A PUBLIC RELATIONS CAMPAIGN OF CORPORATE SOCIAL RESPONSIBILITY: A TEST OF A COGNITIVE PROCESSING MODEL OF A CSR MESSAGE

By

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A THESIS PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN MASS COMMUNICATION

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This thesis is dedicated to my father and my mother. Without their love and support, I could not have accomplished this study.
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Abstract of Thesis Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Communication

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By

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Chair: Spiro Kiousis
Major Department: Journalism and Communications

Little scholarship has examined the effectiveness of CSR campaigns in influencing attitude toward the company. The purpose of this present study is to measure the impact of CSR communication by proposing a cognitive processing model of a CSR message. According to the Elaboration Likelihood Model (ELM), it is assumed in this study that recipients’ perceived CSR and attitudes toward a company can be influenced by CSR campaigns in terms of the effect of message sidedness (one-sided, refutational two-sided and nonrefutational two-sided) and message recipients’ involvement level (high or low).

A mixed 2x3 factorial design is applied for this experiment in which involvement and message sidedness are independent variables, while attitude toward the company and perceived CSR are the dependent variables. Two hundred and five students from the University of Florida participate in this study and randomly assigned to one of the seven conditions. A CSR campaign advocating the corporate social performance of a factitious xix
lumber company named CALCO is created and presented on the printed Web pages of CALCO. A controversy over CALCO’s practice of clearcutting, which is fundamental to the survival of the timber industry, is discussed in the stimuli.

Results of the present study show that the one-sided CSR message is significantly more persuasive than the refutational two-sided and the nonrefutational two-sided one. Two main effects are found between message sidedness on both perceived CSR and attitude toward the company. These results indicate that the one-sided CSR campaign has a significant advantage over the refutational two-sided and the nonrefutational two-sided one in influencing participants’ perceptions about the company’s social performance and their attitudes toward the company.

In addition, the path analysis indicates a significant direct effect between perceived CSR and attitude toward the company. The findings of this study show that the perceived CSR is highly associated with the attitude toward the company. In other words, when a company’s social performance is highly perceived, it is likely that people will generate more positive attitudes toward the company. These results demonstrate the value of CSR communication as part of a business strategy.

When a company attempts to communicate its corporate social performance, the results of this study suggest that the one-sided CSR campaign simply presenting supportive information related to the company’s corporate social activities has more persuasive effects than the two-sided CSR campaigns in influencing public perceptions about the company’s social commitment and generating more positive attitude toward the company.
CHAPTER 1
INTRODUCTION

Corporate Social Responsibility Communication

Understanding the effects of communicating corporate social responsibility (CSR) on public perceptions and attitudes toward the company can create a good opportunity for public relations practitioners to demonstrate the importance of PR function in the corporate world. Communication research has looked specifically into how best to communicate the social responsibility of an organization (Wartick & Cochran, 1985; Wartick & Rude, 1986; Heath & Ryan, 1989; Carroll, 1991; Wood, 1991; Frederick, 1994; L’Etant, 1994; Esrock & Leichy, 1998; Heath, 1998; Clark, 2000). However, little of previous research on public relations has empirically tested the effects of CSR campaigns on people’s cognitive responses and attitudes.

The concept of CSR is not new. It has been widely discussed both in the business and marketing field. More and more CEOs of Corporate America started to talk about a business obligation to society that goes beyond making profits. In this emerging corporate philosophy, contemporary corporations are expected to be both doing good in terms of social performance and doing well in terms of business performance. With an increasing emphasis on corporate social performance, thus, today’s business organizations tend to advocate CSR not only to gain measurable outcomes but also to gain intangible outcomes (Lim, 2001). Corporate executives now believe that socially responsible companies will outperform their peers by enhancing reputations, reducing risks, and seizing new opportunities. An emerging agenda for today’s CEOs is to bring
the economics together with the environmental and the social needs as part of a business strategy.

There haven been a lot of discussions from marketing literature regarding the effects of CSR initiatives on achieving organizational goals such as increasing the organizational bottom-line or boosting shareholder value. However, any attempt to account for CSR as part of a business strategy needs to address a communication management perspective of corporate social responsibility. In this regard, an important research topic for public relations researchers is how to communicate CSR effectively. To achieve excellence in public relations campaign, a good communication strategy should engage a good defense as well as offense. Then, presenting only a CSR message should be considered to be a defense whereas managing an issue with the CSR message could be an offense. In other words, should a company present simply CSR messages or utilize the CSR campaign as an opportunity to address a relevant environmental or a social issue?

This thesis attempted to investigate the best model for the CSR campaign in terms of issues management.

**CSR Communication from the Issues Management Perspectives**

The power of information technology allows today’s public to scrutinize corporate performances in detail. Through the Internet, individuals are able to access all kinds of information from a variety of sources and perspectives. The convenient accessibilities of mass information of corporate performances allow people to actively discuss social issues or environmental concerns related to corporate operations around the world. Irresponsible corporate actions are likely to induce criticisms from external stakeholders such as the media, governmental authorities, communities or even activists groups that organize
boycotts against the company. For example, Shell placed its 100 years of brand building and reputation in jeopardy when the company was accused of the environmental damages and the neglect of human rights in Nigeria in 1994 (Brand Strategy, 2002).

Due to this changing business environment, more corporations have woken up to the environmental and social expectations of today’s society. For instances, to reduce emissions created by daily business operations, FedEx converted all its trucks to hybrid electric-diesel engines while UPS also included 1,800 alternative-fuel vehicles. To ensure biodiversity, Starbucks is buying more organic and shade-grown coffee that minimizes damages of rain forests (Fortune, 2003).

In academia, a sustainable body of literature has discussed CSR from the issues management perspective (Wartick & Cochran, 1985; Wartick & Rude, 1986; Heath & Ryan, 1989; Carroll, 1991; L’Etant, 1994; Esrock & Leichty, 1998; Heath, 1998; Clark, 2000;). According to Lim and Lin (2005), some researchers have specifically looked into how CSR could play an active role in dealing with issues that are critical to organizational survival (Heath & Ryan, 1989; Frederick, 1994; L’Etant, 1994; Esrock & Leichty, 1998; Heath, 1998).

An abundant number of studies have conceptualized CSR in terms of issues management. However, little research has empirically delved into the communication management perspective of a CSR campaign. Moreover, a few studies that could be identified as research on communication management have used the concept of CSR very narrowly as either cause-related marketing or advocacy advertising (Lim & Lin, 2005, for a full list of literature).
Statement of the Purpose

The purpose of the present study is to fill this research gap by proposing an effective CSR communication strategy from an issues management perspective. This study intends to contribute to a better understanding of theoretical and practical implications of CSR communication. In this study, two communication goals are included in the CSR campaigns. First of all, a CSR message aims to inform targeted audiences about the corporate good citizenship. Secondly, in response to external stakeholders’ claims, a CSR message also addresses corporate positions or statements of controversial issues that are important to the company’s fundamental practices. It is proposed in this study that communicating corporate social performance will eventually influence people’s attitude toward the company. Moreover, it is assumed in this study that the persuasiveness of CSR campaigns depends on the effect of message sidedness. Some companies may choose to simply present positive messages that support their social and environmental initiatives, while others may mention additional counterarguments from environmental groups.

Background

In this study, the topic of the experimental stimuli is the clearcutting issue that is critical to the survival of the timber industry. Clearcutting is a management technique in which all of the trees in an area are cut at the same time. Clearcutting is commonly applied by many lumber companies because it is cost effective and efficient.

Bliss (2000) has addressed a problem of clearcutting issue. He argued that there had been a perceptual gap between the public view and the industry’s view. He emphasized that corporate communication should play an important role in restoring public trust on the clearcutting issue. Especially, it was emphasized the social and
environmental performance of the timber industry so that it influences the dominant beliefs and values among the public. It is proposed in this present study that CSR campaigns might help to reduce the perceptual gap of clearcutting issues between the lumber company and the general public.

**Research Questions**

In this study, a dilemma in communication strategy is discussed. In dealing with controversial issues, should companies refute the counterarguments or not? This study examines the effectiveness of communication strategies in influencing individuals’ perceptions of the company’s social performance and their attitude toward the company. From the persuasion perspectives, should the companies present one-sided CSR campaigns that are simply describing the social performance of the company? Or, should corporations design refutational two-sided CSR campaigns that include opposite claims from activists groups but follow with refutational arguments emphasizing the advocated positions? Moreover, companies could also consider the nonrefutational two-sided CSR campaigns presenting both supportive and opposite arguments without refutational arguments.

In order to address these questions, an experimental study of the CSR campaigns was conducted to test empirically which strategy is more effective in influencing people’s attitudes and perceptions.

**Theoretical Framework**

Richard Petty and John Cacioppo’s (1981, 1986a, 1986b) Elaboration Likelihood Model (ELM) is an attitude formation and change model that can be used to explain how publics evaluate persuasive communication. Based on the ELM, two previously used
variables were employed in this study: involvement (high and low) and message sidedness (one-sided, refutational two-sided and nonrefutational two-sided).

A cognitive processing model (see Figure 1-1) of CSR messages is proposed in this study. In this model, the researcher assumes that CSR messages will influence the audience’s perception of the company’s social performance and attitude toward the company depending on the message sidedness effect (one-sided, refutational two-sided and nonrefutational two-sided) and the audience’s involvement level (high and low).

The level of subjects’ involvement is manipulated in the booklet, directing them to either browse through the presented message or to carefully read and think about the message. Consistent with previous research, it is assumed in this study that those who are highly involved will induce more cognitive elaboration.

The hypotheses of the current research were posited to address the main effects and the interaction effects of message sidedness and involvement on perceived CSR and attitudes toward the company advocated. The main effects of both involvement and message sidedness are that high involvement and two-sided messages will induce more cognitive elaboration than low involvement and one-sided messages.

The interaction effects predict that when highly involved people are exposed to refutational two-sided messages, they will be more influenced by the message and create more positive attitudes toward the company. On the other hand, when involvement is low, people will be more influenced by a one-sided message in their evaluation of perceived CSR and attitude toward a company. Nonrefutational two-sided messages are said to have the least persuasiveness in terms of influencing attitudes toward the company and perceived CSR in both high and low involvement conditions.
Based on the ELM, this study empirically tests the persuasive effects of CSR messages on people’s perceptions of corporate social performance and attitude toward the company. This study intends to contribute to a better understanding of the theory and the implications of CSR communication. In essence, the studies of ELM and CSR can be strengthened and supported by connecting the persuasive effects of communicating CSR on publics’ attitude.

Figure 1-1. The cognitive processing model of a CSR message proposed in this study.
CHAPTER 2  
LITERATURE REVIEW  

Corporate Social Responsibility  

Corporate social responsibility (CSR) has been widely discussed in terms of a managerial function in business organizations. CSR has long been referred to the managerial obligation to improve both the societal welfare and a company’s enlightened self-interest (Davis & Blomsstrom, 1975). A study of how U.S. corporate entities make use of the Web to present themselves as socially responsible citizens showed that more than 80% of a random sample from Fortune 500 companies had Web pages that addressed at least one corporate social responsibility issue (Esrock & Leichty 1998). This trend has reflected the pervasive belief among business leaders that CSR is an economic imperative in today’s global marketplace. 

CSR is important for the public relations function in organizations. James Grunig and Todd Hunt (1984), two well-known communication scholars, devoted a whole chapter in their book to public relations and public responsibility. They argued that “Public, or social responsibility has become a major reason for an organization to have a public relations function and that the two-way symmetrical communication is the best means by which to evaluate social responsibility.” (p. 48) Through CSR programs, public relations not only gets involved in the advisory management role by building relationships with key stakeholders but also engages in communicational management by delivering messages to target publics (L’Etang, 1994).
The Origin of CSR

The idea of CSR appeared around the turn of the 20th century (Post, Frederick, Lawrence and Weber, 1996). Clark’s (2000) comprehensive review of CSR and corporate public relations found similarities of these two areas in the origins, theories, processes, and primary responsibilities. Both public relations and CSR struggled to define their disciplines beginning primarily in the 1920s (Clark, 2000, p.366).

Although a large number of today’s business still think of CSR as paternalistic in terms of charitable contributions, researchers argue that there is another form of CSR from the stewardship perspective (Post, Frederick, Lawrence and Weber, 1996). According to the stewardship principle, corporations become stewards or public trustees by using their resources to affect all people in society in fundamental ways. This principle led to modern stakeholder theory that argued that managers should recognize the need to interact meaningfully with all groups who have a stake in the organization's activities.

In the 1960s and 1970s, CSR underwent some of its most important iterations. Wood (1991) pointed out the emerging importance of CSR in her conceptual development of corporate social performance.

"It became apparent during this time, particularly through social activism and regulatory activity, that social expectations of business had outstripped managers' comprehension and capabilities." (p.383)

Thus, scholars and managers began to define what corporate social responsibilities were and were not. In the 1970s, studies about CSR were based on the idea that business is an "actor in the environment and should respond to social pressures and demands."
(Wood, 1991, p.384) Another classic definition also pointed out the broad responsibilities of a modern corporation which defined CSR as “the firm’s consideration of and respond to issues beyond narrow economic, technical, and legal requirements of the firm.” (Davis, 1973)

By the early 1980s, there is a slight shift of the research in CSR from the conceptual idea that companies should be responsible for a more practical approach to addressing how companies could respond to business-related social issues (Clark, 2000).

**CSR Definition**

Since the inception of CSR research, the concepts have been plagued by ambiguity. A long and diverse history has been associated with the evolution and the definition of CSR. According to Wood’s (1991) conceptual development of CSR theory, she included three main principles: (a) the principle of legitimacy at the institutional level, (b) the principle of public responsibility at the organizational level, and (c) the principle of managerial discretion at the individual level.

In particular, Wood (1991) articulated that businesses are not responsible for solving all social problems. However, they are responsible for solving problems that they have caused and for helping to solve other social problems related to their business operations (p.697). For example, a lumber company is rightly held responsible for keeping a forest sustainable. However, it might be harder for such a company to support other social causes that are irrelevant to their practices, such as AIDS prevention or adult literacy. Social responsibilities should be relevant to the firm’s interests, operations, and actions (Wood, 1991, p.698). But this principle leaves room for managerial discretion in
determining what social problems and issues are relevant and how those issues should be addressed.

To sharpen the definition of CSR, Carroll (1991) proposed a pyramid that constituted total CSR from four dimensions of social responsibilities including economic, legal, ethical, and philanthropic. It is worth noting that Carroll’s (1991) pyramid of CSR begins with the economic performance. According to this principle, if a company is not making profits and is not providing high quality of goods and services to meet consumers’ needs, it can not be considered socially responsible even when the company has devoted many efforts in social causes.

Carroll (1991) pointed out that CSR includes philanthropic contributions but is not limited to them. In other words, philanthropy is highly desired and prized but actually less important than the other three categories of social responsibility. Carroll argued that corporate managers and public relations practitioners should be aware of the distinctions between philanthropy and corporate responsibility. More specifically, philanthropic responsibilities do not dominate the definitional construct of CSR. While developing CSR initiatives, corporate managers should pay more attention to other dimensions of CSR rather than only focusing on philanthropy.

**Perceived CSR and Public Relations**

From the public relations perspective, perceived CSR may be considered a more appropriate term in discussing the strategy of communicating corporate social performance as a function of issues management. This is because the public perception of corporations’ social performance is not always predictable. In other words, the same message regarding a company’s CSR activities can be perceived differently by different
publics. As previous research on persuasion has pointed out, some moderators such as message recipient’s involvement or prior attitude toward the issue or the company can influence a recipient’s perceptions about the company’s social performance.

Therefore, more research regarding effective communication methods is needed. Despite the importance of communication management in CSR, effective communication methods are largely absent from the corporate social responsibility literature (Clark, 2000). A few studies about the effectiveness of CSR campaigns come from marketing and consumer research (Varadarajan & Menon, 1988; Menon & Kahn, 2003; Szykman et al., 2004). Moreover, previous discussions about CSR messages have merely considered perceived CSR a function of cause-related marketing (Varadarajan & Menon, 1988) or advocacy advertising of social issues (Haley, 1996; Menon & Kahn, 2003; Szykman et al., 2004).

**CSR and Issues Management**

Issues management is a function dedicated to helping organizations understand and strategically adapt to their environment through issue scanning, tracking, and monitoring (Heath, 1998).

Heath (1998) further pointed out that a rhetorical approach to issues management assumes that organizations sometimes do not keep up with key public’s standards—their expectations of one or more aspects of the organization’s performance (p.275). Along this research line, the function of issues management is considered parallel to the function public relations in organizations.

CSR or corporate social performance (CSP) in literature has often been discussed as issues management (Wartick & Cochran, 1985; Wartick & Rude, 1986; Heath, 1998;
Wood, 1991; Clark, 2002). Carroll (1991), who contributed to the definition of CSR, also took a perspective of stakeholder management by which CSR was considered as a managerial function that helped corporate management to achieve organizational goals. Wartick and Cochran (1985) proposed issues management as the third facet of the corporate social performance (CSP) model which stated that CSP is “the integration of principles of social responsibility, processes of social responsiveness, and policies developed to address social issues.” (p.758) CSR is considered as a process of corporate social responses to external stakeholders (Wood, 1991; Caroll, 1991).

In this study, the CSR campaign was designed based on a lumber company. For the lumber industry, the long-term management of environmental responsibility has been a major issue. In particular, issues related to the practice of clearcutting have long been debated publicly (Berger, 2003). From the issues management perspective, Berger (2003) suggested that a lumber company deal with long-term stewardship and ecological considerations as major driving forces that are very important to the public. Berger (2003) further argued that a lumber company not only needs to understand public perceptions about clearcutting but also address that issue within a context of the structure and functioning of the ecosystem. Therefore, the clearcutting issue is considered an particularly appropriate topic for lumber companies to address and discuss when developing CSR campaigns.

**Corporate Credibility**

CSR can be adopted by companies as part of business strategies in order to enhance their corporate image and credibility. The reputation of a company that produces products has been identified as a type of source credibility in marketing research (Goldberg and
Hatiwick, 1990). In addition to having a credible endorser represent their brand, companies are also concerned with their corporate credibility. This is evident because of the widespread use of public relations campaigns and prevalence of institutional and corporate advertising (Fombrun, 1996). Companies use this type of promotional effort primarily to associate themselves with positive environmental and social issues to enhance their reputation, and also hope of increasing sales (Kolter and Armstrong, 1996).

A few empirical studies in the field of advertising effectiveness have examined the impact corporate credibility has on three principal outcome variables: attitude toward the ad, attitude toward the brand, and purchase intentions. Lafferty and Goldsmith (1999) found that both endorser and corporate credibility influence attitude-toward-the-ad and attitude-toward-the-brand, but corporate credibility alone appears to have a significant influence on purchase intentions. Moreover, whereas endorser credibility seems to have a greater influence on attitude-toward-the-ad, corporate credibility seems to have a greater influence on attitude-toward-the-brand. In other words, it is suggested that corporate credibility can play an influential role on forming people’s attitude toward the brand.

However, little empirical research is available on corporate credibility. Although less attention has been given to this concept in the marketing literature, there is reason to believe that high corporate credibility is also important in producing positive attitude change toward the ad and toward the brand, as well as influencing purchase intentions (Fombrun, 1996).

Goldberg and Hartwick (1990), Newell (1993), and Fombrun (1996) indicated that subjects are influenced by the credibility of the company when formulating their attitude-toward-the-ad and toward the brand as well as purchase intentions. The effect size show
that the endorser’s credibility appeared to have a stronger impact on the subjects when they evaluated the advertisement, and the corporate credibility appeared to have a stronger impact when the subjects assessed the brand.

In the case of high corporate credibility, when the brand attributes are missing, the reputation of the firm may give the consumers more confidence that the product is good and make them significantly more willing to purchase the brand. Research findings are quite consistent with previous research. Newell’s (1993) results indicated that perceived corporate credibility is positively associated with purchase intentions, and Davis (1994) found that an overwhelming majority of consumers have stated that their product purchase decisions are at least in part influenced by their view of the parent company’s good citizenship.

Previous research in marketing and advertising has indicated that corporate credibility and corporate reputation can be considered a function of branding that influences consumers’ attitudes toward the brand and purchase intentions. Some studies in marketing research also showed positive associations between corporate credibility and corporate philanthropy. According to previous research, it is assumed that corporate credibility may be enhanced by the company’s corporate social performance. Therefore, people’s attitude toward the company may also be positively influenced though effective CSR campaigns.

**The Elaboration Likelihood Model**

Persuasion and attitude change have long been the focal point of research with the Elaboration Likelihood Model (ELM) (Petty and Cacioppo, 1986a). The ELM provides
“a fairly general framework for organizing, categorizing, and understanding the basic processes underlying the effectiveness of persuasive communications” (p.125).

The standard paradigm of ELM research has been to test it with two to three variables, such as involvement, source credibility or argument strength. Typically, involvement is used as a motivational indicator of the route a person will use to process a message (central or peripheral route). According to the ELM, a highly involved person scrutinizes the arguments presented in the message and bases his or her attitudes toward the message and the message sponsors on the strengths of the arguments. In contrast, a person who is uninvolved when processing the message will use simple heuristics cues to form his or her attitudes toward the message (Petty and Cacioppo, 1986a). Past research has shown that the ELM is effective in explaining attitude change under various conditions and with certain accuracy.

In this study, the researcher adopted two variables: involvement (high and low) and message sidedness (one-sided, refutational two-sided and nonrefutational two-sided). A review of previous studies based on the ELM will explain how each variable works and interacts in developing a persuasive message.

The Theoretical Framework of the ELM

The ELM is based on the conception that receivers will vary in the degrees to which they are likely to engage in the elaboration of information relevant to the persuasive issue. The term elaboration in the ELM refers to “the extent to which a person thinks about issue-relevant arguments contained in a message” (Petty & Cacioppo, 1986b, p.128). Such elaboration may be viewed as a continuum of commitment of cognitive resources which ranges from no thought to “complete elaboration of every
argument and complete integration of these elaborations into a person’s attitude schema” (p.129).

**Central Route and Peripheral Route**

According to the ELM (Petty & Cacioppo, 1981), the central route is theorized to occur under conditions where the message receiver is both motivated (e.g. due to the personal relevance of the issue) and has ability to process message content. When a message is processed through the central route, persuasion “likely resulted from the information presented in support of an advocacy” (Petty & Cacioppo, 1986b, p.125), and a high level of elaboration and cognitive responses will be fostered and ultimately lead to a significant impact on the message receiver’s attitudes to the communicated issue.

In contrast, unmotivated or cognitively unable individuals follow a peripheral route to persuasion where elaboration is relatively low. The message receiver is theorized not to focus on the primary arguments of the message presented, but instead to focus on various peripheral cues, such as the communicator’s credibility or attractiveness as guides to attitude and beliefs. While both routes are persuasive, the literature on the ELM suggests that the central route produces more enduring results (Petty and Cacioppo, 1986a, 1986b).

The ELM was applied in the current study, because it is comprehensive in outlining the multiple roles by which the variables selected (message sidedness and involvement) might impact persuasion. The central route to persuasion in this study was the focus of personal relevance to environmental issues the clearcutting issue. If message receivers consider environmental issues highly personally relevant, according to the ELM, they will pay more attention and scrutinize the messages presented. In other words, it is
predicted that message receivers who consider the environmental issues highly relevant will engage in the central route in which they give thoughtful consideration to issue-relevant information presented in this study. On the other hand, it is predicted that message receivers will not pay attention to the issues discussed in the message if they have low involvement with environmental issues. In that case, message receivers are likely to engage in the peripheral route and pay little attention to the message.

**The Variable of Personal Relevance/Involvement**

In the ELM, the most important variable affecting the motivation to process a persuasive message is the personal relevance of the advocacy (Petty & Cacioppo, 1986b, p81). Petty and Cacioppo regard personal relevance as the extent to which the advocacy has “personal meaning” (Sherif et al., 1973). Petty and Cacioppo (1979) have termed their use of involvement as issue involvement, which is the “extent to which the attitudinal issue under consideration is of personal importance” (p.1915).

In the current study, the researcher applied Petty and Cacioppo’s (1981) definition of involvement as “the amount of cognitive processing and/or interest the person has in the stimulus or attitude object being attended to.” The ELM argues that when involvement is high, people are likely to use more cognitive processing and induce more message related thoughts, thus engaging the central route. Many researchers found consistent expectations when a given issue becomes increasing personally relevant to the message receivers, their motivations of engaging in thoughtful considerations of that issue presumably increase (Sherif & Hovland, 1961; Petty & Cacioppo, 1979, 1981, 1984; Petty, Cacioppo, & Goldman, 1981; Petty, Cacioppo, & Schumann, 1983).
In contrast, when the level of cognitive elaboration is low, the message receiver is said to be in the low involvement condition. Then, the peripheral route of persuasion is more likely to change the receiver’s attitudes. The peripheral route is often used when the material presented is not as personally relevant, and the individual is not motivated to analyze the facts presented (Petty, Gleicher, & Jarvis, 1993).

**Involvement and Environmental Advocacy**

Involvement has been widely studied in the ELM by marketing and advertising research. Advertisers strive to produce messages that will involve people, prompting audiences to devote more attention to and engage in more elaboration of the information contained in the ads (Gordon, McKeage, & Fox, 1998). Advertising literature has observed that the peripheral cues, such as source credibility or the number of arguments are more effective for low-involvement rather than high-involvement products (Rhine & Severence, 1970; Petty, Ostrom, and Brock, 1981; Heesacker et al., 1983; Gotlieb & Sarel, 1991; Mazursky & Schul, 1992).

When the advertising messages are related to environmental issues, Schuhwerk and Letkoff-Hagius (1995) found that issues involvement played a key role in the effectiveness of green advertising appeals. Those who were highly involved with environment issues were not swayed by green appeals by advertisers. On the contrary, people who were less involved with environment issues found the appeal of “green” advertising significantly more persuasive than non-green appeal.

Several consumer-based studies have investigated psychological aspects of environmental concerns and environmental behaviors. Previous study found a positive correlation between individuals’ environmental attitudes and their intentions of
purchasing ecologically packaged products (Schwepker & Cornwell, 1991). Ellen, Wiener, and Cobb-Walgren (1991) found that consumer efficacy, or the degree to which individuals think they can make a difference in the quality of the environment, was positively related to intent to purchase environmentally safe products.

**Message Sidedness Effect**

**Definitions**

Persuasion research has long questioned whether the persuasive communication is more effective when it only presents the persuader’s arguments or when it includes some discussion (with or without refutation) of opposing arguments (Lumsdaine & Janis, 1953). Two approaches of a one-sided message and a two-sided message are often contrasted and measured by researchers to examine various effects on attitudes toward an issue or a brand (O’Keefe, 1999). It is defined that a one-sided message presents only arguments favoring the position advocated by the source while a two-sided message, on the other hand, presents both arguments opposing the source’s position and those favoring it (Hovland, Lumsdaine, & Sheffield, 1949). This basic contrast—ignoring or discussing opposite arguments—has commonly been discussed in persuasion research as the difference between one-sided and two-sided messages.

Some researchers even break down the two-sided message into the refutational two-sided message and the nonrefutational two-sided message depending on whether a subsequent refutation is included in the message or not. It is indicated that the effects of message sidedness are moderated by the type of two-sided message employed (Allen, 1991; Allen, et al., 1990). Literature has suggested that the message sidedness effect may vary significantly depending upon whether the opposing arguments are refuted (Allen,
1991, 1994; Crowley & Hoyer, 1994). A nonrefutational two-sided message acknowledges opposing arguments but does not include direct refutation of the opposing arguments (e.g. Bettinghaus & Basehart, 1969). A refutational two-sided message, on the other hand, attempts to directly refute the opposing arguments (e.g., McCroskey, Young, & Scott, 1972).

**Origins**

In persuasion research, the different persuasive effects that resulted from types of messages is called message sidedness effect, which has a long research history that can be traced back to earlier persuasive research by Hovland, Lumsdaine, and Sheffield (1949). In their groundbreaking study, an issue concerning the military propaganda effect was discussed. Two treatment groups were presented either with the one-sided message that supported the communicator’s position or the two-sided message which contained additional opposite arguments. Their results did not find any significant differences between the persuasive effect of the one-sided message and the two-sided message.

However, when participants have initial opposition to the communicator’s view, it was found that the two-sided message was more effective in producing opinion change in the desired direction than was the one-sided presentation. The one-sided presentation proved to be more effective only with those audiences who were already favorably disposed toward the communicator’s position. Moreover, their study also showed that a two-sided message was more effective with better educated people, while a one-sided message was more persuasive for less educated people (Hovland et al., 1953; Hovland et al., 1949).
Previous Studies

Previous discussions of message sidedness effect have different conclusions. Some research argued that two-sided messages appear more likely than one-sided messages to produce persuasive effects in the desired direction. (e.g., Hovland et al., 1953; Etgar & Goodwin, 1982; Albert & Golden, 1982; Golden & Alpert, 1987; Kamins & Assael, 1987; Kamins, Brand, Hoeke, & Moe, 1989; Pechmann, 1992; Bettinghaus & Cody, 1994; Crowley & Hoyer, 1994; Lang, Lee & Zwick, 1999; Stiff & Mongeau, 2003), while other studies (e.g., Earl & Pride, 1980; Belch, 1981; Hastak & Park, 1990) do not support the same findings. Thus, some other researchers (e.g., O’Keefe, 1999; Stiff & Mongeau, 2003) urged caution in accepting research findings related to the message sidedness effect.

Advertising and Non-Advertising Messages

According to Allen’s (1991) meta-analytic review of the effects of one-sided and two-sided persuasive messages, the accumulated research shows that the refutational two-sided message appears to be more persuasive than both the one-sided message and the nonrefutational two-sided message (Allen, 1991; Allen et al., 1990).

However, types of two-sided messages may have different persuasive effects according to various topics of messages that are presented. For non-advertising messages such as those on social or political issues, research found that refutational two-sided messages have a persuasive advantage over one-sided messages but there was no such advantage for nonrefutational two-sided messages (Allen, 1991, 1994; O’Keefe, 1999).

The message sidedness effect also differs according to receivers’ initial attitudes. Consistent with Hovland et al.’s (1949) findings, a marketing study found that a two-
sided message can be an extremely efficient persuasive technique when consumers already hold negative attitudes toward a brand and when consumers are to be exposed to negative counterclaims by competitors or by a neutral third party, including news media (Sawyer, 1973; Golden & Alpert, 1987). Therefore some researchers suggest that adding negative information to positive messages can increase credibility with an audience (Golden & Alpert, 1987).

It is asserted that acknowledging opposing arguments may boost the communicator’s credibility by suggesting his or her honesty and lack of bias and thereby increase the effectiveness of messages (e.g., Hovland, Lumsdaine, & Sheffield, 1949, p. 204; Settle & Golden, 1974; Pechmann, 1990). However, nonrefutational two-sided messages on a non-advertising topic do not produce the same enhancement of credibility (O’Keefe, 1999). It is predicted that when communicating a social issue, receivers may feel confused when reading arguments from both supporting and opposing positions of view. Therefore, the persuasive effect is greatly decreased.

**Prior Knowledge, Motivation, Personality**

Previous studies have indicated that prior knowledge about the issue influences the effectiveness of each type of messages. More specifically, one-sided messages are more effective when the audience is uninformed about the issue than when the audience is knowledgeable. On the contrary, two-sided messages tend to persuade well-informed recipients more than individuals who are unfamiliar with the issue (Chu, 1967; Hovland, Lumsdaine, & Sheffield, 1949).

It is asserted that individuals’ motivation to engage in processing messages influences the effectiveness of the types of sided messages. One-sided messages are more
persuasive for people with lower motivations, while two-sided messages are more
effective when audiences have higher motivation. Sorrentino et al. (1988) explained that
recipients of the one-sided message may adopt the recommendations made by the
communicator without much cognitive work while those of a two-sided message engage
in active cognitive integration of conflicting arguments. Thus, a two-sided message is
expected to be more effective when recipients have the motivation to process the
arguments thoughtfully (Sorrentino et al., 1988). Crowley and Hoyer (1994) also
assumed that a two-sided message would increase the recipient’s motivation to process
the message, which also leads to more cognitive responses and relatively enduring
attitude change.

Previous studies have discussed message sidedness in the framework of ELM.
Sorrentino et al.’s (1988) findings on personality and effects of message sidedness
indicated that under high personal relevance, uncertainty-oriented persons are more likely
centrally or systematically process the information. When under low personal relevance,
they will use peripheral or heuristic processing of information.

However, contrary to current theorizing, personal relevance does not necessary
increase recipients’ cognitive analyses of persuasive messages. It was found that the way
people process information depends not only on the effects of personal relevance but also
on the personality of the recipients.

**Issue Involvement**

Most previous studies about message sidedness effect are mainly from marketing or
advertising research. In particular, consumer research has examined other effects of two-
sided message on increasing source credibility perception (Kamins & Assael, 1987;
Bohner et al., 2003), generating attitudinal resistance (Bither et al., 1971; Kamins & Assael, 1987; Bohner et al., 2003), or reducing counter arguing (Belch, 1981; Kamins & Assael, 1987; Swinyard, 1981). Other moderating variables such as the order of argument, the type of two-sided message (refutational or nonrefutational), the availability of counterargument, the initial agreement of recipients, the familiarity with the topic, or educational background (Allen et al., 1990; O’Keefe, 1999) have also been examined by researchers.

A substantial body of literature has been devoted to message sidedness effect (for a review see Allen et. al, 1990). However, little previous studies (Chebat & Picard, 1985; Sorrention et al., 1988; Hastak & Park, 1990) have examined the moderating role of receiver’s issue involvement. While a compelling case can be made for the type of messages as a moderator of sidedness effects, research does not provide insight as to why the messages differ in persuasiveness. One approach that can be taken to address this issue is to study message recipients’ cognitive responses of processing messages (Hale, et al., 1991).

**Three Theoretical Accounts for the Message Sidedness**

Crowley and Hoyer (1994) contend that inconsistency in results on the effects of message sidedness stems from the lack of a theoretical framework that specifically addresses two-sided message effects. In this section, the researcher reviewed three theories that addressed the reasons why two-sided messages have an advantage of persuasiveness over one-sided messages.
Inoculation Theory

According to the inoculation theory, the two-sided refutational message appears to work best to minimize counter argumentation (McGuire and Papageorgis, 1961). The authors suggested that refutation enabled participants to be pre-exposed to weakened counterarguments that heightened their defenses and alerted them to possible attacks on established beliefs. Inoculation theory also predicts that the refutational appeal should be the highest among the three appeals in the degree of support argumentation incurred (McGuire and Papageorgis, 1961).

It is suggested by the inoculation theory that, refutational two-sided appeal leads to greater acceptance of the communicator’s position than the one-sided or two-sided nonrefutational appeal, even when the receiver is in agreement with the communicator’s position (McGuire, 1961; Etgar and Goodwin 1982).

Inoculation should bolster the individual’s cognitive defense by triggering the search for supporting arguments in light of potential counterarguments. In an advertising study, an inoculation of product disclaimers for relatively nonsalient product attributes comprised in a nonrefutational appeal could trigger a moderate to high degree of support argumentation. Because of the absence of inoculation and lack of perceived advertiser truthfulness, the one-sided appeal should produce the lowest degree of support argumentation (Kamins & Assael, 1987).

Correspondence Theory

From the perspective of communicator’s credibility, Tannenbaum (1967) argued that refutational two-sided appeals are effective communication devices because their credibility is enhanced by the opposing arguments presented to consumers. Applying
correspondence theory to advertising study, researchers (Smith & Hunt, 1978) suggest that people perceive a lower degree of credibility and show higher levels of source derogation for one-sided appeals than for two-sided communications. In other words, consumers consider one-sided advertisements are not as credible as two-sided appeals.

Kamins and Assael’s (1987) empirical study on the sided appeals in advertising research found that two-sided refutational appeal resulted in significantly more support argumentation and significantly less counterargumentation than use of the one-sided appeal. Consistent with correspondence theory, the most novel appeal should lead to correspondent attribution and the lowest degree of source derogation upon exposure. The two-sided nonrefutational appeal should be perceived as most novel as no attempt is made to refute product disclaimers.

In particular, research on two-sided nonrefutational appeals has been abundant in the marketing literature. Generally, two-sided nonrefutational appeals were more effective in increasing perceived advertiser truthfulness (Smith and Hunt, 1978; Swinyard, 1981) and believability (Etgar & Goodwin, 1982; Anderson & Golden, 1984; Golden & Alpert, 1987).

Inoculation and correspondent theories contribute to predicting cognitive responses. The inoculation theory is predicting participants’ responses—counter or supportive—based on the communications stimuli. On the other hand, correspondence theory is concerned primarily with the attribution to the source—enhancing or derogatory—based on the same communication stimuli.
Cognitive Response Theory

Previous research has shown clearly that the message sidedness effect is weak, because the effect is indirect (Hale et al., 1991). Hale et al. (1991) asserted that cognitive responses and message evaluation should be considered as two mediating variables between the transmission of the message and the attitude measure (p.387).

Numerous studies that have reasoned that message sidedness can be explained by the cognitive response theory (Allen et al., 1990; Hale et al., 1991; Crowley & Hoyer, 1994). Ford and Smith (1991) assume that such refutational messages may require more commitment and thus result in high elaboration. Sorrentino et al. (1988) explain that recipients of a one-sided message may adopt the recommendations made by the communicator without investing much cognitive work while those of two-sided messages engage in active cognitive integration of conflicting arguments. Thus, two-sided messages are expected to be more persuasive when receivers are more motivated to process the arguments thoughtfully (Sorrentino et al., 1988). Crowly and Hoyer (1994) also assumed that a two-sided message will increase receivers’ motivation to process the message, which also lead to more cognitive response and relatively enduring attitude change.

According to Hale et al. (1991), cognitive responses and message evaluation play an order effect in processing persuasive messages. Their data appears that through exposure to a message prompts the generation of cognitions, which produces an evaluation of the message, and that evaluation influences a recipients’ attitude (p.387).
It was also found that the number of positive cognitions generated is greater for refutational two-sided messages than for either nonrefutational two-sided message or one-sided messages.

Hale et al. (1991) suggested that message sidedness can be considered part of the ELM. Their findings indicated that messages sidedness influenced message elaboration, which is the generation of message relevant cognition.

One intuitive possibility is that direct refutation of an opposing argument increases the perceived strengths of the argument. However, in the nonrefutational two-sided message, receivers may have trouble comparing arguments from conflicting points of view they perceive them to be weaker. The one-sided message may simply be perceived as being weaker than the two-sided message because any mention of opposing arguments is missing.

There is considerable evidence demonstrating that perceived argument strength is positively related to the quantity of positive cognitions (Petty & Cacioppo, 1986b). In the current research, it is predicted that the refutational two-sided message will be perceived to have the strongest argument strength, therefore, induce the highest number of positive cognitions.

The ELM suggests that attitude change results from cognitive elaborations of audiences after receiving persuasion messages (Petty & Cacioppo, 1981, 1986a, 1986b). However, it is important to note that the ELM does not directly predict an attitudinal advantage for two-sided messages (Hastak & Park, 1990). All that this model asserts is that attitudinal advantage for a two-sided message will be mediated by message-related cognitive responses (p.330). However, message sidedness is connected to the ELM when
“motivation and ability to think about the issue will determine the route to persuasion” (Allen, 1991, p.391). The current study of message sidedness is a response to the research call of Hale et al. (1991) that explores the possibility of message sidedness functions as a central persuasive cue.

**Hypotheses**

The Table 2-1 shows the factorial design of the experiment. As noted before, involvement is defined as the message recipients’ motivation to process information about an issue from a message (Petty and Cacioppo, 1979; Johnson & Eagly, 1989). Participants in the high involvement condition will be more motivated to process the message than those in the low involvement condition.

**Hypothesis 1** predicted that participants in a high involvement condition (X1) would generate more message-related thoughts than those in a low involvement condition. (Predicted main effect)

**Hypothesis 2** predicted that a two-sided refutational message (Y1) would induce more message-related thoughts than a one-sided (Y3) or a nonrefutational two-sided message (Y2). (Predicted main effect)

Few results on the interactive effects of message sidedness and perceived CSR are available. No theory-articulated reasoning is provided to fill the gap and a hypothesis is provided. Since it is hard to find any research or any theoretical accounts that explain the effect of message sidedness on perceived CSR, a research question is proposed.

**RQ1:** How does message sidedness influence people’s perception about the corporate social responsibility of a company? Will a two-sided message or a one-sided message lead to more positive perceived CSR?
According to Petty and Cacioppo (1979) under high involvement condition, participants engaged message processing, which enhances persuasion for favorable and strong argument. The ELM argues that when involvement is high, people are likely to use more cognitive processing and more message related thoughts, which engage the central route. Further, Hale, et al.’s (1991) study has shown that when participants are exposed to refutational two-sided messages, they are likely to generate more positive cognitive cognitions than those exposed to one-sided messages. Following this line of research:

**Hypothesis 3** predicted that participants exposed to a refutational two-sided message would show more positive attitudes than those who were exposed to a one-sided or a non-refutational two-sided message.

**Hypothesis 4** predicted that participants in a low involvement condition would show more positive attitudes with a one-sided message while those in a high involvement condition would express more positive attitudes with a refutational two-sided message. (Predicted interaction effect)

**Hypothesis 5** predicted that higher perceived CSR would be positively associated with a positive attitude toward the company.

Table 2-1. Factorial design of the experiment

<table>
<thead>
<tr>
<th>Personal Relevance/Involvement (X1 &amp; X 2)</th>
<th>Message Sidedness (Y1, Y2 &amp; Y3)</th>
<th>Main Effects for Involvement</th>
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<tr>
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<td>Nonrefutational Two-Sided</td>
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<td>Low Involvement</td>
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<tr>
<td>Main effects for Sidedness</td>
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<td></td>
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CHAPTER 3
METHODOLOGY

The present study investigates empirically the persuasiveness of a CSR campaign in influencing message recipients’ attitudes and perceptions. Based on the level of issue involvement and the effects of message sidedness presented in CSR messages, this study also examines the main effect and the interaction effect between these two variables on message recipients’ attitude toward the company and their perceptions of the company’s social achievements.

In addressing the socially responsible achievements, the present study asked whether a company should discuss a relevant issue to communicate with key stakeholders or active publics. In other words, should a company present simply a CSR message or utilize the CSR campaign as an opportunity to address a relevant environmental or a social issue?

To answer the above questions, a factitious lumber company named CALCO was created in the experiment. The reason for choosing a lumber company in experiment design is that timber industry has long been questioned for the practice of lumbering such as clearcutting that result in critical environmental damages. In addition, the continuing controversy over clearcutting has become essentially a social issue. Therefore, the present study is able to test whether people’s attitude toward the company can be positively enhanced after receiving a CSR campaign which advocates the social performance of that company. Moreover, this study further tests whether the enhancements of the positive attitude toward the company can be increased when the company particularly addresses
controversial issues that are critical to the business. In brief, the purpose of this study is to test whether people will have more positive attitude if the company is considered as socially responsible.

By applying a sophisticated experimental study on attitude that examines the cognitive processing model of a CSR message, the present study adds a body of knowledge to the research of CSR and the ELM. In particular, the present study advances the existing research and literature on the effect of message sidedness on CSR messages and environmental issues. Moreover, this study is the first to link between CSR communication and issues management and empirically examine the persuasive effects of the CSR messages on attitude toward the company and the perceptions of the company’s social performance. This innovative approach is based on the growing trend of today’s corporate world to bring the economics together with the environmental and the social needs as part of a business strategy. From an issues management perspective, the present study also presents a good opportunity for public relations practitioners to demonstrate the importance of PR function, pursuing an excellence in CSR communication campaigning.

**An Experimental Design**

This study is grounded on a cognitive response perspective in examining the underlying processes that mediates the persuasive effects of a CSR campaign. An experimental method was considered the most appropriate approach in testing a cognitive response model proposed in this study.

A mixed 2x3 factorial experiment was designed with two between-subject variables being personal involvement (high or low) and message sidedness (one-sided, refutational two-sided and nonrefutational two-sided). Participants’ attitudes toward the company and
their perceptions of the company’s social performance were evaluated after reading the CSR campaigns presented in the stimuli.

Involvement level and message sidedness have been chosen as two independent variables of testing the persuasiveness of a CSR campaign. According to the ELM (Petty and Cacioppo, 1986a, 1986b), issue involvement plays an important role in influencing which route people choose to process the message. The ELM has indicated that for the desired central route of attitude change to occur, participants must be highly involved with the issue and able to cognitively process the persuasive messages. Therefore, participants’ level of involvement with the issue discussed in the CSR messages was controlled in the experiment.

Previous research has indicated that message sidedness could result in different persuasive effects on attitude change. Therefore, message sidedness was experimentally varied so that participants in this study received either a one-sided CSR campaign, a refutational two-sided CSR campaign, or a nonrefutational two-sided CSR campaign. All three CSR campaigns addressed a lumber company’s social performance and the clearcutting issue which was associated with the company’s forestry management.

In this study, the one-sided CSR campaign only presented arguments that support the company’s environmental commitment and corporate citizenship. The refutational two-sided CSR campaign comprised pairs of arguments including both supportive and refutational information. For example, arguments against the company’s clearcutting practices were followed by refutational explanations that defended the company’s goodwill. The nonrefutational two-sided CSR campaign acknowledged the concerns from the opposite positions such as environmental activists groups, but did not attempt to
refute those claims directly. These procedures are similar to the two-sided operationalisation used in previous message sidedness studies (Allen, 1991).

Consistent with previous research of the ELM, it is assumed in this study that the more a person is involved with the environmental issue, the more he or she thinks carefully about (or cognitively elaborates on) the CSR message, eventually the more likely positive attitudes are to occur. The results of the current study will contribute to the research of cognitive response theory and demonstrate the value of the effects of CSR campaigns on attitude toward the company and the function of CSR communication as issues management.

**Pilot Study**

**Procedure**

In order to make sure the manipulation checks of message sidedness and involvement work successfully, a total of fifty-four college students participated in a pilot test. All students were recruited on the campus of the University of Florida and assigned to one of six treatment conditions randomly.

The message stimulus was a CSR campaign presented on the Web site of a lumber company named CALCO. The purpose of the CSR campaign is to advocate the social performance and the corporate citizenship of that company. Participants were presented with a booklet including a background news story, a CSR campaign message, and a questionnaire. The fist part of the booklet was a one-page newspaper article about an environmental activist named Julie “Butterfly” Hills who lived in a tree for two years to protest against the lumber company’s clearcutting practices. CALCO’s CSR campaigns on the company Web site were the second part of the booklet, and finally a five-page questionnaire was included as the third part of the booklet.
Participants were instructed with the following statement to complete the questionnaire once they have finished reading all the messages presented in the booklet. “Based on the background story and the CALCO’s statement you just read from the printed Web pages, please answer the following questions. Please circle the number that best describes your thoughts or feelings.” The questionnaire included Liker-type items designed to measure how interested respondents were in environmental and clearcutting related issues, their feelings toward the company presented, and their level of agreement with various attitudes statements.

Participants’ level of involvement was manipulated by the location of the lumber company presented in the message stimulus. For high involvement groups, the lumber company presented in the stimuli was located in Florida. On the other hand, the lumber company was located in Taiwan for low involvement groups. Involvement level was measured using four questions (see Table 3-1): (1) How important are environmental issues in Taiwan (or Florida) to you personally?; (2) How important is the deforestation issue in Taiwan (or Florida) to you personally?; (3) How much are you concerned about environmental issues in Taiwan (or Florida)?; (4) How much are you concerned about deforestation issue in Taiwan (or Florida)?

Table 3-1. Liker-type items of the manipulation check of involvement level for high involvement groups

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>How important are environmental issues in Florida to you personally?</td>
</tr>
<tr>
<td>How important is the deforestation issue in Florida to you personally?</td>
</tr>
<tr>
<td>How much are you concerned about environmental issues in Florida?</td>
</tr>
<tr>
<td>How much are you concerned about the deforestation issue in Florida?</td>
</tr>
</tbody>
</table>
For the manipulation check of message sidedness, we used two items from Trent and Greer’s (2001) items: (1) CALCO’s statement shows two-sided arguments; (2) CALCO’s statement refutes the opponent’s arguments (see Table 3-2).

Table 3-2. Liker-type items for the manipulation check of message sidedness
CALCO’s statement shows two-sided arguments.
CALCO refutes opponents’ arguments.

Pilot Test Results

From the pilot test, a successful manipulation of involvement was obtained (M low = 3.94, SD=1.69; M high = 4.95 SD=1.19; t=2.54, df=50, p<.05). The mean score of involvement index from the high involvement group is significantly higher than those from the low involvement group. However, the results of the manipulation check of message sidedness did not yield significant differences in the pilot test. In other words, participants can not recognize the differences between three groups of CSR campaigns (one-sided CSR message, refutational two-sided CSR message, and nonrefutational two-sided CSR message). The manipulation of message sidedness failed in the pilot test.

The major problem was attributed to the design of background information page about the clearcutting issue associated with CALCO's practices. In the pilot test, a one-page newspaper article about Julie Hills' tree sitting protest against CALCO's clearcutting practice for two years was provided. It was assumed that this new article might have delivered a too strong message that overrode the message sidedness effect presented in CSR campaigns. The results from the pilot test shown overall negative attitudes toward CALCO. Thus, to reveal the effect of message sidedness in CSR campaigns, CALCO’s
"About Us" page (see Appendix A) including a brief introduction of the company's history and visions was substituted for the news article in the main experiment.

**Main Study**

**Sample**

A convenient sample was adopted in this study. It was considered appropriate to use a convenient sample in this study due to the theoretical testing nature of the experiment (Calder, Phillips, & Tybout, 1981). Calder, Phillips, & Tybout (1981) stated that it is important to use a homogeneous sample for an experiment because of its theoretical testing in nature. They argued that a homogeneous sample permits more exact theoretical predictions than from a heterogeneous group. In addition, a homogenous sample also decreases the chance of making a false conclusion about whether there is a covariation between the variables under study (Cook & Campbell, 1979).

The participants for the main study were recruited from two colleges of the University of Florida. The experiment was conducted in two undergraduate classes from the College of Agricultural and Life Sciences and the College of Journalism and Communications. A total of 205 students (68 male, 113 females, 24 missing) participated in the study. Therefore, educational level and the age of participants appeared to be indicative of traditional college students.

Participants completed the study at the beginning of the class session and received extra credit points as compensation for their participation. One hundred and four participants were in the 2 (involvement: high vs. low) by 3 (message sidedness: one-sided vs. refutational two-sided vs. nonrefutational two-sided) groups, and 21 were in the control group. Thus, all participants were randomly assigned to one of the following seven conditions: 1) high vs. one-sided message, 2) low vs. one-sided message, 3) high vs.
nonrefutational two-sided message, 4) low vs. nonrefutational two-sided message, 5) high
vs. refutational two-sided message, 6) low vs. refutational two-sided message or 7) a
control group (see Table 3-3).

Table 3-3. The conditions of the 2x3 experimental design

<table>
<thead>
<tr>
<th></th>
<th>ONE-SIDED</th>
<th>NR TWO-SIDED</th>
<th>R TWO-SIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH INVOLVEMENT</td>
<td>Group (1)</td>
<td>Group (3)</td>
<td>Group (5)</td>
</tr>
<tr>
<td>LOW INVOLVEMENT</td>
<td>Group (2)</td>
<td>Group (4)</td>
<td>Group (6)</td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”

**Stimuli**

The CSR campaign stimuli used in the main study were slightly different from that
of the pilot study. The newspaper article about Julie Hills' protest against CALCO's
clearcutting practices was replaced by a brief introduction of the company's history and
visions titled as "About Us" in the main experiment. Participants were asked to read three
printed Web pages including a brief introduction about the company, the company’s
environmental commitment, and corporate social activities.

The Web site of one of the largest lumber companies in the United States was
mirrored and slightly changed for simulating Web pages of a fictitious company named
“CALCO.” To manipulate different levels of involvement, two versions of CALCO’s
“About Us” page were created. For high involvement conditions, CALCO was presented
as “The Caribbean Lumber Company” in Southwest Florida in the “About Us” page (See
Appendix A). On the other hand, for low involvement conditions, CALCO was presented
as “The Chiayi Lumber Company” in Taiwan on the same page (See Appendix B).

To manipulate message sidedness (one-sided vs. refutational two-sided vs.
nonrefutational two-sided), three versions of CALCO’s “Environmental Commitment”
Web pages were created. For the one-sided version, the CSR campaign only contained one page of supportive messages that advocated CALCO’s corporate social activities in three areas: environment, community, and employees. Each domain of CSR activities was subtitled as “Responsibility to Our Environment,” “Responsibility to Our Community,” and “Responsibility to Our Employees.” Moreover, this page also has two versions for high involvement groups (See Appendix C) and for low involvement groups (See Appendix D) depending on the location of CALCO presented in the campaign.

For the refutational two-sided version, one page of “Myth and Fact” (See Appendix E) which contained activist groups’ concerns of clearcutting issues and CALCO’s refutational arguments was included in addition to the CSR messages the same as the one-sided group. Therefore, the refutational two-sided version has two pages in total. The refutational message dealt with three controversies related to the timber industry’s clearcutting practice by displaying activist groups’ claims about the impact of clearcutting on aesthetic and recreational value, deforestation, and ecosystem. Each argument was refuted with CALCO’s positions.

For the nonrefutational two-sided version, in addition to the same CSR messages as the one-sided version, one page of activist groups’ claims about clearcutting issues was presented without any refutations or arguments from CALCO’s perspectives (See Appendix F). Thus, the nonrefutational two-sided version also has two pages.

To ensure the manipulation of both involvement level and message sidedness successfully instituted in different treatment conditions, a pilot test with a separate pool of 54 participants in total was conducted.
Procedure

Students were informed during that day’s class session that there would be an extra credit opportunity if they complete the study. Students were also informed that this opportunity would require them to read a couple of corporate Web pages, and answer several questions based on what they read. Participants were told that the purpose of the experiment was to develop creative headlines and body copies for a lumber company’s Web site. Seven versions of booklets including six for the treatment groups and one for the control group were given to participants based on randomly assigned experimental conditions.

The stimuli booklets included one printed Web page of CALCO’s “About Us,” two printed Web pages of CALCO’s CSR advocacy titled “Environmental Commitment,” and finally a five-page questionnaire. Two versions of questionnaires were provided including a U.S. version for high involvement groups (See Appendix G) and a Taiwanese version for low involvement groups (See Appendix H). After reading the stimuli, participants were asked to complete a questionnaire that contained a series of measures on attitudes, perceived CSR, and message-related thoughts. After participants responded anonymously to questions regarding the persuasive effects of CSR messages, they completed a measure for the relationship study and answered demographic questions. The results of the relationship questions will not be discussed in this thesis as they are part of another study that will be explained in a different report.

Finally, participants were debriefed and thanked for their participation. Students were informed that their completion of the measures was voluntary and anonymous. In order to assure the anonymity of participants’ responses, each participant turned in a separate consent form with his or her name written on it.
Operational Definitions: Independent Variables

Involvement

Involvement is a motivational variable that moderates how individuals process information. The manipulation of involvement differentiates the motivation people have while processing the information which in this study is about the company’s CSR initiatives. In this study, involvement is defined in terms of issue involvement which can be explained by the “extent to which the attitudinal issue under consideration is of personal importance” (Petty & Cacioppo, 1979, p.1915). The manipulation of issue involvement in this study is also closely paralleled by the study of Petty, Cacioppo, and Schumann (1983). In Petty et al.’s (1983) research, the high involvement group was led to believe that a comprehensive exam would be held at their university while the low involvement group was told that the exam would be conducted in a different university.

Personal relevance occurs when people expect the issue “to have significant consequences for their own lives” (Apsler & Sears, 1968). Therefore, it is clear that in high involvement conditions, participants would be more motivated to engage in thoughtful consideration of the issue because they would be affected personally whereas in low involvement conditions, they would not.

According to these findings, participants’ levels of involvement were manipulated by receiving different background information about CALCO which was presented either as a lumber company located in Florida or located in Taiwan. Take the high-involvement condition for example, participants read the following messages which were included on the first page of their stimuli package: “CALCO is The Caribbean Lumber Company in Southwest Florida. We have been growing trees, making wood products, and supporting generations of families in Southwest Florida since 1863.” On the other hand, for the low
involvement condition, CALCO was presented as “The Chiayi Lumber Company” in Taiwan on the same page.

**Message sidedness**

Message sidedness was experimentally varied and participants received one of the three message packages: one-sided message, refutational two-sided or nonrefutational two-sided messages to discuss CALCO’s CSR activities. All three packages include one page of background information about the company, and another “Environmental Commitment” describing CALCO’s CSR activities which is to be found on the last page. For the refutational two-sided CSR campaign and the nonrefutational two-sided CSR campaign, an additional page on “Environmental Commitment” discussing the clearcutting issue was included as well.

The “About Us” Web page contains the brief introduction about CALCO’s name, products, history and visions. The following paragraphs are some examples of sentences:

Established more than 140 years ago, CALCO still embodies the vision and spirit of its founders.

Today, their vision is a reality. The modern CALCO is a dynamic and innovative company whose employees are dedicated to providing superior lumber products to customers and value to shareholders.

For the refutational two-sided message, an additional page of “Myth and Fact” contained three controversies about the impact of clearcutting on (1) deforestation, (2) aesthetic and recreational value, and (3) ecosystem. The following paragraphs are examples of arguments related to the impact of clearcutting on deforestation:

Myth: Environmental activist groups have argued that clearcutting leads to deforestation. They have also alleged that nothing can be regenerated once a forest is cut down and that it will never be the same again.

Fact: Deforestation is the removal of a forest with no intention of establishing a future stand of trees. For instance, deforestation is occurring today in Brazil and
other tropical areas in the form of agricultural conversion. Our silvicultural clearcutting is both a harvest and a regeneration of the forest, and is done to improve future stand quality, growth, genetics, and species composition.

While regarding the nonrefutational two-sided message, environmental activists groups’ claims were included without refutational arguments from CALCO’s perspective. The following sentences are provided as examples:

Environmental activist groups have argued that clearcutting leads to deforestation. They have also alleged that nothing can be regenerated once a forest is cut down and it will never be the same again.

Another argument against clearcutting is that the resulting bare patches of land look unsightly. Activist groups argue that clearcutting is the destruction of aesthetic values and recreational opportunity.

In all the three message packages, one page of “Environmental Commitment” was included on the last page of the CSR campaign. Three domains of social activities are presented: (1) “Responsibility to the Environment,” (2) “Responsibility to Our Community,” and (3) “Responsibility to Our Employees.” The following sentences about “Responsibility to the Environment” are provided as examples:

CALCO now offers office paper with 100 percent post-consumer recycled content. Tree-free papers made from kenaf, hemp, or agricultural waste such as wheat straw, rice straw and bagasse (waste from sugar cane processing) are also available. There is also an increasing range of forest-friendly products for use in construction and furniture making.

The following sentences about “Responsibility to Our Community” are provided as examples:

Sustaining the communities in which we operate is a responsibility and a commitment we take very seriously. We believe that we have an obligation to contribute to the quality of life in our communities. Our major contribution to the people in Sarasota County is in our ability to provide hundreds of family-wage jobs.

As part of that commitment, we also provide a medical and dental facility for CALCO employees and people living in our communities. Each year, the CALCO
College Scholarship program awards over $350,000 to students from Sarasota County.

The following sentences related to “Responsibility to Our Employees” are provided as examples:

CALCO fosters personal and professional growth and learning for all employees. Employees in CALCO are empowered to make decisions and to share both the risks and rewards of making decisions. In addition, CALCO employees are eligible to receive $12,000 for attendance at any four-year accredited university or college and $4,600 for any two-year college or trade or religious school.

Operational Definitions: Dependent Variables

Cognitive elaboration

According to Petty and Cacioppo (1986a, 1986b), cognitive elaboration was defined as message-related thoughts. In order to evaluate participants’ level of cognitive elaboration when they were processing the presented CSR messages, participants were requested to list all the thoughts that came to their mind while reading the printed Web pages of the company. Participants read the following instructions on writing their message-related thoughts, “Please list the thoughts that came to your mind while reading CALCO’s statement generate as many as you can. Please write your thoughts in the following lines, one thought per line.” Eight lines were provided and they were followed by the above instructions.

Perceived CSR

In this study, the construct of CSR as the audience’s subjective perceptions is more likely to be formed by exposure to corporate CSR advocacy messages. Thus, the term of perceived CSR is used in this study instead of CSR. To access participant’s perceptions about the company’s CSR activities and commitment, Menon and Kahn’s (2003)
measurements of perceived CSR was applied in this study with a slight change in wording.

Participants’ responses of CALCO’s environmental policies were asked by the following five questions: (1) CALCO believes in environmental commitment; (2) CALCO is likely to follow environmental friendly rules and policies; (3) CALCO is highly involved in community activities; (4) CALCO is highly concerned about environmental issues; (5) CALCO is genuinely concerned about public welfare (see Table 3-4). Participants were told to show their agreement with above questions by 7-point rating scales anchoring “1” as “strongly disagree,” and “7” as “strongly agree.”

The statistical results show that these items on the perceived CSR scale is very reliable ($\alpha = .92$).

<table>
<thead>
<tr>
<th>Table 3-4. Liker-type items for perceived CSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALCO believes in environmental commitment.</td>
</tr>
<tr>
<td>CALCO is likely to follow environment-friendly rules and policies.</td>
</tr>
<tr>
<td>CALCO is highly concerned about environmental issues.</td>
</tr>
<tr>
<td>CALCO is highly involved in community activities.</td>
</tr>
<tr>
<td>CALCO is genuinely concerned about public welfare.</td>
</tr>
</tbody>
</table>

**Attitudes**

A 7-point semantic differential scale with six items was used to evaluate participants’ attitudes toward CALCO. Priester and Petty’s (2003) attitude scale is applied with a slight change in wording for evaluating participants’ attitudes toward the company in this study. The items of attitude scale included in this study were negative-positive, harmful-beneficial, foolish-wise, unfriendly-friendly, bad-good, and
unfavorable-favorable (see Table 3-5). The following instructions were given for participants: “Please evaluate how you feel about CALCO by circling a number on each of the scales below. If you feel that you have no reaction, please circle the number 4 to indicate your neutrality.”

The statistic results of the items applied in this study turned out to be very reliable ($\alpha = .95$).

Table 3-5. Semantic differential type items for attitude toward the company

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Foolish</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Unfriendly</td>
<td></td>
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<tr>
<td>Bad</td>
<td></td>
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<tr>
<td>Unfavorable</td>
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<tr>
<td>Positive</td>
<td></td>
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<td></td>
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<tr>
<td>Beneficial</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Wise</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Favorable</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**Manipulation Check**

**Involvement**

The manipulation check for involvement remained the same as in the pilot study. In this study, participants’ levels of involvement were controlled according to the different locations of the company. For the low involvement condition, CALCO was presented as a lumber company in Taiwan, whereas for the high involvement group CALCO was presented as a lumber company located in Florida. It was assumed that participants would feel more involved with the issue presented in the messages if the company was located in Florida.

To evaluate the manipulation of involvement, four questions were asked to examine participants’ involvement level: (1) How important are environmental issues in Taiwan (or Florida) to you personally?; (2) How important is the deforestation issue in Taiwan (or Florida) to you personally?; (3) How much are you concerned with
environmental issues in Taiwan (or Florida)?; (4) How much are you concerned with deforestation issue in Taiwan (or Florida)? (see Table 2).

**Message sidedness**

The manipulation check for message sidedness also remained the same as in the pilot study (see Table 3). For the manipulation check of message sidedness, we used two items from Trent and Greer’s (2001) with a slight change in wording: (1) CALCO’s statement shows two-sided arguments (2) CALCO refutes opponents’ arguments. Participants show their agreement with 7-point rating scales anchoring as follows: “1” as “strongly disagree,” and “7” as “strongly agree.”
CHAPTER 4
FINDINGS

The analyses of this study contained four parts. First section is the descriptive statistics of the present participants in this experiment. Second part contains the manipulations checks of the main experiment and reliability of dependent measures. Third, the hypotheses and the research question are addressed, using t-test, One-Way ANOVA, post-hoc analysis, Pearson correlation and regression analyses (hierarchical regression). Finally, the path analysis was performed to measure the causal relationships between (1) the effects of message sidedness and involvement level on perceived CSR and (2) the impact of perceived CSR on attitude toward the company.

Profile of Participants

All respondents used for analysis in this experiment were college students at the University of Florida. A total number of 205 students participated in this study. Of the total 205 participants, 68 (33.2%) were males, 113 (55.1%) were females and 24 (11.7%) did not report.

Of those who responded to the question of ethnicity, 114 (55.6 %) were White-Non Hispanic, 30 (14.6%) were Hispanic American, 16 ( 7.8%) were Asian American, 14 (6.8%) were African American, and 7 (3.1%) reported other. Participants’ age ranged from 18 to 40. However, over 90% of participants were in the 18-24 age groups. This study was conducted in two undergraduate classes. Therefore, educational level and the age of participants appeared to be of traditional college students.
205 participants were randomly assigned to one of the seven groups. 21 participants were assigned in the control group, and the remaining 184 participants were assigned in the following treatment groups:

1) 31 in the high and one-sided message group, 2) 30 in the low and one-sided message group, 3) 31 in the high and nonrefutational two-sided message group, 4) 31 in the low and nonrefutational two-sided message group, 5) 30 in the high and refutational two-sided message group, 6) 31 in the low and refutational two-sided message group (see Table 4-1).

Table 4-1. The number of participants in each cell

<table>
<thead>
<tr>
<th>Involvement vs. Message</th>
<th>One-Sided</th>
<th>NR Two-Sided</th>
<th>R Two-Sided</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>30 (32.6%)</td>
<td>31 (33.7%)</td>
<td>31 (33.7%)</td>
<td>92 (100%)</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>31 (33.7%)</td>
<td>31 (33.7%)</td>
<td>30 (32.6%)</td>
<td>92 (100%)</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td></td>
<td></td>
<td>21 (100%)</td>
<td>21 (100%)</td>
</tr>
<tr>
<td>Total</td>
<td>61 (29.8%)</td>
<td>62 (30.2%)</td>
<td>61 (29.8%)</td>
<td>21 (10.2%)</td>
<td>205 (100%)</td>
</tr>
</tbody>
</table>

*Note.* 1. NR stands for “nonrefutational.” R stands for “refutational.”

**Results of Manipulation Checks**

**Involvement**

Consistent with the results from the pilot test, the manipulation check of involvement worked successfully. The four indicators used to check the effectiveness of the involvement manipulation yielded converging and supportive results. Table 4-2 shows the mean scores for two groups that pertained to either a high- or a low-involvement condition were significantly different (M low = 3.89, SD = 1.62; M high = 5.08, SD = 1.32; t = 5.39, df = 179, p < .001).

In other words, the manipulation and the measurements of involvement level applied in this study which closely paralleled by the study of Petty, Cacioppo, and Schumann (1983) work successful.
Table 4-2. The manipulation check of involvement

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>Low</td>
<td>90</td>
<td>3.89</td>
<td>1.62</td>
<td>5.39 ***</td>
<td>179</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>91</td>
<td>5.08</td>
<td>1.32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Items in the involvement scale were measured on a 7-point scale ranging from 1 (not at all) to 7 (very much).

*** p < .001

**Message Sidedness**

For the manipulation check of message sidedness, the revised background story turned out to be a success. After the news article about clearcutting issue was replaced by a CALCO’s “About Us” Web page, the manipulation check of message sidedness worked successfully. The original background story about Julie “Butterfly” Hills' tree-sitting protests might have delivered a strong message to the experiment group that possibly had overridden the message sidedness effect. Therefore, it was difficult to find significant differences between participants' attitude toward the company even after exposure to CSR campaigns advocating the company's good citizenship and its corporate social performance. Therefore, a brief introduction to the company's history was substituted for the news article.

Message sidedness resulted in a significant mean difference between three treatment groups. As researcher’s expectation, the mean score of the message sidedness index for the one-sided message (M=3.44, SD=1.06) turned out to be the lowest among three sided message groups. Table 4-3 indicates that the mean score for a refutational (R) two-sided message was significantly higher than that of a nonrefutational (NR) two-sided message and that of a one-sided message.
Table 4-3. The manipulation check of message sidedness

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Sidedness</td>
<td>One-Sided</td>
<td>61</td>
<td>3.44</td>
<td>1.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NR Two-Sided</td>
<td>62</td>
<td>3.90</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R Two-Sided</td>
<td>61</td>
<td>4.85</td>
<td>1.33</td>
<td>23.67</td>
<td>2/181</td>
</tr>
</tbody>
</table>

*Note.* 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. Items in the message sidedness scale were measured on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). Question Items used in the message sidedness were “CALCO’s statement refutes the opponent’s arguments,” and “CALCO’s statement shows two-sided arguments.”

*** p < .001

Reliability Checks for Dependent Measures

In order to establish the reliability of dependent measures used in this study, reliability analyses were conducted for each of construct used in this study including perceived corporate social responsibility (CSR) and attitude toward the company. Cronbach’s alpha was computed to evaluate if the items within each index have high internal reliability. Alpha represents a coefficient that demonstrates how well the items measuring the same characteristic correlate with one another (Hon & J. E. Grunig, 1999). In general, reliability coefficients over .90 are considered “excellent,” over .80 are “very good,” and over .70 are considered “adequate” (Kline, 1998).

The index of perceived CSR includes five questions relating to CALCO’s environmental policies. Participants’ attitudes toward CALCO were evaluated by a 7-point semantic differential scale with six items. Reliability tests confirmed that the indexes of overall attitude toward the company (Cronbach’s $\alpha = .93$) and perceived CSR ($\alpha = .90$) applied in this research was appropriate. Therefore, the statistical analysis indicated that the dependent measures used in this experiment had a high internal reliability.
Test of Hypotheses

Cognitive Elaboration

**Hypothesis 1:** Participants in a high involvement condition will generate more message-related thoughts than those in a low involvement condition. *(Predicted main effect)*

Based on the literature review, it was assumed that message sidedness and involvement have main effects on cognitive elaboration. Contrary to the expectations, the main effects of involvement and message sidedness were not significant. Hypothesis 1, “participants in a high-involvement condition would generate more message-related thoughts than those in a low-involvement condition,” was rejected.

A t-test was conducted to test the main effect of issue involvement level on cognitive elaboration. As Table 4-4 demonstrates, no statistical differences of message-related thoughts between a high and a low involvement group were found (p= .398). Thus, Hypothesis 1 was rejected. Contrary to previous research, this study did not find more cognitive elaboration among participants of the high-involvement condition. These results showed that regardless of whether the participant is highly involved or less involved with the issue, it is likely that he or she would generate the same amount of message-related thoughts about to the issue discussed in the messages.

Table 4-4. A t-test of mean difference of message-related thoughts generated between the high and the low involvement group

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>Low</td>
<td>91</td>
<td>3.42</td>
<td>2.21</td>
<td>.190</td>
<td>181</td>
</tr>
<tr>
<td>Involvement</td>
<td>High</td>
<td>92</td>
<td>3.36</td>
<td>1.99</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* 1. Participants were requested to generate message-related thoughts after reading experimental stimuli.  
2. p= .398
Hypothesis 2: A two-sided refutational message will induce more message-related thoughts than a one-sided or a nonrefutational two-sided message. (Predicted main effect)

To test Hypothesis 2, a One-Way Analysis of Variance (ANOVA) test was run (see Table 4-5). In this experiment, no statistically significant differences were found between the numbers of message-related thoughts from different message sidedness groups (p=.134). Thus, Hypothesis 2 was also rejected. For cognitive elaboration, there were no significant effects attributed to involvement and message sidedness.

Table 4-5. A t-test of mean difference of message-related thoughts generated between three groups of sided messages

<table>
<thead>
<tr>
<th>Measure</th>
<th>Treatment</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>F</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>One-Sided</td>
<td>61</td>
<td>3.70</td>
<td>2.22</td>
<td>2.03</td>
<td>2/180</td>
</tr>
<tr>
<td></td>
<td>NR Two-Sided</td>
<td>62</td>
<td>2.97</td>
<td>2.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R Two-Sided</td>
<td>61</td>
<td>3.49</td>
<td>1.91</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. Items in the attitude scale were measured in a seven-point semantic differential scale.
3. p= .134

Main Effects of Message Sidedness on Perceived CSR

RQ1: How does message sidedness influence people’s perception about corporate social responsibility of a company? What will lead to more positive perceived CSR between a two-sided message and a one-sided message?

None of the previous studies from the literature of CSR and persuasion research had empirically tested the persuasiveness of a CSR campaign based on the effect of message sidedness. Therefore, a research question was proposed. To answer this research question, a one-way ANOVA test with perceived CSR as a dependent variable was undertaken. The test yielded a significant message sidedness effect, F (3, 201) = 15.74, p < .001.
The results in Table 4-6 and Table- 4-7 show that there were significant mean differences between the treatment group and the control group. The mean score of overall perceived CSR for the control group (M=4.05) was significantly lower than those of treatment groups (M One-sided = 5.39; M NR Two-sided = 4.61; M R Two-sided = 4.86, Scheffe post-hoc test, p < .05). In other words, participants’ perceptions about the company’s corporate social performance were significantly different from that in the control group who did not receive CSR campaigns.

Table 4-6. Perceived CSR by message sidedness

<table>
<thead>
<tr>
<th>Message Sidedness</th>
<th>Control (N=21)</th>
<th>One-Sided (N=61)</th>
<th>NR Two-Sided (N=62)</th>
<th>R Two-Sided (N=61)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Perceived CSR</td>
<td>4.00 (.62)</td>
<td>5.51 (.97)</td>
<td>4.61 (.88)</td>
<td>4.86 (1.15)</td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. Standard deviation in parentheses.
3. The perceived CSR index shows the average of five items on a 7-point scale, with higher value indicating higher perceived CSR.

Table 4-7. F-test of perceived CSR by message sidedness

<table>
<thead>
<tr>
<th></th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Perceived CSR</td>
<td>Between groups</td>
<td>3</td>
<td>15.01</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>201</td>
<td>.95</td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. *** p < .001

In particular, significant mean differences were also found between the scores of perceived CSR among the three message sidedness groups. Table 4-8 shows the mean score of perceived CSR for the one-sided message group is significantly higher than that of two-sided message groups. It is noteworthy that participants of all the three groups received the same CSR message(see Appendix C & D) while only that in two-sided message groups received additional arguments on the clearcutting issue (see Appendix E
Moreover, participants in nonrefutational two-sided message groups rated the lowest score on perceived CSR among all the three groups. Participants in the refutational two-sided message groups, on the other hand had a lower score on perceived CSR than the one-sided message group.

However, the finding is contrary to previous research. These results indicated that the one-sided CSR message is the most persuasive in influencing participants’ perceptions about the company’s corporate social performance.

Table 4-8. Perceived CSR by message sidedness

<table>
<thead>
<tr>
<th>Sidedness</th>
<th>Subset for Alpha - .05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Control</td>
<td>21</td>
</tr>
<tr>
<td>NR Two-Sided</td>
<td>62</td>
</tr>
<tr>
<td>R Two-Sided</td>
<td>61</td>
</tr>
<tr>
<td>One-Sided</td>
<td></td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. Displayed are means for groups in homogeneous subset.
3. Scheffe post-hoc test was performed; p < .05.

Interaction Effect on Perceived CSR

As results of Table 4-9 and Table 4-10 show, a significant interaction effect was found only when the participant is in the low involvement condition. The results indicated that perceived CSR was more positive in a one-sided condition (M=5.85, SD=.82) than in the remaining conditions (M for NR TWO = 4.57, M for R TWO=4.70) under a low involvement condition, however the mean difference between the refutational two-sided group (M = 5.02) and the one-sided group (M = 5.18) decreased under a high involvement condition. The mean score of the nonrefutational two-sided group remained relatively unchanged by the two involvement levels. In short, the
interaction effect of involvement and message sidedness on perceived CSR was statistically significant, \( F (2,178) = 4.17, p < .05. \)

Table 4-9. Interaction of involvement and message sidedness on perceived CSR

<table>
<thead>
<tr>
<th>Message Sidedness</th>
<th>Low Involvement</th>
<th>High Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M (SD)</td>
</tr>
<tr>
<td>ONE-SIDED</td>
<td>30</td>
<td>5.85 (0.82)</td>
</tr>
<tr>
<td>NR TWO</td>
<td>31</td>
<td>4.57 (0.89)</td>
</tr>
<tr>
<td>R TWO</td>
<td>31</td>
<td>4.70 (1.14)</td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. \( p < .05 \)

Table 4-10 Tests of between-subject effects (dependent variable: perceived CSR)

<table>
<thead>
<tr>
<th></th>
<th>MS</th>
<th>df</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>4591.72</td>
<td>1</td>
<td>4656.13 ***</td>
</tr>
<tr>
<td>Involvement</td>
<td>.38</td>
<td>1</td>
<td>.38</td>
</tr>
<tr>
<td>Message Sidedness</td>
<td>13.40</td>
<td>2</td>
<td>13.59 ***</td>
</tr>
<tr>
<td>Involvement* Message Sidedness</td>
<td>4.11</td>
<td>2</td>
<td>4.17 *</td>
</tr>
<tr>
<td>Error</td>
<td>.99</td>
<td>178</td>
<td></td>
</tr>
</tbody>
</table>

Note. 1. * \( p < .05; \\ *** p < .001 \)
2. \( R^2 = .17 \)

The Figure 4-1 clearly shows the differences in the interaction effects of message sidedness on perceived CSR when the participant is in the low involvement and the high involvement conditions. These findings indicated that a one-sided CSR message appeared to be most persuasive in influencing people’s perceptions about a company’s corporate social performance. Particularly, the persuasion effect of a one-sided CSR message is more obvious when the message recipient is in a low-involvement situation. However, the advantage of persuasiveness for one-sided message decreased when involvement was high.
Hypothesis 3: Participants exposed to a refutation two-sided message would show more positive attitudes than those who were exposed to a one-sided or a non-refutational two-sided message. (Predicted main effect)

Another important dependent variable that was widely studied by researchers was participants’ attitude toward a brand or a company. To test this Hypothesis 3, a one-way ANOVA test was applied to the overall attitudes toward CALCO, followed by the Scheffe homogeneous subset comparison procedure upon significance level at $\alpha = .05$. Table 4-11 and Table 14-2 demonstrate that results from the ANOVA test turn out to be contrary to the prediction of Hypothesis 3.
Contrary to Hypothesis 3, it was found that the one-sided message group showed the most positive attitude toward CALCO with M=5.82, SD=1.03. Results from the one-way ANOVA test revealed a significant main effect of message sidedness on attitudes toward CALCO, F (3, 200) = 20.56, p < .001.

Table 4-11. Attitudes toward CALCO by message sidedness

<table>
<thead>
<tr>
<th>Message Sidedness</th>
<th>Control (N=21)</th>
<th>One-sided (N=60)</th>
<th>NR TWO (N=62)</th>
<th>R TWO (N=61)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes Toward CALCO</td>
<td>4.18 (.63)</td>
<td>5.82 (1.03)</td>
<td>4.73 (.96)</td>
<td>4.75 (1.11)</td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. “Two” indicates “two-sided.”
4. The attitude index shows the average of six items with a 7-point semantic differential scale, with higher value indicating more positive attitudes toward CALCO.

This finding again suggested that one-sided CSR messages have an advantage in persuasiveness over refutational two-sided messages and non-refutational two-sided messages. According to the findings of the current study, one-sided CSR messages appear to be more persuasive in communicating CSR activities, in terms of generating positive attitudes toward the company and inducing higher perceptions of the company’s corporate social performance. In other words, a one-sided CSR campaign presenting simply the positive information related to the social activities of the company generated more positive attitudes toward the company than a two-sided CSR campaign.

Table 4-12. F-test for attitudes toward CALCO by message sidedness

<table>
<thead>
<tr>
<th></th>
<th>Df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes toward CALCO</td>
<td>3</td>
<td>20.77</td>
<td>20.56***</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>1.01</td>
<td></td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. *** p < .001
Since the main effect for control of message sidedness on attitudes toward the company was significant, a subsequent post-hoc analysis with Scheffe’s homogeneous subset test showed that the effects of message sidedness on the attitudes toward CALCO could be attributed to the differences between the one-sided message group and the two-sided message groups (see Table 4-13). The mean attitude score of the one-sided message group (M = 5.82) was significantly higher than that of both the nonrefutational two-sided message group (M = 4.73) and the refutational two-sided message group (M = 4.75) under p < .05.

Table 4-13. Attitudes toward CALCO by message sidedness

<table>
<thead>
<tr>
<th>Sidedness</th>
<th>Subset for Alpha - .05</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Control</td>
<td>21</td>
</tr>
<tr>
<td>NR TWO</td>
<td>62</td>
</tr>
<tr>
<td>R TWO</td>
<td>61</td>
</tr>
<tr>
<td>One-sided</td>
<td></td>
</tr>
</tbody>
</table>

Note. 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. Displayed are means for groups in homogeneous subset.
3. Scheffe post-hoc test was performed; p < .05.

These findings indicated that significant differences were found between the one-sided message and the two-sided message (refutational two-sided and nonrefutational two-sided) in terms of the effects on perceived CSR and attitudes toward the company. However, no significant differences were found between the refutational two-sided message and the nonrefutational two-sided message. The results of the current study might explain why the mainstream of message sidedness research mainly focused on one-sided and two-sided messages, instead of comparing two types of two-sided messages.

Interaction Effect on Attitude toward a Company

Hypothesis 4: Participants in a low involvement condition will show more positive attitudes with a one-sided message while those in a high involvement condition
would express more positive attitudes with a refutational two-sided message.

*(Predicted interaction effect on attitude)*

In Hypothesis 4, an interaction effect of message sidedness and involvement on attitude toward CALCO was predicted. It was more specifically hypothesized that participants in a low involvement condition would show more positive attitudes to a one-sided message while those in a high involvement condition would express more positive attitudes to a refutational two-sided message.

Table 4-14 and Table 4-15 revealed that there was no significant interaction effect of message sidedness and involvement on attitudes toward the company. Therefore, Hypothesis 4 was rejected. There was only a main effect of message sidedness on attitude toward the company as confirmed in the earlier analysis. The one-sided message resulted in more positive attitude toward CALCO both in a high involvement and in a low involvement condition than other remaining conditions.

Table 4-14. Interaction of involvement and message sidedness on attitudes

<table>
<thead>
<tr>
<th>Message Sidedness</th>
<th>Low Involvement</th>
<th>High Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M   (SD)</td>
</tr>
<tr>
<td>One-Sided</td>
<td>30</td>
<td>5.93 (1.16)</td>
</tr>
<tr>
<td>NR Two-Sided</td>
<td>31</td>
<td>4.45 (0.98)</td>
</tr>
<tr>
<td>R Two-Sided</td>
<td>31</td>
<td>4.70 (1.27)</td>
</tr>
</tbody>
</table>

*Note.* 1. NR stands for “nonrefutational.” R stands for “refutational.”
2. “Two” indicates “two-sided.”
4. The attitude index shows the average of six items with a 7-point semantic differential scale, with higher value indicating more positive attitudes toward CALCO.
Table 4-15. Tests of between-subject effects (dependent variable: attitudes)

<table>
<thead>
<tr>
<th></th>
<th>MS</th>
<th>df</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>4758.61</td>
<td>1</td>
<td>4474.25***</td>
</tr>
<tr>
<td>Involvement</td>
<td>1.00</td>
<td>1</td>
<td>.94</td>
</tr>
<tr>
<td>Message Sidedness</td>
<td>23.31</td>
<td>2</td>
<td>21.92 ***</td>
</tr>
<tr>
<td>Involvement* Message Sidedness</td>
<td>2.39</td>
<td>2</td>
<td>2.25</td>
</tr>
<tr>
<td>Error</td>
<td>188.25</td>
<td>177</td>
<td></td>
</tr>
</tbody>
</table>

Note. 1. *** p < .001 2. $R^2 = .22$

A sub Analysis between Two Sample Groups

The participants of the present experiment were recruited from two undergraduate class from two different colleges: the College of Agricultural and Life Sciences and the College of Journalism and Communications. It is appropriate to assume that there might be some differences between the two groups of participants because of the majors of students in the College of Agricultural and Life Sciences are related to environmental issues and therefore assumed to be more environmental concerned. A sub analysis was run between two groups of participants to test the above four hypotheses. However, the results did not indicate any significant statistical differences.

A Correlation between Perceived CSR and Attitudes toward a Company

**Hypothesis 5:** Higher perceived CSR would be positively associated with more positive attitude toward CALCO.

As a test of this hypothesis, a correlation analysis was conducted. In order to determine any significant relationships between perceived CSR and attitudes toward the company, the Pearson correlation was undertaken. Pearson correlations coefficient is a measure of association which caries from -1 to +1, while 0 indicating no linear relationship, -1 indicating a perfect negative linear relationship and +1 indicating a perfect linear relationship (Garson, 2005).
In the Table 4-16, the Pearson correlation coefficient shows that there is a positive correlation between perceived CSR and attitude toward a company. Thus, Hypothesis 5 was supported. This finding indicated that perceived CSR was highly associated with attitudes toward the company. In other words, when a person perceives a company as socially responsible, it was likely that he or she would have more positive attitude toward the company.

Table 4-16. A Pearson Bivariate Correlation between perceived CSR and attitudes

<table>
<thead>
<tr>
<th>Perceived CSR</th>
<th>Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived CSR</td>
<td>1.00</td>
</tr>
<tr>
<td>Attitudes</td>
<td>.697 **</td>
</tr>
</tbody>
</table>

\*Note: 1. ** p < .01 (2-tailed).

A Hierarchical Regression Analysis between Perceived CSR and Attitudes toward a Company

To look into the relationship between perceived CSR and attitude toward the company, a hierarchical regression analysis was performed (see Table 4-17).

“Attitudes toward CALCO” was the dependent variable for this hierarchical regression model. In this hierarchical regression analysis, three blocks of variables were entered into the hierarchical regression analysis

The three blocks of variables consisted of “participants’ demographics,” “experimental variables (i.e., message sidedness and involvement),” and “mediators.” Participants’ demographics consisted of age, gender, and ethnicity: gender and ethnicity were dummy-coded ($M_1$). The experimental variables of involvement and messages sidedness were also entered as dummy variables ($M_2$). Finally, in order to examine mediating impacts of cognitive elaboration and perceived CSR on the dependent variable, the total number of message-related thoughts and perceive CSR were entered into the third step ($M_3$). The regression model helped verify the hypothesis by comparing the
standardized coefficient ($\beta$) and $R^2$. Standardized regression coefficients ($\beta$) and R-square changes ($\Delta R^2$) in explained variance were examined.

Table 4-17. Hierarchical regression analysis for proposed model

<table>
<thead>
<tr>
<th>Attitude toward the company as a DV(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>(\beta)</td>
</tr>
<tr>
<td>Demographics</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Gender (female)(^b)</td>
</tr>
<tr>
<td>Ethnicity (White)(^b)</td>
</tr>
<tr>
<td>Experimental Variables</td>
</tr>
<tr>
<td>One-sided(^b)</td>
</tr>
<tr>
<td>Refutational Two-sided(^b)</td>
</tr>
<tr>
<td>Involvement: High(^b)</td>
</tr>
<tr>
<td>Mediators</td>
</tr>
<tr>
<td>Cognitive Elaboration</td>
</tr>
<tr>
<td>Perceived CSR</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>(R^2)</td>
</tr>
<tr>
<td>Adjusted (R^2)</td>
</tr>
<tr>
<td>(\Delta R^2)</td>
</tr>
<tr>
<td>F for Regression</td>
</tr>
</tbody>
</table>

Notes: Standardized regression coefficients ($\beta$) are shown; Std. Error means standard errors.

- \(^a\) DV = dependent variable
- \(^b\) dummy coded

Mean for the items means the average score for the 7 items in the Fortune reputation index.

\(^{**} p < .01; \^{***} p < .01\)

In the regression analysis, three demographic variables were entered first. No significant influence was found from entering this block (i.e., \(M1\) of variables. Since these demographics were considered as control variables in this experiment, it could be
interpreted that individual differences that may hurt the results of this experiment were strongly controlled. The second block of the analysis (M2) observed a significant impact of message sidedness (i.e., one-sided message) on the dependent variables of attitudes toward CALCO (\( \beta = .52, p < .001 \)). The refutational two-sidedness entered as a dummy variable did not contribute to the dependent variable, nor did involvement manipulation. The experimental variables entered in step 2 accounted for 21 percent of the variance (\( p < .001 \)).

In the final step of analysis (M3), the entire variables were entered to look into a relative contribution of each variable to the dependent variable. The beta coefficient of message sidedness (\( \beta = .21, p < .01 \)) was reduced but it was still significantly associated with attitudes toward CALCO, the dependent variable. Therefore, the one-sided message could be interpreted as a reliable contributor to positive attitudes toward CALCO. The results also showed that perceived CSR could be an effective predictor for achieving positive attitudes toward CALCO (\( \beta = .63, p < .001 \)). Therefore, Hypothesis 5 that predicted a positive relationship between perceived CSR and attitudes toward the company was corroborated.

In order to be perceived as socially responsible, the findings of this study suggest that companies should emphasize not only practicing CSR but also communicating its corporate social performance to their stakeholders. In brief, the findings of this study demonstrate the effectiveness of CSR campaigns on enhancing people’s perceptions of the corporate social performance and attitude toward the company. More specifically, in terms of CSR communication strategy, one-sided messages presenting supportive
arguments for the company’s social performances are more persuasive in influencing people’s perceptions in a desired direction regardless of involvement level.

Path Analysis

The researcher proposed a cognitive processing model of a CSR message in this study (see Figure 4-2). However, no significant difference of the numbers of message related thoughts was found between treatment groups. The assumption related to the main effects and interaction effects of message sidedness and issue involvement on participants’ levels of cognitive elaboration was rejected. Therefore, in order to revise the cognitive processing model of a CSR message, an additional path analysis was undertaken to explore the causal relationships between message sidedness, involvement, perceived CSR and attitude toward the company.

Moreover, in response to the research call for effective communication methods of CSR (Clark, 2000), it is essential to demonstrate the impact of communicating CSR activities or commitment on achieving organizational goals. Based on the notion that effective CSR communication should have positive impact on organizational goals, the present study attempts to explore the causal relationships between the perceptions of a company’s corporate social performance and the attitudes toward the company by conducting path analysis.

Path analysis is a statistical procedure consisting of a series of regression analyses. The key advantage of using the path analysis approach in this research study is that the researcher can demonstrate the causal relationships between variables so that in turn the theories and relationships among variables can be clarified and strengthen (Agresti & Finlay, 1997).
The equations for a five-variable path model were depicted in Figure 4-3. Based on the equations, the researcher tested direct and indirect effects of exogenous variables and different patterns of CSR messages and involvement level on both attitude toward the company and perceived CSR. It is assumed in this study that perceived CSR has a mediating effect on attitude toward the company.

The results of the path analysis suggest that the one-sided message has both significantly direct effects on perceived CSR \((P=.38, p<.001)\) and on attitude toward the company \((P=.43, p<.001)\). Refutational two-sided message also has a direct effect on perceived CSR \((P=.18, p<.05)\), but only marginal impact on attitude toward the company \((P=.10, p<.10)\). The path analysis also indicated that a significant direct effect between perceived CSR and attitude toward the company \((P=.65, p<.001)\). That is, the higher the person perceived a company’s corporate social activities, the more likely to the person will induce positive attitudes toward the company.

However, Figure 4-3 shows that involvement level did not link to either perceived CSR or attitude toward the company. In other words, according to the results of the path analysis, involvement level does not affect people’s perceptions of a company’s corporate social performance and their attitudes toward the company.

The most important findings in the causal model were related to the power of perceived CSR in predicting attitude toward the company. Consistent with the hypothesis of this study, it was found that perceived CSR was highly associated with attitude toward the company. The higher participants perceived the corporate social performance of a company, the more they had positive attitudes toward the company. In this regard, communicating a company’s social performance is as important as conducting corporate
social activities. Therefore it is needed to address a communication management perspective of corporate social responsibility in order to include CSR as part of a business strategy.

Another interesting finding from this path analysis is the effects of message sidedness on perceived CSR and attitude toward the company. The path coefficients of message sidedness in the path model show that a one-sided message has a direct impact on perceived CSR and attitude toward the company. In other words, a one-sided CSR campaign which presents only positive information has a significant advantage over a two-sided CSR campaign in influencing message recipients’ perceptions of the company’s social performance and their attitudes toward the company.

The involvement variable however, has no direct effect on perceived CSR nor has it on attitudes toward the company. Regardless of involvement level, a CSR campaign has the same effect on message recipients’ perceived CSR and their attitudes toward the company. Therefore, according to the results of the path analysis, a revised cognitive processing model of a CSR message is presented in Figure 4-4. The effect of message sidedness is highly associated with both perceived CSR, and attitude toward the company.

In brief, the results of the path analysis show that five paths, all direct, are statistically significant (see Figure 4-3): from a one-sided message to perceived CSR ($P=.38, p<.001$), from a one-sided message to attitude toward the company ($P=.43, p<.001$), from perceived CSR to attitude toward the company ($P=.65, p<.001$), from refutational two-sided message to perceived CSR ($P=.18, p<.05$), from refutational two-sided message to attitude toward the company ($P=.10, p<.10$).
Figure 4-2. The original cognitive processing model of a CSR message proposed in this research.

Figure 4-3. The path diagram based on the path analysis.

Note. 1. Message sidedness and involvement were dummy coded. 2. † p < .10, * p < .05, *** p < .001 3. n.s. represents nonsignificant
Figure 4-4. The revised cognitive processing model of a CSR message proposed in this research.
CHAPTER 5
DISCUSSION

Over View of the Present Study

The present study represents an innovative experiment of a cognitive processing model of a CSR message. The purpose of this study is to test empirically the persuasive effect of a CSR campaign in influencing participants’ attitudes toward a company and perceived CSR regarding involvement level and the effect of message sidedness. In particular, the relationships of a CSR campaign on attitudes toward the company via message recipients’ perceptions of the company’s social performance were verified in this study.

By testing the persuasiveness of a CSR campaign and proposing a cognitive processing model, this study sheds light on the research of CSR communication and persuasion. Even though previous research has discussed CSR from the issues management perspective (Carroll, 1991; Clark, 2000; Esrock & Leichty, 1998; Heath, 1998; Heath & Ryan, 1989; L’Etant, 1994; Wartick & Cochran, 1985; Wartick & Rude, 1986), the discussions about the effects of a CSR campaign on public perceptions of a company’s social performance were missing.

To fill this research lacuna, this study explored the persuasiveness of a CSR message in influencing public perceptions of a company’s social performance and attitudes toward the company. The present study asked whether presenting a one-sided CSR campaign or a two-sided CSR campaign is more persuasive in advocating a company’s corporate citizenship and addressing the controversial issues related to the
fundamental practice of the business. The two-sided CSR campaigns were further broken down into two different forms: 1) a nonrefutational two-sided campaign in which the opposing messages were shown without additional refutations, and 2) a refutational two-side message in which the opposing arguments were shown with refutational explanations.

From the public relations perspectives, this study contributed to explore the effectiveness of CSR campaigns as proactive tools of issues management. The main objective of the present study was to test whether attitude toward the company can be influenced by people’s perceptions of the company’s corporate social performance. Moreover, this study also explored the functions of a CSR campaign not only in advocating the corporate citizenship of the company but also preventing crisis situations by actively addressing controversial issues with external stakeholders.

Little research had empirically examined the effectiveness of a CSR campaign. The present study attempted to explore this uncharted research area with relevant theories in persuasion, such as the cognitive response research and the ELM. In addition, this study tested the causal relations between perceived CSR and attitude toward the company.

The experimental design of this study can provide some practical implications to public relations practitioners who have to communicate with active publics concerning a critical issue. According to Grunig’s (1997) situational theory, the active public is identified as a high involvement group. It is assumed in this study that if participants are highly involved with the issue, they would generate more message-related thoughts particularly when they were exposed to a refutational two-sided message.
In addition, another important assumption related to involvement level was message recipients’ cognitive elaboration of the CSR messages. Based on the ELM, it was reasoned in this study that an individual’s perceptions about a company’s corporate social performance and attitudes toward the company would be mediated by his or her motivation to process the message and the issue presented in CSR campaigns. However, findings in this study did not support the assumption that message sidedness and issue involvement have impact on participants’ cognitive elaboration level of processing a CSR message.

Even though there were no significant differences between the numbers of recipients’ message-related thoughts, it was found in this study that a one-sided CSR campaign has an advantage of persuasiveness over both refutational two-sided and nonrefutational two-sided CSR campaigns. The findings in this study indicated that presenting only supportive messages about a company’s corporate social activities will induce more positive attitudes toward the company. Regardless of the involvement level, people are likely to form a positive attitude toward a company when the company is considered as socially responsible.

Contrary to previous findings on the effect of message sidedness, it was found in this study that a one-sided CSR message had generated more positive attitudes toward the company and more positive perceptions of the company’s corporate social achievements than two-sided one. In addition, this study also found that the perceived CSR was positively associated with attitudes toward the company ($r = .697$), implying that the perceived CSR might play a mediating role in the process of attitude formation when a person was exposed to a CSR advocacy message.
Overview of the Hypotheses and Research Question

In the following section, each of the five hypotheses and one research question is discussed in detail based on the results of this study.

**Hypothesis 1**: Participants in a high involvement condition will generate more message-related thoughts than those in a low involvement condition

The first hypothesis investigated the main effect of involvement level on cognitive elaboration of the CSR messages presented in the experiment. To test this hypothesis, a t-test was conducted. However, the results showed no statistical differences of message-related thoughts between a high and a low involvement group (p= .398). Thus, Hypothesis 1 was rejected.

Even though a successful manipulation check of involvement was obtained in this study, participants in high involvement groups did not demonstrate higher level of cognitive elaboration as previous research has indicated. The results showed that regardless of participants’ involvement level, the numbers of message-related thoughts generated by participants in high involvement conditions were not significantly different from that in low involvement conditions.

One explanation of these results is that the manipulation of involvement used in this experiment did not affect respondents’ motivation to process the messages presented in the stimuli booklets.

In this study, participants’ level of involvement was manipulated by the location of the lumber company presented in the message stimulus. For high involvement groups, the lumber company presented in the stimuli was located in Florida, whereas the lumber company was located in Taiwan for low involvement groups. Involvement level was
measured using four questions regarding participants’ concerns about the environmental issues in Florida or in Taiwan.

Even though the manipulation check of involvement worked successfully in this experiment, it did not show that participants’ motivation to cognitively processing the CSR messages was also manipulated by the stimuli. Therefore, it is appropriate to assume that the amounts of effort participants invested in reading the CSR messages and answering the questionnaire were not influenced by the involvement manipulation presented in the stimuli materials. Participants in the high involvement group were not necessary more motivated to process the stimuli even though their responses to the manipulation check were significantly different from that in the low involvement group. Therefore, to test the cognitive elaboration, future research should consider other approaches to enhance participants’ motivation in responding experimental materials.

**Hypothesis 2:** *A two-sided refutational message will induce more message-related thoughts than a one-sided or a nonrefutational two-sided message.*

To test Hypothesis 2, a One-Way ANOVA test was run. In this experiment, no statistically significant differences were found between the numbers of message-related thoughts from different message sidedness groups. Thus, Hypothesis 2 was also rejected. For cognitive elaboration, there were no significant effects attributed to involvement and message sidedness.

However, a previous research by Hale et al. (1991) found that more positive cognitions were generated by refutational two-sided messages than nonrefutational two-sided messages and one-sided messages. Contrary to previous study, this experiment found that one-sided CSR message had induced more message related thoughts than two-
sided CSR messages. One explanation may be that the total number of message-related thoughts was considered for measuring cognitive elaboration in this study, instead of the number of positive and negative thoughts.

In conclusion, these results failed to support the main effects of message sidedness and involvement on cognitive elaboration. Further analysis is needed to revise the cognitive elaboration model of a CSR message proposed in the beginning of this study. Therefore, path analysis, regression analysis and Pearson correlation analysis were conducted in this study and discussed in the following section to explain the causal relationships between the three variables in the revised cognitive elaboration model of a CSR message.

**RQ1:** *How does message sidedness influence people’s perception about corporate social responsibility of a company? What will lead to more positive perceived CSR between a two-sided message and a one-sided message?*

To answer this research question, a one-way ANOVA test with perceived CSR as a dependent variable was undertaken. The test yielded a significant message sidedness effect and the results showed that participants’ perceptions about the company’s corporate social performance were significantly influenced by CSR campaigns. In particular, these results indicated that the one-sided CSR message is the most persuasive in influencing participants’ perceptions about the company’s corporate social performance.

A significant interaction effect was also found in this study. However, the interaction effect was limited to the low involvement condition. The results indicated that
one-sided CSR message had induced more positive perceived CSR in the low involvement condition.

In conclusion, the present study confirmed previous studies that demonstrated a relationship between CSR communication and perceptions about a company’s corporate social performance. The CSR campaign designed for the present experiment appears to represent the majority of CSR initiatives and activities, because the three areas of CSR activities chosen for research, environment, employees and community, are the focus of CSR initiatives and activities for the majority of today’s corporations.

**Hypothesis 3:** Participants exposed to a refutation two-sided message would show more positive attitudes than those who were exposed to a one-sided or a non-refutational two-sided message. *(Predicted main effect)*

To test this Hypothesis 3, a one-way ANOVA test was applied to the overall attitudes toward the company. Results revealed a significant main effect of message sidedness on attitudes toward the company *(p < .001)*. However, contrary to the prediction, this finding again suggested that one-sided CSR messages have an advantage in persuasiveness over refutation two-sided messages and non-refutational two-sided messages.

**Hypothesis 4:** Participants in a low involvement condition will show more positive attitudes with a one-sided message while those in a high involvement condition will express more positive attitudes with a refutational two-sided message. *(Predicted interaction effect on attitude)*

The results indicated that no interaction effect of message sidedness and involvement on attitudes toward the company was found. Therefore, Hypothesis 4 was
rejected. There was only a main effect of message sidedness on attitude toward the company as confirmed in the earlier analysis.

Two main effects of message sidedness were found on perceived CSR and attitude toward the company, while only one interaction effect between message sidedness and perceived CSR was found when participants’ involvement levels were low. In conclusion, the results to above hypotheses showed that (1) generally the effect of message sidedness on perceived CSR and on attitude toward the company were significant, (2) contrary to previous research, one-sided CSR messages appear to have an overall advantage of persuasiveness in influencing people’s perceptions about a company’s social performance and their attitude toward the company, and (3) the relationships between message sidedness and involvement on cognitive elaboration were do found. Based on these findings, it can be suggested that the proposed cognitive elaboration model of processing a CSR message can be revised by taking out the cognitive elaboration.

**Hypothesis 5:** Higher perceived CSR will be positively associated with more positive attitude toward CALCO.

As expected, the Pearson correlation coefficient shows that there is a positive correlation between perceived CSR and attitude toward a company. This finding indicated that perceived CSR was highly associated with attitudes toward the company. A hierarchical regression analysis was performed to look into the relationship between CSR messages, perceived CSR and attitude toward the company. The regression analyses tested whether CSR messages and perceived CSR had significant effect on predicting
attitudes toward the company. According to the results, the one-sided message could be interpreted as a reliable contributor to positive attitudes toward CALCO.

Using the path analysis, the researcher examined the effects of message sidedness and involvement had on perceived CSR and attitude toward the company. As expected, the analysis showed that both message sidedness had both direct effects on perceived CSR and attitude toward the company, while no significant effects were found between involvement and other variables. The results of path analysis also indicated the direct relationship between perceived CSR and attitude toward the company is statistically significant.

Path analysis confirmed five paths, all direct, are statistically significant: one-sided message had two direct effects on perceived CSR and attitude toward the company, while refutational two-sided message also had two direct effects on perceived CSR and attitude toward the company, and refutational two-sided message had a direct effect on attitude toward the company. Consequently, the present study proposed a model of relationship between message sidedness, perceived CSR and attitude toward the company as the final model.

In conclusion, the present study demonstrated that (1) CSR messages (one-sided message and refutational two-sided message) were significantly associated with perceived CSR, (2) perceived CSR was significantly associated with attitude toward the company.

Although most of hypotheses were rejected except for the last one hypothesized on the relationship between perceived CSR and attitude toward the company, some of interesting and information were found. First, regardless of people’s involvement level
with issues, the one-sided CSR message has an overall advantage of persuasiveness in influencing people’s perceptions about a company’s corporate social performance and their attitudes toward the company. Contrary to previous research, the results of the present study reflected the conflicting findings of the mainstream research in message sidedness.

Second, perceived CSR was found to have a significant effect on predicting attitude toward the company. The present study had verified the relationship between a CSR message, perceived CSR and attitude toward the company. The results of this study suggest that CSR communication is highly associated with the attitude toward the company. In particular, a one-sided CSR message presenting only positive information about the company’s social commitment and activities are most persuasive in positively influencing the attitude toward the company.

Despite these unexpected results related to the message sidedness effect, the present study supports the proposition that perceived CSR can function as an important predictor of attitude toward the company. The present study concluded that CSR campaigns had a directly effect on people’s perceptions about the company’s social performance, while these perceived CSR also directly influence attitudes toward the company.
It has been a crucial topic in public relations research to explore the ways in which public relations can contribute to organizational goals.

Clark (2000) indicated a set of similarities between CSR and public relations and suggested that both disciplines are seeking to enhance the quality of the relationship of an organization among key stakeholder groups. However, for both fields to solidify a permanent place as a management function, more research into the value of their efforts is needed.

Moreover, recent developments in the fields of CSR and public relations suggest that reputation is an important area for future research to measure the value of both fields (Clark, 2000). According to Fombrun (1996), organizations can build a sound reputation through effective communication. Previous research in communication has looked specifically into how best to communicate the social responsibility of an organization (J. E. Grunig, 1986; Ledingham & Bruning, 1999). However, more specifically, a question about the chosen messages presented in CSR campaigns and how they affect the reputation or perception of an organization as responsible remain (Clark, 2000, p.376).

To overcome the research gap, the present study explored empirically the persuasive effects of a CSR message on attitude toward the company and perceived CSR. The effect of message sidedness and involvement level were also tested as a way of designing an effective CSR communication strategy.
The results of this study indicated that presenting a one-sided CSR campaign which presented only positive information about a company’s social activities was more persuasive in influencing public perceptions about the company’s social performance. Moreover, this study verified the relationships between the CSR message, perceived CSR and attitude toward the company. The results of this study demonstrated that there were direct effects between the CSR message, perceived CSR and attitude toward the company.

The results of the present study not only responded to Clark’s (2000) research call on the effects of CSR messages but also verified the communication management functions on CSR. It was showed in this study that an effective CSR campaign can influence public perceptions about a company’s social performance and induce positive attitude toward the company. The present study had build on the knowledge of CSR communication, cognitive response, and persuasive effect of message sidedness on CSR activities.

**Discussions about the Effect of Message Sidedness**

A couple of previous studies found that a one-sided message had more persuasive effect than a refutational two-sided message (e.g., Halverson, 1975; Smith et al, 1994). O’Keefe (1998) had argued that the conclusion of the message sidedness effect should be interpreted carefully by considering the message topics. He argued that: “given the different effects of nonrefutational forms in advertising and nonadvertising contexts, one should not too easily assume that refutational forms will function identically in the two circumstances” (p. 238).

Even thought an abundant number of studies have shown superior persuasiveness of refutational two-sided messages, other studies have found that one-sided messages can
be more persuasive under certain conditions, implying the existence of moderators in the message sidedness effect. For future research on message sidedness, the possible moderators of the effect of message sidedness were discussed.

From the very beginning of sidedness research, a number of possible moderators have been proposed. Hovland et al. (1949, p.225), for example, suggested that the audience’s educational level is an important determinant of the consequences of sidedness variations. Several variables such as the message recipient’s initial attitude toward the source’s position, topic familiarity (Allen, 1991), and intelligence (Hovland et al., 1949; Allen et al., 1990) are commonly mentioned as moderators of the persuasive effects of sidedness variations. Other proposed moderators have included perceived source motivation (Pechmann, 1990), and exposure to subsequent opposing communications (Lumsdaine & Janis, 1953). Specifically, one-sided messages were posited to be more effective than two-sided messages when the recipient initially agreed with the source’s position, while being unfamiliar with the topic, or unintelligent (Allen et al., 1990).

The following sections are discussions about the moderators of the effect of message sidedness. Even though these variables were controlled or in this experiment, previous studies had indicated that they may have an impact on the persuasiveness of the message sidedness which required some attention for future research.

**Credibility Perceptions**

Credibility perceptions are very important to the interpretation of the findings from this study. According to Allen et al.’s (1990) meta-analytic review, the credibility perception about the communicator was reported to play an important role in a persuasive process. In another comprehensive meta-analysis of the message sidedness effect by
O’Keefe’s (2000), the credibility perceptions were discussed in terms of a mediator in a persuasive process.

The variable of source credibility was controlled in this experiment. All the participants received CSR messages from the same source: the CALCO’s company Web site. Previous research indicates that refutational two-sided messages might evoke closer message scrutiny, and the persuasive effect was discounted because the message source could have been perceived to be less credible. In other words, participants may discount the message if it is delivered from a less credible source or because the message is considered as the one with a self-serving bias.

Regarding the impact of message-sidedness on persuasion, Chebat, Filiatrault, Laroche, and Watson (1988, p.619) had an important finding. They found that the attention span of negatively oriented recipients was more limited when the source was less credible and the message was two-sided. Therefore, an unexpected finding regarding the message sidedness in this study might be attributed to the impact of source credibility.

**Pre-Attitudes toward an Issue**

Previous research found that a one-sided message could be more persuasive when the audience was positively predisposed (Etgar & Goodwin, 1982). As discussed previously, a one-sided message is more persuasive to message recipients with positive initial attitudes toward an issue while a two-sided message is more persuasive to those who initially have negative attitudes.

In this experiment, some participants in the experimental conditions reported that the background information about CALOC which is delivered on CALCO’s “About Us” page generated positive initial attitudes toward the company. Even though we tried to deliver a brief company introduction, we had not anticipated that a well-designed
corporate Web page would have such an effect in forming a positive pre-attitude toward the company.

**Fear Arousal**

Smith et al.’s (1994) study on the persuasive message regarding organ donation found that a one-sided message was more persuasive than a refutational one. Their study showed the effects of prior thoughts and intent on outcomes associated with persuasion. They found that refutational messages induced significantly higher fear and anxiety in the segment of audience who are lacking in prior thought and intent to donate an organ.

In other words, the decreased persuasive effects of refutational two-sided messages in the present research might also be associated with unintended consequences such as the recipients’ avoidance of negative discussion. It was possible that participants would have perceived the refutational messages to be self-serving, which in turn generates negative attitudes toward the message itself and consequently toward the company.

**Application**

The current study responded to the research call of developing an effective method in communicating CSR. The findings in this study suggest that a one-sided CSR message may have an advantage in communicating the company’s corporate social performance as opposed to a two-sided one. More importantly, findings in this study also confirmed that communicating corporate social responsibility enhanced people’s perceptions about the company’s social performance and also generated more positive attitudes toward the company advocated. From the positive role of a CSR campaign in generating positive image and attitudes toward company, the CSR could be recommended as an effective tool of building a long-term relationship between the public and an organization. Further research examining the effect of CSR on building relationships is needed.
However, the conclusion of this study should be overstated because of several limitations mentioned previously. Regarding the level of issue involvement, the participants recruited in this study may mirror the general public who do not particularly concern about environmental issues. The results of this study did not suggest that all CSR campaigns should be presented as one-sided. On the contrary, for public relations practitioner to design an effective CSR communication strategy, it is essential to consider the characteristic of targeted audiences. For example, if the CSR campaign is targeted to communicate with environmental active audiences, then the conclusion of this study should be applied with caution. Future research is needed to explore the impact of CSR campaign on different audiences.

**Limitations**

This study examines only a small part of the process and the effects of CSR communication with a limited group of people and limited stimulus message. The results of this experimental study offer interesting and useful findings for public relations practitioners and researchers. However, any generalization from the findings of this study should be made with caution.

Despite a couple of limitations, this study could be improved with some considerations. In this research, the total number of message-related thoughts was considered for measuring cognitive elaboration, instead of the number of positive and negative thoughts. Several studies in this cognitive response paradigm suggest that valence of cognitive elaboration be considered. In the current research, the researcher did not test whether a refutaitonal two-sided message generates more positive message-related thoughts or it leads to negative cognitive elaboration. Future research can test the
cognitive process model of a CSR message with the consideration of valence of cognitive elaboration.

**Suggestions for Future Research**

**Knowledge Level**

Previous research in persuasion has indicated that participants’ educational levels have an influence on their responses of a one-sided or a two-sided message (Chu, 1967; Hovland, Lumsdanie, & Sheffield, 1949).

It has been found that lower education people would be more likely to respond to one-sided messages. However, controlling for the educational level, the preset study still found that one-sided CSR messages had an advantage of influencing attitude toward the company and perceived CSR. The clearcutting issue discussed in the stimuli materials was not a common topic in Florida areas. Therefore, it was assumed that most participants in this study were not familiar with the issue and had a low knowledge level. That is, because of the lower knowledge level about the clearcutting issue, participants in this study were more likely to respond to a one-sided message, regardless of their educational level.

**Message Length**

Apparently, another consideration is the length of message in this study. The lengths of two-sided CSR messages are much longer than the one-sided CSR message. Previous research suggested that the message length has an impact on the persuasive effect of message sidedness. It was found that low involvement people are more likely to respond to short message length. Therefore, for future research, it is suggested that the length of messages should be controlled.
Source Credibility

As mentioned earlier, the source perception of the CSR message may have influenced the message effect. It is possible that the audiences will discount the corporate source, presumably because they thought that the arguments presented from the corporate source at best served for self-interests.

Source credibility is a key role in persuasion and has been studied widely by researchers in different fields, such as marketing, advertising and social psychology. Future research could advance the current research with a consideration of source credibility manipulation. For instance, a future research design might use an experimental study that presents the same message used in the current study from either a high credible source (e.g., from a third party or a researcher in forestry) or the company.

Attitudes toward Issues

From an issues management perspective, future research may add some considerations on the interaction between people’s attitudes toward an issue and attitudes toward the company that advocated the issue. An additional dependent variable such as the attitudes toward the issue may be included in an experimental study via a pre-and post-test, so that an attitudinal change can be measured.

The present research has shed light on developing an effective communication strategy on CSR based on the message sidedness effect. However, in order to fully understand the persuasive effects of a CSR campaign on people’s perceived CSR, attitudes toward the company, and even the long-term relationship building between the company advocated and stakeholders, additional primary research is needed concerning the sidedness effect on CSR messages.
Contrary to previous studies, findings in this study show that a one-sided CSR campaign turned out to be more persuasive than a two-sided one. As discussed previously, unintended consequences regarding the message receiver’s skepticism of the credibility of acknowledged counterarguments might play a mediating effect on the persuasiveness of message sidedness. Differences in initial mistrust might be responsible for the observed differences in the perceived credibility of presenting counterarguments in the CSR messages. Exploration of the role of initial receiver skepticism seems warranted.

This possibility might be explored through systematic examination of the relationship between sidedness effects and receivers’ background expectations about the sidedness of messages that are potentially characterized by such mistrust. Finally, future research may also consider other topics of a CSR campaign considering the company’s unique characteristics of the industry: for instance, an experiment to test the persuasive effects of a CSR campaign targeting the AIDS issue in Africa a global pharmaceutical company.
CALCO is The Caribbean Lumber Company in Florida. We have been growing trees, making wood products, and supporting generations of families in Southwest Florida since 1863.

Established more than 140 years ago, CALCO still embodies the vision and spirit of its founders.

Today, their vision is a reality. The modern CALCO is a dynamic and innovative company whose employees are dedicated to providing superior lumber products to customers and value to shareholders.

And through wise management, careful stewardship, sustainable forestry, and modern environmental science, the people of CALCO have realized yet another vision of the company’s founders: forests that will go on forever.
CALCO is the Chiayi Lumber Company in Taiwan. We have been growing trees, making wood products, and supporting generations of families in Chiayi County, Taiwan since 1863.

Established more than 140 years ago, CALCO still embodies the vision and spirit of its founders.

Today, their vision is a reality. The modern CALCO is a dynamic and innovative company whose employees are dedicated to providing superior lumber products to customers and value to shareholders.

And through wise management, careful stewardship, sustainable forestry, and modern environmental science, the people of CALCO have realized yet another vision of the company’s founders: forests that will go on forever.
APPENDIX C
CALCO “ENVIRONMENTAL COMMITMENT”-UNITED STATES

CALCO embraces the philosophy of corporate social responsibility. In all of its operations, CALCO has been consistently committed to working in harmony with the environment.

Responsibility to the Environment
CALCO now offers office paper with 100 percent post-consumer recycled content. Tree-free papers made from kenaf, hemp, or agricultural waste such as wheat straw, rice straw and bagasse (waste from sugar cane processing) are also available. There is also an increasing range of forest-friendly products for use in construction and furniture making. To promote community awareness about recycling, CALCO, in a joint effort with the Sarasota County government, has collected wastepaper from schools. CALCO staff have provided instruction on how to classify wastepaper, so that collected wastepaper can be reused to make recycled paper.

CALCO has a deep respect for the environment and understands the importance of our land in protecting biodiversity. We plant 350 seedlings per acre, or 3 trees for every 1 tree that is harvested. We also voluntarily seek an average size of harvested openings smaller than the 120 acres that Florida laws allow. Under our Habitat Conservation Plan (HCP), we have set aside 5,000-plus acres of forests to protect threatened species including the marbled murrelet and spotted owl.

Responsibility to Our Community
Sustaining the communities in which we operate is a responsibility and a commitment we take very seriously. We believe that we have an obligation to contribute to the quality of life in our communities. As part of that commitment, we also provide a medical and dental facility for CALCO employees and people living in our communities. Each year, the CALCO College Scholarship program awards over $150,000 to students from Sarasota County.

Responsibility to Our Employees
CALCO fosters personal and professional growth and learning for all employees. Employees are empowered to make decisions and to share both the risks and rewards in making decisions. In addition, CALCO employees are eligible to receive $12,000 for attendance at any four-year accredited university or college and $4,000 for any two-year college or trade or religious school.
CALCO "ENVIRONMENTAL COMMITMENT" - TAIWAN

APPENDIX D

CALCO embraces the philosophy of corporate social responsibility in all of its operations. CALCO has been consistently committed to working in harmony with the environment.

Responsibility to the Environment
CALCO now offers office paper with 100 percent post-consumer recycled content. Tree-free papers made from kenaf, hemp, or agricultural waste such as wheat straw, rice straw and bagasse (waste from sugar cane processing) are also available. There is also an increasing range of forest-friendly products for use in construction and furniture making. To promote community awareness about recycling, CALCO, in a joint effort with the Chiayi County government, has collected wastepaper from schools. CALCO staff have provided instruction on how to classify wastepaper, so that collected wastepaper can be reused to make recycled paper.

CALCO has a deep respect for the environment and understands the importance of our land in protecting biodiversity. We plant 365 seedlings per acre, or 3 trees for every 1 tree that is harvested. We also voluntarily seek an average size of harvest openings smaller than the 120 acres that Taiwania laws allow. Under our Habitat Conservation Plan (HCP), we have set aside 6,200 plus acres of forests to protect threatened species including the marked muskrat and spotted owls.

Responsibility to Our Community
Sustaining the communities in which we operate is a responsibility and a commitment we take very seriously. We believe that we have an obligation to contribute to the quality of life in our communities. As part of that commitment, we also provide a medical and dental facility for CALCO employees and people living in our communities. Each year, the CALCO College Scholarship program awards over $85,000 to students from Chiayi County.

Responsibility to Our Employees
CALCO fosters personal and professional growth and learning for all employees. Employees are empowered to make decisions and to share both the risks and rewards in making decisions. In addition, CALCO employees are eligible to receive $12,000 for attendance at any four-year accredited university or college and $4,000 for any two-year college or trade or religious school.
APPENDIX E
CALCO “MYTH & FACT”

Now that the forest is no longer the exclusive domain of professional foresters, forest practices will not be acceptable unless they are compatible with prevailing beliefs and values—and until public trust in forestry is restored.” John C. Bliss, Professor and Stanker Chair in Forestry, Oregon State University.

Myth: Environmental activist groups have argued that clearcutting leads to deforestation. They have also alleged that nothing can be re-planted once a forest is cut down and it will never be the same again.

Fact: Deforestation is the removal of a forest with no intention of establishing a future stand of trees. For instance, deforestation is occurring today in Brazil and other tropical areas in the form of agricultural conversion. Clearcutting is both a harvest and a regeneration of the forest, and is done to improve future stands quality, growth, genetics, and species composition.

Myth: Another argument against clearcutting is that the resulting bare patches of land look unsightly. Activist groups argue that clearcutting is the destruction of aesthetics, values, and recreational opportunities.

Fact: The ageless of a clearcut soon passes—often sooner than expected. In three to four years, natural regeneration has filled in, the area has lost its brown, disturbed appearance, and the hillsides are again green in the summer and ablaze with colored leaves in the autumn. In six to ten years, the young trees are free to grow above all the shrubbery and seed trees. In ten to fourteen years, the young stand of 25- to 30-foot tall trees is once again a pleasant place to walk through. Finally, in 35 to 40 years, the growing trees begin to look like a valuable timber crop.

Myth: Environmental activist groups assert that the decreased number of trees will eventually lead to an unbalanced ecosystem which CALCO should be responsible for its consequence.

Fact: This is an inaccurate evaluation. Each species on our land has individual needs when it comes to food, shelter, and protection from predators. A balanced ecosystem is able to meet the diversified needs of different species. For example, on our property, marked marmots prefer the protection provided by dense undergrowth while many songbirds need forest openings to thrive. Spotted owls like a variety of forest cover and openings in which to hunt.
Environmental activist groups have argued that clearcutting leads to deforestation. They have also alleged that nothing can be regenerated once a forest is cut down and it will never be the same again.

Another argument against clearcutting is that the resulting bare patches of land look unsightly. Activist groups argue that clearcutting is the destruction of aesthetic values and recreational opportunities.

Environmental activist groups also assert that the decreased number of trees will eventually lead to an unbalanced ecosystem, which CALCO should be responsible for its consequence.
APPENDIX G
QUESTIONNAIRE FOR HIGH INVOLVEMENT GROUPS

Based on CALCO’s statement you just read from the printed Web pages, please answer the following questions. Please circle the number that best describes your thoughts or feelings.

Q1. Please evaluate how you feel about CALCO by circling a number on each of the scales below. If you feel that you have no reaction, please circle the number 4 to indicate your neutrality.

<table>
<thead>
<tr>
<th></th>
<th>Negative</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Harmful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Beneficial</td>
</tr>
<tr>
<td>2</td>
<td>Foolish</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Wise</td>
</tr>
<tr>
<td>3</td>
<td>Unfriendly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Friendly</td>
</tr>
<tr>
<td>4</td>
<td>Bad</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Good</td>
</tr>
<tr>
<td>5</td>
<td>Unfavorable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Favorable</td>
</tr>
</tbody>
</table>

Q2. Please evaluate how you feel about CALCO’s environmental policies. Please circle the number that best indicates your agreement with each item. If you strongly disagree with the provided statement, please circle “1”. If you strongly agree with the provided statement, please circle “7”. If you have no reaction, please circle “4” to indicate your neutrality.

To what extent do you agree with the following statements?

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) CALCO believes in environmental commitment.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(2) CALCO is likely to follow environment-friendly rules and policies.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(3) CALCO is highly concerned about environmental issues.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(4) CALCO is highly involved in community activities.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>(5) CALCO is genuinely concerned about public welfare.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

[Please go to the next page]
Q3. Please evaluate **how you feel about the statement provided by CALCO**. Please circle the number that best indicates your agreement with each item. If you strongly disagree with the provided statement, please circle “1”. If you strongly agree with the provided statement, please circle “7”. If you have no reaction, please circle “4” to indicate your neutrality.

<table>
<thead>
<tr>
<th>To what extent do you agree with the following statements?</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) CALCO’s statement made their points effectively.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(2) I like CALCO’s statement.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(3) The arguments presented in CALCO’s statement were convincing.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(4) Considering both content and style, I think CALCO’s statement is well written.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(5) CALCO’s statement was effective in increasing the awareness about the company’s environmental commitment.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(6) CALCO’s statement shows two-sided arguments.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(7) CALCO refutes opponents’ arguments.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(8) CALCO’s statement helps me understand the issue.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(9) CALCO’s statement corrects misunderstanding.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(10) CALCO’s statement provides facts.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Q4. **Please give your impressions or feelings about CALCO on each of the scales below.** If you have no reaction to CALCO on either scale, please circle the number 4 to indicate your neutrality. For example, how trustworthy or untrustworthy do you think CALCO is to inform you about their commitments?

<table>
<thead>
<tr>
<th>1</th>
<th>Untrustworthy</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Trustworthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Selfish</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Unselfish</td>
</tr>
<tr>
<td>3</td>
<td>Unbelievable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Believable</td>
</tr>
<tr>
<td>4</td>
<td>Not reliable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Reliable</td>
</tr>
<tr>
<td>5</td>
<td>Not honest</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Honest</td>
</tr>
</tbody>
</table>

[Please go to the next page]
Q5. Please **list the thoughts that came to your mind** while reading CALCO’s statement as many as you can generate. Please write your thoughts in the following lines, one thought per line. Please spend your time to list your thoughts. Thank you.

Thought1 ______________________________________________________________________

______________________________________________________________________________

Thought2 ______________________________________________________________________

______________________________________________________________________________

Thought3 ______________________________________________________________________

______________________________________________________________________________

Thought4 ______________________________________________________________________

______________________________________________________________________________

Thought5 ______________________________________________________________________

______________________________________________________________________________

Thought6 ______________________________________________________________________

______________________________________________________________________________

Thought7 ______________________________________________________________________

______________________________________________________________________________

Thought8 ______________________________________________________________________

______________________________________________________________________________

[Please go to the next page]
Q6. Please evaluate how you respond to the following questions. “1” indicates “not at all” and “7” indicates very much. If you have no reaction, please circle “4” to indicate your neutrality.

<table>
<thead>
<tr>
<th>To what extent do you respond to the following questions?</th>
<th>Not at All</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) How much did you pay attention to read the statement presented by CALCO?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(2) How much were you motivated to read the statement presented by CALCO?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(3) How much did you make an effort to think of the issue addressed in the statement presented by CALCO?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(4) How important are environmental issues in Florida to you personally?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(5) How important is the deforestation issue in Florida to you personally?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(6) How much are you concerned about environmental issues in Florida?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(7) How much are you concerned about the deforestation issue in Florida?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(8) How often do you think about environmental issues in general?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(9) How often do you think about the deforestation issue in particular?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(10) How confident are you that you can do something to solve environment issues in general?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(11) How confident are you that you can do something to solve the deforestation issue in particular?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

[Please go to the next page]
Q7. Please evaluate **how you feel about the relationship between you and CALCO.**
Please circle the number that best indicates your agreement with each item. If you strongly disagree with the provided statement, please circle “1”. If you strongly agree with the provided, please circle “7”. If you have no reaction, please circle “4” in the box to indicate your neutrality.

<table>
<thead>
<tr>
<th>To what extent do you agree with the following statements</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Whenever CALCO makes an important decision, I know it will be concerned about people like me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(2) CALCO can be relied on to keep its promises.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(3) I believe that CALCO takes the opinions of people like me into account when making decisions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(4) CALCO has the ability to accomplish what it says it will do.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(5) Sound principles seem to guide CALCO’s behavior.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(6) I can see that CALCO wants to maintain a relationship with people like me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(7) There is a long-lasting bond between CALCO and people like me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(8) CALCO and people like me benefit from their relationship.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(9) I feel people like me are important to CALCO.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(10) CALCO seems to be the kind of company that invests in the community.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(11) CALCO has the ability to attract, develop, and keep talented people.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Gender
- Male [], Female []

Age [ ]

What year are you in the college? [ ]

Ethnicity
- White-Non Hispanic [ ]
- Hispanic American [ ]
- African American [ ]
- Native American [ ]
- Asian/Pacific Islander [ ]
- Others (Please specify): [ ]

This is the End. I appreciate your participation.
APPENDIX H
QUESTIONNAIRE FOR LOW INVOLVEMENT GROUPS

Based on CALCO’s statement you just read from the printed Web pages, please answer the following questions. Please circle the number that best describes your thoughts or feelings.

Q1. Please evaluate how you feel about CALCO by circling a number on each of the scales below. If you feel that you have no reaction, please circle the number 4 to indicate your neutrality.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Negative</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

Q2. Please evaluate how you feel about CALCO’s environmental policies. Please circle the number that best indicates your agreement with each item. If you strongly disagree with the provided statement, please circle “1”. If you strongly agree with the provided statement, please circle “7”. If you have no reaction, please circle “4” to indicate your neutrality.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) CALCO believes in environmental commitment.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(2) CALCO is likely to follow environment-friendly rules and policies.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(3) CALCO is highly concerned about environmental issues.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(4) CALCO is highly involved in community activities.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(5) CALCO is genuinely concerned about public welfare.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

[Please go to the next page]
Q3. Please evaluate **how you feel about the statement provided by CALCO**. Please circle the number that best indicates your agreement with each item. If you strongly disagree with the provided statement, please circle “1”. If you strongly agree with the provided statement, please circle “7”. If you have no reaction, please circle “4” to indicate your neutrality.

<table>
<thead>
<tr>
<th>To what extent do you agree with the following statements?</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) CALCO’s statement made their points effectively.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(2) I like CALCO’s statement.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(3) The arguments presented in CALCO’s statement were convincing.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(4) Considering both content and style, I think CALCO’s statement is well written.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(5) CALCO’s statement was effective in increasing the awareness about the company’s environmental commitment.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(6) CALCO’s statement shows two-sided arguments.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(7) CALCO refutes opponents’ arguments.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(8) CALCO’s statement helps me understand the issue.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(9) CALCO’s statement corrects misunderstanding.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(10) CALCO’s statement provides facts.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Q4. **Please give your impressions or feelings about CALCO on each of the scales below**. If you have no reaction to CALCO on either scale, please circle the number 4 to indicate your neutrality. For example, how trustworthy or untrustworthy do you think CALCO is to inform you about their commitments?

<table>
<thead>
<tr>
<th>1</th>
<th>Untrustworthy</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Trustworthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Selfish</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Unselfish</td>
</tr>
<tr>
<td>3</td>
<td>Unbelievable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Believable</td>
</tr>
<tr>
<td>4</td>
<td>Not reliable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Reliable</td>
</tr>
<tr>
<td>5</td>
<td>Not honest</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>Honest</td>
</tr>
</tbody>
</table>

[Please go to the next page]
Q5. Please list the thoughts that came to your mind while reading CALCO’s statement as many as you can generate. Please write your thoughts in the following lines, one thought per line. Please spend your time to list your thoughts. Thank you.

Thought 1

Thought 2

Thought 3

Thought 4

Thought 5

Thought 6

Thought 7

Thought 8

[Please go to the next page]
Q6. Please evaluate how you respond to the following questions. “1” indicates “not at all” and “7” indicates very much. If you have no reaction, please circle “4” to indicate your neutrality.

<table>
<thead>
<tr>
<th>Question</th>
<th>Not at All</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) How much did you pay attention to read the statement presented by CALCO?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(2) How much were you motivated to read the statement presented by CALCO?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(3) How much did you make an effort to think of the issue addressed in the statement presented by CALCO?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(4) How important are environmental issues in Taiwan to you personally?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(5) How important is the deforestation issue in Taiwan to you personally?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(6) How much are you concerned about environmental issues in Taiwan?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(7) How much are you concerned about the deforestation issue in Taiwan?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(8) How often do you think about environmental issues in general?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(9) How often do you think about the deforestation issue in particular?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(10) How confident are you that you can do something to solve environment issues in general?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(11) How confident are you that you can do something to solve the deforestation issue in particular?</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>
Q7. Please evaluate **how you feel about the relationship between you and CALCO.**
Please circle the number that best indicates your agreement with each item. If you strongly disagree with the provided statement, please circle “1”. If you strongly agree with the provided, please circle “7”. If you have no reaction, please circle “4” in the box to indicate your neutrality.

<table>
<thead>
<tr>
<th>To what extent do you agree with the following statements</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Whenever CALCO makes an important decision, I know it will be concerned about people like me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(2) CALCO can be relied on to keep its promises.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(3) I believe that CALCO takes the opinions of people like me into account when making decisions.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(4) CALCO has the ability to accomplish what it says it will do.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(5) Sound principles seem to guide CALCO’s behavior.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(6) I can see that CALCO wants to maintain a relationship with people like me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(7) There is a long-lasting bond between CALCO and people like me.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(8) CALCO and people like me benefit from their relationship.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(9) I feel people like me are important to CALCO.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(10) CALCO seems to be the kind of company that invests in the community.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
<tr>
<td>(11) CALCO has the ability to attract, develop, and keep talented people.</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

Gender
- Male [ ], Female [ ]

Age [ ]

What year are you in the college? [ ]

Ethnicity
- White-Non Hispanic [ ]
- Hispanic American [ ]
- African American [ ]
- Native American [ ]
- Asian/Pacific Islander [ ]
- Others (Please specify): [ ]

This is the End. I appreciate your participation.
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Shu Yu Lin is a master’s candidate for the Master of Arts in Mass Communication degree focusing on public relations. She was born in Taiwan and received her B.S. degree in Economics and a certification of marketing from National Chengchi University in 2002. Her research interests were particularly focused on issues management, corporate social responsibility campaigns, and integrated marketing communication.