

Social Representations, Social Networks, and Public Relations Effects: The
Consequences of Exposure to Sided Media Content in Different Interpersonal
Settings

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Abstract

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Based on the theoretical framework of social representations, the possibility that exposure to sided news coverage of an organization and subsequent interpersonal communication might affect audiences directly as well as interact in their effects was experimentally assessed in this research. Also, following a social network analysis perspective, the extent to which social network characteristics, such as social network density and presence of strong ties, determine the degree of independent as well as interactive effects of media information and subsequent interpersonal communication on public relations outcomes was examined.

Sided media exposure significantly affected audiences' attitudes and behavioral intentions toward an organization covered in the media. Also, sided

media exposure significantly accounted for intensity of subsequent interpersonal communication in a social network, as a two-sided media information flow with mixed evaluative cues led to more intense subsequent interpersonal communication than did a one-sided media information flow. Intensity of subsequent interpersonal communication, in turn, helped predict duration of audiences' attitudes toward as well as their future WOM intentions about the covered organization in the media.

Interpersonal communication after media exposure caused rather non-intuitive effects. When allowed to talk with others in a social network, audiences reported significantly less amount of knowledge, weaker personal issue stance, less durable attitudes/behavioral intentions, and less media influence. Such negative effects of interpersonal communication after media exposure, however, varied in its magnitude across different levels of social network density. In a disconnected social network, negative effects of subsequent interpersonal communication on attitudes and behavioral intentions disappeared, whereas effects of sided media exposure prevailed. In a connected social network, on the contrary, subsequent interpersonal communication exerted significantly negative influence on attitudes and behavioral intentions, while effects of sided media exposure were completely nullified.

Social network density also significantly accounted for intensity of interpersonal communication after media exposure; such interpersonal communication was more intense in a densely connected social network than in a loosely connected social network. Presence of strong ties in a social network, in addition, helped predict the degree of interpersonal influence that network members perceived in terms of determining their opinions about the covered issue and organization.

Despite some limitations, the findings of this research offered both public relations scholars and practitioners considerable implications in their future work. Demonstrating an occasion when media effects may not be pronounced as theoretically expected, because of different interpersonal influence on audiences across different interpersonal settings, this research calls for more scholarly as well as practical attention to the social interaction of media and interpersonal communication in understanding and evaluating public relation outcomes.

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Chapter One

Introduction

A suggestion for public relations research: Moving beyond the traditional approach

Over the last few decades, theoretical paradigms of mass media effects have substantially transformed as new scholarly perspectives, taking into account factors that mediate or moderate the effects both at the micro as well as macro level, have been introduced to the scholarship (Bryant & Zillmann, 1994). It seems safe to argue that no contemporary media effects researcher would still hold robust theoretical faith in the rather naïve theories of media effects in the past, which asserted absolutely powerful and even unavoidable media effects that were often figuratively described as hypodermic needles or magic bullets (Lowery & DeFleur, 1995). Instead, the accumulated body of media effects research has educated us that while information and communication disseminated through the media appear to exert a certain amount of cognitive, attitudinal, and, ultimately, behavioral influence on the audiences, the degree of media effects may vary across the contexts of media exposure and as the function of subsequently accompanying individual experiences (e.g., Eveland, Shah, & Kwak, 2003; Kwak, Williams, Wang, & Lee, 2005; McLeod, Kosicki, & McLeod, 2002).

Simply put, media effects depend, although mediating and moderating factors identified by previous studies have illuminated and elaborated our theoretical lenses looking into the relationships between media contents and human behaviors.

In line with the past viewpoints of media effects, it appears that early public relations researchers were simply looking at and focusing on how and to what extent exposure to media coverage of an organization directly results in changes in audiences' cognitive and behavioral outcomes relevant to the covered organization's relationship management. While this line of research has helped develop theoretical foundations of public relations and contribute to the body of knowledge, it may have overlooked and oversimplified the complex mechanism of public relations effects determined by multiple factors and through multiple processes. Moving beyond the traditional approach, public relations scholars should take into consideration not only the role of framing and sidedness media effects, but also the importance of interpersonal communication following media exposure and the ways in which such interpersonal communication is influenced by network characteristics in its effects.

Apparently, media effects do not occur in a vacuum. Rather, they are, for the most part, likely to be mediated or moderated by subsequent interpersonal

communication and accompanying interpersonal influence along the social information and communication pipelines (Southwell & Yzer, 2007). Information that is diffused from the media is received and processed at an individual level, then, is communicatively conveyed and shared through interpersonal networks (Katz & Lazarsfeld, 1955; Watts & Dodds, 2007). The interactive transmission and exchange of information in interpersonal networks, subsequently, result in active re-evaluation of information, negotiation of meanings, and interpersonal influence both at an individual and group level (Cappella, 1987; de Vreese & Boomgaarden, 2006). Media effects, then, are likely to be amplified, neutralized, or sometimes dampened through such social processes (de Vreese & Boomgaarden, 2006; Schmitt-Beck, 2003). A growing number of studies looking at the intersection of media and interpersonal communication have supported this theoretical notion by empirically demonstrating evidence of the interactive effects between media and interpersonal communication on individuals, ranging from political participation to health-related behaviors (e.g., Cho, Shah, McLeod, McLeod, Scholl, & Gotlieb, 2009; David, Cappella, & Fishbein, 2006; Druckman, 2004; Hardy & Scheufele, 2009; Hornik & Yanovitzky, 2003; McClurg, 2006; McLeod, Scheufele, & Moy, 1999; McLeod, Scheufele, Moy, Horowitz, Holbert,

Zhang, Zubric, & Zubric, 1999; Morgan & Miller, 2002; Valente, Paredes, & Poppe, 1998).

Media coverage of organizations: An issues management perspective

While the intersection of media and interpersonal communication have garnered growing theoretical interest and concern in the political and health communication divisions as abovementioned, relatively little scholarly attention in this line of theorization has been paid to public relations studies, especially in terms of strategic organizational issues management. Media coverage of organizations, which more often than not results from organizations' public relations efforts, has been one of the most studied and practiced elements of public relations (Vercic, Vercic, & Laco, 2008). As much as people frequently talk about political issues or health information with others as a result of media exposure, media coverage of organizations is likely to be shared and discussed through interpersonal communication channels. That is, it is highly likely that the public relations effects of media coverage are mediated or moderated by subsequent interpersonal communication exchanges in the theoretically same way as political or health information conveyed through the media.

Such theoretical assumption of the interactive effects of media and interpersonal communication becomes even more convincing in light of the perspective of issues management. According to the stakeholder theory (Clarkson, 1995; Donaldson & Preston, 1995), an organization must appropriately deal with economic, political, and social issues that revolve around the relationships with its stakeholders in order to achieve its social legitimacy. In particular, issues that reside in the relationships between an organization and its stakeholders can develop into public issues through media coverage, which often invites larger public concern and interest (Botan & Taylor, 2004). That is, once an organizational issue attains public status through media coverage, it may become a critical public issue that can be a topic of everyday conversations as it is often the case for politics, public policy, or health information covered in the media. Therefore, mediating or moderating effects of interpersonal communication on the relationship between exposure to media coverage of organizations and the audiences' cognitive, attitudinal, and behavioral outcomes appear to call for special scholarly attention in the academic domain of public relations as well.

The first-level effects of media coverage: Sidedness of media information

As issues management has been considered the strategic core of public relations (Botan & Taylor, 2004), media coverage of organizations has been the focal unit of analysis for many public relations studies, because of its capability to convert organizational issues into public agendas, which has been theoretically supported by the hypotheses of agenda-setting and framing media effects (Bridges & Nelson, 2000; Entman, 1989, 1993; McCombs, 1977, 1994). On the theoretical base of agenda-setting effects, issues and organizations covered by the media are likely to be processed as salient in the minds of audiences, as such media coverage helps direct the audiences' attention to the organizational issues and call for more in-depth evaluation and understanding both at an individual as well as social level (Kiousis, Popescu, & Mitrook, 2007; Ohl, Pincus, Rimmer, & Harrison, 1995; Weaver & Elliot, 1985).

On the other hand, the ways in which issues and organizations are depicted and framed in the media are of great concern for public relations professionals as well. It has been well documented that framing effects of the media make a significant contribution to the audiences' evaluative judgments by affecting the ways in which they view and think about covered issues and organizations (Entman, 1989; Fortunato, 2000; Van Leuven & Slater, 1991). According to the

theoretical claim of framing effects, an organization is likely to suffer from public damage to its reputation and image and may have to seek crisis management for restoring its beneficial relationships with the publics, if the organizational issue covered by the media is perceived as socially detrimental or unacceptable by the audiences (Coombs, 2000). On the contrary, an organizational issue that draws media attention can be beneficial and may provide strategic opportunities for the organization, if it is framed in a positive and favorable manner (Bridges & Nelson, 2000). Evaluative valence and sidedness of media coverage, therefore, are critical with respect to public relations implications, in the sense that it could result in either a crisis or an opportunity for the covered organization, depending on how an organization and issue are framed in media coverage. Then, it comes as no surprise why managing mutually beneficial relations with the media is one of the core responsibilities for public relations practitioners.

Direct media effects appear to be subsistent at the level of media exposure. By agenda-setting effects, the media help make issues and organizations salient in the audiences' cognitive processes. Also, agenda-setting effects seem to be responsible for audiences' increasing likelihood of subsequent conversations. Framing effects, on the other hand, seem to help guide and shape audiences'

evaluative conclusions in response to covered issues and organizations, which, in turn, may affect directional formation of public opinions in a collective fashion.

Sidedness of media coverage is of particular interest in this study. Media effects are suggested to be maximized, when the audiences are exposed to a one-sided media information flow (Zaller, 1992, 1996). Directional bias of media coverage appears to be the determinant of either an organizational public relations crisis or opportunity, depending on whether the available media information is positively or negatively framed for the covered organization. On the contrary, media effects are suggested to be neutralized, if the audiences are exposed to a two-sided media information flow that transmits opposing viewpoints, primarily due to the audiences' cognitive ambivalence as a result of the mixed evaluative cues (Zaller, 1992, 1996).

Explicating the second-level effects of media coverage: Social representations and social network approaches

Media coverage of organizations provides not only “running accounts of developing issue dimensions and events prompted by the issue,” but also “a description of how publics are organizing around an issue” (Van Leuven & Slater, 1991, p. 166). Based on the information conveyed by such media coverage, the

audiences are likely to develop certain schemata, which serve as the cognitive foundations guiding and shaping their attitudes and behaviors toward the issue and the involved organization (Bridges & Nelson, 2000). In addition to media coverage, on the other hand, relevant commentaries and opinions that individuals may acquire from interpersonal interactions appear to influence their discretion about the organizational issue as well (Wanta & Wu, 1992; Weaver, Zhu, & Willnat, 1992). In other words, individuals' cognitive bases that direct their beliefs, attitudes, and behaviors in response to media coverage of organizations are, in fact, the collective products of their information processes based on diverse social interactions, including both media exposure and interpersonal interactions.

The theory of social representations offers a conceptual framework to better understand these interdependent relationships among media exposure, interpersonal communication, and individual outcomes (Moscovici, 1988). The theory of social representations helps explain “how groups of people communicate about and make sense of emerging or novel phenomena (the social element in “social representations”), as covered by the mass media, and how these resulting frames (“representations”) shape the subsequent behaviors of individuals who belong to these social groups” (Morgan, 2009, p. 30). In such

process, the second-level information processing—interpersonal communication exchanges—that follows exposure to media information has been pointed out as one of the most crucial stages for the creation and formation of social representations (Hwang & Southwell, 2009; Morgan, 2009; Southwell & Torres, 2006). Applying the theoretical notion of social representations to explicating public relations effects of media coverage, then, people appear to develop certain social representations of issues and organizations on the basis of their cognitive frames informed and constructed by media coverage as well as subsequent interpersonal communication exchanges. According to the theory, such social representations are composite constructs consisting of individuals' cognition, attitude, or behavioral intention (Morgan, 2009). Thus, individuals' social representations serve as cognitive foundations that determine their behaviors toward the issue and the organization. Arguably, exposure to media coverage of organizations and subsequent interpersonal communication appear to play a significant role in the formation of public relations consequences.

Taking into consideration this theoretical view on social representations of issues and organizations and their effects on the publics' cognitive, attitudinal, and behavioral outcomes, social networks appear to be the central places for analysis, where people deliver, share, discuss, and negotiate meanings of social

environments (Dal Fiore, 2007; DiMaggio & Louch, 1998). That is, social networks should be observed and analyzed in order to more clearly understand the interaction dynamics among individuals, which co-creatively help construct the social representations about an issue and organization along with media coverage. By investigating a social network, which can be characterized as “a network of flexible and discretionary relations in which not all the components knew each other and which might or might not interact with each other” (Piselli, 2007, p. 868), the interpersonal influence accompanying information and opinion sharing as a result of media exposure can be more systematically analyzed and assessed.

Social network analysis also views individuals as actors engaged in multiple interactions in a broad social context (Piselli, 2007). Social co-presence and relational linkages among individuals, in that sense, have been regarded as significant factors that should account for each individual’s cognitive, attitudinal, and behavioral consequences, independent of self-judgments of individuals as independent agencies (Harrington & Fine, 2006). In fact, today’s individuals belong to and maintain a variety of social groups, and such social groups seem to vary in network properties, such as network density and strength of interpersonal ties, which have been considered contextual and structural characteristics of social relationships that shape and constrain individuals’ thoughts and actions

(DiMaggio & Louch, 1998; Harrington & Fine, 2006; Knox, Savage, & Harvey, 2006). In order to more comprehensively understand and measure the public relations effects of media coverage, therefore, the social network approach that takes into consideration the interpersonal influence subsequently associated with media exposure as well as network properties affecting interpersonal communication modalities and patterns appears to be considerable.

The purposes of the study

In line with the increasing scholarly attention to the mediating and moderating roles of interpersonal communication in explicating and understanding media effects, the overarching purpose of this study is to more comprehensively and rigorously analyze public relations effects by looking at the interdependent relationships among media contents, interpersonal communication, social structures, and individual outcomes.

First of all, based on the theoretical framework of social representations, the study looks into how media coverage of an organization and subsequent interpersonal communication independently as well as interactively bring forth individual consequences relevant to public relations. To this end, an experiment is designed to observe how and to what extent media coverage of an organization

and subsequent interpersonal communication affect audiences and, more importantly, interact in their effects

In addition, the study attempts to direct the focus of analysis to small group social networks, where social representations of issues and organizations are produced, validated, and negotiated by media exposure as well as subsequent interpersonal communication. Following the theoretical and methodological approaches of social network analysis, this attempt allows a fresh analytic framework to more comprehensively and rigorously examine the extent to which contextual and structural circumstances surrounding the intersection of media and interpersonal communication play a role in determining the degree of each effect. An experimental analysis helps empirically demonstrate how individuals develop and maintain social representations within a small group social network as a result of both media exposure and subsequent interpersonal interactions.

Chapter Two

Literature Review: Hypotheses and Research Questions

Public relations: Organizations, publics, and communication

Public relations' conceptual and practical boundaries encompass a wide array of strategic communication activities, such as "investor relations, membership relations, outreach, health advocacy, public affairs, public information, risk communication, strategic marketing, strategic planning, crisis management, constituent relations, community relations, and many others" (Thomlison, 2000). Despite the somewhat overlapping use and application of public relations in association with advertising, marketing communication, and health communication, what separates public relations from other strategic communication activities is its emphasis on the use of communication for relationship management between an organization and its stakeholder publics (Ferguson, 1984; Ledingham & Bruning, 2000). That is, the core function and value of public relations is the organization-public relationship management through strategic communication.

Cutlip, Center, and Broom (1994) defined public relations as "the management function that establishes and maintains mutually beneficial relationships between an organization and the publics on whom its success or

failure depends” (p. 2). Along the same vein, Thomlison (2000) contended that “relationship management in public relations settings implies the development, maintenance, growth, and nurturing of mutually beneficial relationships between organizations and their significant publics” (p. 178). In parallel with the disciplinary emphasis on the relationship management function, Dozier, Grunig, and Grunig (1995) asserted that public relations should focus on the use of communication for strategic relationship management, which is critical for accomplishing organizational objectives. Grunig, Grunig, and Dozier (2002) also highlighted the importance of organizational relationship management by insisting that “Relationships help the organization manage its interdependence with the environment” (p. 95).

The conceptual and theoretical perspective of public relations as relationship management has motivated several public relations researchers to explicate public relations with interpersonal communication principles (e.g., Botan & Hazelton, 1989; Heath, 1994; Spicer, 1997), particularly in that the term “relationship” inherently connotes interpersonal interactions. The rationale behind this scholarly approach is that organizations can build and maintain relationships with the concerned publics through strategic communication in the same way as individuals manage relationships with others through interpersonal interactions.

Some of the definitive characteristics of interpersonal communication, such as “mutual influence, turn-taking, conversational pragmatics, and negotiation” (Cappella, 1987, p. 189), have informed public relations researchers to conceptualize and theorize public relations as a communication process facilitating collaboration, negotiation, and mutual influence between an organization and its key publics in order to establish mutually beneficial relationships for both parties (Toth, 2000). The conceptual and theoretical approach to explicating public relations with interpersonal communication dynamics has been well reflected in many studies, such as the two-way symmetrical model of public relations that emphasizes bidirectional communication and control mutuality between an organization and its key publics (Grunig & Grunig, 1992) and the personal influence model of public relations that focuses on the importance of interpersonal relationships between public relations practitioners and key publics at an individual level that may ultimately lead to mutually beneficial organization-public relationships (Grunig, Grunig, Sriramesh, Huang, & Lyra, 1995). The conceptual and theoretical explication of organization-public relationship, based on the body of interpersonal communication knowledge, has become one the central frameworks for the recent public relations research (Ki & Hon, 2007b).

The conceptual and theoretical framework of organization-public relationship has also helped public relations researchers focus on the relationship state and quality between an organization and its publics in relation to measuring and assessing the communication effects of public relations activities. The level of consensus, understanding, and interdependence between an organization and its key publics has been regarded as one of the strong indicators of a relationship state and quality for both parties (Broom & Dozier, 1990). In this light, Ledingham and Bruning (1998) defined organization-public relationship (OPR) as “the state which exists between an organization and its key publics, in which the actions of either can impact the economic, social, cultural or political well being of the other” (p. 62), and many public relations researchers have developed and proposed relationship dimensions of OPR, such as control mutuality, trust, commitment, satisfaction, exchange relationship, and communal relationship, that help theoretically understand and empirically evaluate the relationship state between an organization and its key publics (e.g., Hon & Grunig, 1999; Ledingham, Bruning, Thomlison & Lesko, 1997). It has been also empirically attested that these relationship dimensions of OPR are strong predictors of publics’ attitudes and behavioral intentions toward an organization (Ki & Hon, 2007a).

Such interdisciplinary explication of public relations in consideration of the principles of interpersonal communication and relationship maintenance has brought about the fruitful scholarly outcomes in defining and understanding the core value, functions, and likely consequences of public relations. However, only recently have public relations researchers broadened their observations upon the effects of strategic organizational communication across diverse social channels and, more specifically, have paid attention to how organizational news coverage disseminated by the media produces public relations outcomes in concert with subsequent interpersonal communication and opinion exchanges.

Strategic issues management: The media, publics, and issues

Publics and issues have been recognized as important concepts of public relations (Botan & Taylor, 2004). In fact, publics as the relationship subjects and issues as the intermediaries of relationships are inseparable from defining and understanding public relations. Issues management, in this regard, has been considered the strategic essence of public relations that deals with issues involving both organizations and publics in mutually influential relationships (Botan & Taylor, 2004; Briges & Nelson, 2000; Ehling & Hesse, 1983; Taylor, Vasquez, & Doorley, 2003).

Issues management can be defined as “the capacity to understand, mobilize, coordinate, and direct all strategic and policy planning functions, and all public affairs/public relations skills, toward the achievement of one objective” (Chase, 1982, pp. 1-2). In recent years, a strategic organizational capacity to manage issues with public relations techniques has been increasingly understood as co-creational activities, rather than functional activities. Departing from the functional perspective that conceptualizes publics as objectified targets of communication and public relations as merely communicative tools to mobilize publics and to accomplish organizational goals, the co-creational perspective acknowledges independent roles of publics in organization-public communication processes and counts publics as co-creators of meanings and implications of organizational public relations communication. According to the co-creational perspective, public relations can be regarded as relationship negotiation processes between organizations and publics through communicative activities from both sides (Botan & Taylor, 2004). The co-creational perspective, therefore, suggests that public relations professionals “look for relationships between emerging social concerns, and then seek correspondences between industry or organizational actions on a micro scale, and the social context on a macro scale” (Murphy, 1996, p. 103).

Issues that relationally connect organizations and publics can become critical public issues through media coverage, which often multiply public awareness and concern and, consequently, call for organizations' strategic responses with respect to relationship management (Bridges & Nelson, 2000). In this sense, media coverage of organizations has long been considered one of the most important sources of social information and communication that affects and determines relationships between an organization and its key publics. Specifically when issues go bad for organizations, in other words, when media coverage is framed negatively and unfavorably for organizations, the reputations, images, and even social legitimacy of organizations can be called into question through public discourses, and chain reactions generated from negative media coverage sometimes develop into tremendous relational crises for organizations as seen in many previous cases (For further review, see Benoit, 1997; Englehardt, Sallot, & Springston, 2004). By contrast, if media coverage is framed positively and favorably for organizations, organizations might be able to take advantage of it as an opportunity in favor of achieving their objectives (Bridges & Nelson, 2000). The public relations effects of media coverage have been theoretically explained and supported by the agenda-setting and framing effects hypotheses. The agenda-setting effects hypothesis posits that media coverage helps guide and shape public

perceptions of issue priority and salience, which, in turn, often result in increased public awareness of and interest in issues covered by the media (McCombs, 1994). The framing effects hypothesis, on the other hand, emphasizes selection processes of the media that present only certain dimensions of an issue and explains how the media influence the way in which publics think about and view an issue (Entman, 1989, 1993). According to Bridges and Nelson (2000), “The concept of framing applied to issues management suggests that what is said, what is omitted, and the terminology related to media coverage define an issue for media audiences” (p. 100). Acknowledging the power and effects of media coverage, many organizations have considered building and maintaining mutually beneficial media relations one of the central functions of public relations management, and media relations even has been equated with public relations per se by some organizations (Cameron, Sallot, & Curtin, 1997; Marconi, 2004; Spicer, 1993).

In spite of not being strongly supported by empirical studies (e.g., Cameron, 1994; Hallahan, 1999; Jo, 2004), another conventional and still prevalent wisdom among public relations professionals is that positive media coverage of organizations results in more persuasive communication effects than does advertising (For further discussion, see Ries & Ries, 2002), since “publicity is perceived not as the sponsoring organization’s self-serving view but as the

view of the objective, neutral, impartial news source” (Seitel, 1999, p. 214).

Whether or not this theoretical contention of media coverage of organizations being more persuasive than advertising is true, the fact that media coverage of organizations is more likely to generate communication epidemics among publics than is advertising should not be taken lightly (Vercic, Vercic, & Laco, 2008).

That is, media coverage of organizations appears to be more capable of generating talk values out of organizational issues than paid forms of strategic communication, while facilitating individuals’ interpersonal communication and opinion sharing activities following media exposure and accompanying interpersonal influence, known as the word-of-mouth (WOM) effects (e.g., Brown & Reingen, 1987; Frenzen & Nakamoto, 1993; Richins & Root-Shaffer, 1988).

Many researchers (e.g., Botan & Taylor, 2004; Crable & Vibbert, 1985) have attempted to identify developmental stages of public issues and how issues come to obtain public significance as a function of social communications. Botan and Taylor (2004), especially, outlined the life cycle of issues classified by five steps: Pre-issues, potential issues, public issues, critical issues, and dormant issues. Pre-issues imply all “occurrences in the environment to which publics have not yet attached significance but could” (Botan & Taylor, 2004, p. 656). Pre-issues develop into potential issues, when some individuals or groups, but not

significant quantities yet, start increasing awareness of and interest in issues.

Potential issues, then, come to obtain public status mainly through media coverage, and issues are much more broadly recognized and discussed by general publics. In this stage, issues become public agendas, and, as the agenda-setting and framing effects hypotheses postulate, certain public priority and salience are granted to issues by the media. Public issues likely become critical issues that demand some sort of social resolution, as public awareness and concern of issues increase and public discourses about issues become intense. Once issues are resolved or forgotten in the minds of publics, issues finally end up dormant (Botan & Taylor, 2004).

The developmental stages of issues show how and when issues become salient and significant both for organizations and publics. Especially when issues go public mainly through media coverage and become critical as social communications, including relevant information and opinion exchanges at an interpersonal level, intensively occur, organizations often strive to come up with relevant strategic responses either to avoid potential crises or to leverage organizational opportunities. From the perspective of publics, on the other hand, publics become more active participants of the development of issues, as issues pass through the public and critical stages. That is, publics are likely to more

actively seek and more saliently process relevant information and opinions regarding issues, as their awareness of and interest in issues increase (Bridges & Nelson, 2000; Grunig, 1997). When issues become public and critical, it seems that multiple social constituencies, including organizations, publics, and the media, collectively create and negotiate meanings and implications of issues, and at the same time, issues mobilize them for social communications and discourses as well. The relationship between media coverage of organizations and its social consequences can be more clearly understood, then, only after comprehensively taking into consideration effects of the media as well as the publics' active role in information sharing and processing through interpersonal communication exchanges: how publics process media coverage of organizations in interpersonal and social settings, where information is shared and opinions are exchanged; and how media coverage of organizations along with subsequent interpersonal communication helps shape publics' beliefs, attitudes, and behavioral intentions with regard to organizations and issues.

Creation and validation of social representations: Sidedness of media coverage

The theory of social representations (Moscovici, 1988) concerns with how the social reality is viewed, represented, negotiated, and solidified in each

individual's psychologies based on a variety of communication contents and communication modalities (Morgan, 2009). A social representation can be defined as "a network of interacting concepts and images whose contents evolve continuously over time and space" (Moscovici, 1988, p. 220). Each individual develops and maintains representations of certain social issues or phenomena through information processing and communicative interactions available to them (Markova, 1987). Representations of certain social issues or phenomena, therefore, inherently vary across individuals, depending on what information they are exposed to and what paths of communication they take in the formation of social representations. Social representations are not static but dynamic, because relevant information individuals refer to and communication interactions individuals participate in constantly confirm or challenge their own social representations both at a psychological and social level (Moscovici, 1988).

Social knowledge about certain issues or phenomena mainly consists of individuals' social representations (Moscovici, 1988). Communicative interactions, as a means of information and opinion sharing, help individuals obtain and accumulate necessary social knowledge. As communication behaviors are inherently social behaviors, social representations based on social knowledge are not only individually independent, but also socially interconnected products:

By analogy, we could think of social representations as being produced by a collective decision committee. Its members cast their votes and can express a broad range of opinions. The final decision is the joint effect of the participants and expresses a sense of the meeting. There is no need to reach an explicit consensus or to submit to a rite; as long as the individual initiatives are in line with the social flow, nothing more is needed. Each individual proposition is thus tied in with the action of the group, which can give it a shape that is acceptable and comprehensible for all concerned. In these exchanges, all representations are at the interface of two realities: psychic reality, in the connection it has with the realm of the imagination and feelings, and external reality which has its place in a collectivity and it subject to group rules. (Moscovici, 1988, p. 220)

Bauer and Gaskell (1999) suggested four modes in which individuals' social representations are grounded as well as embodied: Formal communication, informal communication, cognition, and behavior. A general process of social representation formation can be summarized as follows: First, individuals' social representations of certain issues or phenomena are created and shaped by formal communications, which are mainly characterized as information and opinions circulated by the media. Second, their social representations are shared, elaborated, and cultivated through informal communication, namely, interpersonal conversations. Finally, individuals' social representations are settled in their cognitions and, as a result, are often reflected in their behaviors (Bauer & Gaskell, 1999).

On one hand, media coverage of organizations as formal communication is a critical information source for individuals to obtain social knowledge in identifying and understanding social issues between organizations and publics (Morgan, 2009). Assuming the agenda-setting and framing effects, media coverage of organizations seems to influence the audiences' social representations by orienting them to what to think about and how to view the issues revolving around organizations and publics (Entman, 1993; McCombs, 1994). Above all, media coverage of organizations, as one of the primary information sources, provides the audiences with novel social information to process and significant public issues to consider. Novel social information and significant public issues primed by media coverage, then, help the audiences construct certain social representations (Hwang & Southwell, 2009). Social representations, in turn, play as powerful antecedents of individuals' attitudes and behaviors (Bauer & Gaskell, 1999; Castro, 2006; Moscovici, 1988). Based on media coverage of organizations, the audiences develop individual-specific mental representations that help define and shape their attitudes and behaviors toward the covered organization and their standpoints about the covered issue.

Meanwhile, individuals are often exposed to a wide spectrum of media coverage providing different, at times even contradictory, information and

perspectives. In fact, different information and perspectives of media coverage may account for the plurality of social representations varying across individuals (Bauer & Gaskell, 1999). Specifically when the audiences are exposed to a wide range of media coverage conveying different or contradictory information and perspectives, individuals' social representations, serving as the psychological bases for attitudes, behavioral intentions, and behaviors, may be constructed and manifested in a more dynamic as well as complicated fashion.

The notion of media sidedness proposed by Zaller (1992, 1996) offers a considerable theoretical framework in explicating and understanding possibly different public relations effects of media coverage in relation to the audiences' formation of social representations: If the available media maintain a consistent directional bias to certain information, whether it is positive or negative, the effects of media coverage are likely to be maximized. By contrast, if the available media provide opposing information and viewpoints, the effects of media coverage are likely to be minimized, as a result of the offset between different and competing information and perspectives (de Vreese & Boomgaarden, 2006). The audiences' attitudes and behavioral intentions toward the covered organization after media exposure are of special concern in this study to more clearly understand and evaluate the public relations effects of media coverage

(e.g., Fishbein & Cappella, 2006; Rimer & Kreuter, 2006). Therefore, following the theoretical claim of media sidedness, two research hypotheses are proposed in light of the effects of media coverage on the audiences' attitudes and behavioral intentions toward the covered organization:

H1: Sidedness of media coverage will predict attitudes toward an organization covered in the media. Positively framed media coverage will lead to positive attitudes, whereas negatively framed media coverage will lead to negative attitudes toward an organization covered in the media. Exposure to mixed media coverage will lead to neutral attitudes.

H2: Sidedness of media coverage will predict behavioral intentions toward an organization covered in the media. Positively framed media coverage will lead to positive behavioral intentions, whereas negatively framed media coverage will lead to negative behavioral intentions toward an organization covered in the media. Exposure to mixed media coverage will lead to neutral behavioral intentions.

As aforementioned, individuals independently create social representations of certain issues or phenomena by being exposed to media contents, and, then, they are likely to articulate, compare, negotiate, and re-create such social representations through interpersonal communication exchanges (Bauer & Gaskell, 1999; Morgan, 2009; Schmitt-Beck, 2003). In line with this theoretical premise, the effects of media coverage of organizations should be understood and evaluated by looking at how such media coverage invokes or facilitates individuals' subsequent interpersonal communication exchanges after exposure.

When exclusively exposed to one-sided media coverage, whether it is positive or negative, subsequent interpersonal communication exchanges are less likely expected, since such media coverage may not strongly stimulate or motivate individuals to verify and reassure their social representations of the covered organization. In contrast, when exposed to two-sided media coverage, individuals are likely to engage in interpersonal communication exchanges more intensively as a function of more dynamic and complicated self-verification and reassurance processes in line with the formation of social representations:

H3: Perceived intensity of subsequent interpersonal communication on a topic will be greater among those exposed to two-sided content than among those exposed to positive one-sided or negative one-sided media content.

Diffusion of information: The two-step flow model

The two-step flow model (Katz & Lazarsfeld, 1955) has been long considered one of the groundbreaking and insightful theoretical frameworks that helped direct scholars' attention to the role of interpersonal communication in explicating the media effects (Gitlin, 1978). As it literally implies, the two-step flow model theoretically conceives two sequential steps of information diffusion and influence occurrence—the media to opinion leaders and the opinion leaders to less attentive publics. It postulates that while the media provide opinion leaders

with relevant information to think about and to talk about, it is the opinion leaders who bring forth more decisive cognitive, attitudinal, and behavioral changes in less attentive general publics with interpersonal influence. That is, as Robinson (1976) put it, “Whereas the mass media convey information at an ‘awareness’ stage to both opinion leaders and those less active, it is the opinion leaders who wield influence in a subsequent ‘evaluation’ stage” (p. 306). The media are influential in the first step, in that they help both opinion leaders and less attentive publics identify what to think about and what to talk about, then, in the second step, the opinion leaders additionally exert interpersonal influence on less attentive publics while sharing and discussing information that both of them acquire from the media. In line with this theoretical assertion, the model also presumes that direct media effects are greater for individuals with less personal links with opinion leaders (Robinson, 1976).

Interpersonal interactions, mainly conversations, are fundamental human activities (Southwell, 2008). People talk with a variety of partners about a wide range of topics (Yang & Stone, 2003). Human communication behaviors, in addition, are basically goal-directed and plan-guided processes (Berger, 2007). That is, interpersonal interactions are designed and performed through goals-plans-actions (GPA) processes (Dillard, 1990; Dillard, Anderson, & Knobloch,

2002). Communication goals, which can be defined as “cognitive representations of desired end states for which individuals strive” (Berger, Knowlton, & Abrahams, 1996, p. 112), help individuals strategically construct and design conversation plans. Each individual’s conversation plans, then, help coordinate and organize conversation sequences that aim to accomplish each individual’s goals. Finally, individuals actually perform conversations in accordance with their goals and plans (Dillard, Anderson, & Knobloch, 2002).

Considering that interpersonal interactions are inherently strategic and goal-directed, there must be individual motivations that activate and drive conversations after media exposure as well (Pittman, 1998). In fact, investigating why people talk with others about media information appears to be one of the most daunting yet important tasks for media effects researchers to shed light on the theoretical link between the media and interpersonal communication and, more importantly, to explain how the media and interpersonal communication jointly as well as separately influence individuals’ cognitions, attitudes, and behaviors. As one of the potential explanations, the priming effects hypothesis posits that individuals are likely to be primed by issues and images presented by the media and, in turn, will cognitively prioritize those issues and images (Jo & Berkowitz, 1994). Therefore, the priming effects hypothesis theoretically

suggests that individuals might talk about media information with others, since what they have seen and heard from the media becomes salient and readily available in their memories (Druckman, 2004; Druckman, Jacobs, & Ostermeier, 2004; Southwell, 2005b). In this respect, media information can be simply used as a top-of-mind topic for interpersonal interactions in an attempt to find a common ground for talk or to lubricate conversation exchanges.

In addition, when conversations about certain issues or topics are expected in the near future, individuals might actively seek relevant information from the media (Hwang & Southwell, 2007). In other words, individuals can take advantage of media information as a staple of conversation in order to achieve various goals during interpersonal interactions. By the same token, individuals might actively seek relevant information from the media as a result of interpersonal communication and subsequently increased interest in certain issues (Eveland, 2004; Eveland & Thomson, 2006). After all, participation in conversations enables “the opportunity to express opinions, gather information, solicit affective or instrumental responses, persuade, define self-images, and solve problems” (Palmer, 1989, p. 1). Individuals actively participate in interpersonal communication in order to accomplish or identify their internal desires and needs (Pittman, 1998). In these processes, they not only selectively

seek personally relevant media information, but also differently use and take advantage of media information in favor of their personal motivations and goals (Jamieson & Cappella, 1996).

The role of interpersonal communication in relation to media effects, on the other hand, has been empirically demonstrated by a number of studies that were primarily informed by the theoretical framework of the two-step flow model (Southwell & Yzer, 2007). A series of diffusion of innovations literature has pointed out the ancillary role of interpersonal communication in addition to the media with regard to the social diffusion of information (e.g., Brown & Duguid, 2000; Conway & Steward, 1998; Rogers, 1983). Wejnert (2002) defined diffusion of innovation as “the spread of abstract ideas and concepts, technical information, and actual practices within a social system, where the spread denotes flow or movement from a source to an adopter, typically via communication and influence” (p. 297). Arguably, a fair amount of information conveyed by the media can be abandoned, ignored, or avoided by general publics (Granovetter, 1983), which may hinder the spread of information in a social system. Although media information may not be directly delivered to individuals, it can still be reached to individuals through interpersonal communication, and, as a result, information can be diffused through social networks, where interpersonal links

are embedded and information is circulated through such links (David, Cappella, & Fishbein, 2006; Southwell & Yzer, 2009). In sum, individuals' interpersonal communication can play a significant role in information and knowledge diffusion along with the media, in that it can mediate the diffusion of media information as well as can work as derivative and ancillary channels of communication and influence (Hwang & Southwell, 2007; Southwell & Yzer, 2007; Yanovitzky & Stryker, 2001).

Besides the role of interpersonal communication as an alternative channel of social communication and influence, the mediating or moderating effects of interpersonal communication on the relationship between media exposure and individuals' cognitive, attitudinal, and behavioral consequences have been well documented as well. As reviewed earlier, the media effects are likely to be affected by individuals' various uses of communication channels and the ways in which they receive and process relevant information deriving from various routes of information and communication (Hornik & Yanovitzky, 2003). Many researchers have empirically found and demonstrated such interactive effects of media and interpersonal communication on changes in individuals' cognitions, attitudes, and behaviors. For example, Druckman (2004) found that the priming effects of political media campaigns were reinforced by subsequent interpersonal

discussions. Valente and Saba (2001), in addition, empirically demonstrated how media and interpersonal communication jointly influence the audiences' awareness of and behavioral responses to public health campaigns. Many other scholars have also identified the interactive effects of media and interpersonal communication with specific emphasis on the mediating or moderating role of interpersonal communication in the relationship between media exposure and its outcomes (e.g., Atwater, Salwen, & Anderson, 1985; Ball-Rokeach, 1985; Erbring, Goldenberg, & Miller, 1980; Scheufele, 2002; Shaw, McCombs, Weaver, & Hamm, 1999; Sotirovic & McLeod, 2001; Yang & Stone, 2003).

Due to different reasons and needs across individuals, social communication is likely to occur in various channels, and, as a result, the diffusion of social information is likely to take various routes and forms. Along these processes, individuals not only actively choose a source of information, whether it is the media or interpersonal mediators, but also apply their evaluative criteria in processing each incoming information (Burkhalter, Gastil, & Kelshaw, 2002; Hornik & Yanovitzky, 2003). The media effects, therefore, need to be understood and evaluated in consideration of these multi-level and multi-factor processes of communication and influence.

Diffusion of information: The horizontal social network perspective

Although the two-step flow model has offered a central theoretical framework for a number of studies on media effects and diffusion of innovations, criticism to the model, specifically in relation to the role of opinion leaders and interpersonal communication influence, has been actively debated as well. Somewhat blurring definitions and conceptual boundaries of opinion leaders, above all things, are the most problematic aspect of the model in terms of applying the model to real-world phenomena as well as explicating the role of opinion leaders in information diffusion and interpersonal influence (Robinson, 1976). The status of opinion leader is not officially granted nor continuously sustained in most of social information diffusion and interpersonal communication situations. Rather, for the most part, individuals identify and appoint different opinion leaders across various interpersonal interactions based on their perceptions—how trustworthy and how expert other persons are. In other words, defining opinion leaders is highly arbitrary, which might vary across individuals as well as contexts. Therefore, it is very challenging to clearly conceptualize and identify opinion leaders in a real-world setting.

Furthermore, Lin (1973) found that while interpersonal influence from opinion leaders to less attentive publics is subsistent, interpersonal influence in a

reverse fashion—from less attentive publics to opinion leaders—was not weaker than the former. It seems, therefore, interpersonal influence between opinion leaders and less attentive publics is actually mutual and two-way. On the other hand, national election data collected by the Center for Political Studies of the University of Michigan reported that the majority of the survey respondents—almost 68 percent—acted both as opinion givers and receivers during the 1968 election, which makes dichotomous classification of opinion leaders and less attentive publics highly contestable (Robinson, 1976). Considering the give-and-take nature of interpersonal interactions and the possibility of turn-taking in opinion giving and receiving across conversation topics, the unilateral direction of interpersonal influence postulated by the two-step flow model, exclusively from opinion leaders to less attentive publics, appears to be not very convincing or plausible (Arndt, 1968; Robinson, 1976).

People engage in meaningful interpersonal interactions with family members, friends, neighbors, and colleagues on a daily basis (Piselli, 2007). In these typical interpersonal interactions, people share information, talk about things, and discuss issues rather casually, while any specific person rarely takes on the responsibility of being an opinion leader. In fact, these horizontally structured networks of interpersonal interactions are a much more frequent and

dominant form of interpersonal interactions, compared to vertically structured networks, where designated opinion leaders with higher social status exert one-way influence on others (Robinson, 1976; Walker, Thye, Simpson, Lovaglia, Willer, & Markovsky, 2000). Along the line, Watts and Dodds (2007) argued that easily influenced individuals influencing other easily influenced individuals are far more powerful and considerable than opinion leaders in terms of driving most social changes (For further discussion, see also Ikeda & Richey, 2005; Putnam, 2000). Given today's information saturated as well as highly segmented social structures, status equalization among conversation partners and peer-to-peer information sharing in social networks seem to all the more prevail (Dubrovsky, Kiesler, & Sethna, 1991; Southwell, 2008; Yzer & Southwell, 2008). All things considered, thus, the primary interpersonal interaction mechanism, which is an essential concept to understand and analyze the interactive effects of media exposure and interpersonal communication, should be explicated as horizontal structures of social networks, rather than vertical structures (Ikeda & Richey, 2005; Putnam, 1995, 2000). Interpersonal interactions in horizontal social networks, such as friendship networks, result in two-way or multiple-way outcomes, in a sense that information and opinions pass along divergent communication lines one way or the other and collectively generate shared social

meanings that ultimately determine each individual's worldview (Dal Fiore, 2007).

As reviewed earlier, people talk about social issues and exchange opinions for various reasons. More often than not, self-verification is one of the major motivations that drive people to engage in interpersonal communication (Southwell & Yzer, 2009). Upon the reception of new information, individuals want to make sense of the information and attempt to verify whether or not their understanding of the information is politically correct and socially acceptable through active self comparisons with others. According to the self-categorization theory (Turner, 1999), individuals constantly compare themselves with others in their categorical boundaries, while evaluating similarities and differences between the self and others. Through these self-others comparison processes, individuals often classify others into in-group members and out-group members based on their perceived similarities and differences (Oldmeadow, Platow, Foddy, & Anderson, 2003). Individuals' self-categorization and a sense of membership, then, become their social identities, which are often shared with similar in-group members (Deaux & Martin, 2003). Individuals may attempt to reassure themselves and maintain self-esteem by interpersonally interacting with their similar in-group members (Compton & Pfau, 2009; Southwell & Yzer, 2009), and,

moreover, their attitudes and behaviors resulting from such self-verification processes are likely to be reinforced and prolonged by constant interpersonal interactions with similar in-group members (Deaux, Reid, Mizrahi, & Ethier, 1995). The theoretical explanations of self-categorization and social identity support the greater likelihood of interpersonal interactions taking place in horizontal social networks, where information is speculated, elaborated, and clarified through conversations with similar and significant in-group members, such as family, friends, and colleagues (Katz, Lazer, Arrow, & Contractor, 2004).

Applying this theoretical notion of information and opinion sharing in horizontal social networks, media coverage of organizations is also likely to serve as a relevant information source that helps initiate and motivate conversations, and, subsequently, people are more likely to speculate, elaborate, and clarify issues covered and highlighted in the media through casual conversations with similar as well as significant others. The public relations effects of media coverage, then, should be understood and measured by looking at how information disseminated by the media is shared, interpreted, and sometimes negotiated through interpersonal communication, and, further, how individuals come up with and internalize certain social meanings—social representations—

about issues covered in the media through interpersonal interactions in horizontal social networks.

Social networks: The junctions of media information and interpersonal communication

The literature review up to this point regarding how media effects can be mediated or moderated by subsequent interpersonal communication helps direct the focus of this study to social networks as the contexts of analysis. Apparently, social networks are central junctions of media information and interpersonal communication, where media information is interpersonally shared and discussed, and subsequent interpersonal communication and additional influence could emerge along the processes. Social networks consist of relationships and interactions among social entities (Wasserman & Faust, 1994). Social networks, in that sense, are defined as “interconnected individuals who are linked by patterned communication flows” (Rogers & Agarwala-Rogers, 1976, p. 10) and are usually formed by “ties of friendship, kinship, and acquaintance partly inherited and partly constructed by the person himself or herself” (Piselli, 2007, p. 868). Analytic approaches to social networks, on the other hand, help conceptualize and theorize social networks as clusters of actors (nodes) and

relations among them (ties) (Katz et al., 2004). To the extent that social networks are principal social structures embracing social communication systems and bodily processes (Knox, Savage, & Harvey, 2006), analyzing how issues primed and framed by media coverage are interpersonally shared and discussed in social networks appears to bring forth fruitful academic findings to more comprehensively and rigorously understand the public relations effects of media coverage filtered through multiple layers of social communications.

One of the noteworthy products of social networks is social capital (Putnam, 1995, 2000). Social capital can be defined as “the material and symbolic resources that an actor (individual or collective) is able to obtain through his or her network of direct and indirect personal relations to pursue his or her goals” (Piselli, 2007, p. 872). A social network is one the main conduits of social capital that enables exchanges of resources, information and knowledge in particular, among the actors (Ikeda & Richey, 2005; Portes, 1998). In other words, a social network serves as the place, where individuals can have broader sources of social information and knowledge, based on their interpersonal relationships (Wellman & Frank, 2001). The theoretical conception of social capital helps shed light on the role of interpersonal communication in a social network that expands and strengthens individuals’ information and knowledge bases in relation to

comprehending and understanding certain social phenomena and issues. Along this vein, the role of interpersonal communication in a social network in view of media coverage of organizations is hypothesized:

H4: Those who are engaged in interpersonal communication after exposure to media coverage will show a greater level of perceived amount of knowledge regarding an issue covered in the media than those who are not involved in interpersonal communication after media exposure.

Moreover, interpersonal communication in a social network after exposure to media coverage may enhance individuals' perceived level of issue salience. A positive relationship between interpersonal communication and individuals' perceived issue salience have been found in many previous studies (e.g., Erbring, Goldenberg, & Miller, 1980; Wanta & Wu, 1992; Weaver, Zhu, & Willnat, 1992). What is critical from the issues management and organization-public relationship management perspectives is, however, whether or not issues covered by the media develop into critical issues by subsequent interpersonal communication among the audiences. Individuals are likely to give more careful attention to information and issues covered in the media, if they are involved in subsequent interpersonal communication, and, further, individuals are likely to have more solid personal stance toward such issues as a function of interpersonal communication that may facilitate their self-verification and reassurance processes (Kwak et al., 2005;

Petty & Cacioppo, 1984; Southwell & Yzer, 2009). Attending to these theoretical claims, the following two research hypotheses are suggested:

H5: Those who are engaged in interpersonal communication after exposure to media coverage will show a higher level of perceived issue salience than those who are not involved in interpersonal communication after media exposure.

H6: Those who are engaged in interpersonal communication after exposure to media coverage will show a greater level of perceived strength of personal issue stance than those who are not involved in interpersonal communication after media exposure.

An interesting question to be addressed here, on the other hand, is whether or not interpersonal communication after media exposure enhances individuals' perceived effectiveness of media coverage. Simple conversations after media exposure may motivate or facilitate individuals' self-verification and reassurance processes (e.g., Compton & Pfau, 2009; Southwell & Yzer, 2009). That is, individuals are likely to verify what they internally process with media information and are likely to reassure themselves through interpersonal communication. Hypothetically, then, media coverage of an organization, which is processed individually as well as interpersonally through media exposure and subsequent interpersonal communication, may be perceived as more verifiable and realistic and, as a result, may be perceived as more effective (Fishbein, Hall-Jamieson, Zimmer, von Haeften, & Nabi, 2002). The theoretical link between

individuals' self-verification and reassurance processes resulting from interpersonal communication after media exposure and their perceived effectiveness of media coverage still remains verifiable. Therefore, a research question is proposed to empirically examine the relationship between interpersonal communication after media exposure and individuals' perceived effectiveness of media coverage:

RQ1: Does perceived effectiveness of media coverage vary as a function of interpersonal communication after media exposure?

Meanwhile, many social network analysts have insisted that individuals' social contexts can be explained and understood by patterns and implications of relational ties among a set of individual actors (Frenzen & Nakamoto, 1993). In line with the conceptual and theoretical bases of social network approaches, a wide array of social network analytic techniques, such as a sociogram, "in which people (or more generally, any social units) are represented as points in two-dimensional space, and relationships among pairs of people are represented by lines linking the corresponding points" (Wasserman & Faust, 1994, p. 12), have helped visually illustrate structures of social networks and empirically analyze structural variables. Other important aspects of social network analysis are as follows:

- (1) Actors and their actions are viewed as interdependent rather than independent, autonomous units
- (2) Relational ties (linkages) between actors are channels for transfer or “flow” of resources (either material or nonmaterial)
- (3) Network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual actions
- (4) Network models conceptualize structure (social, economic, political, and so forth) as lasting patterns of relations among actors (Wasserman & Faust, 1994, p. 4)

The focus of this study on social networks as the context of analysis is concerned with how and to what extent interpersonal relations and influence play out in social networks in association with exposure to media coverage of an organization. A number of previous studies have especially focused on individual-level factors in explicating the extent to which interpersonal relations and influence affect the ways in which message recipients process information and, as a result, come to hold cognitive, attitudinal, and behavioral patterns. In such previous studies, message recipients’ perceived trust and expertise about the communicator have been found significant in determining the extent to which interpersonal interactions influence cognitive, attitudinal, and behavioral outcomes (Fukuyama, 1999; Hallahan, 1999; Petty & Cacioppo, 1984; Vercic et al., 2008). That is, the extent to which message recipients put personal trust on the communicator as well as the extent to which message recipients believe the

communicator has expertise in a certain topic moderate the relationship between interpersonal communication and subsequent changes in individuals. The two basic dimensions of source characteristics, trust and expertise, seem to associatively account for source credibility and, therefore, affect the level of attention to and integration of conversations at the message recipients ends, which ultimately leads to certain cognitive, attitudinal, and behavioral changes in individuals (Kwak et al., 2005). In addition to message recipients' perceived source credibility of the communicator, individuals' perceived relevance and salience (Rimer & Kreuter, 2006), individuals' level of personal involvement (Petty & Cacioppo, 1979, 1984), and individuals' pre-established attitudes (Compton & Pfau, 2009; Eagly & Chaiken, 1998) have been identified as significant predictors of interpersonal influence during conversations.

In marked contrast to studies focusing on individual-level factors, social network approaches emphasize effects of network properties, which are group-level factors, in understanding and explaining interpersonal influence deriving from conversations (Wasserman & Faust, 1994). In effect, it may not be too exaggerating to argue that media effects researchers so far have relatively understudied and underexplored how and to what extent social and structural environments of interpersonal interactions affect the ways in which interpersonal

communication mediate or moderate media effects. Social and structural environments have been suggested as significant antecedents or mediators of human behaviors by many social psychologists and sociologists (e.g., Durlauf, 2001; Postmes & Spears, 1998; Spears, Lea, Corneliussen, Postmes, & Haar, 2002; Spears, Postmes, Lea, & Wolbert, 2002; Turner, 1991; Wellman, 1988). For example, individuals' perceived group presence and group identification have been identified as accountable for behavioral conformity to group norms and standards (e.g., Durlauf, 2001; Turner, 1991). Also, social network properties, such as network density and strength of relational ties, have been found to be predictive of normative behavioral patterns among people (e.g., DeLaat, 1987; Harlan & Saidel, 1994; Reagans & McEvily, 2003; Rivera & Rogers, 2006; Son & Lin, 2008). In light of such theoretical as well as empirical claims, the extent to which exposure to media information and interpersonal communication intersect and affect each other is likely to be determined by how network properties allow or hinder individuals' interpersonal communication and information processing in social networks after media exposure. After all, structures of individuals' social relationships significantly organize and direct their communication paths and the way in which they interact with one another (DiMaggio & Louch, 1998; McClurg, 2006).

Interpersonal communication and social network researchers have increasingly turned their attention from dyads to more complex group networks in order to map dynamic interactions in larger social contexts (Yamagishi, Gillmore, & Cook, 1988). Small-group network analysis, specifically, has been fast emerging as an analytic tool to better examine and understand group-individual dynamics, social and psychological influence, and both social and individual outcomes (Katz et al., 2004). By observing interpersonal interactions in small-group networks, which provide simulations or microcosms of larger social units, some of the basic processes of social interactions and influence as well as following outcomes can be identified in rich detail, and, consequently, more localized social and psychological theories that take into consideration both social structure and individual agency can be established (Harrington & Fine, 2006). Following the principles of small-group network analysis, the analytic and methodological directions of this study are tailored to focus on how individuals of small-group networks interact with one another after exposure to media coverage of an organization and how such media coverage and subsequent interpersonal interactions in small-group networks jointly produce individuals' cognitive, attitudinal, and behavioral intentional outcomes relevant to organization-public relationship management.

In addition, individuals are likely to have more durable attitudes and behavioral intentions toward an organization covered in the media, if asked to be engaged in subsequent interpersonal communication. In line with the effect of interpersonal communication contributing to individuals' self-verification and reassurance processes, active participation in interpersonal communication helps individuals establish more durable associations in memory between their cognitive social representations, attitudes, and behavioral intentions (Huckfeldt, Mendez, & Osborn, 2004). Thus, the following research hypotheses are additionally suggested:

H7: Predicted duration of attitudes toward an organization covered in the media is higher among those who are engaged in interpersonal communication after media exposure than those who are not engaged in interpersonal communication after media exposure.

H8: Predicted duration of behavioral intentions toward an organization covered in the media is higher among those who are engaged in interpersonal communication after media exposure than those who are not engaged in interpersonal communication after media exposure.

H9: Among those who are engaged in interpersonal communication after media exposure, perceived intensity of interpersonal communication will predict both duration of attitudes and behavioral intentions toward an organization covered in the media.

Also, whether or not individuals' perceived intensity of interpersonal communication after media exposure is associated with their future word-of-

mouth (WOM) intentions about an issue and organization covered in the media could be another worthwhile question. As reviewed earlier, public issues covered in the media can more likely develop into critical issues through active interpersonal communication and diffusion of information at a micro level, which facilitate the formation and socialization of public opinions and movements. Critical issues, then, inevitably call for organizations' strategic public relations management either as crisis management when issues imply negative aspects of organizations or as proactive public relations management when issues highlight good sides of organizations (e.g., Andsager & Smiley, 1998; Coombs & Holladay, 1996; Gaunt & Ollenburger, 1995; Holladay, 2009; Nelson, 1990). Moreover, individuals' WOM intentions, whether it is positive or negative, have been recognized as one of the significant factors in shaping and influencing attitudes and behaviors toward an organization (Hong & Yang, 2009). Hypothetically, individuals' perceived intensity of interpersonal communication after media exposure is positively related to their future WOM intentions about an organization covered in the media as participation in intense subsequent interpersonal communication might help individuals put the covered organization on top of the mind:

H10: Perceived intensity of interpersonal communication after media exposure will predict future WOM intentions about an organization covered in the media.

Effects of social network property: Social network density

As aforementioned, social network researchers focus on social contexts and network structures in understanding and explaining human behaviors.

Basically, social network researchers view an individual as an element of a larger social system—instead of an independent agency—who is inseparable from social dynamics of surrounding environments. Social network researchers, therefore, explicate individual behaviors as a function of interpersonal relationships within a network, which set boundaries of each individual's roles and identities to protect and maintain social order and harmony. Individuals define their self identities and social roles through interpersonal interactions and relationships with others. As a result, individual behaviors are directed and manifested in accordance with self identities and social roles each individual assumes within certain interconnected relationships (Deaux & Martin, 2003; Emirbayer, 1997).

Wellman (1988) suggested some underlying principles of the social network approach. First, he argued that behaviors can be more clearly explained and predicted by looking at the web of interpersonal relationships in which individuals are embedded, rather than examining their internal motivations. He

emphasized the role of interpersonal relationships that define cognitive and behavioral boundaries for individuals. Second, social network researchers, therefore, should make an analysis of interpersonal relationships, rather than intrinsic differences across individual characteristics. Third, individuals should be analytically recognized as interdependent units defined by their mutual relationships, rather than independent units. Finally, in order to take into account the interdependence among interpersonal relationships, social networks should be conceptualized as social fields where multiple actors and relationships exist, rather than aggregations of dyadic ties.

Given the theoretical assumptions and analytic principles of social network analysis, it appears only natural to reckon that interpersonal relationship is one of the key concepts to explain and predict human behaviors. Further, many social network analysts have considered that individuals and relational ties comprise and characterize structures of social networks (Wasserman & Faust, 1994). In this vein, many social network analysts have recognized structures of social networks as one the central units of analysis, which intrinsically vary across social networks, depending on existing relational ties among actors and their relationship types (Eguiluz, Zimmermann, Cela-Conde, & Miguel, 2005). In order to conceptualize and operationalize structures of social networks as research

variables, a number of network property concepts have been developed and introduced as well (Wasserman & Faust, 1994).

Of particular interest, social network density is a network property concept that reflects an overall relationship structure of a social network. Social network density has been defined as “the overall level of interaction of various kinds reported by network members” (Sparrowe, Liden, Wayne, & Kraimer, 2001, p. 317). Similarly, Marsden (1990) defined social network density as “the mean strength of connections among units in a network” (p. 453). Taking into consideration these conceptual definitions, social network density seems to be an important network property concept for this study looking at how organizations and issues covered in the media are interpreted and discussed in interpersonal networks and, more importantly, how the interactive effects of sided media exposure and subsequent interpersonal communication are determined within social networks as a function of network properties. Social network density is a variable that needs special attention in this study as well, in that interpersonal communication hinges on the relationship structure of a social network (Borgatti & Cross, 2003). After all, relational ties in a social network serve as major, if not exclusive, conduits for interpersonal communication (Podolny & Baron, 1997).

Individuals' interpersonal communication is contingent on relational ties among social network members, in that "(1) the extent to which a person knows and values the expertise of another, (2) the accessibility of this person, and (3) the potential costs incurred in seeking information from this person" (Borgatti & Cross, 2003, p. 434) collectively determine individuals' motivation to communicate with others in favor of information and opinion seeking. In parallel with the highlighted roles of relationship structure of social networks with respect to individuals' interpersonal communication, the effects of social network density have been both theoretically and empirically discussed and investigated by many researchers. Emirbayer (1997) theoretically posited that density of a social network and intensity of common group norms and emotions should be positively associated with each other. Reagans and McEvily (2003), on the other hand, stated that a densely interrelated social network can promote knowledge transfers among members due to increasing likelihood of coordination and cooperation among members that potentially lower interpersonal communication barriers. From the perspective of interpersonal communication, in addition, interpersonal communication is likely to be more intense in a high network density condition, as denser relational ties among members require much less cognitive energies for communicative behaviors as well as reduce individuals' perceived face threats

(Dainton & Aylor, 2002; Westmyer, DiCioccio, & Rubin, 1998). In other words, individuals in a high network density condition are likely to have a certain amount of established knowledge about other interaction partners' backgrounds, preferences, dispositions, and interaction proclivities to reduce cognitive energies in fashioning their interpersonal communication behaviors and to minimize potential face threats (Berger, 2002). In a low density network, in contrast, interpersonal communication is expected to be less intense, as relational uncertainties among members increase cognitive energies for communicative behaviors as well as perceived face threats (Knobloch, 2006). Most recently, Sohn (2009) empirically shed light on the positive relationship between social network density and individuals' motivation to communicate with others—electronic word-of-mouth intentions—after online media exposure.

While many previous studies have indicated that social network density is positively related to individuals' motivation of interpersonal communication, whether or not their motivation leads to an actual behavior—talking to others—still needs to be empirically addressed. Specifically in view of the purpose of this study, examining whether or not social network density can account for and predict individuals' interpersonal communication after being exposed to sided

media coverage of an organization appears to be critical. To this end, the following research hypothesis is proposed:

H11: Among those who are engaged in interpersonal communication after exposure to media coverage, social network density is positively related to perceived intensity of interpersonal communication in an interpersonal network.

Further, in view of the role of social capital being exchanged in a social network, individuals' perceived amount of knowledge regarding an issue covered in the media as a result of sided media exposure and subsequent interpersonal communication appears to be an important aspect to be investigated with respect to the concept of social network density. Fukuyama (1999) suggested that trust among social network members is an indispensable relationship variable that motivates and mobilizes resource exchanges in social networks. Putnam (2000) also pointed out the role of bonding social capital that enhances reciprocal information and knowledge transfers in a social network. In other words, the more densely social network members are interrelated, the more opinion and knowledge exchanges are expected in a social network as a function of pre-established trust and bonding social capital among the members. More precisely put, if interpersonal communication after exposure to sided media coverage of an organization is expected to be more intense in a high network density condition as

hypothesized above, individuals' perceived amount of knowledge about an issue covered in the media should also be greater in a high network density condition as a function of more intense interpersonal communication:

H12: Among those who are engaged in interpersonal communication after exposure to media coverage, social network density is positively related to perceived amount of knowledge regarding an issue covered in the media.

In addition, it can be also hypothesized that individuals may come to have a greater level of perceived issue salience and perceived strength of personal issue stance in a high network density condition, as interpersonal communication is expected to be more intense, and, as a result, individuals' cognitive elaboration on an issue covered in the media is expected to be more centrally processed (Petty & Cacioppo, 1979, 1984). Thus, the following two research hypotheses are drawn to verify these theoretical claims:

H13: Among those who are engaged in interpersonal communication after exposure to media coverage, social network density is positively related to perceived issue salience.

H14: Among those who are engaged in interpersonal communication after exposure to media coverage, social network density is positively related to perceived strength of personal issue stance.

How and to what extent exposure to sidedness of media coverage, subsequent interpersonal communication, and social network density interactively

affect individuals' attitudes and behavioral intentions toward an organization covered in the media is another considerable question to be addressed. Taking into account little, if any, previous public relations research empirically looking at the interactive effects of exposure to sided media coverage, interpersonal communication, and social network density on publics' attitudes and behavioral intentions, the present study raises the following research question:

RQ2: Do attitudes and behavioral intentions toward an organization covered in the media vary as a function of the interactions among sided exposure of media coverage of an organization, subsequent interpersonal communication, and social network density?

Influence of interpersonal relations: Strength of ties

Although the concept of social network density helps understand the extent to which social network members are interconnected with each other, it falls short of informing how close a person (ego) is with others (alters) in a social network (Scott, 2000). Strength of ties is a social network analysis concept that shows how close and emotionally attached a pair of social network actors are with each other (Granovetter, 1983). In this regard, the concept of strength of ties indicates relational types and contents among social network actors, whereas the concept of social network density shows relational connections among actors in a social network (Brown & Reingen, 1987). Also, the concept of strength of ties

represents the degree of communality among social network actors, whereas the concept of social network density represents the degree of connectivity among social network actors (Fulk, Flanagin, Kalman, Monge, & Ryan, 1996). By investigating strengths of ties among social network actors, intensity of relationships individuals maintain with each other can be appreciated, and, more importantly, behavioral consequences of certain interpersonal relationships can be explained and predicted (Harrington & Fine, 2006). Therefore, despite the conceptual overlap and correlation between strength of ties and social network density (i.e., more strong ties are assumed to occur in a denser social network), they should be regarded as separate and independent variables in order to more clearly identify the roles of relational types and forms in directing and inducing context-specific human behaviors. Strength of ties, then, appears to be an important concept to take into account in line with the purpose of this study that attempts to explain and predict the degree of interpersonal influence along the media and interpersonal communication pipelines.

Strength of ties can be categorized into weak ties and strong ties, depending on individuals' perceived importance of and emotional attachment to relationships (Brown & Reingen, 1987; Granovetter, 1983). Weak ties, which refer to relationships between a person and mere acquaintances, occasionally

provide individuals with sources of novel information or simple knowledge (e.g., Granovetter, 1983; Hansen, 1999; Podolny & Baron, 1997). In a broader sense, the media can be recognized as communication vehicles of weak ties that connect audiences and producers, in that individuals, as members of a broad social network, frequently rely on novel information or simple knowledge disseminated by the media in an attempt to scan and digest their social circumstances. Weak ties, along the line, seem to play a significant role in spreading new information and simple knowledge within and across loosely connected social networks and, consequently, in bridging diverse as well as isolated individuals in society (Granovetter, 1983).

On the contrary, strong ties, which account for relationships between a person and significant others, serve as communication channels for more frequent and more complex information and knowledge exchanges among individuals (Granovetter, 1983; Hansen, 1999). Strong ties in a social network are believed to account for individuals' greater motivation to communicate with each other and to be of assistance to each other in line with individuals' general social considerations and interpersonal communication goals, such as the desire to reciprocate and the desire to manage relational resources (Dillard, Kinney, & Cruz, 1996; Reagans & McEvily, 2003; Wilson & Feng, 2007). Strong ties, in

that sense, may serve as bonding social capital, which contributes to increasing social cohesion that affects the extent to which individuals are willing to invest time, energy, and efforts in maintaining relationships with each other through interpersonal interactions (Reagans & McEvily, 2003).

More importantly, strong ties are regarded as more effective and influential than weak ties in terms of individuals' information and communication processing and, further, changes in cognitions, attitudes, and behaviors as a result of interpersonal interactions (e.g., Deaux & Martin, 2003; Granovetter, 1983; Wejnert, 2002). Interpersonal trust among individuals connected by strong ties is one of the decisive factors that modulate effectiveness and influence of interpersonal communication (e.g., Dal Fiore, 2007; Reagans & McEvily, 2003). That is, as individuals know and understand each other well, based on more concretely defined and established relationships of strong ties, they are likely to pay greater attention to and greater trust in what each other has to say. As a result, a higher level of perceived interpersonal influence is expected in strong ties than in weak ties due to individuals' greater attention to interpersonal communication as well as individuals' greater trust in opinions of significant others.

Shared emotions among individuals are another significant factor that helps explain and predict a stronger level of interpersonal influence on

individuals' information and communication processing in strong ties. As reviewed earlier, strong ties represent closer and stronger interpersonal relationships among individuals. Closer interpersonal relationships among individuals, in turn, are likely to result in a higher level of shared emotions among individuals (e.g., Deaux & Martin, 2003; Dillard et al., 1996; Oldmeadow et al., 2003). Shared emotions in a social network allow individuals to more easily discover what matters to others and, therefore, lead to a greater level of mutual understanding (Planalp & Fitness, 1999). A greater level of mutual understanding among individuals, in turn, may account for more accurate and effective interpersonal communication (Berger, 2002; Wilkes-Gibbs & Clark, 1992). All things considered, the following research hypothesis is proposed in view of presumably greater interpersonal influence of strong ties:

H15: Among those who are engaged in interpersonal communication after exposure to media coverage, perceived presence of strong ties in their social network is positively related to perceived interpersonal influence on the information processing of media coverage.

Chapter Three

Methods

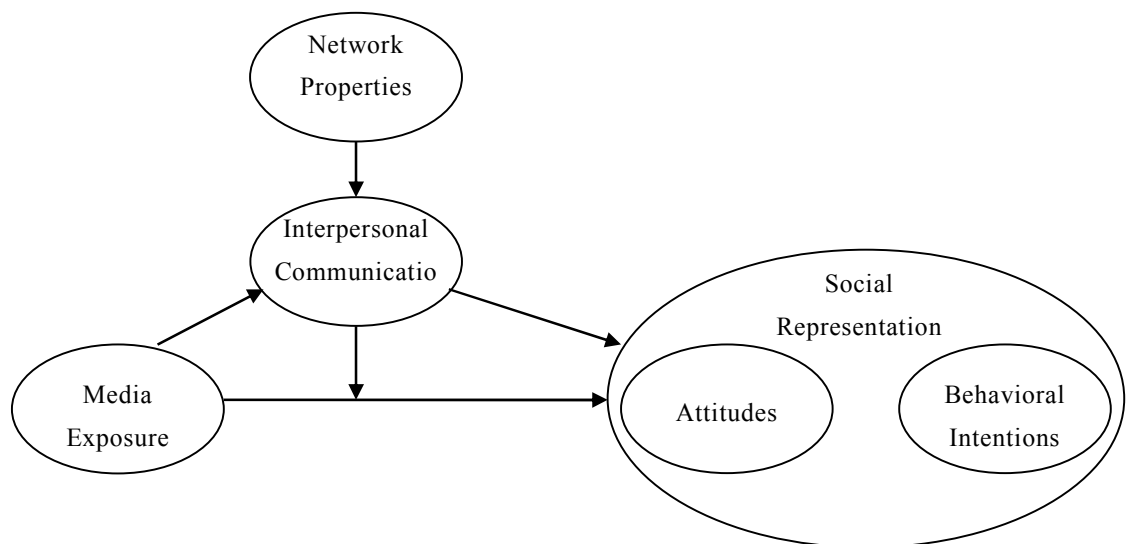
Research model

One of the main purposes of this study is to conceptually explicate and empirically test effects of exposure to sided media coverage of an organization on audiences' social representations, which are theoretically believed to consist of attitudes and behavioral intentions toward an organization covered in the media (Bagozzi, 1981; Bauer & Gaskell, 1999; Malhotra, 2005; Moscovici, 1988). In examining the formation of individuals' attitudes and behavioral intentions after sided media exposure, mediating or moderating effects of interpersonal communication are taken into consideration in explicating and demonstrating the relationship between sided exposure to media coverage of an organization and individuals' attitudes and behavioral intentions. Furthermore, effects of social network properties, such as social network density and strengths of ties, on interpersonal communication after media exposure and accompanied interpersonal influence on information processing are investigated in the study. The following research model visually describes the hypothesized relationships among sided exposure to media coverage of an organization, individuals' social representations as composite constructs comprising attitudes and behavioral

intentions, interpersonal communication after media exposure, and social network properties:

Figure 3.1

Hypothesized model



Experiment design

A 2×3 factorial experiment was designed in order to test and address the research hypotheses and questions. The main independent variables of this study were availability of interpersonal communication after media exposure and

sidedness of media coverage. More specifically, availability of interpersonal communication after media exposure was manipulated across two experimental conditions: conversations-available and conversations-unavailable condition. On the other hand, sidedness of media coverage was manipulated across three experimental conditions: positive one-sided; negative one-sided; and two-sided condition. Across two conditions of interpersonal communication after media exposure and three conditions of sidedness of media coverage, six different experimental conditions were prepared.

Description of participants

Experiment participants were college students enrolled in journalism courses at a large Midwestern public university. Students participated in the experiment in a voluntary fashion, while provided with extra course credit in compensation for participation. This procedure yielded a total of 180 college students as the experiment participants.

The experiment participants ranged from 18 to 40 in age. The mean age was 20.71, while the median age was 20. In terms of gender, far more female students participated in the experiment, as 120 of the participants were female (66.7%), whereas 60 of them were male (33.3%). Juniors comprised the

participant pool most (41.7%), followed by sophomores (34.4%), seniors (12.8%), and freshmen (11.1%). Also, 130 (72.2%) of the participants identified their ethnicity as “White, Non-Hispanic,” followed by “Asian/Pacific Islander” (21.7%), “African American” (2.8%), “Hispanic American” (1.1%), “Native American” (1.1%), and “Others” (1.1%)

Random assignments

A randomization approach was taken to eliminate any extraneous influence. Participants were randomly assigned to five-person groups, then, those five-person groups were randomly and evenly assigned to each of the six experimental conditions, resulting in a balanced experiment.

Experiment manipulations

In order to manipulate availability of interpersonal communication after media exposure, the following procedures were taken: participants assigned to the conversations-available condition were asked to freely talk with others about the issue and organization covered in the media, whereas participants assigned to the conversations-unavailable condition did not have any opportunity to talk with others about the covered issue and organization after media exposure. All other

circumstances were kept constant without interpersonal communication opportunities after media exposure.

Sidedness of media coverage was manipulated by having participants exposed to a set of newspaper articles covering an organization and a relevant issue, which vary in positive and negative valence of content and framing. A fictitious organization, Next Energy, was used for creating a set of media coverage, in order to avoid any confounding effects, such as participants' pre-established beliefs about and attitudes toward a real organization. At the same time, names and affiliations of media sources were undisclosed to avoid any confounding effects as well (See Appendix A).

Four newspaper articles were created and used for the experiment: Two positively framed articles and two negatively framed articles. Next Energy as the covered organization was either positively or negatively framed in each article with regard to economic and environmental pros and cons of bio-fuel production. The main reasons for preparing two newspaper articles for each directional bias were to facilitate subsequent group conversations by providing more information about Next Energy as well as to enhance participants' sense of reality by being exposed to more than one media outlet. Except for the directional bias, other

properties, such as writing quality, length, source credibility, and persuasiveness, were kept constant through a series of pilot tests.

Participants who were assigned to the positive one-sided condition were exposed to two positively-framed articles, whereas those who were assigned to the negative one-sided condition were exposed to two negatively-framed articles. On the other hand, participants who were assigned to the two-sided condition were simultaneously exposed to one positively-framed and one negatively-framed article. That is, sidedness of media coverage was manipulated by controlling different media exposure across the conditions.

Social network density measure

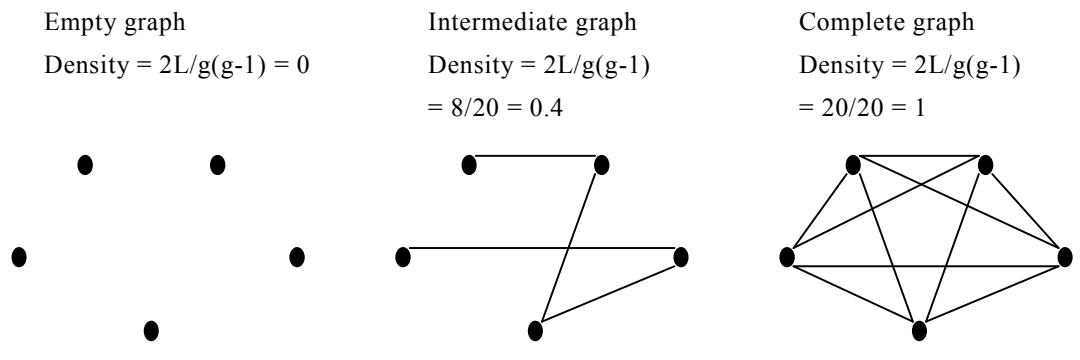
Social network density was measured only for participants assigned to the conversations-available condition. The sociometric technique, which adopts a self-report method that helps identify relationship structures of social networks (Moreno, 1934; Wasserman & Faust, 1994), was employed to measure social network density of each five-person group. For each five-person group assigned to the conversations-available condition, a fixed roster of the members was prepared prior to the experiment. Upon arrival, participants were provided with a fixed roster including the names of all members in their five-person group and

were asked to indicate their perceived closeness with other members: *don't know at all; acquainted; close; and very close* (See Appendix B). The data resulting from this procedure yielded relationship information of each five-person group, which served as a small-group social network for participants (Reagans & McEvily, 2003).

Social network density for each five-person group, then, was computed by the formula based on the graph theory. The graph theory assumes that a social network can be visually illustrated with nodes (actors) and lines (relational ties) (Wasserman & Faust, 1994). Referring to the relationship data collected by the sociometric technique, social network graphs were drawn for each five-person group. Taking into account the conceptual definition of social network density adopted in this study, relational ties between dyadic participants were considered to be present, only when the two participants mutually reported their perceived closeness with each other as either *close* or *very close*. Then, social network density for each five-person group was computed with the following formula: $\Delta = 2L/g(g-1)$, where L denotes the number of existing lines (relations), and g denotes the number of nodes (actors) in a social network. Figure 3.2 below illustrates how to operationalize relations and actors in a social network and how to compute social network density with the formula:

Figure 3.2

Relationship structure and social network density



Other measures

A questionnaire was designed to measure the variables of interest as well as to collect the demographic information of experiment participants. The variables of interest were as follows: amount of knowledge; issue salience; strength of personal issue stance; intensity of interpersonal communication; presence of strong ties in a social network; interpersonal influence; effectiveness of media coverage; attitudes toward the covered organization; behavioral intentions toward the covered organization; duration of attitudes; duration of behavioral intentions; and future WOM intentions. The variables were operationalized and measured, using either seven-point Likert scales or semantic-differential scales that follow relevant statements describing experiment

participants' thoughts and feelings. An original copy of questionnaire and some descriptive statistics about the variables are attached as appendices.

Experiment procedure

Participants entered a designated room as a five-person group. Upon arrival at the designated room, participants were told to carefully read given news articles in accordance with their sided media exposure conditions.

After media exposure, participants assigned to the conversations-available condition were asked to talk with other group members for 10 to 15 minutes about their thoughts and opinions regarding the covered organization and issue. In contrast, participants assigned to the conversations-unavailable condition were asked to fill out a questionnaire after media exposure without any opportunity to converse with others. All participants were thanked and dismissed after filling out a questionnaire.

Chapter Four

Results

Manipulation check

To check whether or not the manipulation of media coverage sidedness was successful, group differences in perceived directional bias of media coverage (1: negative; 7: positive) were statistically tested with a one-way ANOVA analysis.

The analysis showed statistically significant group differences across the three different conditions ($F(2, 177) = 208.7, p < .05$). The mean score of perceived directional bias for the positive one-sided condition was 6.12 ($n = 60, SD = .87$), whereas the mean score for the negative one-sided condition was 2.57 ($n=60, SD=1.06$). The mean score for the two-sided condition, on the other hand, was 4.05 ($n=60, SD=.93$), indicating that the participants perceived a neutral directional bias by being exposed to positively framed and negatively framed news articles at the same time. A post-hoc analysis also confirmed statistically significant group differences in perceived directional bias across the three conditions.

Main effects of sided exposure to media coverage

The first three hypotheses were to specifically address main effects of sided exposure to media coverage on attitudes, behavioral intentions, and intensity of subsequent interpersonal communication. In order to examine the hypothesized relationships between sided media exposure and experiment participants' attitudes toward the covered organization, behavioral intentions toward the covered organization, and their perceived intensity of subsequent interpersonal communication, a series of one-way ANOVA analyses was conducted to statistically test group differences across the experiment conditions (positive one-sided, negative one-sided, and two-sided condition).

A descriptive analysis of attitudes toward the covered organization showed some mean differences across the three conditions. The mean score of attitudes for the positive one-sided condition was the highest ($n = 60$, $M = 4.52$, $SD = .99$), whereas that of the negative one-sided condition was the lowest ($n = 60$, $M = 3.65$, $SD = .98$). The mean score of attitudes for the two-sided condition, on the other hand, was in between the positive one-sided and the negative one-sided condition ($n = 60$, $M = 3.78$, $SD = 1.02$).

In addition, a one-way ANOVA analysis confirmed statistically significant group differences regarding attitudes across the three conditions ($F(2, 177) = 13.37, p < .05$). More specifically, a post-hoc analysis indicated statistically significant group differences between the positive one-sided condition and the other two conditions. The group difference between the negative one-sided condition and the two-sided condition, however, was not statistically significant. H1 was statistically supported as a result.

Table 4.1

Post-hoc analysis: Attitudes

Condition (I)	Condition (J)	Mean Difference (I-J)	Std. Error	Sig.
Positive one-sided	Negative one-sided	.87500	.18266	< .001
	Two-sided	.74583	.18266	< .001
Negative one-sided	Positive one-sided	-.87500	.18266	< .001
	Two-sided	-.12917	.18266	.760
Two-sided	Positive one-sided	-.74583	.18266	< .001
	Negative one-sided	.12917	.18266	.760

In terms of behavioral intentions toward the covered organization, mean differences across the three conditions were examined as well. Similar to the result of attitudes, the mean score of behavioral intentions for the positive one-sided condition was the highest ($M = 4.41, SD = 1.22$), while that of the negative one-sided condition was the lowest ($M = 3.75, SD = 1.19$). As for the two-sided condition, the mean score fell in between ($M = 4.03, SD = 1.31$).

A one-way ANOVA analysis on group differences across the three conditions indicated statistically significant main effects of sided media exposure on behavioral intentions ($F(2, 177) = 4.25, p < .05$). Further, a post-hoc analysis revealed that participants assigned to the positive one-sided condition reported significantly more favorable behavioral intentions toward the covered organization than participants assigned to the negative one-sided condition. However, both the group difference between the positive one-sided and the two-sided condition and the group difference between the negative one-sided and the two-sided condition was not statistically significant. According to the results, H2 was statistically supported as well.

Table 4.2

Post-hoc analysis: Behavioral intentions

Condition (I)	Condition (J)	Mean Difference (I-J)	Std. Error	Sig.
Positive one-sided	Negative one-sided	.65556	.22587	.012
	Two-sided	.37778	.22587	.219
Negative one-sided	Positive one-sided	-.65556	.22587	.012
	Two-sided	-.27778	.22587	.437
Two-sided	Positive one-sided	-.37778	.22587	.219
	Negative one-sided	.27778	.22587	.437

Meanwhile, whether or not experiment participants' perceived intensity of interpersonal communication after media exposure was significantly different across the three conditions was statistically tested with a one-way ANOVA

analysis. According to a descriptive analysis of perceived intensity of subsequent interpersonal communication, participants assigned to the two-sided condition reported the highest perceived intensity of interpersonal communication after media exposure ($n = 30$, $M = 4.53$, $SD = 1.20$), followed by participants assigned to the negative one-sided condition ($n = 30$, $M = 3.63$, $SD = 1.52$) and those who assigned to the positive one-sided condition ($n = 30$, $M = 2.83$, $SD = .95$).

These mean differences across the conditions were statistically significant ($F(2, 87) = 14.03$, $p < .05$), and a post-hoc analysis showed that the group differences between the positive one-sided, the negative one-sided, and the two-sided condition were all statistically significant at the .05 level. Thus, H3 was statistically supported.

Table 4.3

Post-hoc analysis: Intensity of subsequent interpersonal communication

Condition (I)	Condition (J)	Mean Difference (I-J)	Std. Error	Sig.
Positive one-sided	Negative one-sided	-.80000	.32116	.039
	Two-sided	-1.70000	.32116	< .001
Negative one-sided	Positive one-sided	.80000	.32116	.039
	Two-sided	-.90000	.32116	.017
Two-sided	Positive one-sided	1.70000	.32116	< .001
	Negative one-sided	.90000	.32116	.017

Main effects of subsequent interpersonal communication

In order to statistically test H4, which predicted that participants engaged in interpersonal communication after media exposure will report greater perceived amount of knowledge about the covered issue than participants not being able to talk with others after media exposure, a one-way ANOVA analysis was conducted.

Contrary to the hypothesis, a descriptive analysis showed that participants indeed reported greater perceived amount of knowledge in the conversations-unavailable condition ($n = 90$, $M = 4.37$, $SD = 1.22$) than in the conversations-available condition ($n = 90$, $M = 3.96$, $SD = 1.16$). Further, this group difference was statistically significant according to a one-way ANOVA analysis ($F(1, 178) = 5.357$, $p < .05$). Therefore, not only was H4 rejected, but also a negative effect of interpersonal communication after media exposure on participants' perceived amount of knowledge about the covered issue was identified as opposed to the hypothesis.

H5 was to test a relationship between interpersonal communication after media exposure and participants' perceived salience of the covered issue. More precisely, H5 presumed that participants will perceive higher issue salience as a result of interpersonal communication after media exposure. Descriptive statistics,

however, indicated higher issue salience reported by participants assigned to the conversations-unavailable condition ($n = 90, M = 5.61, SD = .98$) than those who assigned to the conversations-available condition ($n = 90, M = 5.48, SD = 1.01$), although the group difference was not statistically significant ($F(1, 178) = .810, p > .05$). H5 was not supported.

In addition, a relationship between subsequent interpersonal communication and participants' perceived strength of personal issue stance was statistically tested in order to address H6. In line with the previous results, a statistical analysis suggested a direction against the hypothesis predicting a positive relationship between interpersonal communication after media exposure and participants' perceived strength of personal issue stance. That is, participants assigned to the conversations-unavailable condition reported higher perceived strength of personal issue stance ($n = 90, M = 4.70, SD = 1.13$) than those who assigned to the conversations-available condition ($n = 90, M = 4.30, SD = 1.36$). Also, a one-way ANOVA analysis suggested that this group difference was statistically significant ($F(1, 178) = 4.613, p < .05$). Thus, H6 was not supported, yet a negative effect of subsequent interpersonal communication on participants' perceived strength of personal issue stance was found in light of the result.

Hypothesizing that participants' engagement in interpersonal communication after media exposure might bring forth more durable attitudes toward the covered organization—specifically due to more durable memory as a result of interpersonal interactions in addition to media exposure, a relationship between subsequent interpersonal communication and participants' perceived duration of attitudes was statistically tested as well. As opposed to the hypothesis, however, participants assigned to the conversations-available condition reported lower perceived duration of attitudes toward the covered organization ($n = 90$, $M = 3.59$, $SD = 1.37$) than participants assigned to the conversations-unavailable condition ($n = 90$, $M = 4.09$, $SD = 1.14$). Moreover, according to a one-way ANOVA analysis, this group difference was statistically significant ($F(1, 178) = 7.074$, $p < .05$). In view of the results, a negative effect of subsequent interpersonal communication on participants' perceived duration of attitudes was identified, while H7 was rejected.

Along the same vein, a relationship between subsequent interpersonal communication and participants' perceived duration of behavioral intentions toward the covered organization was statistically tested. Similar to perceived duration of attitudes, participants in the conversations-available condition showed lower perceived duration of behavioral intentions ($n = 90$, $M = 3.48$, $SD = 1.22$)

in comparison with participants in the conversations-unavailable condition ($n = 90$, $M = 3.90$, $SD = 1.27$). Also, a statistically significant group difference was identified by a one-way ANOVA test ($F(1, 178) = 5.163$, $p < .05$). Accordingly, H8 was rejected, yet the results of a statistical analysis suggested a negative effect of subsequent interpersonal communication on participants' perceived duration of behavioral intentions.

In demonstrating main effects of subsequent interpersonal communication, another interesting research question was if participants' perceived effectiveness of media coverage varies as a function of interpersonal communication after media exposure. In a questionnaire, participants' perceived effectiveness of media coverage was measured in two ways: effectiveness regarding the covered issue and effectiveness regarding the covered organization. In other words, participants were asked to indicate their perceived effectiveness of media coverage in deciding their opinion about the issue of bio-fuel production as well as their opinion about the organization, Next Energy.

First, whether or not interpersonal communication after media exposure affects participants' perceived effectiveness of media coverage in making up their opinions regarding the issue of bio-fuel production was statistically analyzed. Consistent with the previous results pointing to negative effects of subsequent

interpersonal communication, participants assigned to the conversations-available condition reported lower perceived effectiveness of media coverage ($n = 90$, $M = 3.51$, $SD = 1.49$) than participants assigned to the conversations-unavailable condition ($n = 90$, $M = 4.69$, $SD = 1.09$). Also, this group difference was statistically significant ($F(1, 178) = 36.577$, $p < .05$).

As to participants' perceived effectiveness of media coverage in making up their opinions regarding Next Energy, a similar pattern was pronounced. Participants' perceived effectiveness of media coverage decreased, when they are allowed to talk with others after media exposure ($n = 90$, $M = 3.71$, $SD = 1.46$), compared to when participants did not have any opportunity to converse with others after media exposure ($n = 90$, $M = 4.32$, $SD = 1.37$). A one-way ANOVA analysis also indicated a significantly negative effect of subsequent interpersonal communication on participants' perceived media effectiveness ($F(1, 178) = 8.399$, $p < .05$).

Main effects of interpersonal communication intensity

Based on a theoretical assumption that participants' attitudes and behavioral intentions toward the covered organization would hold longer, if they are engaged in more intense interpersonal communication after media exposure,

positive relationships between participants' perceived intensity of subsequent interpersonal communication and their perceived duration of attitudes and behavioral intentions were hypothesized in H9.

A correlation analysis on the relationship between participants' perceived intensity of subsequent interpersonal communication and their perceived duration of attitudes toward the covered organization was conducted. Pearson correlations statistics showed that intensity of subsequent interpersonal communication was significantly correlated with duration of attitudes ($r = .339, p < .05$). Thus, a significantly positive relationship between participants' perceived intensity of interpersonal communication and their perceived duration of attitudes was demonstrated.

Another correlations analysis examining a relationship between intensity of subsequent interpersonal communication and duration of behavioral intentions, on the other hand, revealed a different outlook. Although intensity of subsequent interpersonal communication was somewhat correlated with duration of behavioral intentions ($r = .152$), it was not statistically significant at the .05 level.. Taken together, while participants' perceived intensity of interpersonal communication after media exposure was significant in accounting for their perceived duration of attitudes toward the covered organization, it was not

statistically significant in explaining participants' perceived duration of behavioral intentions toward the covered organization. Thus, H9 was only partially supported.

Meanwhile, in order to address H10, a relationship between participants' perceived intensity of subsequent interpersonal communication and their future WOM intentions about the covered organization was statistically tested with a regression analysis. According to Pearson correlations statistics, intensity of subsequent interpersonal communication was significantly correlated with future WOM intentions ($r = .303, p < .05$), confirming a positive relationship between participants' perceived intensity of interpersonal communication and their future WOM intentions about the covered organization. Consequently, H10 was supported.

Main effects of social network density

Taking into account theoretical implications of social network density as a structural variable that might influence and determine not only modalities of interpersonal interactions in social networks but also some of the individual outcomes of media exposure and subsequent interpersonal communication, H11

to H14 were to explore the extent to which social network density accounts for variations in such outcomes.

Specifically focusing on how and to what extent social network density influences interpersonal communication modalities in social networks, H11 predicted a positive relationship between social network density and participants' perceived intensity of interpersonal communication after media exposure. To statistically test H11, a correlation analysis was conducted.

According to Pearson correlations statistics, social network density was significantly correlated with participants' perceived intensity of interpersonal communication after media exposure ($r = .320, p < .05$), suggesting that social network was positively related to participants' perceived intensity of interpersonal communication after media exposure. In other words, interpersonal communication after media exposure was significantly more intense in densely connected social networks than in loosely connected networks as hypothesized. In light of the results, H11 was supported.

As one of the hypothesized effects of social network density on individual outcomes of media exposure and subsequent interpersonal communication, H12 predicted that social network density would be positively related to participants' perceived amount of knowledge about the covered issue. That is, participants in a

more densely connected social network would report higher amount of knowledge about the covered issue than participants in a less densely connected social network.

Indeed, social network density was positively as well as significantly correlated with participants' perceived amount of knowledge about the covered issue ($r = .343, p < .05$), suggesting a positive relationship between social network density and participants' perceived amount of knowledge about the covered issue. Therefore, H12 was supported.

In addition, the extent to which social network density influences participants' perceived issue salience and their perceived strength of personal issue stance was statistically tested as well in order to address H13 and H14, respectively.

As for participants' perceived issue salience, social network density was not significantly correlated ($r = .134, p > .05$). Likewise, social network density was not significantly correlated with participants' perceived strength of personal issue stance ($r = .117, p > .05$). Thus, both H13 and H14 were rejected.

Interaction effects of sided media exposure, subsequent interpersonal communication, and social network density

One of the most interesting as well as illuminating parts of this research was to shed light on interaction effects among sided media exposure, subsequent interpersonal communication, and social network density on participants' attitudes and behavioral intentions toward the covered organization (RQ1). Due to the experimental design and operationalization of this research, examining an interaction effect of interpersonal communication after media exposure and social network density or three-way interaction effects of sided media exposure, subsequent interpersonal communication, and social network density was statistically meaningless—social network density was measured only for groups of participants who were allowed to talk with others after media exposure. For that reason, only the following analyses were taken into consideration in this research:

- (1) An interaction effect of sided media exposure and subsequent interpersonal communication on participants' attitudes toward the covered organization
- (2) An interaction effect of sided media exposure and subsequent interpersonal communication on participants' behavioral intentions toward the covered organization
- (3) An interaction effect of sided media exposure and social network density on participants' attitudes toward the covered organization
- (4) An interaction effect of sided media exposure and social network density on participants' behavioral intentions toward the covered organization

Also, social network density variable was mean-centered for interaction analyses, while sided media exposure and subsequent interpersonal communication did not require such processes, as the mean scores of both variables were zero due to a balanced experimental design.

First, an interaction effect of sided media exposure and subsequent interpersonal communication on participants' attitudes toward the covered organization was statistically tested with a univariate analysis of variance.

Table 4.4

*Descriptive statistics: Attitudes (sidedness*conversation)*

Condition	Conversation	Mean	Std. Deviation	N
Negative one-sided	Conversations-unavailable	3.9333	.90956	30
	Conversations-available	3.3583	.97531	30
	Total	3.6458	.97890	60
Two-sided	Conversations-unavailable	3.7333	.92600	30
	Conversations-available	3.8167	1.12750	30
	Total	3.7750	1.02376	60
Positive one-sided	Conversations-unavailable	4.7500	.88083	30
	Conversations-available	4.2917	1.06892	30
	Total	4.5208	.99819	60
Total	Conversations-unavailable	4.1389	.99867	90
	Conversations-available	3.8222	1.11504	90
	Total	3.9806	1.06737	180

An analysis of variance showed no statistically significant interaction effect between sided media exposure and subsequent interpersonal communication (See Table 4.5).

Table 4.5

*Tests of between-subjects effects: Attitudes (sidedness*conversation)*

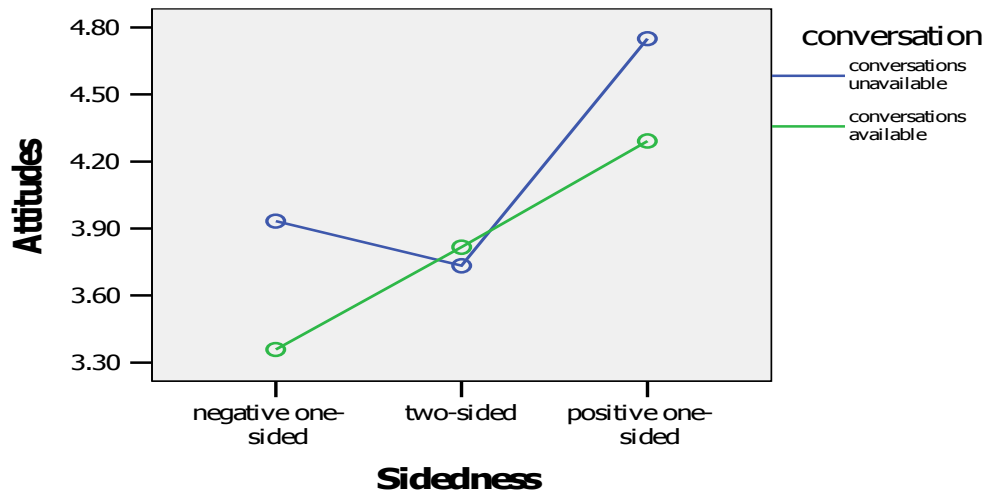
Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected model	34.986	5	6.997	7.207	< .001
Intercept	2852.068	1	2852.068	2937.390	< .001
Sidedness	26.772	2	13.386	13.786	< .001
Conversation	4.513	1	4.513	4.647	.032
Sidedness*Conversation	3.702	2	1.851	1.906	.152
Error	168.946	174	.971		
Total	3056.000	180			
Corrected total	203.932	179			

R Squared = .172 (Adjusted R Squared = .148)

Meanwhile, Figure 4.1 describes how sided media exposure and subsequent interpersonal communication interact in their effects of attitudes.

Figure 4.1

*Attitude plots (sidedness*conversation)*



Second, an interaction effect of sided media exposure and subsequent interpersonal communication on participants' behavioral intentions toward the covered organization was statistically tested with a univariate analysis of variance.

Table 4.6

*Descriptive statistics: Behavioral intentions (sidedness*conversation)*

Condition	Conversation	Mean	Std. Deviation	N
Negative one-sided	Conversations-unavailable	3.8444	1.32680	30
	Conversations-available	3.6556	1.04123	30
	Total	3.7500	1.18628	60
Two-sided	Conversations-unavailable	4.1667	1.38893	30
	Conversations-available	3.8889	1.22344	30
	Total	4.0278	1.30520	60
Positive one-sided	Conversations-unavailable	4.6778	.84637	30
	Conversations-available	4.1333	1.46374	30
	Total	4.4056	1.21679	60
Total	Conversations-unavailable	4.2296	1.24686	90
	Conversations-available	3.8926	1.25602	90
	Total	4.0611	1.25934	180

Table 4.7

*Tests of between-subjects effects: Behavioral intentions (sidedness*conversation)*

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected model	19.131	5	3.826	2.515	.032
Intercept	2968.672	1	2968.672	1951.068	< .001
Sidedness	12.993	2	6.496	4.269	.015
Conversation	5.112	1	5.112	3.360	.069
Sidedness*Conversation	1.027	2	.514	.338	.714
Error	264.752	174	1.522		
Total	3252.556	180			
Corrected total	283.883	179			

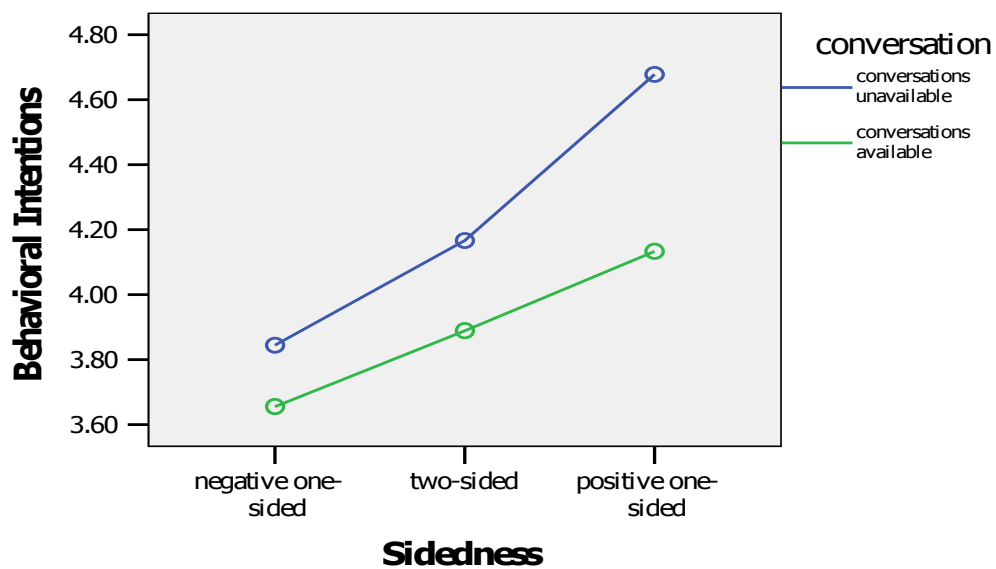
R Squared = .067 (Adjusted R Squared = .041)

According to an analysis of variance, sided media exposure was only statistically significant in explaining the variation in behavioral intentions, whereas subsequent interpersonal communication and the interaction were not statistically significant (See Table 4.7).

Figure 4.2 shows behavioral intention plots with regard to sidedness of organizational media coverage and availability of subsequent interpersonal communication.

Figure 4.2

*Behavioral intention plots (sidedness*conversation)*



Among those who were assigned to the conversations-available condition only, an interaction effect of sided media exposure and social network density on attitudes was statistically tested. In the same manner as the previous interaction effect analyses, a univariate analysis of variance was conducted in consideration of the extent to which sided media exposure, social network density, and the interaction of the two accounted for the variation in participants' attitudes toward the covered organization.

Table 4.8

*Descriptive statistics: Attitudes (sidedness*density)*

Condition	Density	Mean	Std. Deviation	N
Negative one-sided	.00	2.7750	1.16934	10
	.10	3.7833	.74322	15
	.60	3.2500	.58630	5
	Total	3.3583	.97531	30
Two-sided	.00	3.5750	1.08685	10
	.10	3.6000	1.38544	10
	.20	3.8000	.44721	5
	.80	4.7500	.82916	5
	Total	3.8167	1.12750	30
Positive one-sided	.00	4.5167	.90370	15
	.10	3.0500	.67082	5
	.30	4.5750	1.08685	10
	Total	4.2917	1.06892	30
Total	.00	3.7500	1.24853	35
	.10	3.6000	.99698	30
	.20	3.8000	.44721	5
	.30	4.5750	1.08685	10
	.60	3.2500	.58630	5
	.80	4.7500	.82916	5
	Total	3.8222	1.11504	90

An analysis of variance showed a statistically significant interaction effect of sided media exposure and social network density on participants' attitudes toward the covered organization. However, independent effects of both sided media exposure and social network density were not statistically significant in the model (See Table 4.9).

Table 4.9

*Tests of between-subjects effects: Attitudes (sidedness*density)*

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected model	33.920	9	3.769	3.929	< .001
Intercept	851.932	1	851.932	888.177	< .001
Sidedness	2.519	2	1.260	1.313	.275
Density	9.193	5	1.839	1.917	.101
Sidedness*Density	14.139	2	7.070	7.370	.001
Error	76.735	80	.959		
Total	1425.500	90			
Corrected total	110.656	89			

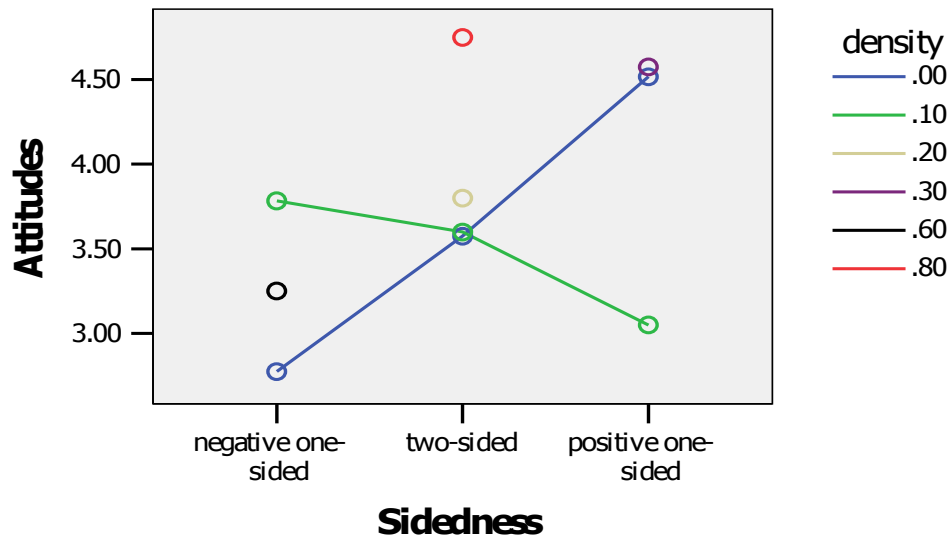
R Squared = .307 (Adjusted R Squared = .229)

Figure 4.3 illustrating attitude plots in relation to sided media exposure and social network density also suggested a significant interaction effect of the two. More specifically speaking, when there was no interpersonal relations in a social network (social network density = .00), it seemed participants' attitudes toward the covered organization were greatly influenced by sidedness of organizational media coverage. In contrast, when there were some interpersonal relations in a social network (social network density = .10), it seemed sidedness

of organization media coverage was not predictive of participants' attitudes toward the covered organization at all.

Figure 4.3

*Attitude plots (sidedness*density)*



Finally, an interaction effect of sided media exposure and social network density on participants' behavioral intentions toward the covered organization was statistically tested.

Table 4.10

*Descriptive statistics: Behavioral intentions (sidedness*density)*

Condition	Density	Mean	Std. Deviation	N
Negative one-sided	.00	3.2000	.89166	10
	.10	3.9556	1.03023	15
	.60	3.6667	1.22474	5
	Total	3.6556	1.04123	30
Two-sided	.00	4.0333	1.27124	10
	.10	3.3667	1.34669	10
	.20	3.9333	1.21106	5
	.80	4.6000	.54772	5
	Total	3.8889	1.22344	30
Positive one-sided	.00	4.6444	1.58598	15
	.10	2.9333	1.36219	5
	.30	3.9667	.94868	10
	Total	4.1333	1.46374	30
Total	.00	4.0571	1.42912	35
	.10	3.5889	1.22140	30
	.20	3.9333	1.21106	5
	.30	3.9667	.94868	10
	.60	3.6667	1.22474	5
	.80	4.6000	.54772	5
	Total	3.8926	1.25602	90

Similar to the result regarding an interaction effect of sided media exposure and social network density on attitudes, an analysis of variance suggested a statistically significant interaction effect of the two on behavioral intentions, while no significant independent effects were identified in the model for sided media exposure and social network density, respectively (See Table 4.11).

Table 4.11

*Tests of between-subjects effects: Behavioral intentions (sidedness*density)*

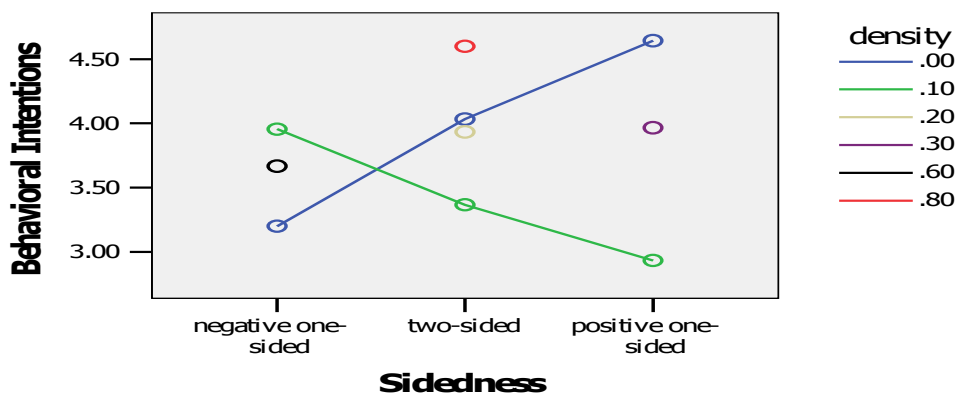
Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected model	23.721	9	2.636	1.807	.080
Intercept	865.773	1	865.773	593.579	< .001
Sidedness	.434	2	.217	.149	.862
Density	7.479	5	1.496	1.026	.408
Sidedness*Density	14.782	2	7.391	5.067	.008
Error	116.685	80	1.459		
Total	1504.111	90			
Corrected total	140.406	89			

R Squared = .169 (Adjusted R Squared = .075)

Behavioral intention plots also demonstrated a similar pattern of participants' behavioral intentions across organization media coverage sidedness and social network density (See Figure 4.4).

Figure 4.4

*Behavioral intention plots (sidedness*density)*



Main effects of strength of ties

Main effects of strength of ties were assessed in relation to participants' perceived interpersonal influence in group conversations after media exposure.

Participants' perceived interpersonal influence resulting from subsequent conversations was evaluated in two ways: interpersonal influence on developing opinions about the covered issue and about the covered organization. A couple of correlation analyses were conducted to statistically demonstrate the relationship between participants' perceived presence of strong ties in a social network and the degree of interpersonal influence they perceived.

In regards to participants' perceived interpersonal influence on opinions about the covered issue, a statistically significant correlation was identified with participants' perceived presence of strong ties ($r = .243, p < .05$), indicating a positive relationship between perceived interpersonal influence on opinions about the covered issue and perceived strong ties presence in a social network.

Participants' perceived interpersonal influence on opinions about the covered organization, on the other hand, was significantly correlated with their perceived presence of strong ties in a social network as well ($r = .279, p < .05$), suggesting a positive relationship between interpersonal influence on opinions

about the covered organization and presence of strong ties in a social network was demonstrated by an analysis. Taken together, H15 was supported.

Chapter Five

Discussion

Sided media exposure affecting audiences' social representations and subsequent interpersonal communication

As hypothesized in view of theories of media effects, sided exposure to media coverage of an organization did manifest robust effects on not only the audiences' attitudes and behavioral intentions toward the covered organization, but also their perceived intensity of interpersonal communication after media exposure.

In parallel with what Zaller (1992, 1996) suggested regarding media sidedness, media effects appeared to be maximized in the one-sided conditions, significantly polarizing attitudes toward the covered organization in accordance with a directional bias in content and framing. More specifically, those who were exposed to the positive one-sided media information flow came to have positive attitudes toward the covered organization, while those who were exposed to the negative one-side media information flow reported negative attitudes toward the covered organization. In the two-side media information flow, on the other hand, media effects appeared to be neutralized, as those who were assigned to the two-

sided media exposure condition held fairly neutral attitudes toward the covered organization.

Similar media effects of sided exposure were pronounced in relation to behavioral intentions toward the covered organization, although the magnitude of media effects was somewhat less than that of attitudes. Participants assigned to the positive one-sided condition reported significantly more favorable behavioral intentions to the covered organization than participants assigned to the negative one-sided condition. Participants exposed to the two-sided media coverage displayed neutral behavioral intentions toward the covered organization, although it was not significantly different from behavioral intentions of those who in the positive one-sided and the negative one-sided condition.

Taken together, substantial media effects on attitudes and behavioral intentions at the level of exposure (the first-level effects) were demonstrated in this research. From issues management perspectives, these findings are consistent with one of the commonly accepted ideas in public relations: positive media coverage benefits the covered organization, whereas negative media coverage impairs the covered organization.

In addition, the findings of this research educates us that not only is an evaluative content or frame of single media coverage important, but also a

directional flow of media information is critical in the formation of audiences' attitudes and behavioral intentions toward an organization covered in the media. A one-sided media information flow amplifies media effects, leading to polarizing (positive or negative) attitudes and behavioral intentions of audiences. When a directional bias of media information flow is exclusively positive for an organization, the covered organization is likely to enjoy desirable public relations outcomes, such as publics' favorable attitudes and behavioral intentions. When a directional bias of media information flow is exclusively negative for an organization, however, the covered organization is likely to suffer from public backlash, such as hostile attitudes and behavioral intentions, which might give rise to a crisis situation for the covered organization as it further develops (Benoit, 1997; Englehardt, Sallot, & Springston, 2004). A two-side media information flow, on the other hand, appears to neutralize media effects of single coverage on audiences' attitudes and behavioral intentions toward an organization covered in the media, most likely as a result of their cognitive uncertainties due to competing and contradictory media information about the covered organization (de Vreese & Boomgaarden, 2006). This finding indicates that one of the effective antidotes for negative media coverage of an organization may be being covered in the media in a positive and favorable light at the same time.

Meanwhile, effects of sided media exposure on participants' perceived intensity of subsequent interpersonal communication found in this research pose a noteworthy theoretical claim: intensity of interpersonal communication after media exposure varies as a function of media coverage sidedness. As hypothesized, when simultaneously exposed to competing and contradictory media information, participants reported higher level of perceived interpersonal communication intensity after media exposure than participants exposed to one-sided media coverage. Theoretically, this result can be attributed to participants' cognitive uncertainties about the covered issue and organization and, consequently, more intense opinion exchanges in subsequent interpersonal communication. In other words, interpersonal communication after media exposure seems to be perceived more intense in a two-sided media information flow, because individuals are likely to take sides and attempt to negotiate and persuade each other in subsequent interpersonal interactions so that they can resolve some cognitive uncertainties—mainly due to contradictory evaluative cues provided by media information—about an issue and organization covered in the media. By contrast, participants assigned to the one-sided conditions perceived less intense interpersonal communication after media exposure. More precisely, interpersonal communication after media exposure was most intense in the two-

sided condition and least intense in the positive one-sided condition with the negative one-sided condition in between. In both one-sided conditions, participants did not have to take their sides, because media coverage provided only one-sided information flow to talk about and think about, so it is likely that participants perceived less intense interpersonal communication after media exposure, compared to those who were in the two-sided condition.

While such theoretical reasoning for the variance in intensity of subsequent interpersonal communication across different sided media exposure conditions seems to make sense, another question arose: Does participants' perceived intensity of interpersonal communication after media exposure vary as a function of individual differences in conversation engagement? Put it another way, are individuals motivated to talk more because of sidedness of media coverage they are exposed? An additional analysis on a relationship between sided media exposure and participants' degree of conversation engagement indicated that it might not be the case. Although participants exposed to two-sided media coverage reported slightly higher conversation engagement ($M = 5.23$, $SD = 1.36$) than participants exposed to positive one-sided media coverage ($M = 4.70$, $SD = 1.32$) and participants exposed to negative one-sided media coverage ($M = 5.10$, $SD = 1.30$), the group differences were not statistically

significant ($F(2, 87) = 1.32, p > .05$). In sum, sided media exposure does not necessarily motivate audiences talk more in subsequent interpersonal interactions, yet it appears to affect audiences' perceived intensity of subsequent interpersonal communication due to attributes of media information flow—contradictory information in a two-sided condition and consistent information in a one-sided condition.

Table 5.1

Post-hoc analysis: Conversation engagement

Condition (I)	Condition (J)	Mean Difference (I–J)	Std. Error	Sig.
Positive one-sided	Negative one-sided	–.40000	.34170	.474
	Two-sided	–.53333	.34170	.268
Negative one-sided	Positive one-sided	.40000	.34170	.474
	Two-sided	–.13333	.34170	.920
Two-sided	Positive one-sided	.13333	.34170	.268
	Negative one-sided	.53333	.34170	.920

Negative effects of subsequent interpersonal communication: The effect of social comparison, the limited capacity perspective, and the role of biased processing

Consistently found in relation to interpersonal communication after media exposure were its negative main effects on a variety of individual outcomes. In a nutshell, interpersonal communication after media exposure negatively influenced: knowledge about the covered issue; strength of personal issue stance; duration of attitudes and behavioral intentions toward the covered organization;

and effectiveness of organizational media coverage about the covered issue and about the covered organization.

Taking into consideration that individuals exchange, share, and diffuse information and knowledge through interpersonal interactions in a social network, a positive relationship between interpersonal communication after media exposure and knowledge about the covered issue was hypothesized in this research. Moreover, the concept of social capital from which individuals can expand and reinforce their information and knowledge by interpersonal interactions seemed to add considerable theoretical support to this idea. Quite opposite to the hypothesis, however, interpersonal communication after media exposure was negatively related to knowledge about the covered issue—those who were assigned to the conversations-unavailable condition came to have significantly higher knowledge about the issue of bio-fuel production than those who were assigned to the conversations-available condition.

One of the potential explanations for this finding is the effect of social comparison. Participants assigned to the conversations-available condition had a chance to listen to others' thoughts and opinions after media exposure, whereas their counterparts were merely exposed to media information without any interpersonal interaction opportunity. Through such interpersonal interactions,

participants who were allowed to talk with others after media exposure might have realized that there may be some other things that they were not aware of previously and that they may be relatively oblivious to the covered issue compared to others. This potential effect of social comparison might have led to participants reporting a less amount of knowledge about the covered issue, specifically in comparison with participants who simply obtained information from the media and processed it individually without any subsequent interpersonal interactions.

In addition, this rather non-intuitive finding can be explained and understood in light of the limited capacity perspective (Lang, 1995, 2000). The limited capacity perspective has shed light on potential cognitive constraints of human brains in processing media content. More precisely, the perspective has suggested that information transmitted by the media can sometimes exceed one's cognitive capacity and, as a result, can hinder one's information processing, especially when new information is provided and a task of information processing is demanding (Southwell, 2005a). Later studies in this line of theorization have empirically demonstrated that a higher level of user control in processing media content can exacerbate audiences' recognition memory (Southwell & Lee, 2004)

and that excessive stimulation, such as context instability, from media content can negatively affect audiences' recognition memory (Southwell, 2005a).

Being experimental by nature, participants were exposed to a couple of news articles covering economic and environmental issues revolving around bio-fuel production. Then, they were either allowed to talk or not allowed to talk with other group members—according to their assigned condition—before they were asked to fill out a self-reported questionnaire. Specifically in regards to participants assigned to the conversations-available condition, subsequent group conversations they had with others for 10 to 15 minutes in conjunction with media content they were exposed to may have caused some kind of cognitive overload for them to process the information in a relatively short amount of time. Such potential information overload, in turn, may have resulted in their significantly lower amount of perceived knowledge about the covered issue in comparison to those who were only exposed to media coverage without any opportunity to converse with others after media exposure. This finding highlights a potentially negative effect of interpersonal communication after media exposure, especially when audiences are forced to process an amount of information in a short period. That is, not always does interpersonal communication after media exposure play a positive role in diffusion of knowledge and information in a

social network as a number of previous studies have suggested (e.g., Druckman, 2004; Eveland, 2004; McClurg, 2006; Morgan, 2009).

A negative effect of interpersonal communication after media exposure on perceived strength of personal issue stance makes a lot of sense as well, considering the potentially negative effects of social comparison and limited information processing capacity on knowledge about the covered issue. If social comparison and information overload that participants assigned to the conversations-available condition might have experienced reasonably account for their significantly lower amount of knowledge about the covered issue, it seems only natural that they also reported significantly more ambiguous issue stance than their counterparts. Due to recognition of relative ignorance about the covered issue as well as cluttered information—from media exposure as well as subsequent interpersonal communication—that participants were forced to process in a short amount of time, they seemed not being able to strongly indicate where they stand and how they think in relation to the covered issue.

Lower amount of knowledge and more ambiguous issue stance as a result of social comparison and information overload, in turn, might have led to significantly weaker duration of attitudes and behavioral intentions toward the covered organization. It appears reasonable to argue that participants assigned to

the conversations-available condition reported significantly weaker duration of attitudes and behavioral intentions toward the covered organization than their counterparts, because a) an amount of knowledge about the covered issue they came to have was lower due to social comparison and information overload, and b) a lower amount of knowledge, in turn, prevented them from holding strong issue stance that might have contributed to more durable attitudes and behavioral intentions toward the covered organization.

On a different note, participants also reported significantly less favorable attitudes toward the covered organization—regardless of the sidedness of media coverage—when allowed to communicate with others after media exposure (Conversations-available: $M = 3.82$, $SD = 1.12$; Conversations-unavailable: $M = 4.14$, $SD = .99$; $F(1, 178) = 4.028$, $p < .05$). Even when participants were exposed to the positive one-sided media coverage, the likelihood of them forming positive attitudes toward the covered organization decreased, if they had a chance to talk with other group members. This tendency, however, was not significantly pronounced in relation to behavioral intentions toward and WOM intentions about the covered organization.

Negative effects of interpersonal interactions along the media communication routes still remain underexplored as well as underestimated.

While the majority of studies looking at the intersection of media and interpersonal communication has hypothesized and evinced positive effects of conversations that help diffuse media messages through interpersonal networks as well as reinforce the persuasiveness of media messages as a result of interpersonal influence, only a handful of studies have demonstrated negative effects of conversations against the intended goals of media messages.

Considerable in a limited amount of research that shed light on negative effects of interpersonal interactions were some health communication studies demonstrating the “boomerang effect” of interpersonal interactions that may cause some opposite effects contrary to the purposes of health campaigns. For example, David et al. (2006) found that online chats among seventh and twelfth graders after health campaign exposure brought forth negative influence on anti-drug attitudes. It was also reported that interpersonal interactions among youths could lead to negative effects on reducing problematic behaviors despite campaign interventions (Dishion, McCord, & Poulin, 1999). In such studies, the role of biased processing has been identified and highlighted. The concept of biased processing takes into consideration the importance of individuals’ prior attitudes and dispositions in forming certain attitudes and behaviors when exposed to media messages (Petty & Cacioppo, 1986). Individuals are likely to

disprove and counterargue media messages, if those messages are against their prior attitudes and dispositions. Those individuals, in turn, can radiate some negative interpersonal influence, while communicating with others in interpersonal networks (David et al., 2006).

A negative effect of subsequent group conversations on attitudes identified in this research can be explained along this vein. Although a fictitious organization was used in the experiment to control the effect of biased processing, the covered organization being described as a corporation may have led to biased processing from experiment participants—college students—that the covered organization is operating for profit and it may have put some spin on the media coverage for its own benefit. In this case, those who held biased processing were likely to counterargue the media coverage—especially in the positive one-sided condition—when communicating with other group members and, in turn, might have caused some negative influence within interpersonal networks.

Another interesting finding was a significantly negative effect of interpersonal communication after media exposure on participants' perceived effectiveness of media coverage about the covered issue and organization. That is, organizational media coverage was perceived as less effective—specifically in terms of helping participants determine opinions about the covered issue and

organization—when they were allowed to talk with others after media exposure. While this finding can be attributed to the potentially negative effects of social comparison and information overload, there is also a possibility that participants were much more swayed and influenced by subsequent interpersonal communication than initial media exposure in processing the information and determining their opinions about the covered issue and organization. As a result they might have perceived organizational media coverage as significantly less effective than their counterparts who were not allowed to talk with others after media exposure. The real cause behind this tendency is, however, beyond the scope of this research and remains debatable, while inviting more scholarly attention from future researchers.

Intensity of subsequent interpersonal communication: A predictor of attitude duration and future WOM intentions

While interpersonal communication after media exposure negatively influenced participants' perceived duration of attitudes toward the covered organization, it turned out that participants' perceived intensity of interpersonal communication after media exposure was positively related to duration of attitudes. This result certainly diverts our attention that ways in which

interpersonal communication after media exposure is exchanged in a social network are as much important in explicating and exploring the intersection of media and interpersonal communication as whether or not such interpersonal interactions are available to audiences after media exposure.

More intense interpersonal communication after media exposure helps audiences bear more durable attitudes toward an organization covered in the media. This result can be attributed to the fact that individuals are likely to develop and retain stronger memories and social representations about an organization covered in the media through active and intense interpersonal interactions after media exposure (Huckfeldt, Mendez, & Osborn, 2004). These stronger memories and social representations, in turn, seem to induce audiences' more durable attitudes toward the covered organization.

Intensity of interpersonal communication after media exposure also helped predict participants' future WOM intentions about the covered organization. More specifically, participants who were engaged in more intense interpersonal communication after media exposure reported significantly higher future WOM intentions about the covered organization than participants who were engaged in relatively less intense interpersonal communication after media exposure.

Theoretically, this finding can also be explained and understood in line with the

impact of intense interpersonal interactions after media exposure on individuals' memories and social representations, as these cognitive outcomes resulting from intense interpersonal experiences would last longer and stronger. Such stronger and more durable cognitive outcomes, in turn, might have helped put the covered organization on top of their minds and facilitate their future WOM intentions about the covered organization.

Given that participants' perceived intensity of interpersonal communication after media exposure significantly varied across different sided media exposure conditions, intensity of subsequent interpersonal communication in a social network predicting individuals' future WOM intentions pointed to a theoretically important link between a way in which an organization is framed and covered in the media and a degree of media information diffusion taking place through interpersonal communication networks. As demonstrated earlier, audiences engaging in interpersonal communication after two-sided media exposure are likely to perceive more intense interpersonal communication exchanges than audiences engaging in interpersonal communication after one-sided media exposure. In addition, if they feel interpersonal communication is intense, the likelihood of them initiating or engaging in other interpersonal communication on later occasions increases.

An additional analysis looking at a relationship between sided media exposure and future WOM intentions about the covered organization revealed a statistically significant result as well ($F(2, 177) = 3.780, p < .05$), while a post-hoc analysis more specifically indicated a statistically significant mean difference between the positive one-sided ($M = 4.09, SD = 1.79$) and the negative one-sided condition ($M = 4.83, SD = 1.49$) and the positive one-sided and the two-sided condition ($M = 4.79, SD = 1.66$) at the .05 level. Taken together, these results highly suggested a possible mediating effect of intensity of interpersonal communication after media exposure on the relationship between sided media exposure and future WOM intentions about the covered organization.

A bivariate regression analysis between sided media exposure and intensity of interpersonal communication after media exposure showed a statistically significant relationship between the two variables ($\beta = -.232, t = -2.240, p < .05$). When future WOM intentions were regressed on both sided media exposure and intensity of subsequent interpersonal communication, in addition, intensity of subsequent interpersonal communication held a statistically significant effect on future WOM intentions, even after controlling for sided media exposure ($\beta = .269, t = 2.593, p < .05$), whereas an effect of sided media exposure on future WOM intentions apparently diminished ($\beta = -.145, t = -1.398,$

$p > .05$). Therefore, it was statistically confirmed that intensity of interpersonal communication after media exposure mediates between sided media exposure and future WOM intentions, suggesting sided media exposure influences intensity of interpersonal communication after media exposure, and intensity of interpersonal communication after media exposure, in turn, influences individuals' future WOM intentions about the covered organization.

Social network density: An indicator of open and intense interpersonal communication channels for diffusion of media information

One of the main purposes of this research was to demonstrate whether a social/contextual level variable can help explain and predict intensity of interpersonal communication after media exposure as well as some cognitive outcomes at the intersection of media and interpersonal communication, independent of taking into account any individual level variable. In order to tackle this inquiry, main effects of social network density, as a structural property that helps conceptualize and operationalize the overall relationship structure and the level of interactions in a given social network, were statistically tested against a variety of dependent variables.

According to the research finding, social network density reflecting how densely actors in a social network are connected to each other was turned out to be a significant predictor of participants' perceived intensity of interpersonal communication after media exposure. In a sense, social network density helps conceptualize and operationalize the extent to which more accustomed and comfortable interpersonal communication channels for actors are established and furnished in a social network prior to media exposure. As reviewed earlier, frequencies, modalities, and intensity of interpersonal communication in a social network are likely to depend on how closely actors in that network are related to each other (Borgatti & Cross, 2003), as relational ties among the actors play as a route as well as a facilitator of interpersonal communication (Podolny & Baron, 1997). Indeed, the research finding was in line with such theoretical contention, suggesting that the more densely actors are connected to each other in a social network, the more likely they engage in intense interpersonal communication after media exposure.

In view of some of the effects of intense interpersonal communication after media exposure demonstrated in this research, this finding hints at a few things worth considering with regard to public relations effects at the intersection of media and interpersonal communication. When individuals are engaging in

interpersonal communication after media exposure in a more densely connected social network, such interpersonal communication is likely to be more intense, perhaps thanks to familiar and convenient relational ties for interpersonal communication exchanges that were already established in that social network prior to media exposure. In a sequential manner, then, intense interpersonal communication after media exposure brings forth more durable attitudes toward and higher future WOM intentions about an organization covered in the media.

Along the similar vein, participants reported significantly higher amount of perceived knowledge about the covered issue in a more densely connected social network than in a less densely connected one. This finding indicates that diffusion of shared knowledge appears to be more facilitated in a densely connected social network, since previously established relational ties among actors might have served as more convenient and efficient interpersonal communication routes that help each other's opinions and feelings travel well across in a given social network. Individuals involved in such interpersonal communication, consequently, might have felt that they came to know an issue covered in the media in a much better and sophisticated way.

In all likelihood, people are talking about what they see and hear from the media usually with their family, friends, and co-workers—someone they are

familiar with and feel comfortable to talk to in the first place. That is, in reality, interpersonal communication after media exposure is more likely to occur in a densely connected social network. However, being experimental by nature, this research helps increase our understanding of the roles of social network density that apparently affects not only modalities and patterns of interpersonal communication after media exposure in a given social network, but also individuals' perceived knowledge of an issue covered in the media. Social network density as a contextual/structural property that appears to significantly influence individuals' thoughts and actions constrained by social relationships deserves more scholarly attention in analyzing and understanding public relations outcomes at the intersection of media exposure and subsequent interpersonal communication.

Attitudes and behavioral intentions at the intersection of sided media exposure, subsequent interpersonal communication, and social network density

Oftentimes, individually processed media information is interpersonally diffused, shared, and reevaluated in social networks, while initial media effects on individuals' attitudes and behavioral intentions are likely to be amplified, neutralized, or dampened through such processes. The experimental design of this

research, where participants were grouped in social networks varying in density with or without opportunities to converse with others after media exposure, allowed for interaction effect analyses between sided media exposure, subsequent interpersonal communication, and social network density in relation to attitudinal and behavioral intentional outcomes.

According to the findings, sided media exposure and subsequent interpersonal communication exerted independently significant influence on participants' attitudes toward the covered organization. Participants who were exposed to a positive one-sided media flow reported favorable attitudes toward the covered organization, whereas participants who were exposed to a negative one-sided media flow maintained unfavorable attitudes toward the covered organization. Interestingly, when participants were exposed to a two-sided media flow, they tended to bear less favorable attitudes toward the covered organization than participants assigned to the negative one-sided condition. Availability of interpersonal communication after media exposure, on the other hand, significantly led to negative influence on participants' attitudes toward the covered organization. That is, participants who were allowed to talk with others after media exposure were likely to report significantly less favorable attitudes toward the covered organization than their counterparts.

Meanwhile, it appeared that subsequent interpersonal communication did not moderate the relationship between sided media exposure and attitudes toward the covered organization, as no statistically significant interaction effect was identified. The findings clearly pointed to robust yet independent effects of sided media content (formal communication) and subsequent interpersonal communication (informal communication) in constructing and determining participants' social representations about and their attitudes toward the covered organization. However, the attitude plots hinted at a potential interaction effect between sided media exposure and subsequent interpersonal communication, as participants who were assigned to the two-sided/conversations-unavailable condition displayed a somewhat anomalous pattern in relation to their attitudes toward the covered organization.

As for behavioral intentions, sided media exposure also turned out to be a significant predictor, whereas subsequent interpersonal communication was not statistically significant in a multiple regression model. Similar to the relationship between sided media exposure and attitudes, participants' behavioral intentions toward the covered organization were in accordance with sided evaluative cues from the media experimentally controlled across the three conditions. Subsequent interpersonal communication, however, had no statistically significant effect on

participants' behavioral intentions, although the pattern of negative influence was still observed. In addition, the findings suggested no statistically significant interaction effect.

Analyses on interaction effects between sided media exposure and social network density offered interesting as well as theoretically noteworthy findings. A series of analysis showed statistically significant interaction effects between sided media exposure and social network density on both attitudes and behavioral intentions toward the covered organization. Effects of sided media exposure—participants' attitudes and behavioral intentions swayed by a directional bias and flow of media content—were significantly and robustly pronounced in disconnected social networks, while such effects were completely reversed in more densely connected social networks. In light of the negative effects of interpersonal communication after media exposure, potentially due to the role of biased processing in such interpersonal interactions, it can be also argued that subsequent interpersonal communication brought forth no to minimal effects in disconnected social networks, whereas such interpersonal interactions after media exposure appeared to exert a considerable amount of influence—to the extent that it overturned the effects of sided media exposure—in more densely connected

social networks in shaping their attitudes and behavioral intentions toward an organization covered in the media.

Social networks are physical venues, where media contents are likely to interact with accompanying interpersonal interactions in their effects on a variety of outcomes. Furthermore, when information transmitted and disseminated from the media is interpersonally shared, discussed, and reevaluated in social networks, contextual and structural characteristics of social networks facilitate or constrain individuals' thoughts and actions in such processes and, consequently, produce different individual outcomes when media contents intersect interpersonal interactions. The significant interaction effects between sided media exposure and social network density identified in this research clearly support this theoretical claim. When individuals are disconnected with each other in a social network, media effects appear to be maximized, as subsequent interpersonal influence is likely to be enervated or nullified. However, when individuals are connected with each other in a social network to a certain degree, media effects are likely to be minimized, as presumably stronger interpersonal influence stemming from their prior relationships takes over in their cognitive processes. Specifically in view of the research findings, the role of biased processing in more densely connected social network settings is highly suspected, as effects of sided media exposure

were overturned in such experimental conditions. A significant individual—perhaps centrally located in a social network in terms of interpersonal relations—might have radiated so robust negative interpersonal influence on other group members that they formed unfavorable attitudes and behavioral intentions toward the covered organization, regardless of directional biases of media contents.

The findings help not only turn our attention to, but also increase our understanding of the role of contextual and structural circumstances in determining the magnitude of media and interpersonal communication effects at the intersection. As reviewed earlier, individuals acquire information from various communication channels and process such information within various social settings. If the media is the sole information source, individuals tend to receive and believe what they see and hear from the media as it stands, thus media contents are likely to exert robust influence on their cognitive, attitudinal, behavioral consequences. As demonstrated in this research, in addition, media effects are expected to remain strong even when individuals engage in interpersonal interactions after media exposure, if their interaction partners are strangers or merely acquainted. However, it seems that interpersonal influence emerges to the surface and intervenes in such media effects, when individuals engage in interpersonal communication with relationally important and

significantly close others after media exposure. It is such densely connected social networks where interpersonal communication after media exposure is most likely to moderate media effects on a variety of individual outcomes, as theoretically insisted and empirically demonstrated by a stream of previous studies. On balance, the extent to which individuals are affected by the media or subsequent interpersonal communication at the intersection significantly depends on social and structural circumstances of such occurrences.

Effects of strong ties on perceived interpersonal influence

When participants perceived that they engaged in interpersonal interactions with relationally close others in a social network, they reported much higher interpersonal influence in making up their minds about the covered issue and organization. This finding clearly demonstrates that strong ties in a social network appear to permit much more influential interpersonal communication among individuals after media exposure, and, consequently, such interpersonal communication after media exposure appears to modify media effects that otherwise would have been different. Indeed, presence of strong ties in a social network, along with social network density, helps explain and predict interactive

effects of sided media exposure and subsequent interpersonal communication across different interpersonal settings.

Strong ties serve as more effective and influential interpersonal communication channels in a social network. As a result of interpersonal trust and mutual understanding, not only are individuals more likely to pay attention to their significant and close others have to say, but also they are more likely to shape and develop their opinions in a similar fashion with others. Such greater level of interpersonal influence resulting from presence of strong ties in a social network helps explain the reversed effects of sided media exposure in more densely connected social networks. Due to much more influential interpersonal communication after media exposure, individuals' attitudes and behavioral intentions toward an organization covered in the media may not conform to directional biases of media contents, suggesting a possibility of nullified media effects in such contextual and structural circumstances.

Implications for public relations studies

A good deal of media coverage of organizations is interpersonally shared and discussed by audiences on a daily basis. Through such social communication flows, media effects are likely to be strengthened or weakened by subsequent

interpersonal communication. However, theoretical debates and empirical studies on the intersection of media and interpersonal communication have been surprisingly underachieved in the field of public relations. In response, this research helps shed light on how sided exposure to media coverage of an organization and subsequent interpersonal communication independently as well as interactively affect audiences in a context relevant to public relations. When further interpersonal interactions are not readily available and the media is the sole source of information, individuals remain passive and uncritical audiences who receive and process media coverage of organizations as is and who somewhat heedlessly construct and develop attitudes and behavioral intentions in accordance with evaluative messages provided in the media. Individuals appear to change themselves into active and critical audiences, on the other hand, when they engage in subsequent interpersonal interactions after exposure to media coverage of organizations. In light of the negative effects of interpersonal communication after media exposure, it seems that individuals are more likely to critically and thoroughly process meanings and cues conveyed by the media, when they interpersonally discuss such media information. Interpersonal interactions following media exposure may affect the ways in which audiences decode media messages and, thus, produce certain effects that potentially go

against expected media effects. In such cases, then, audiences are not simply an enervated group of people, who are easily influenced and persuaded by the media, but yet they are active and critical message recipients as postulated by the reception theory (Hall, 1980; McQuail, 1990). Further public relations studies delving into the intersection of media and interpersonal communication may yield more fruitful knowledge claims and theoretical advancement in understanding how publics react to media coverage of organizations and mobilize around certain organizational issues, depending on the ways in which they receive and process information coming from the media.

In addition, this research calls more scholarly attention to group-level variables in exploring the intersection of media and interpersonal communication. As reviewed earlier, a stream of previous studies have demonstrated how media effects are occasionally amplified, neutralized, or dampened by subsequent interpersonal interactions. In such studies, individual-level variables, such as prior attitudes, individual differences in expressiveness, or perception of majority/minority status, were taken into consideration for the most part in explaining and predicting the likelihood of interpersonal interactions after media exposure and the degree to which such interpersonal interactions moderate media effects.

This research, on the other hand, highlights the role of contextual and structural circumstances at the intersection of media and interpersonal communication. Focusing on social network density as a group-level variable, the findings of this research suggest that media effects are robust even after subsequent interpersonal communication in a disconnected social network, whereas such media effects are significantly dampened in a densely connected social network as a result of subsequent interpersonal communication.

Demonstrating different magnitude of media and interpersonal communication effects on a variety of public relations outcomes across various contextual and structural circumstances, this research calls for more group-level analyses looking at the intersection of media and interpersonal communication in order to more comprehensively and rigorously understand and evaluate public relations effects.

Implications for public relations practices

The findings of this research challenge the conventional wisdom of public relations practices: positive media coverage of an organization should always lead to positive public relations outcomes. According to the findings, while media coverage of an organization did significantly influence participants' attitudes toward the covered organization in the absence of subsequent interpersonal

interactions, it was identified that participants reported significantly less favorable attitudes toward the covered organization, when communicating with others after media exposure. What is noteworthy here is that even when participants were exposed to a positive one-sided media flow, the likelihood of them forming favorable attitudes toward the covered organization decreased, if they had a chance to talk with other group members after media exposure.

The negative effects of subsequent interpersonal communication after media exposure found in this study add empirical support to the importance of mutually beneficial relationship management between an organization and its key publics over the long run. The findings of this study show that although positive media coverage may be able to produce positive public relations outcomes on a short-term basis, such media effects are likely to be watered down or even reversed through following interpersonal interactions, especially when the covered organization suffers from negative public images and is notorious for bad past behaviors. Then, publics' biased processing about the covered organization and, more importantly, its consequences in interpersonal networks may inhibit positive outcomes expected by being favorably covered in the media. One of the solutions to this uninvited consequence, of course, is building and developing

respectable public images and reputations by mutually beneficial relationship management with a wide spectrum of publics over the long haul.

The findings of this study also educate public relations practitioners that observing how people talk about their organizations and what is being talked in interpersonal networks is as important as monitoring the ways in which their organizations are covered in the media in order to effectively manage organizational issues and prevent potential crises. Without a doubt, building and maintaining mutually beneficial relationships with key publics in the long term would be the most effective and proactive public relations strategy.

Chapter Six

Conclusions

Overall summary

In line with the theory of social representations, media coverage (formal communication) and interpersonal communication after media exposure (informal communication) significantly yet distinctively affect the ways in which people make sense of an issue and organization covered in the media. On the other hand, social network density and strength of ties, as variables defining contextual and structural circumstances where the media intersect interpersonal interactions, help explain and predict the degree to which media exposure and subsequent interpersonal communication affect individuals directly as well as interact in their effects.

Media coverage of an organization significantly leads to individuals' attitudes and behavioral intentions in accordance with its directional sidedness. In a one-sided media exposure condition, media effects appear to be maximized, as individuals are likely to have either favorable or unfavorable attitudes/behavioral intentions toward an organization covered in the media, conforming to positive or negative evaluative cues offered in media coverage. In a two-sided media exposure condition, however, individuals are likely to have rather ambivalent

attitudes and behavioral intentions toward an organization covered in the media, suggesting that media effects are neutralized in such situations, due to mixed evaluative cues that may limit a bipolar cognitive processing. Media sidedness also accounts for intensity of interpersonal communication after media exposure. In a two-sided media exposure condition, individuals are likely to perceive more intense interpersonal interactions than their counterparts in a one-sided media exposure condition. It seems that mixed evaluative cues provided in a two-sided media flow may encourage individuals express and discuss conflicting viewpoints in a social network, which, in turn, make them perceive more intense and heated interpersonal communication exchanges after media exposure. However, a further analysis shows that media sidedness does not significantly influence individuals' conversation engagement after media exposure, suggesting that sided media exposure does not necessarily motivate individuals talk more to alleviate cognitive uncertainties possibly resulting from exposure to contradictory media information.

Meanwhile, intensity of interpersonal communication after media exposure appears to be a significant predictor of duration of attitudes toward as well as future WOM intentions about an organization covered in the media. In light of the relationship between sided media exposure and intensity of subsequent

interpersonal communication, individuals are not only likely to have more durable attitudes toward an organization covered in the media, but also more likely to talk about the covered organization with others on future occasions, especially when the media cover the organization in a mixed light and in a controversial manner. In other words, an organization covered in the media with a controversial issue is more likely to be subject to intense public attention and discourse, as it polarizes audiences' viewpoints and opinions, and audiences are likely to develop and maintain more durable attitudes—whether it is positive or negative—toward the covered organization, while undergoing such intense interpersonal interactions taking place both at a macro and micro level.

Interpersonal communication after media exposure negatively affects a variety of individual outcomes, such as amount of knowledge, strength of personal issue stance, and duration of attitudes/behavioral intentions toward an organization covered in the media. These rather non-intuitive findings can be attributed to not only social comparison effects, where individuals might have realized that they do not know much about an issue and organization covered in the media through subsequent interpersonal interactions after media exposure, but also the limited capacity of human cognition, as individuals might have reached a stimulus saturation point and have felt cognitively overwhelmed by information

both coming from media contents and subsequent interpersonal communication in a short period of time.

Taking into account how densely individuals are connected with each other in a social network, however, the degree to which interpersonal communication after media exposure negatively influences individuals' attitudes and behavioral intentions toward an organization significantly varies as a function of social network density. In a disconnected social network, negative effects of interpersonal communication after media exposure on their attitudes and behavioral intentions are significantly weakened, whereas effects of sided media exposure prevail. In a densely connected social network, on the other hand, interpersonal communication after media exposure negatively affects individuals' attitudes and behavioral intentions, while effects of sided media exposure are significantly invalidated. These findings suggest that the extent to which interpersonal communication after media exposure influences individuals' cognitive processing is likely to be determined by how densely individuals are connected in a social interaction setting. To put it in a different way, media effects are likely to be maximized or minimized, depending on contextual and structural circumstances where media information is transmitted and processed individually, then, discussed and consulted interpersonally. In a nutshell, social

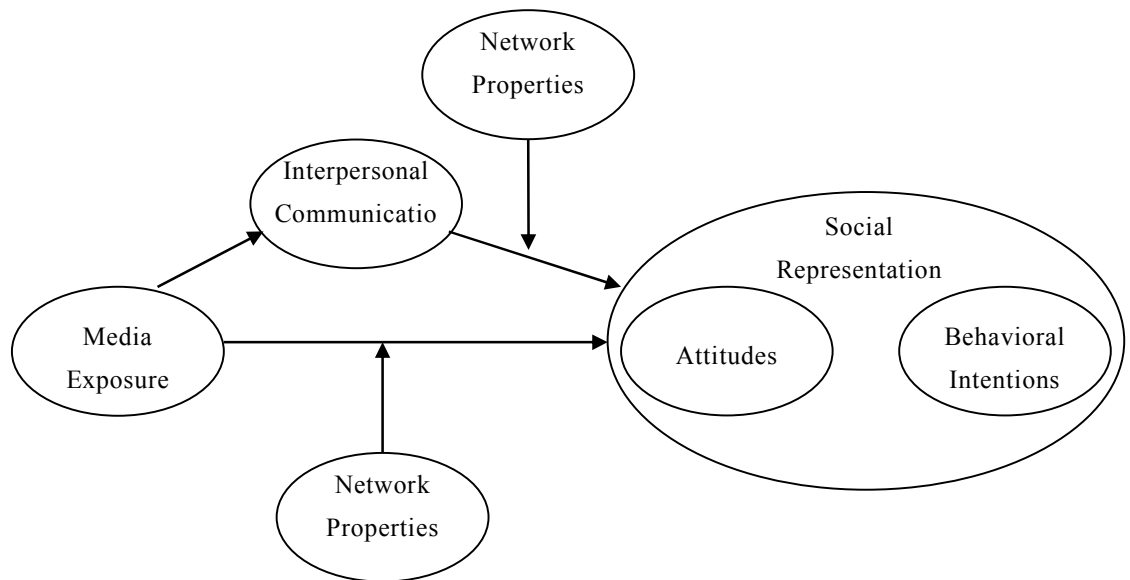
network density moderates the magnitude of media and subsequent interpersonal communication effects on individuals' attitudes and behavioral intentions toward an organization covered in the media.

Along the similar vein, strong ties in a social network account for greater interpersonal influence on individuals at the intersection of media and subsequent interpersonal communication. The more individuals are strongly and closely connected to each other in a social network, the more robust effects of interpersonal communication on individuals' cognitive processing are likely to occur, while effects of media coverage are likely to be reduced as a result. The findings additionally point to potential magnifying or buffering effects of network characteristics that determine the degree of media and subsequent interpersonal communication influence at the intersection.

On balance, the initially hypothesized model was modified in view of the theoretical relationships among sided media exposure, subsequent interpersonal communication, and social network characteristics identified in this research.

Figure 6.1

Final model



Limitations

The findings of this research may lack external validity due to some characteristics of the experiment participants. Those who participated in the experiment were all college students enrolled in journalism courses at a large Midwestern public university. The participants were skewed in terms of gender as well, since much more female students participated in the experiment than male

students. In addition, the size of pool ($n = 180$) could be considered somewhat small to ensure statistical power of the findings.

Furthermore, the experimental nature of this present research invites artificiality issues. As participants were randomly assigned to different conditions and exposed to media contents varying in evaluative cues and directional sidedness, the possibility of individuals selectively having themselves exposed to media contents of their own interests was defied in the first place. Also, individuals' interpersonal interactions after media exposure was experimentally manipulated and artificially maneuvered, as participants assigned to the conversations-available condition were asked to talk with others, while participants assigned to the conversations-unavailable condition were not allowed to interact with others after media exposure. The randomization approach to assigning participants to five-person groups in order to experimentally manipulate social networks varying in density may raise an artificiality issue as well. In reality, individuals are more likely to talk about what they see and hear from the media with close others, such as family members or friends, suggesting that interpersonal communication after media exposure among subjects in a disconnected social network, as manipulated in this research, is less likely to occur in actuality. Despite such limitations, however, the fact that the findings of

this study pose interesting connections among media contents, subsequent interpersonal interactions, and social network characteristics in theorizing public relations consequences should not be disregarded, as “a misplaced preoccupation with external validity can lead us to dismiss good research for which generalization to real life is not intended or meaningful” (Mook, 1983, p. 379).

Also, the ways in which some of the variables were conceptualized and operationalized in this research warrant further debates. Some variables, such as intensity of subsequent interpersonal communication and duration of attitudes/behavioral intentions, were measured subjectively by a self-report questionnaire rather than being assessed objectively by an observation. Reliability and validity of such variables, therefore, can be called into question, as it is somewhat uncertain how well these measures would provide accurate data for what is supposed to be measured. Future researchers may want to come up with more elaborate ways of measuring such variables.

Without any in-depth conversation analysis, in addition, this research fails to observe and probe what was actually being talked by whom in what way in social networks after media exposure. Thus, this research falls short of more clearly identifying and demonstrating why interpersonal communication after media exposure caused negative effects on a variety of outcomes. Further

conversation analyses looking at the intersection of media and interpersonal should fill this intellectual void that this research has left.

Recommendations for future studies

Given the abovementioned methodological limitations of this research, future researchers should delve into how and to what extent media coverage of an organization and subsequent interpersonal communication independently as well as interactively function across different contextual and structural circumstances in a real-world situation. In light of the experimentally demonstrated interdependent relationships among sided media exposure, subsequent interpersonal communication, and social network density, a survey research method that helps collect hands-on data of the ways in which people are exposed to media coverage of an organization and go on to engage in interpersonal interactions with such media information would increase our theoretical understanding of the mechanism of interplays between media and interpersonal communication in reality as the major information sources. Also, more generalizable theoretical claims could be deduced by such research efforts, investigating the degree to which media information and subsequent interpersonal communication respectively as well as collectively account for public relations

outcomes across various types of social network, where people are actually sharing, debating, and making sense of media information with each other.

Different ways of measuring outcome variables can be discussed and practiced in future studies as well. In addition to a subjective way of analysis based on a self-report questionnaire, which might have been vulnerable to insufficient and inaccurate evaluation of outcomes due to participants' cognitive error in reporting, an objective analytic approach could be a good complement to triangulating knowledge claims in a more reliable and valid fashion. A content analysis of interpersonal interactions after media exposure, in that sense, should be considered in later studies. Whether it is quantitative or qualitative, observing the ways in which individuals interact with each other after media exposure should yield rich as well as detailed information of group dynamics and interpersonal influence along social communication flows.

Future researchers may want to extend this line of research to a new media environment, as people are forming virtual social networks through media technologies in recent years. Since social media technologies, such as Facebook, Twitter, and a slew of personal/institutional blogs, have allowed people to be communicatively wired to each other online, now it is very much likely that interplays between media and interpersonal communication are taking place

beyond traditional, face-to-face social networks. A growing amount of social relevance and impact of such media technologies in many people's daily lives may warrant theoretically meaningful scholarly findings: how and to what extent people's exposure to media coverage of organizations and subsequent interpersonal interactions through social media technologies interactively function in causing a wide array of public relations outcomes for organizations covered in the media.

The role of other social network characteristics, including size and power relations, at the intersection of media and interpersonal communication should be discussed and examined in future studies as well. In addition to social network density and presence of strong ties, such social network characteristics are also likely to reinforce or constrain the magnitude of interpersonal communication influence after media exposure and, therefore, are likely to result in a different level of media effects across various types of social network. Further, cross-national and/or cross-cultural comparative analyses on the ways in which such social network characteristics play out at the intersection of media interpersonal communication may yield considerable contribution to the body of knowledge of public relations. Such studies would help increase our understanding of how and to what extent culture accounts for the potentially different ways in which people

individually as well as interpersonally understand, share, and discuss media information of organizations in their social networks.

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Appendix A

Experiment Stimuli

Questions about Bio-fuels' Environmental Costs

While bio-fuels, such as ethanol and bio-diesel, are suggested to be a more eco-friendly energy than traditional petroleum-based gasoline and diesel, many critics claim that bio-fuels' potential environmental costs do not seem to merit government subsidies and production incentives given to the industry.

Next Energy, the largest local bio-fuel producer, recently made a public announcement in relation to its plan on purchasing and converting lands to cultivate crops, mostly corn, to more efficiently rearrange its bio-fuel production line. The company has also lodged a petition to the state government for public subsidy to appropriate for land purchasing and converting. The company's plan, however, has stirred up some local environment activists' oppositions. The major concern of those environmentalists is the volume of emissions when forest or land is converted to corn fields. Converting land can release large amounts of greenhouse gases when vegetation is cleared. In addition, it has been reported that plowing for land conversion exposes carbon stored in the soil to the air. Another concern of local environmentalists is the emission of greenhouse gases in producing bio-fuels. A recent study has revealed that the burning of crops to produce bio-fuels emits enough nitrous oxide to create a greenhouse effect. While research is still ongoing, no method of bio-fuel production has been discovered that can significantly reduce this environmental problem.

"We should not overlook bio-fuels' potentially detrimental side effects, not to mention that we have to seriously question if the company deserves public money for its own good," said Isaac Ellis, staff director of a local environment activist coalition, Save the Earth. "We should be careful in determining whether it is truly eco-friendly to support bio-fuel production."

Bio-fuels, Savors to Environment

Boosted by the recently enacted energy law by Congress and the growing public interests in renewable and sustainable energy, plants extracting bio-fuels from agricultural crops, such as corn or sugarcane, have been sprouting in the local area in the hopes of elbowing traditional petroleum-based energy aside.

It has been reported that the use of bio-fuels, such as ethanol and bio-diesel, can significantly lessen greenhouse gas emissions. The amount of carbon dioxide created by the burning of bio-fuels is equal to the CO₂ absorption capacity of the plants. Hence, no extra CO₂ remains in the atmosphere. Additionally, bio-fuels are inherently renewable and biodegradable, since they are derived and produced from agricultural, organic materials. The market demands for bio-fuels have been steadily increasing over the years in line with consumers' growing awareness of such environmental benefits of bio-fuels. The energy law mandating a doubling of ethanol use, to 15 billion gallons a year by 2015, has added another momentum to the bio-fuel industry as well. As a result, many local bio-fuel companies are mapping out plans to expand their operations. The largest bio-fuel company in the local area, Next Energy, announced its business plan that outlines increase in its bio-fuel production capacity up to 200 percent by 2015. The company is also looking for a government subsidy to develop and complete more efficient and eco-friendly production line and land provision.

“We are hopeful that bio-fuels will replace gasoline and diesel at a considerable level in the near future, in light of the growing popularity of green agendas,” said Fred Rasmussen, executive vice president of Next Energy. “We are proud of contributing to improving the environment with continuing research and production of bio-fuels. We have no reason to delay.”

Ethanol Industry's 15% Solution Raises Concern

As the ethanol industry has fallen on hard times being stuck in between staggering ethanol prices and soaring corn costs, 54 ethanol manufacturers, including Next Energy, the largest local ethanol company, have collectively asked the Environmental Protection Agency for a waiver of the Clean Air Act, so that more ethanol could be added to gasoline.

Last year, nearly three-quarters of the gasoline sold in the United States contained some ethanol. E10, which is 10 percent ethanol, is by far the most common fuel. This 10 percent limit for ethanol blend is set about three decades ago by the Clean Air Act. Asking for a waiver of this act, ethanol producers are requesting that the maximum ethanol content in the most common blend of gasoline should be increased to as much as 15 percent to make the industry sustainable in this bad economic situation.

However, studies have revealed cautious findings against the use of 15 percent ethanol fuel. It has been reported that 15 percent ethanol in gasoline may cause problems in small engines from lawnmowers to portable generators and boats. Some car engines may tolerate the higher blend of ethanol, but others—especially those in older vehicles—may require costly repairs, a hardship to be borne by lower-income Americans. The ethanol industry's request has made engine manufacturers and consumer advocates worried about possible damage and has put service owners in a tizzy over the financial and legal implications.

“Approving E15 would have a huge impact on consumers and could cause problems including the voiding of car warranties,” said Chris Dillard, executive director of the Center for Auto Safety. “We think that the current waiver request is premature. Much more research is necessary, probably several years' worth.”

15%, Not 10%, Makes It Greener and Sustainable

In response to falling gasoline and ethanol consumption, Next Energy, the local's largest ethanol manufacturer, has filed a waiver petition of the Clean Air Act to the Environmental Protection Agency, along with 53 other ethanol producers in the nation, to raise the permissible amount of ethanol in gasoline from 10 percent to 15 percent.

The ethanol manufacturers contend that the increase from 10 to 15 is necessary to meet the requirement of the Energy Independence and Security Act passed by Congress in 2007. The act includes a renewable fuels standard that requires a steady increase in the use of bio-fuels—from 11 billion gallons this year to 36 billion gallons in 2022. To meet the goal, refiners must add ethanol to gasoline. Now that Americans are buying far less gasoline, however, it may be impossible to meet the standard with a 10 percent limit.

While some people are concerned with potentially negative impact of 15 percent ethanol blend gasoline, which is commonly known as E15, on vehicles, studies have found that it may be just unfounded apprehension. According to them, when using E15, there were no significant changes in vehicle drivability, and no significantly harmful effects were found that may damage the engine systems. In addition, proponents of the waiver argued that E15 would provide increased energy security, enhanced economic development, creation of American jobs, reduced transportation costs, and environmental benefits.

“We are on solid scientific ground for this push and will continue our efforts to prove E15 is safe and helpful for consumers as well as the environment,” said Garrett Terrico, the chief executive of Next Energy. “The cap needs to be raised to make our environment greener and the industry sustainable.”

Appendix B

Social Network Density Questionnaire

The following is the list of your group members. Indicate your perceived closeness with each member on the list. You do not need to indicate your perceived closeness with yourself on the list. Your responses will be regarded as personal information and will be kept confidential.

Name _____

Person A

Don't know at all	Acquainted	Close	Very close

Person B

Don't know at all	Acquainted	Close	Very close

Person C

Don't know at all	Acquainted	Close	Very close

Person D

Don't know at all	Acquainted	Close	Very close

Person E

Don't know at all	Acquainted	Close	Very close

Appendix C

Questionnaire

Please read the following statements carefully and mark on the scales that best describe your thoughts or feelings.

1. Before I entered the experiment, my opinion about bio-fuels, such as ethanol, was:

	1	2	3	4	5	6	7	
Unfavorable								Favorable
Bad								Good
Disliking								Liking
Negative								Positive

2. I think the set of news articles I read presented a _____ viewpoint about the issue of bio-fuels and Next Energy.

Negative	1	2	3	4	5	6	7	Positive

3. The news articles I read were identical in information quality.

Yes [] No []

If you said no, please specify your opinion:

4. The news articles I read were identical in information credibility.

Yes [] No []

If you said no, please specify your opinion:

5. How much do you feel you know about the covered issue of bio-fuels now?

Not at all	1	2	3	4	5	6	7	Very much

6. How much do you feel the covered issue of bio-fuels is socially important and worth media coverage?

Not important at all	1	2	3	4	5	6	7	Very important

7. You may have your own personal stance about the covered issue of bio-fuels. How strong do you feel your personal stance is now about the issue, regardless of its direction (positive or negative)?

Not strong at all	1	2	3	4	5	6	7	Very strong

8. How effective do you think the news articles were for you to make up your opinion regarding the covered issue of bio-fuels?

Not effective at all	1	2	3	4	5	6	7	Very effective

9. How effective do you think the news articles were for you to make up your opinion regarding the covered organization, Next Energy?

Not effective at all	1	2	3	4	5	6	7	Very effective

10. Please indicate your feelings about Next Energy.

	1	2	3	4	5	6	7	
Unfavorable								Favorable
Bad								Good
Disliking								Liking
Negative								Positive

11. In relation to the previous question, how long do you think your feelings about Next Energy would hold?

Very short	1	2	3	4	5	6	7	Very long

12. Please read the following statement and indicate your intentions: "I would buy products of Next Energy, if they are available in the market."

	1	2	3	4	5	6	7	
Unlikely								Likely
Improbable								Probable
Impossible								Possible

13. In relation to the previous question, how long do you think your consumer support for Next Energy would hold?

Very short	1	2	3	4	5	6	7	Very long

14. Please read the following statement and indicate your intentions: “I would talk about the covered organization with others later on.”

	1	2	3	4	5	6	7	
Unlikely								Likely
Improbable								Probable
Impossible								Possible

Note: The following question items were only available for subjects in the conversations-available condition.

15. How much did you converse with other group members?

Not at all	1	2	3	4	5	6	7	Very much

16. How intense did you feel about the conversation exchanges among the group members?

Not intense at all	1	2	3	4	5	6	7	Very intense

17. I feel like I was with close others in my group.

Strongly disagree	Disagree	Slightly disagree	No opinion	Slightly agree	Agree	Strongly agree

18. I think I additionally obtained a fair amount of information from the conversations with other group members about the issue of bio-fuels.

Strongly disagree	Disagree	Slightly disagree	No opinion	Slightly agree	Agree	Strongly agree

19. I think what others had to say in my group has been influential for me to determine my opinion about the issue of bio-fuels.

Strongly disagree	Disagree	Slightly disagree	No opinion	Slightly agree	Agree	Strongly agree

20. I think what others had to say in my group has been influential for me to determine my opinion about Next Energy.

Strongly disagree	Disagree	Slightly disagree	No opinion	Slightly agree	Agree	Strongly agree

21. I think my opinion about the covered issue and organization is similar to those of other group members.

Strongly disagree	Disagree	Slightly disagree	No opinion	Slightly agree	Agree	Strongly agree

Please provide the following information about yourself:

Age []

Gender Male [] Female []

Major _____

Grade year Freshman [] Sophomore [] Junior []
Senior []

Ethnicity White-Non Hispanic []

African American []

Hispanic American []

Native American []

Asian/Pacific Islander []

Others (Please specify) _____

U of M e-mail account (To receive extra credits) _____

Thank you very much for your time and participation!

Appendix D

Pearson Correlations Table

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14
V1	1	.369**	.409**	.211**	.278**	.310**	.147*	-.003	.082	.256**	.203	.139	.086	.213*
V2	.369**	1	.446**	.091	.173*	.271**	.087	-.004	.007	.370**	.160	.103	.147	.198
V3	.409**	.446**	1	.229**	.094	.354**	.074	.133	-.052	.505**	.216*	.093	-.011	.020
V4	.211**	.091	.229**	1	.557**	.192**	.216**	.158*	.229**	.037	.145	.251*	.212*	.308**
V5	.278**	.173*	.094	.557**	1	.330**	.304**	-.046	.215**	.085	.111	.196	.269*	.352**
V6	.310**	.271**	.354**	.192**	.330**	1	.373**	.006	-.034	.247**	.339**	.082	.011	.138
V7	.147**	.087	.074	.216**	.304**	.373**	1	.325**	.423**	.063	.152	.212*	.184	.214*
V8	-.003	-.004	.133	.158*	-.046	.006	.325**	1	.581**	-.021	-.111	.151	-.052	-.035
V9	.082	.007	-.052	.229**	.215**	-.034	.423**	.581**	1	-.055	-.128	.187	-.017	-.014
V10	.256**	.370**	.505**	.037	.085	.247**	.063	-.021	-.055	1	.303**	.129	.269*	.181
V11	.203	.160	.216*	.145	.111	.339**	.152	-.111	-.128	.303**	1	.173	.292**	.226*
V12	.139	.103	.093	.251*	.196	.082	.212*	.151	.187	.129	.173	1	.243*	.279**
V13	.086	.147	-.011	.212*	.269*	.011	.184	-.052	-.017	.269*	.292**	.243*	1	.734**
V14	.213*	.198	.020	.308**	.352**	.138	.214*	-.035	-.014	.181	.226*	.279**	.734**	1

** . Correlation is significant at the 0.01 level (2-tailed); * . Correlations is significant at the 0.05 level (2-tailed)

Note:

V1	Amount of knowledge	V8	Attitudes
V2	Issue salience	V9	Behavioral intentions
V3	Strength of personal issue stance	V10	WOM intentions
V4	Media effectiveness about issue	V11	Intensity of interpersonal communication
V5	Media effectiveness about organization	V12	Presence of strong ties
V6	Duration of attitudes	V13	Interpersonal influence about issue
V7	Duration of behavioral intentions	V14	Interpersonal influence about organization

Appendix E

Descriptive Statistics

1. Amount of knowledge

	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge	180	1.00	6.00	4.1611	1.20596

	Condition	Mean	Std. Deviation
Knowledge	Positive One-Sided	4.1000	.14594
	Negative One-Sided	4.0167	.14937
	Two-Sided	4.3667	.16969

	Condition	Mean	Std. Deviation
Knowledge	Conversations-Unavailable	4.3667	.12881
	Conversations-Available	3.9556	.12231

	Gender	Mean	Std. Deviation
Knowledge	Male	4.5000	.15677
	Female	3.9917	.10684

2. Issue salience

	N	Minimum	Maximum	Mean	Std. Deviation
Issue Salience	180	2.00	7.00	5.5444	.99340

	Condition	Mean	Std. Deviation
Issue Salience	Positive One-Sided	5.3500	.12538
	Negative One-Sided	5.5833	.13919
	Two-Sided	5.7000	.11717

	Condition	Mean	Std. Deviation
Issue Salience	Conversations-Unavailable	5.6111	.10325
	Conversations-Available	5.4778	.10627

	Gender	Mean	Std. Deviation
Issue Salience	Male	5.6500	.13409
	Female	5.4917	.08856

3. Strength of personal issue stance

	N	Minimum	Maximum	Mean	Std. Deviation
Issue Stance	180	1.00	7.00	4.5000	1.26182

	Condition	Mean	Std. Deviation
Issue Stance	Positive One-Sided	4.3333	.17413
	Negative One-Sided	4.7500	.15878
	Two-Sided	4.4167	.15274

	Condition	Mean	Std. Deviation
Issue Stance	Conversations-Unavailable	4.7000	.11872
	Conversations-Available	4.3000	.14348

	Gender	Mean	Std. Deviation
Issue Stance	Male	4.7000	.15641
	Female	4.4000	.11680

4. Media effectiveness about issue

	N	Minimum	Maximum	Mean	Std. Deviation
Effectiveness	180	1.00	7.00	4.1000	1.43032

	Condition	Mean	Std. Deviation
Effectiveness	Positive One-Sided	4.0000	.19601
	Negative One-Sided	4.2167	.18578
	Two-Sided	4.0833	.17352

	Condition	Mean	Std. Deviation
Effectiveness	Conversations-Unavailable	4.6889	.11465
	Conversations-Available	3.5111	.15742

	Gender	Mean	Std. Deviation
Effectiveness	Male	4.3500	.17111
	Female	3.9750	.13413

5. Media effectiveness about organization

	N	Minimum	Maximum	Mean	Std. Deviation
Effectiveness	180	1.00	7.00	4.0167	1.44344

	Condition	Mean	Std. Deviation
Effectiveness	Positive One-Sided	3.7333	.17282
	Negative One-Sided	4.3833	.20041
	Two-Sided	3.9333	.17766

	Condition	Mean	Std. Deviation
Effectiveness	Conversations-Unavailable	4.3222	.14467
	Conversations-Available	3.7111	.15340

	Gender	Mean	Std. Deviation
Effectiveness	Male	4.2167	.19324
	Female	3.9167	.12887

6. Duration of attitudes

	N	Minimum	Maximum	Mean	Std. Deviation
Duration	180	1.00	7.00	3.8389	1.28230

	Condition	Mean	Std. Deviation
Duration	Positive One-Sided	3.8333	.16150
	Negative One-Sided	3.7167	.16823
	Two-Sided	3.9667	.16802

	Condition	Mean	Std. Deviation
Duration	Conversations-Unavailable	4.0889	.11997
	Conversations-Available	3.5889	.14473

	Gender	Mean	Std. Deviation
Duration	Male	4.0333	.17940
	Female	3.7417	.11133

7. Duration of behavioral intentions

	N	Minimum	Maximum	Mean	Std. Deviation
Duration	180	1.00	7.00	3.6889	1.26088

	Condition	Mean	Std. Deviation
Duration	Positive One-Sided	3.8667	.16548
	Negative One-Sided	3.4667	.16027
	Two-Sided	3.7333	.16098

	Condition	Mean	Std. Deviation
Duration	Conversations-Unavailable	3.9000	.13413
	Conversations-Available	3.4778	.12859

	Gender	Mean	Std. Deviation
Duration	Male	3.8000	.18986
	Female	3.6333	.10448

8. Attitudes toward the organization

	N	Minimum	Maximum	Mean	Std. Deviation
Attitudes	180	1.00	7.00	3.9806	1.06737

	Condition	Mean	Std. Deviation
Attitudes	Positive One-Sided	4.5208	.12887
	Negative One-Sided	3.6458	.12638
	Two-Sided	3.7750	.13217

	Condition	Mean	Std. Deviation
Attitudes	Conversations-Unavailable	4.1389	.10527
	Conversations-Available	3.8222	.11754

	Gender	Mean	Std. Deviation
Attitudes	Male	3.8792	.13214
	Female	4.0313	.09944

9. Behavioral intentions toward the organization

	N	Minimum	Maximum	Mean	Std. Deviation
Behavioral intentions	180	1.00	7.00	4.0611	1.25934

	Condition	Mean	Std. Deviation
Behavioral intentions	Positive One-Sided	4.4056	.15709
	Negative One-Sided	3.7500	.15315
	Two-Sided	4.0278	.16850

	Condition	Mean	Std. Deviation
Behavioral intentions	Conversations-Unavailable	4.2296	.13143
	Conversations-Available	3.8926	.13240

	Gender	Mean	Std. Deviation
Behavioral intentions	Male	4.0278	.17364
	Female	4.0778	.11135

10. WOM intentions about the organization

	N	Minimum	Maximum	Mean	Std. Deviation
WOM intentions	180	1.00	7.00	4.5722	1.67624

	Condition	Mean	Std. Deviation
WOM intentions	Positive One-Sided	4.0944	.23046
	Negative One-Sided	4.8333	.19318
	Two-Sided	4.7889	.21406

	Condition	Mean	Std. Deviation
WOM intentions	Conversations-Unavailable	4.6333	.16864
	Conversations-Available	4.5111	.18512

	Gender	Mean	Std. Deviation
WOM intentions	Male	4.8222	.21370
	Female	4.4472	.15332

11. Intensity of interpersonal communication

	N	Minimum	Maximum	Mean	Std. Deviation
Intensity	90	1.00	6.00	3.6667	1.41421

	Condition	Mean	Std. Deviation
Intensity	Positive One-Sided	2.8333	.17343
	Negative One-Sided	3.6333	.27744
	Two-Sided	4.5333	.21832

	Gender	Mean	Std. Deviation
Intensity	Male	3.9200	.27641
	Female	3.5692	.17673

12. Presence of strong ties

	N	Minimum	Maximum	Mean	Std. Deviation
Strong ties	90	1.00	7.00	4.6889	1.45064

	Condition	Mean	Std. Deviation
Strong ties	Positive One-Sided	4.4000	.30172
	Negative One-Sided	4.5667	.26988
	Two-Sided	5.1000	.20539

	Gender	Mean	Std. Deviation
Strong ties	Male	4.7600	.24685
	Female	4.6615	.19024

13. Interpersonal influence about issue

	N	Minimum	Maximum	Mean	Std. Deviation
Interpersonal influence	90	1.00	7.00	4.3000	1.60372

	Condition	Mean	Std. Deviation
Interpersonal influence	Positive One-Sided	3.3000	.27606
	Negative One-Sided	4.6000	.25641
	Two-Sided	5.0000	.25820

	Gender	Mean	Std. Deviation
Interpersonal influence	Male	4.3600	.29933
	Female	4.2769	.20511

14. Interpersonal influence about organization

	N	Minimum	Maximum	Mean	Std. Deviation
Interpersonal influence	90	1.00	6.00	3.7444	1.63227

	Condition	Mean	Std. Deviation
Interpersonal influence	Positive One-Sided	3.1000	.29302
	Negative One-Sided	4.0667	.23941
	Two-Sided	4.0667	.32847

	Gender	Mean	Std. Deviation
Interpersonal influence	Male	3.8800	.32823
	Female	3.6923	.20325