. In addition, there is a need to further develop customers’ emotions in ecological psychology research, as suggested by previous studies describing the DMH model (i.e., Yoon, Laczniak, Muehling, & Reece, 1995). This study includes emotions, in addition to cognition aspects, of customers towards green movement cues of a lodging website. Figure 1 depicts the proposed theoretical framework for this study.

Figure 1. A Modified Affect Transfer Hypothesis for Green Movement Indicators
Green movement exposure through the website

Along with customers’ increased interests in environmental concerns, environmental advertising has addressed proactive issues related to the environment by meeting customers’ needs. For example, many hotels call themselves green hotels as a great marketing strategy, since more guests expect hotels to practice pro-environmental activities. According to Kim, Forney, and Arnold (1997), pro-environmental consumers showed more positive responses to fashion advertisements with an environmental message than to those without ecological messages. Thorgersen’s (2002) study also identified a positive relationship between eco-labels and customers’ purchase decisions. In this study, the aspect of Internet communication will be investigated, since one of the most attractive and comprehensive marketing strategies is believed accomplished through a company’s website in the lodging industry. Environmental promotions can be established through environmental commitment messages on companies’ websites.

Many companies have begun to publicize their social responsibilities through their websites (Patten & Crampton, 2004). In addition, when promoting a “green hotel” image, hotels can have easy and low-cost communication opportunities, as well as targeting customers, with no geographical barriers by utilizing their websites (Biloslavo & Trnavčević, 2009). Previous studies identified that two advertising information formats (i.e., emotional vs. informational) have been considered as two of the most strategically advertised cues. Based upon previous studies (Hartmann, Ibáñez, & Sainz, 2005), two different green attributes (i.e., emotional- and functional-based green indicators) will be incorporated in this study. An emotional green indicator focuses on customers’ emotions (i.e., incorporating emotion-eliciting strategies, such as a feeling of well-being or pleasant imagery of nature); on the other hand, functional green indicators represent targeting customers’ rationality, based upon objective information describing a hotel’s environmental commitment (i.e., fact-based and functional information).

According to Damasio (1998), when encouraging customers’ pro-environmental attitudes, both emotions and cognitions should be considered. Customers’ cognitive aspects refer to whether the advertising is credible or not. For example, Szymecko (2003, p. 23) mentions, “people trust a message if they think it is trustworthy and the communicator is competent and honest.” Customers will positively respond to the advertisement, if they perceive the message or source of the advertisement is credible (Phau & Ong, 2007). In addition, McCarty and Shrum (1994) investigated if the advertisement included components of fun and enjoyment, customers were more likely to have positive attitudes toward the advertisement, which conveyed recycling information. Furthermore, according to Hartmann et al.’s (2005) study, the highest perceptual effects on brand attitude were identified, when functional and emotional positions were combined. Thus, the following propositions are proposed:

\( P_1 \): Functional information about a hotel’s green movement on its website will positively affect customers’ emotions.
\( P_2 \): Emotional information about a hotel’s green movement on its website will positively affect customers’ emotions.
\( P_3 \): Functional information about a hotel’s green movement on its website will positively affect customers’ cognitions.
\( P_4 \): Emotional information about a hotel’s green movement on its website will positively affect customers’ cognitions.
\( P_5 \): There is an interaction effect between functional and emotional cues on customers’ emotions.
\( P_6 \): There is an interaction effect between functional and emotional cues on customers’ cognitions.

Important roles of emotion and cognition to form customers’ brand attitudes

When consumers are exposed to an advertisement, they are likely to develop feelings (i.e., emotions) and judgments (i.e., cognition) (Batra & Ray, 1986). For example, emotions are considered predictors of customers’ brand attitudes (Batra & Ray, 1986; Holbrook & Batra, 1987) and identifiers to measure an increased level of the brand’s market share when customers were exposed to some environmental information (Henion, 1972). When customers’ emotions and cognitions are developed, based upon exposure to advertising, their emotions and cognitions might further influence their attitudes towards the advertising as well as brands. Therefore, when
evaluating customers’ attitudes towards an advertisement, both cognitive evaluations of and affective responses to
the advertising should be examined (Madden, Allen, & Twible, 1988). Previous studies also have identified
cognitive and affective predictors of brand attitudes (Lutz, 1975). According to Keller (1998), a company’s social
responsibility of the product can be associated with brand image, a product’s credibility, and customers’ brand
attitudes. Therefore, the following propositions are proposed:

\[ P7: \text{Customers’ emotions toward green movement cues positively influence brand attitude.} \]

\[ P8: \text{Customers’ cognitions toward green movement cues positively influence brand attitude.} \]

**Customers’ behavioral intentions**

As an indicator of customers’ behaviors, their intentions will be evaluated in this study. Behavioral
intentions refer to customers, who are likely to change their image toward a hotel and/or recommend the hotel to
their family and friends, after they are exposed to green movement cues on its website in this study. Suchard and
Polonski (1991) identified pro-environmental customers are likely to conserve the environment in various ways (i.e.,
recycling or purchasing only green products/services). Customers’ attitudes are influenced by both their thoughts
(i.e., the cognitive function) and feelings (i.e., the emotional function), and affect behaviors (i.e., recommendation
behavior) (Hoyer & MacInnis, 2004). For example, Chan (1999) investigated if customers, who showed positive
attitudes toward environmental concerns, tend to represent ecologically conscious consumption behavior. Thus, this
study predicts the following proposition:

\[ P9: \text{Brand attitude influences customers’ behavioral intentions (i.e., positive word-of-mouth).} \]

**Effects of customers’ involvement**

Previous studies (i.e., extending the DMH model or examining the ATH model) incorporated motivation or
involvement of consumers, identifying different advertising processes and influences on attitude formation for both
high-involved and low-involved groups (Yoon et al., 1995). In this study, customers’ involvement (i.e., different
levels of personal relevance) will serve as a moderator to understand differences on high and low involvement of
green customers, influencing their emotions, cognitions, brand attitudes, and further behavior intentions. Customers,
who care about the environment and practice green activities in their daily lives, will be considered high
involvement customers (i.e., environmental concerns tend to influence consumers’ purchase behaviors); whereas,
low involvement customers refer to those who don’t incorporate green activities in their lives (i.e., environmental
concerns might minimally influence consumers’ decision-making) (D’Souza & Taghian, 2005). Thus, the following
propositions are predicted:

\[ P10: \text{Environmentally high-involved customers will have a more positive emotion than environmentally}
\]

\[ P11: \text{Environmentally high-involved customers will have a more positive cognition than environmentally}
\]

\[ \text{low-involved customers.} \]

**Methods**

**Study design plan**

An online self-administered survey will be employed with those who have experienced a visit to a hotel
website and booked a room through the website. With this group of people, this study will investigate how
customers perceive green advertising cues from the website to form their emotions, cognitions, brand attitudes, and
behavior intentions. A 2 x 2 x 3 between subject, experimental design of a lodging website will be implemented.
Manipulation will be based on two green movement cues (functional vs. emotional), two different affiliations (chain
vs. independent), and three different levels of service (economy vs. mid-market vs. luxury). Green movement cues
will be differentiated by providing either emotion-elicited green cues (i.e., pleasant nature image) or fact-based
information (i.e., green certification) and affiliations, as well as different levels of service will be differentiated
through scenarios that each participant will be asked to read during the survey. Twelve different fictitious websites
will be created, based on fictitious hotel information. Other than green movement cues, affiliations, and expected
level of service, everything will be kept as constant as possible to control other extraneous variables. Upon
participants’ agreement to participate in this study, they will be randomly assigned to one of the experimental
websites. They will be asked to browse the website, read descriptions about the hotel for few minutes, and answer the survey questionnaire.

Data will be collected through the online survey instrument, Qualtrics, which will be linked to the fictitious website. An invitation for this study will be sent to at least 2,500 people, who have used a hotel website as a place to previously reserve their room. To contact the relevant sample to meet the requirements of this study, a leading market research company will administer the quasi field experiment survey. It will invite participation in this study from its panel database containing more than two million U.S. consumers.

**Measurements**

Based on previous studies, the survey questionnaire will be modified to ensure validity and reliability of each item. The survey questionnaire will consist of six sections: 1) manipulation questions (i.e., green indicators, affiliation, and levels of service), 2) customers’ emotions and cognitions toward green movement cues on the lodging website, 3) brand attitudes, 4) behavioral intentions, 5) customers’ involvement toward pro-environmental activities, and 6) their demographic profile, such as gender, age, household income, and education. All questions will be scaled by 7-point Likert-type responses, ranging from 1, “strongly disagree,” to 7, “strongly agree.” A detailed description of the survey’s questions is described in Table 1.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Items of the survey question</th>
<th>Supporting literature(s)</th>
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<tr>
<td>Emotions</td>
<td>Participants’ feelings, such as 1) amused, 2) attentive, 3) enthusiastic, 4) excited, 5) happy, 6) interested, and 7) pleased.</td>
<td>Coulter &amp; Punj, 1999; Holbrook &amp; Batra, 1987</td>
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<td>Cognitions</td>
<td>1) Believable-non believable, 2) convincing-not convincing, 3) informative-not informative, 4) meaningful-not very meaningful, 5) ingenious-not ingenious, 6) persuasive-not persuasive, 7) tasteful-not tasteful, 8) artful-not artful, 9) trustworthy-non trustworthy, and 10) credible-not credible.</td>
<td>Coulter &amp; Punj, 1999; MacKenzie et al., 1986</td>
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<td>Brand attitudes</td>
<td>1) Attractive-unattractive, 2) I like it-I do not like it, 3) it is good-it is bad, and 4) agreeable-disagreeable.</td>
<td>Sicilia et al., 2006</td>
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<td>Behavioral intentions</td>
<td>What is the likelihood that you will recommend the hotel to family or friends? 1) Probable-improbable and 2) likely-unlikely. Overall image of the hotel 1) Positive-negative and 2) pleasant-unpleasant.</td>
<td>MacKenzie et al., 1986; Yoon et al., 1995</td>
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<td>Involvement toward green activities</td>
<td>1) I am concerned about the environment. 2) The condition of the environment affects the quality of my life. 3) I am willing to make sacrifices to protect the environment. 4) My actions impact the environment.</td>
<td>D’Souza &amp; Taghian, 2005</td>
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**Data Analysis Plan**

Upon completion of data collection, data will be analyzed using SPSS statistical program. Participant’s background information will be analyzed, based on the descriptive analysis. In addition, ANOVA analysis will be utilized to identify how green movement cues, affiliation, and levels of service influence customers’ emotions and
cognitions. Regression analysis also will be used to identify how customers’ cognitions and emotions influence their brand attitudes and behaviors. Furthermore, the t-test will be used to identify differences between low-involvement customers and high-involvement customers.

Conclusions

This study will provide significant implications not only for academia, but also for industry, since it is a starting point for further research development in this very promising area, combining both online marketing communications and emerging market trends—“going green” marketing. In particular, this study conceptually discovers how green movement cues influence customers’ emotions, cognitions, brand attitudes, and further their behavior intentions by applying the well-developed advertising processing model in an online environment—the ATH model. In addition, this study aims to investigate two different green movement indicators (i.e., functional and emotional cues) to determine how these cues might influence customers’ emotions, as well as cognitions towards website advertising, brand attitudes, and further their behavioral intentions differently in the context of lodging websites.

Attitudes toward advertisement have been widely used to investigate the effectiveness of advertising. Previous scholars have identified attitudes toward advertisement influences customers’ behavioral intentions and brand attitudes (Bruner & Kumar, 2000). Even though attitudes toward the website and their consequences are well developed (Chen & Wells, 1999), what really influences attitude toward the website, customers’ emotions, and cognitions remains relatively under developed, especially in online green marketing. For example, different message strategies (i.e., hedonic vs. utilitarian) or different levels of customers’ involvement indeed influence customers’ emotions, cognitions, and brand attitudes. However, how these structural factors influence customers is still unexplored. Therefore, this study may fill the existing literature gaps by conceptually investigating such an unexplored, but significant area, as effects of online green movement messages on customers’ emotional behaviors. If structural variables (i.e., different message type) influence customers’ brand attitudes and their emotions as well as cognitions, advertisers should evaluate which features of the message influence customers the most to improve their advertising effectiveness.

In terms of industry perspectives, hotels must realize the significant impact of green movement cues on their websites, because, as communication tools, websites will positively influence customers, business partners, and the general public, as well as distinguish them from competitors, if these websites contain correct cues for customers. Specifically, based upon the results of this study, hotels might increase customers’ brand attitudes and their behavioral intentions by providing either one of the green movement indicators or incorporating both indicators (i.e., functional or emotional indicators) on their websites, targeting their current green customers as well as potential, prospective green customers. Furthermore, even though this study focuses on the lodging industry, investigating which green movement cues most effectively influence customers’ emotions and cognitions might be useful for public policy-makers. Thus, public policy-makers might develop pro-environmental campaigns that include the most persuasive message types to increase people’s pro-environmental activities.

References


