

TESTING EFFECTS OF TRANSPARENCY EFFORTS ON RESTORING TRUST AND THE
BOTTOM LINE IN POST-CRISIS COMMUNICATION

by

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(Under the Direction of Bryan Reber)

ABSTRACT

The trust in corporations within the public has decreased sharply, especially after scandals in the finance industry in recent years. How to restore trust among the public has become a crucial issue for many corporations because trust is claimed to be an important indicator of consumer purchase intent. The purpose of the study is to assess whether the trust level is higher in groups that are exposed to communication transparency efforts compared to a group that was not exposed to transparency efforts in two types of crisis scenarios. A second objective of the research is to see whether the consumer purchase intent is higher in the groups that are exposed to communication transparency efforts in different crisis scenarios. The effect of various specific aspects of transparency efforts on the trust level towards an organization is explored as well. Results indicate that transparency efforts do have a positive effect on trust but no effect on consumer purchase intent after a crisis. The effect of specific aspects of transparency efforts on trust vary in different crisis scenarios. Finally, trust level and consumer purchase intent share a significantly strong association.

INDEX WORDS: transparency efforts, informational transparency, participatory transparency, accountability transparency, trust, post-crisis communication

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CHAPTER 1

INTRODUCTION

The concept of “organization transparency” has recently gained much attention within the public due to increasing deceptive and unfair practices by some large corporations (Rawlins, 2009). The crises of Enron, WorldCom, and Tyco have stirred unfavorable attitudes towards large entities in the public.

The decline in public trust is even worse since the U.S. financial industry experienced a near collapse beginning in late 2008. The investment bank giant Lehman Brothers faced an adverse financial situation. Instead of reporting their struggling reality to their stockholders, the Executive Board of Lehman Brothers intentionally withheld the company’s dreadful situation and deceived stockholders into thinking Lehman Brothers was still on track two weeks before the company filed with a federal bankruptcy court for protection. This deceptive conduct of Lehman Brothers was later disclosed by the media but it was too late for stockholders who had already lost hundreds and thousands of dollars in stock value of Lehman Brothers. These and similar scandals have smashed the public trust in large institutions.

The decline in trust impacts the business environment as a whole and makes it harder for an organization to cope with more and more distrust, frustration, anger and skepticism among its

publics. How to rebuild credibility among an organization's publics after a crisis of trust becomes a critical question that should be pondered by every organization now.

Many academic researchers have found that transparency is the antidote for mistrust and a strong indicator of good organization-public relationships (OPRs). Jahansoozi (2006) conducted a study to see whether Shell regained its reputation among its stakeholders after experiencing a crisis of trust. Shell established the Sunde Petroleum Operators Group (SPOG) in Alberta, Canada to increase transparency and to rebuild a healthy relationship with its community stakeholders. The results showed that transparency is a crucial factor for rebuilding a trustworthy and healthy relationship with stakeholders. Jahansoozi (2006) said, "when there is a lack of trust or a state of distrust exists in the organization-stakeholder relationships, transparency is a required condition for rebuilding trust and commitment in the relationship" (p.2). In a study of health care organizations conducted by Carpenter (2009), results showed that hospital industry leaders and expert observers think that ignoring the issue of transparency would be a big mistake in a time of crisis. Carr (2006) thinks that transparency refers to highly visible, easily accessible, accountable and open to participation information, business practices, and decision-making processes. She argued that transparency plays a role in restoring trust of public schools among citizens. In the practical field, the Edelman Trust Barometer (Edelman Public Relations, 2007) mentioned transparency frequently as a means for organizations to bridge the trust gap with stakeholders.

This study is dedicated to explore whether transparency efforts restore trust in a post-crisis setting and impact consumers' purchase intent. It will also explore the relationship between trust

and consumer purchase intent. Moreover, the research investigates how three types of transparency efforts, including informational, participatory, and accountability transparency, relate to trust in two crisis scenarios. The results provide insights of how different types of transparency efforts relate to trust on a more specific basis.

CHAPTER 2

LITERATURE REVIEW

What is transparency?

There are various definitions in the academic literature but all definitions showed that transparency has a natural bond with openness and trust. The easiest way to explain transparency is as the opposite of secrecy. Rawlins (2009) recommended Sissela Bok's definition of secrecy as withholding facts from another with intention to prevent understanding, absorbing, utilizing, or revealing the information. Rawlins (2009) examined many guidelines and principles for transparency brought up in the academic and practical fields and came up with 13 distinct guidelines for transparency. To be transparent, organizations should voluntarily share information that is inclusive, auditable (verifiable), complete, relevant, accurate, neutral, comparable, clear, timely, accessible, reliable, honest, and holds the organization accountable (Rawlins, 2009).

Balkin (1998) introduced three elements to explain transparency in his work which discussed the mass media's contribution to openness and accountability in the political arena. He suggested that transparency is composed of these three elements: informational transparency, participatory transparency and accountability transparency. They work together but are distinct concepts. Rawlins (2009) further explained these three elements of transparency in a simpler and

broader way, which goes beyond the political transparency discussed in Balkin's study. Rawlins (2009) said, "transparency is defined as having these three important elements: information that is truthful, substantial, and useful; participation of stakeholders in identifying the information they need; and objective, balanced reporting of an organization's activities and policies that holds the organization accountable" (p.4).

Informational transparency requires open and honest communication. Heise (1985) described transparent organizations as making openly available "all legally releasable information—whether positive or negative in nature—in a manner which is accurate, timely, balanced, and unequivocal" (p.209). Gower (2006) suggested that informational transparency is to provide truthful information—information which a party is interested in and would impact actions and decisions of the party. At the personal level, Clarke (2009) started a research diary to provide transparency as well as to acknowledge factors that may have influenced her analysis. However, truth alone is not sufficient for establishing a transparent organization. Giving information, even though it is truthful, can be confusing and mislead stakeholders about the complete truth of an occasion many times. The increase of information flow does not necessarily strengthen understanding but can impair understanding (Wall, 1996). To attain transparency in an organization, Cotterrell (2000) argued that transparency should be regarded as a process which "involves not just availability of information but active participation in acquiring, distributing and creating knowledge" (p. 419). Stakeholder participation elevates disclosure of information to transparency because it guarantees that the information that an organization discloses is what its stakeholders seek to know (Rawlins, 2009).

Accountability is the third quality of transparency. Cotterrell (2000) gave his definition of accountability transparency. He argued it is the responsibility of an organization to present a meaningful and accurate account of circumstances in which one is involved or of which one is aware. Transparent organizations are accountable for their actions, words, and decisions and make their accounts available for stakeholders to examine (Rawlins, 2009). As transparency encourages openness, it also increases concerns for secrecy and privacy because it is very difficult for organizations to disclose the bad side to the public on its own initiative. To create transparency alongside accountability, it requires organizations to think twice before they are making decisions that might be harmful for stakeholders. It inhibits future deceptive behaviors of organizations to some degree and motivates improvement. Accountability transparency works as a supervising mechanism to restrict irresponsible and unaccountable behaviors of organizations and rewards reasonable actions (Rawlins, 2009).

Transparency and Trust

Transparency matters more when an organization gets involved in the post-crisis phase. In such times, trust in an organization among stakeholders has declined sharply and the reputation of the organization has already been damaged. In the unfavorable situation, open communication during and after a crisis can contribute to building an organizational reputation of being transparent. When open communication is particularly challenging during crises since an immediate response is limited by information uncertainty (Ulmer et al, 2007), an organization should have enough information at hand and have sufficient time to ponder over their conduct after a crisis moves away from the center of media publicity. It is crucial for organizations to

initiate communication after a crisis (Ulmer et al, 2007). Moreover, Meyers and Holusha (1986) illustrated seven potential opportunities associated with crises: “heroes are born, change is accelerated, latent problems are faced, people can be changed, new strategies evolve, early warning systems develop, and new competitive advantages appear” (p46).

Transparency is described as one of the requirements to create trust, and it is vital for organizations to take transparency efforts to restore trust after a crisis. In politics, the call for transparency is aimed at restoring declining trust in government among citizens. Baum (2008) indicated that government openness enhanced transparency and further increased citizens’ confidence in civil service in South Korea. Grimmelikhuijsen (2009) found the level of transparency affected perceptions of benevolence and honesty, which are considered dimensions of trust in literature reviews. In his study, groups of participants were shown varying amounts of information about a political policy and were asked their attitudes towards the government. When exposed to more information in the high transparency group, participants showed a higher level trust in government.

In the field of public relations, transparency is intertwined with the relationship between an organization and its publics, and trust is an important indicator of the organization-public relationship (Huang, 2001). The case study of Shell’s crisis (Jahansooz, 2006) showed that transparency efforts were crucial to restoring trust in Shell among stakeholders and in rebuilding a trustworthy relationship with the public generally.

In other research conducted by Jahansooz (2006), she tried to identify relationship components that are necessary to build and maintain organization-stakeholder relationships. In

her literature review, she found that transparency and dialogue are identified as relational elements that have been largely ignored in public relations literature on the relational perspective. Transparency, she said, “is a key relational condition that is connected to other relational characteristics such as trust, accountability, cooperation, and collaboration”.

In the academic world of public relations, many researchers have shifted their research focus to measurement of relationship between organization and its publics as the overall field moves toward a two-way relational communication model advocated by Ledingham and Bruning (2000b). The concept of dialogue changes the way of thinking of public relations as a technical communicating function to a long term process to maintain favorable OPRs. Kent and Taylor (2002) included engagement as a key feature of dialogue. Engagement coincides with participatory transparency which emphasizes the ability to participate in decisions either through fair representation or direct participation (Balkin, 1999). When transparency drives an organization to support full engagement of its local or global community in its decisions, Kent and Taylor (2002) argued that it will have broader contexts and wider perspectives to draw upon in its decision-making. Engagement benefits all parties involved because decisions serve multiple publics.

Rawlins (2009) suggested that transparency and OPR studies have two overlapping dimensions: openness and trust. Grunig and Huang (2000) implied that openness is a crucial indicator of two-way symmetrical communication. It is also a natural part of informational transparency. Moreover, trust works as one of the four dimensions to achieve good OPRs summarized by Huang (2001). Kent and Taylor (2002) pointed out that trust become even more

important for long-term relationships. When trust has declined due to a crisis or been eroded over time, transparency becomes a critical relational characteristic. Hence, a state of distrust makes transparency a necessary condition for restoring trust and encouraging commitment of both sides in the OPR. Furthermore, trust is likely to be abused when there is little detection, and therefore transparency fills the blank (Jahansooz, 2006). Finally, transparency has a distinct impact on building good OPR through mediating variables such as engagement, trust and openness.

Informational transparency and trust

In Chou et al. (2009), their results showed that consumers trust a company more and are more willing to provide their personal information when the company website discloses much of its identity information. It is apparent that keeping the crisis undisclosed is not accepted by stakeholders and it will ruin trust in an organization after the crisis is disclosed. There is not much literature addressing the relationship between disclosure in crisis and trust but disclosure is always encouraged in crisis communication.

How to disclose information in a crisis becomes an issue that should be addressed. Dilenschneider and Hyde (1985) proposed to tell it all and tell it fast in crisis communication, which was adopted as the golden rule widely. The common notion in crisis management literature is that organizations should provide accurate information as quickly as possible to all stakeholders (Sellnow & Ulmer, 1995). The uncertainty would be decreased by providing information to the public, but many other factors are involved including lack of timely information and receipt of conflicting information (Hagar, 2010). Also, there is a need for stakeholders to identify trusted information sources to gain information about a crisis (Hagar,

2010). To keep customers loyal during the crisis, Fearn-Banks (2007) suggested telling consumers all five Ws of the crisis--who, what, when, where and why. Also, when providing information that can be compared to previous performance, organizations can use bolstering to mitigate the negative effects of the crisis according to image restoration theory. Organizations can advocate positive actions that they have performed in the past when they are releasing information (Benoit, 1997). Moreover, once the organization has made the changes necessary to protect itself from recurrences of the crisis, the public relations professional must communicate these changes to stakeholders and make it clear that the organization has changed and is committed to transparency (Fitzpatrick and Bronstein, 2006). A responsible message must be communicated to stakeholders.

The factors mentioned above stay consistent with forms of informational transparency efforts listed by Rawlins (2009). To implement informational transparency, he requires organizations to provide timely information that is relevant, complete, accurate, reliable, can be compared to previous performance, and is easy to understand. However, while rapidly responding to the crisis seems necessary and ethical, many factors can make the decision to release information quickly difficult, including fear of legal liability, the need to evaluate the situation, and the need to develop a unified organizational message (Fitzpatrick & Rubin, 1995).

Participatory transparency and trust

There are six indicators of participatory transparency summarized by Rawlins (2009). They are asking for feedback from people about the quality of the organization's information, involving people to help identify the information they need, providing detailed information,

making it easy to find information, asking the opinions of people before making decisions, taking the time with people to understand who they are and what they need. De Cremer and Dewitte (2002) found that cooperative behaviors may influence beliefs about exploitation and cooperation in mixed-motive situations and individuals may vary in levels of trust. It is believed among stakeholders that organizations are always hiding unfavorable information even if it is detrimental to stakeholders. If an organization would demonstrate an open attitude to welcome stakeholders to participate in acquiring information and decision-making, it will expect a higher level of trust among its publics. Jahansoozi (2006) found that Shell achieved transparency mainly through enhancing two-way communication after it found its failure to catch up with expectations of community stakeholders. The communities were welcome to get involved not only with crucial decisions but also everyday activities that had an impact on their quality of life. By building a dialogue between the industry and the community, the majority of community members interviewed expressed their satisfaction and agreed that Shell is heading in a more transparent direction.

Stakeholder participation is also advocated in crisis management literature. Coombs (1998) argued that better crisis responses come from a better understanding of the crisis situation. He suggested that stakeholder perceptions are of central concern with identifying crisis responsibility of an organization. An organization will be more prepared for progress after a crisis if it engages stakeholders in recognizing their concerns. Nafziger and Maak (2008) have noted that dialogues through legislative websites help visitors understand the legislation process and instill transparency of the legislative process. Visitors to these legislative websites help

identify information they need and, in return, make their information demands satisfied. If an organization wants to regain a good relationship with its stakeholders, it should develop instrumental communication channels with them (Ulmer, 2001). Stakeholder participation facilitates efficient communication and provides valuable information for organizations to make decisions and take actions.

Stakeholder participation is also crucial to ensure that meaningful information is disclosed in a crisis when implementing informational transparency. In the crisis scenario, there might be too much information, which makes the complete truth about the accident vague and unclear. Rawlins (2009) differentiates disclosure of information and transparency, and he suggested that allowing stakeholder participation can elevate disclosing information to transparency. By actively engaging participants to acquire, distribute and create knowledge (Cotterrell, 2000), misleading information can be discarded and the truth can be clarified.

Accountability transparency and trust

Coombs (1998) characterizes accounts as “statements used to explain one's behavior and are invoked when one's behavior is called into question, thereby threatening one's image” (p. 179). Benoit (1997) put apologia and accounts together and came up with an array of image restoration strategies that can be applied to crisis management. Allen and Caillouet (1994) laid the foundation for their work in impression management and accounts. Giving a complete and accurate account after a crisis is not that meaningful in terms of telling it fast but it is meaningful in terms of telling it all and telling it well. Cheney and Lair (2005) called attention to the advantage of viewing organizations as rhetorical enterprises. They explain: “Organizational

rhetoric has drawn attention to issues and concerns in contemporary organizational life with a focus on issues of persuasion and identification” (p. 75). This kind of self-disclosure after a crisis is called “discourses of renewal” by Ulmer et al. (2007). Elwood (1995) observed that some organizational crises require rhetoric that explains how and why a misdeed occurred. Discourse somewhat set the tone and frame the crisis situation especially when some stakeholders are not fully informed about a crisis and know little about it. In these cases, the crisis may be less self-evident, allowing the organization to “shape public opinion” (Elwood, 1995). Rawlins (2009) also summarized five factors to constitute accountability transparency: presenting more than one side of controversial issues, being forthcoming with information that might be damaging to the organizations, being open to criticism by people, freely admitting when it has made mistakes, and providing information that can be compared to industry standards.

Eijffinger and Hoerberichts (2002) specified transparency as giving a truthful and accurate account of policies and words of an organization and they contended that transparency is critical for entities with credibility problems. Situational variables may influence perceptions of trust and behaviors in mixed-motive situations. De Cremer and Dewitte (2002) mentioned in their study that one such situational variable is whether decision makers feel accountable to the others involved in the decision situation.

In the field of crisis communication, the fourth dimension of accountability transparency proposed by Rawlins (2009) is freely admitting when it has made mistakes, which coincides with mortification strategy of image restoration theory. It suggests that if people believe the apology is sincere, they may choose to forgive the wrongful act (Benoit, 1997). Fearn-Banks (2007) argued

that people tend to be forgiving if the organization's policies are acceptable and somehow, somehow, something unforeseen happened. One individual, who was later fired, might be blamed. Also, publics might forgive more if they know steps have been taken to prevent the occurrence of the misdeed.

Transparency, trust and the bottom line

At the post-crisis stage, organizations have the ability and responsibility to disclose truthful and accurate information wisely to enhance stakeholders' understanding of a crisis, to settle existing concerns and to implement improvement plans. However, it is rarely seen that an organization presents official explanations or public discourse about the encounter after a crisis. It is also rarely seen that organizations encourage public participation to identify questions and concerns that stakeholders still bear in mind. Also almost none provides an accurate and complete account of previous neglect and future improvement. Obviously, these efforts help an organization become more transparent.

Transparency may have influence on the bottom line of an organization because it is believed that OPRs have an influence on the reputation and the bottom line of an organization. Heath (2001) put forward a shift towards a revenue generation paradigm which was based on the premise that important stakeholder groups preferred to be connected to organizations that invested in developing and maintaining relationships. Trust increases collaboration and commitment, which lead to improved performance (Jahansooz, 2006). Rawlins (2009) witnessed that public relations scholars put more attention on the function of building, maintaining, and sustaining mutually-beneficial relationships as the bottom-line purpose of public relations.

Ledingham and Bruning (1998) indicated that trust, commitment, and openness are strongly related to an individual's decision to stay with the current telephone service provider or sign up with a new provider. Bruning and Ledingham (2000) stated that dimensions of transparency such as "trust, openness, involvement, investment, and commitment impact the ways in which organization-public relationships are initiated, developed, and maintained, and ultimately can engender loyalty toward the organization among key publics" (p162). Carvalho and De Oliveira Mota (2010) suggested a process by which trust is first developed and then translated to the perceived value of an organization, eventually leading to the development of loyalty toward the organization in the setting of higher education institutions. It is consensus that trust has a positive influence on loyalty in the literature but there is no strong evidence that transparency has a positive influence on loyalty in the academic research. It is possible that transparency has an effect on trust level towards an organization, and then trust level influences the bottom line of an organization through customer satisfaction and customer loyalty. However, their association needs further exploration in the study to investigate the scope of the effects.

CHAPTER 3

PURPOSE OF RESEARCH

This research is focused on exploring the relationship among perceived transparency efforts types, people's trust level towards an organization, and consumer purchase intent. Also, it is focused on exploring whether people's trust level towards an organization is related to people's purchase intent. Two research hypotheses will be tested and three research questions will be answered.

H1: The trust level in the control group that does not receive the letter will be lower compared to the three transparency letter groups.

H2: Consumer purchase intent in the control group that does not receive the letter will be lower compared to the three transparency letter groups.

RQ1: How does informational transparency influence trust in an organization in two crisis scenarios?

RQ2: How does participatory transparency influence trust in an organization in two crisis scenarios?

RQ3: How does accountability transparency influence trust in an organization in two crisis scenarios?

H1 will be tested by conducting independent-samples t test between the means of participants' trust in an organization in experiment groups and that of a control group. H2 will also be tested by conducting independent-samples t test between the means of participants' purchase intent in experiment groups and that of a control group. Other research questions will be assessed using regression tests to see how each aspect of transparency efforts influence trust in two crisis scenarios.

CHAPTER 4

METHODOLOGY

Developing the instrument

This research is to delve into effects of perceived transparency efforts on restoring trust and consumer purchase intent after a crisis. Effects of perceived transparency efforts were examined by a 2×3 experimental design. The first factor is a crisis scenario. It includes one crisis scenario caused by an employee and one crisis scenario caused by a vendor. The second factor is transparency efforts. It contains three types of transparency: informational, participatory, and accountability transparency. Participants were randomly assigned to the six conditions. Each participant was given a crisis scenario and was shown one type of transparency effort, followed by an online questionnaire.

The crisis scenarios were made-up news stories about crisis events. These fictional news stories were written in a style similar to ones published in a campus newspaper. One crisis news story reports a food poisoning accident caused by an employee working at a pizza restaurant in a university town. The name of the pizza restaurant is fictional as well. In the news story, it is noted that the employee forgot to turn up the oven cooking temperature, which caused chicken and ground beef to be undercooked. Eight people had been confirmed as having food poisoning,

which can cause vomiting, diarrhea and dehydration. Three were admitted to hospital for treatment, and all were later discharged. The other crisis news story covered the same facts about the food poisoning accident as the first news story except reporting that the accident was caused by one vendor's bad ground beef.

Transparency efforts were presented through letters written by a fictional manager of the pizza restaurant. Three letters were designed to represent different types of transparency.

Consistent with informational transparency, the first letter is written in a way that shows the pizza restaurant provides accurate, timely, complete, reliable, comparable, understandable and relevant information about the crisis in the letter. Specifically, in the letter, the manager explained the main cause and unfavorable results of the accident, the closing and reopening dates of the restaurant, and its performance record. The letter that represents informational transparency provides more detailed information than the other two.

In accordance with participatory transparency efforts, the second letter is written in a way that shows the pizza restaurant providing detailed information, asking opinions of its public before making decisions, understanding its public, making it easy to find information, asking for feedback from its public about the quality of the information, and involving its public. In the letter, the manager mentioned the main cause and unfavorable results of the accident with the exception of the closing and reopening dates of the restaurant and its previous performance. To represent participatory transparency, the manager showed care for concerns of its publics, welcomed opinions from them, and provided multiple ways for contact to encourage its publics to get involved.

In accordance with accountability transparency efforts, in the third letter, the manager admitted mistakes, apologized for the accident and provided information about the restaurant inspection score that can be compared to industry standards. He also said he is open to criticism and will inform customers about the food safety accident whenever there is new progress, which shows he is forthcoming with potentially damaging information.

Rawlins (2009) suggested and tested the normal standards of informational transparency efforts, participatory transparency efforts and accountability transparency efforts. The elements of transparency efforts were drawn from literature and transparency guidelines.

Hence, six conditions were generated: employee crisis news story with a letter showing informational transparency efforts ($N=41$); employee crisis news story with a letter showing participatory transparency efforts ($N=32$); employee crisis news story with a letter showing accountability transparency efforts ($N=46$); vendor crisis news story with a letter showing informational transparency efforts ($N=38$); vendor crisis news story with a letter showing participatory transparency efforts ($N=44$); vendor crisis news story with a letter showing accountability transparency efforts ($N=39$). See Table 1.

Table 1 Experiment Groups

Experiment Groups	N
Employee informational transparency	41
Employee participatory transparency	32
Employee accountability transparency	46
Vendor informational transparency	38
Vendor participatory transparency	44
Vendor accountability transparency	39

After each participant was given a crisis scenario and was shown a letter representing one type of transparency effort, they were required to fill out a questionnaire. Each participant's attitudes towards the pizza restaurant were examined including their trust in the pizza restaurant and their willingness to purchase pizzas at the restaurant in the future. Attitudes were measured using a five-point Likert scale between strongly disagree and strongly agree. "Strongly disagree" indicated by 1 and "strongly agree" indicated by 5.

To assess the effect of transparency efforts on trust and consumer purchase intent after a crisis, one control group ($N=39$) was created for comparison with the six experiment groups. Participants in the control group were shown the employee crisis news story, followed directly by a questionnaire. Different from experiment groups, the control group was not presented the letter written by the manager of the fictional pizza restaurant.

To test H1 (The trust level in the control group that does not receive the letter will be lower compared to the three transparency letter groups.), the mean of trust in the pizza restaurant among participants across the six experiment groups was compared with that in the control group. If the former is higher, it suggests that transparency does restore trust after a crisis regardless of types of transparency efforts and crisis scenarios.

H2 (Consumer purchase intent in the control group that does not receive the letter will be lower compared to the three transparency letter groups.) can be answered by comparing the mean of purchase intent among participants across the six experiment groups and that in the control group. If the former is higher, it implies that transparency efforts help increase consumer purchase intent. Besides evaluating the effect of transparency, the research also looks into the relationship between perceived transparency efforts and trust in an organization in more detail. As Rawlins (2009) suggested, perceived transparency efforts consist of three types of elements: informational transparency, participatory transparency, and accountability transparency. Each element is a multi-dimensional concept measured in various aspects. In the questionnaire, participants were asked how they perceived informational transparency, participatory transparency, or accountability transparency in specific aspects, according to the group into which they fell.

Informational transparency is assessed through seven aspects: accurate, timely, complete, reliable, comparable, understandable, and relevant information. Also there are four factors to evaluate the opposite side of informational transparency or “secrecy”: withholds information, blames others, information unclear, and slow to inform.

With regard to participatory transparency, participants were asked how they perceive the pizza restaurant in terms of providing detailed information, asking opinions, understanding them, making it easy to find information, asking for feedback from them, and involving them.

Relating to accountability transparency, participants were asked their perception towards the pizza restaurant in terms of freely admitting mistakes, providing balanced information that can be compared to industry standards, being open to criticism, and forthcoming with information that might be damaging to the organization.

To answer RQ1 (How does informational transparency influence trust in an organization in two crisis scenarios?), RQ2 (how does participatory transparency influence trust in an organization in two crisis scenarios?), and RQ3 (how does accountability transparency influence trust in an organization in two crisis scenarios?), regression was conducted between each aspect of a type of transparency effort and trust in the pizza restaurant separately. Results are analyzed to discover which perceived transparency element and its dimensions have stronger or weaker effect on trust in the pizza restaurant in the two crisis scenarios respectively.

Survey Sample

The 2 × 3 experimental design was conducted through an online multi-page survey. An e-mail invitation was sent with a link to the survey. Participants were assigned randomly to one condition: one of six experiment groups or the control group. All participants are undergraduate students who attended an introduction to public relations class at a large public university in the southeastern U.S.. Participants were offered extra credit points for completing the survey.

The total number of participants was 279. Seventy-five percent of participants reported their

gender as female (N=210), twenty-three percent reported their gender as male (N=65), and two percent did not report their gender (N=4). All the participants are undergraduate students from various departments in the university. The most common majors of participants are public relations, journalism, marketing and advertising.

Manipulation Check

As Table 2 and 3 show, all of the means measuring the attitudes of participants towards the pizza restaurant's transparency efforts are above 3 and the majority are close to 4 in both crisis scenarios. It means that the transparency letters make the participants somewhat agree that the restaurant has conducted some aspects of transparency efforts but not strongly agree.

Table 2 Means of Attitudes of Participants Towards Transparency Efforts (Vendor)

Item (Vendor crisis scenario)	Mean
provides information in a timely fashion to people like me	3.79
provides information that is relevant to people like me	3.84
provides information that can be compared to previous performance	4.00
provides information that is complete	3.58
provides information that is easy for people like me to understand	4.03
provides accurate information to people like me	3.89
provides information that is reliable	3.74
asks for feedback from people like me about the quality of its information	3.80
involves people like me to help identify the information I need	3.50
provides detailed information to people like me	3.70
makes it easy to find information for people like me	3.70
asks the opinions of people like me before making decisions	3.27
takes the time with people like me to understand who we are and what we need	3.50
presents more than one side of controversial issues	3.51
is forthcoming with information that might be damaging to the organizations	3.77
is open to criticism by people like me	3.92
freely admits when it has made mistakes	4.15
provides information that can be compared to industry standards	3.67

Table 3 Means of Attitudes of Participants Towards Transparency Efforts (Employee)

Item (Employee crisis scenario)	Mean
provides information in a timely fashion to people like me	3.78
provides information that is relevant to people like me	4.00
provides information that can be compared to previous performance	3.85
provides information that is complete	3.71
provides information that is easy for people like me to understand	4.15
provides accurate information to people like me	3.95
provides information that is reliable	3.76
asks for feedback from people like me about the quality of its information	3.75
involves people like me to help identify the information I need	3.59
provides detailed information to people like me	3.97
makes it easy to find information for people like me	3.81
asks the opinions of people like me before making decisions	3.16
takes the time with people like me to understand who we are and what we need	3.53
presents more than one side of controversial issues	3.37
is forthcoming with information that might be damaging to the organizations	3.91
is open to criticism by people like me	4.04
freely admits when it has made mistakes	4.15
provides information that can be compared to industry standards	3.72

CHAPTER 5

RESULTS

All participants across the six experiment groups and one control group were asked to respond to “I trust the pizza restaurant” on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree.

In the crisis scenario caused by the employee, the trust level of participants towards the pizza restaurant ($M = 3.48$, $SD = .901$) in three experiment groups is higher than the trust level in the control group ($M = 2.90$, $SD = .940$).

Independent-samples t test was conducted between the means of participants’ trust towards the pizza restaurant in experiment groups and that in the control group. The mean difference in trust is significant in the employ crisis scenario ($p=.001$).

In the crisis scenario caused by the vendor, the trust level of participants towards the pizza restaurant ($M = 3.21$, $SD = .942$) in the other three experiment groups is also higher than the trust level in the control group ($M = 2.90$, $SD = .940$) but the results are not significant ($p=.069$). See Table 4.

Participants in the experiment groups were shown a letter from the manager of the pizza restaurant when ones in the control group were not. The former demonstrated a higher trust level

towards the pizza restaurant after reading the letter while the latter showed a lower trust level in the employee crisis scenario but not in the vendor crisis scenario. The perceived transparency effort seems to have had an effect on the trust level after the food poisoning accident occurred in the pizza restaurant only in the employee crisis scenario. The first hypothesis (H1: The trust level in the control group that does not receive the letter will be lower compared to the three transparency letter groups.) is partially supported by the results.

Table 4 Means of “I trust the pizza restaurant”

	N	Mean	S.D
Employee	119	3.48	.901
Vendor	121	3.21	.942
Control	39	2.90	.940

In the questionnaire, all the participants were also required to indicate their purchase intent “I am willing to buy pizzas from the pizza restaurant” on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree.

In the crisis scenario caused by the employee, the mean of purchase intent of participants ($M = 3.13$, $SD = 1.127$) in three experiment groups is higher than that in the control group ($M = 2.90$, $SD = 1.142$).

In the crisis scenario caused by the vendor, the mean of purchase intent of participants

towards the pizza restaurant ($M = 2.97$, $SD = .991$) in the other three experiment groups is also higher than that in the control group ($M = 2.90$, $SD = 1.142$). (See Table 5)

Table 5 Means of “I am willing to buy its pizzas”

	N	Mean	S.D.
Employee	119	3.13	1.127
Vendor	121	2.97	.991
Control	39	2.90	1.142

Independent-samples t test was conducted between the means of participants’ purchase intent in experiment groups and in the control group. The difference in the means of purchase intent is not significant in the employee crisis scenario ($p=.258$) and also in the vendor crisis scenario ($p=.714$). H2 (Consumer purchase intent in the control group that does not receive the letter will be lower compared to the three transparency letter groups.) is not supported and the results add little support to the effect of perceived transparency efforts on consumer purchase intent. Overall, the effect of perceived transparency efforts on the purchase intent is not supported, and the effect on the trust level is partially supported.

With regard to the third research question (RQ3: How does informational transparency influence trust in an organization in two crisis scenarios?), the two experiment groups are

compared. Participants in the employee crisis scenario group and the vendor crisis scenario group were shown a similar letter from the manager of the pizza restaurant, which was written to present seven aspects of informational transparency efforts. They are providing accurate, timely, complete, reliable, comparable, understandable, and relevant information.

Participants' perception towards the pizza restaurant in terms of the seven aspects of informational transparency and four aspects of secrecy was measured. For example, participants were asked to respond to "provides information in a timely fashion to people like me" on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Linear regression was run between attitudes towards seven aspects of informational transparency efforts and trust in the pizza restaurant to explore their association. Linear Regression was run between four aspects of secrecy and trust as well. Transparency is the opposite of secrecy. Transparency and secrecy should exert opposite effects on the trust level in an organization after a crisis.

As Tables 6 and 7 show, in both crisis scenarios, agreement upon "it provides information that is complete" and "it provides information that is reliable" has a positive and significant effect on trust in the pizza restaurant. The influence of "it provides information that is complete" on trust in the pizza restaurant is relatively stronger in the vendor crisis scenario ($r=.481, p< .01$) in comparison with that in the employee crisis scenario ($r=.344, p< .05$). In terms of trust in the pizza restaurant and agreement upon "it provides information that is reliable", the relationship in the vendor crisis scenario ($r=.387, p< .05$) is similar to that in the employee crisis scenario ($r=.380, p< .05$). "It provides information that is relevant to people like me" enjoys significant and moderate influence in trust in the pizza restaurant in the vendor crisis scenario ($r=.423,$

$p < .01$) but not in the employee crisis scenario ($r = .296$, $p > .05$). In the meantime, “it provides information in a timely fashion to people like me” only has an effect on trust towards the pizza restaurant in the employee crisis scenario ($r = .438$, $p < .01$).

In both crisis scenarios, no influence on trust were found with some aspects of informational transparency including “it provides information that can be compared to previous performance”, “it provides information that is easy for people like me to understand”, and “it provides accurate information to people like me”.

The Cronbach’s Alpha among seven aspects of informational transparency efforts is .802 in the vendor crisis scenario and .883 in the employee crisis scenario. The means of attitudes towards seven aspects of informational transparency were scaled, and regression was run between the scaled mean of informational transparency efforts and trust in the pizza restaurant in two crisis scenarios. The results have shown that informational transparency efforts are significantly related to trust in both scenarios and account for 46.3% of variance in trust towards the restaurant in the vendor crisis scenario ($p < .01$), while explaining 39% of variance in trust in the employee crisis scenario ($p < .05$). As a whole, the effect of informational transparency on trust in the pizza restaurant is slightly stronger in the vendor crisis scenario than in the employee crisis scenario.

With regard to secrecy and trust, in the vendor crisis scenario, “withholds information” ($r = -.453$, $p < .01$) and “provides unclear information” ($r = -.355$, $p < .01$) have negative effect on trust in the pizza restaurant, while no influence was found in the employee crisis scenario. The fact stays consistent with a stronger effect of informational transparency on trust in the restaurant

in the vendor crisis scenario. Corresponding to the first research question (RQ1: How does informational transparency influence trust in an organization in two crisis scenarios?), the effect of informational transparency elements on trust in the pizza restaurant share similarities in both crisis scenarios and vary to some extent. Overall, informational transparency efforts exert stronger effects on the trust level in the vendor crisis scenario.

Table 6 Regression Analysis of Informational Transparency Factors Influencing Trust

Vendor crisis scenario	I trust it	
	N	R
provides information in a timely fashion to people like me	38	.269
provides information that is relevant to people like me	38	.423**
provides information that can be compared to previous performance	38	.261
provides information that is complete	38	.481**
provides information that is easy for people like me to understand	38	.083
provides accurate information to people like me	38	.260
provides information that is reliable	38	.387*
withholds information	38	-.453**
blames others	38	-.125
provides unclear information	38	-.355*
is slow to provide information to people like me	38	-.226
scaled informational transparency efforts	38	.463**

(*p<.05 **p<.01 ***p<.001)

Table 7 Regression Analysis of Informational Transparency Factors Influencing Trust

Employee crisis scenario	I trust it	
	N	R
provides information in a timely fashion to people like me	41	.438**
provides information that is relevant to people like me	41	.296
provides information that can be compared to previous performance	41	.178
provides information that is complete	41	.344*
provides information that is easy for people like me to understand	41	.187
provides accurate information to people like me	41	.272
provides information that is reliable	41	.380*
withholds information	41	-.016
blames others	41	.006
provides unclear information	41	-.002
is slow to provide information to people like me	41	-.067
scaled informational transparency efforts	41	.390*

(*p<.05 **p<.01 ***p<.001)

With regard to aspects of participatory transparency efforts, another two experiment groups were compared. Participants in the employee crisis scenario group and the vendor crisis scenario group were also shown a similar letter from the manager of the pizza restaurant, which was written to demonstrate the six aspects of participatory transparency efforts. They are: providing

detailed information, asking opinions, understanding, making it easy to find information, asking for feedback, and involving. Participants' attitudes towards the pizza restaurant in terms of the six aspects of participatory transparency were assessed as well. For example, participants were asked to respond to “involves people like me to help identify the information I need” on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Linear regression was run between attitudes towards six aspects of participatory transparency efforts and trust in the pizza restaurant.

As Tables 8 and 9 indicate, in both crisis scenarios, there is an effect of “making it easy to find information” on trust in the restaurant. The influence is stronger in the employee crisis scenario ($r=.459$, $p<.01$) compared to that in the vendor crisis scenario ($r=.304$, $p<.05$). Another common association exists between “takes the time with people like me to understand who we are” and trust in the pizza restaurant. Still, the influence is stronger in the employee crisis scenario ($r=.577$, $p<.01$) than in the vendor crisis scenario ($r=.298$, $p<.05$).

Beyond the two common associations, no effect on trust exists among other aspects of participatory transparency efforts in the vendor crisis scenario. Oppositely, in the employee crisis scenario, all six aspects of participatory transparency efforts have an indicated effect on trust in the restaurant. In the employee crisis scenario, “provides detailed information to people like me” has the strongest effect on trust in the restaurant ($r=.707$, $p<.01$).

Moreover, “it asks for feedback from people like me about the quality of its information” ($r=.595$, $p<.01$) and “it takes the time with people like me to understand who we are and what we need” ($r=.577$, $p<.01$) share a moderate influence on the trust level in the restaurant.

“It involves people like me to help identify the information I need” ($r=.427$, $p<.05$) and “it asks the opinions of people like me before making decisions” also enjoy an effect on trust in the pizza restaurant ($r=.472$, $p<.01$). The effect of these two items on trust appear to be less evident.

The Cronbach’s Alpha among six aspects of participatory transparency efforts is .786 in the vendor crisis scenario and .894 in the employee crisis scenario. The means of attitudes towards six aspects of participatory transparency were scaled, and regression was run between the scaled mean of participatory transparency efforts and trust in the pizza restaurant in two crisis scenarios. The results have shown that participatory transparency efforts are significantly related to trust in both scenarios and account for 35% of variance in trust towards the restaurant in the vendor crisis scenario ($p<.05$), while explaining 66.2% of variance in trust in the employee crisis scenario ($p<0.001$). As a whole, the effect of participatory transparency on trust in the pizza restaurant is much stronger in the employee crisis scenario than in the vendor crisis scenario.

Corresponding to the second research question (RQ2: How does participatory transparency influence trust in an organization in two crisis scenarios?), the association between participatory transparency aspects and trust in the pizza restaurant enjoy some commonalities in both crisis scenarios. Nevertheless, the effect of participatory transparency is more visible in the employee crisis scenario. It suggests that participatory transparency efforts have stronger effects on the trust level in the employee crisis scenario than in the vendor crisis scenario.

Table 8 Regression Analysis of Participatory Transparency Factors Influencing Trust

Vendor crisis scenario	I trust it	
	N	R
asks for feedback from people like me about the quality of its information	44	.091
involves people like me to help identify the information I need	44	.207
provides detailed information to people like me	44	.281
makes it easy to find information for people like me	44	.304*
asks the opinions of people like me before making decisions	44	.284
takes the time with people like me to understand who we are and what we need	44	.298*
scaled participatory transparency efforts	44	.350*

(*p<.05 **p<.01 ***p<.001)

Table 9 Regression Analysis of Participatory Transparency Factors Influencing Trust

Employee crisis scenario	I trust it	
	N	R
asks for feedback from people like me about the quality of its information	32	.595***
involves people like me to help identify the information I need	32	.427*
provides detailed information to people like me	32	.707***
makes it easy to find information for people like me	32	.459**
asks the opinions of people like me before making decisions	32	.472**
takes the time with people like me to understand who we are and what we need	32	.577**
scaled participatory transparency efforts	32	.662***

(*p<.05 **p<.01 ***p<.001)

Regarding five aspects of accountability transparency efforts, the last two experiment groups are compared. Similarly, participants in the employee crisis scenario group and the vendor crisis scenario group were shown a letter from the manager of the pizza restaurant, which was written to show participants that the pizza restaurant is freely admitting mistakes, providing balanced information that can be compared to industry standards, is open to criticism, and forthcoming with information that might be damaging to the organization. Attitudes of participants towards

the pizza restaurant in terms of the five aspects of accountability transparency were evaluated. For example, participants were asked to respond to “it presents more than one side of controversial issues” on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. Linear regression was run between attitudes towards the five aspects of accountability transparency efforts and trust in the pizza restaurant.

As Tables 10 and 11 show, in the vendor crisis scenario, all aspects of accountability transparency have no effect on trust in the pizza restaurant, while in the employee crisis scenario some aspects indicate an influence on trust in the restaurant.

In the employee crisis scenario, the strongest influence on trust in the restaurant comes from “it provides information that can be compared to industry standards” ($r=.485$, $p<.01$). Moreover, “it is open to criticism by people like me” ($r=.350$, $p<.05$) and “freely admits when it has made mistakes” ($r=.299$, $p<.05$) also enjoy some effect on trust.

The Cronbach’s Alpha among five aspects of accountability transparency efforts is .117 in the vendor crisis scenario and .835 in the employee crisis scenario. The means of attitudes towards five aspects of accountability transparency in the vendor crisis scenario cannot be scaled due to low reliability among five variables of accountability transparency. Hence, the means of perception regarding accountability transparency were scaled only in the employee crisis scenario. Then regression was run between the scaled mean of accountability transparency efforts and trust in the pizza restaurant in the employee crisis scenario. The results have shown that accountability transparency efforts are significantly related to trust and account for 35.3% of variance in trust towards the restaurant in the employee crisis scenario ($p<.05$).

Regarding the third research question (RQ3: How does accountability transparency influence trust in an organization in two crisis scenarios?), the effect of accountability transparency aspects on trust in the pizza restaurant vary dramatically as the crisis scenario changes. The relationship is significant in the employee crisis scenario compared to no significant effect found in the vendor crisis scenario. It indicates that accountability transparency efforts have stronger effects on the trust level in the employee crisis scenario than in the vendor crisis scenario.

Table 10 Regression Analysis of Accountability Transparency Factors Influencing Trust

Vendor crisis scenario	I trust it	
	N	R
presents more than one side of controversial issues	39	.194
is forthcoming with information that might be damaging to the organizations	39	.074
is open to criticism by people like me	39	.112
freely admits when it has made mistakes	39	.169
provides information that can be compared to industry standards	39	.190

(*p<.05 **p<.01 ***p<.001)

Table 11 Regression Analysis of Accountability Transparency Factors Influencing Trust

Employee crisis scenario	I trust it	
	N	R
presents more than one side of controversial issues	46	.093
is forthcoming with information that might be damaging to the organizations	46	.133
is open to criticism by people like me	46	.350*
freely admits when it has made mistakes	46	.299*
provides information that can be compared to industry standards	46	.485**
scaled accountability transparency efforts	46	.353*

(*p<.05 **p<.01 ***p<.001)

As Table 12 shows, there is an evenly strong association between the purchase intent and trust in the pizza restaurant in both scenarios. The association is .749 in the vendor crisis scenario (p<.01) and is .746 in the employee crisis scenario (p<.01).

Table 12 Correlation between “I trust it” and “I am willing to buy its pizzas”

		I am willing to buy its pizzas	
		N	R
Employee crisis scenario	I trust it	119	.746**
Vendor crisis scenario	I trust it	121	.749**

(*p<.05 **p<.01 ***p<.001)

CHAPTER 6

DISCUSSION AND LIMITATIONS

Taking an experimental approach to effective post-crisis communication, this study examined the effects of transparency efforts on publics' trust in an organization that has experienced a crisis and consumers' purchase intent. The results of this study shed light on the relationship among transparency efforts, trust in an organization, and publics' purchase intent in different crisis scenarios.

Transparency efforts and trust

The results of the study have indicated that transparency efforts raise the trust level of participants towards the pizza restaurant after a food poisoning incident occurred in the employee crisis scenario but not in the vendor crisis scenario.

The study extends the scope of transparency efforts by testing the effect of them on the trust level in two types of crisis. One type of crisis is directly caused by an employee's inattention, and the other is caused by a third party – one of the vendors of the pizza restaurant. However, the transparency efforts have shown an effect on raising the trust level in the employee crisis scenario, and the difference in the means of the trust level is not significant in the vendor crisis scenario. The results of the study partially support previous research results.

The research also adds some support to the model of transparency efforts suggested by Rawlins (2009). He conducted exploratory factor analysis across various aspects of transparency efforts and generated three factors to constitute transparency efforts: informational transparency, participatory transparency, and accountability transparency. In this study, the letters written by the manager of the pizza restaurant were designed to satisfy the standards of informational, participatory, and accountability transparency tested by Rawlins. The effect of transparency efforts on trust shown in the results of this study is partially supported. The results are able to justify and validate Rawlins's model to some extent (2009).

When the effect of transparency efforts on trust is not supported statistically in the vendor crisis scenario, the effect of specific aspects of transparency efforts on trust is weaker in the vendor crisis scenario compared to the employee crisis scenario as a whole. No effect on trust exists among many aspects of transparency efforts in the crisis caused by the vendor.

It would be highly likely to find a significant difference in the means of trust between vendor experiment groups and the control group, if the influence of transparency efforts on trust was much stronger across various aspects. The current weak effect of various aspects of transparency efforts on trust in the vendor crisis scenario may prevent transparency efforts from exerting a larger impact on trust as a whole.

The less visible effect of transparency on trust across specific aspects in the vendor crisis scenario might be attributed to the nature of a crisis. It is possible that the effect of transparency efforts is more direct and stronger when a crisis involves only one organization. When two and more organizations get involved with a crisis, the process of impacting trust through

transparency efforts becomes more complex and the effect is influenced by many factors.

Nevertheless, the weak effect in the vendor crisis scenario is possible to be improved by two ways. One is to redesign the letter to make it more fully meet standards of transparency efforts. The current letter may suffer from not reflecting certain aspects of transparency efforts or not inciting strong agreement among participants towards the restaurant meeting these standards in the vendor crisis scenario. The other way is to combine organizational discourse with actual involvement with participants. The nature of participatory transparency is to develop a dialogue between an organization and its stakeholders. It requires actual engagement of stakeholders, which is very difficult to reflect in organizational discourse. In future studies, researchers can set up a fictional crisis scenario, and actually invite participants to join conversation with a person on behalf of an organization that experienced a crisis, to make participatory and accountability transparency efforts more prominent.

Moreover, the insignificant effect of transparency efforts on trust in the vendor crisis scenario implies the effect of a single type of transparency effort on trust is much vaguer than that of all transparency efforts. The combined transparency efforts create a synergy that is more likely to have a significant influence on restoring trust after a crisis.

For practitioners, the standards of transparency efforts are very helpful when they are preparing a public message or making a public statement during or after a crisis. Practitioners can refer to these standards of transparency efforts, and help an organization stay transparent in organizational rhetoric. Although the results are partially supported, the importance of having a reputation of being transparent for an organization after a crisis is undeniable. Even though an

organization cannot avoid its reputation from being affected, damaged or ruined in a crisis, it can still recover its publics' trust after implementing visible transparency efforts. Practitioners should combine informational, participatory, and accountability transparency efforts together and the synergy of the three will maximize the effect on restoring trust in post-crisis communication.

However, it is not possible to know whether the trust level can be recovered to the original trust level through post-crisis transparency efforts in this study because the pizza restaurant is a fictional organization and participants do not have previous brand perceptions towards it. It suggests much room for future research to revise and refine the experimental design to identify the effect of transparency efforts.

Another limitation of the study lies in the measurement of participants' trust in the pizza restaurant as a single dimensional concept. Trust in the pizza restaurant was measured by asking participants to rate "I trust it" on a 5-point Likert scale where 1 = strongly disagree and 5 = strongly agree. The results would be more reliable and valid if participants' trust level towards the pizza restaurant was examined across various aspects. Trust in an organization is seen as a multi-dimensional notion held by its publics. Based on Grimmelikhuijsen's (2009) literature review, trustworthiness consists of three dimensions which are in common with most definitions of trust. Most of the authors cited in Grimmelikhuijsen's study regard competence, benevolence and honesty as the most important dimensions of trust. Even though some authors identify additional dimensions such as predictability, or name dimensions in a slightly different way, these three dimensions are universal throughout the literature on trust. The dimension of benevolence concerns the level to which participants consider an organization as showing

genuine care for its publics. Competence describes the extent to which participants perceive that an organization is satisfactorily competent to carry out its tasks. Honesty refers to whether participants believe that an organization performs its responsibilities soundly, i.e., tells the truth (Grimmelikhuijsen, 2009). Future studies can address the limitation to assess trust from these three dimensions including benevolence, competence, and honesty.

Transparency efforts, trust and purchase intent

Trust in the pizza restaurant is strongly and significantly related to participants' purchase intent in two types of crisis scenarios in the study, which stays consistent with Ledingham and Bruning's research findings (1998). They found trust has a strong relationship with an individual's decision to stay with the current telephone service provider or sign up with a new provider. This study adds support to recognizing trust as an indicator of consumer purchase intent.

There is no effect of transparency efforts on consumer purchase intent. The result is expected to some extent because no previous research studies have revealed any direct effect which transparency efforts may exert on purchase intent.

Although the effect of transparency efforts on the trust level among participants towards the pizza restaurant is supported in the employee crisis scenario, purchase intent seems not to vary much with or without transparency efforts. The fact implies that, except for trust, other indicators are missing between transparency efforts and consumer purchase intent in post-crisis communication. Jahansooz (2006) suggested that trust increases commitment, which leads to improved performance. Ledingham and Bruning (1998) indicated that commitment and openness

are also strongly related to a customer's willingness to purchase telephone service from a new provider or stay with the current one. Trust, commitment, and openness are dimensions of organization-public relationships (Huang, 2001). Researchers should explore further delve into these dimensions of organization-public relationships to identify other indicators of purchase intent. Future studies should include other indicators of purchase intent to examine the effect of transparency efforts on these factors, which will provide a better understanding and a more complete picture of the relationship between transparency and purchase intent.

Also, in the study, purchase intent is only measured by participants' attitudes towards "I am willing to purchase its pizzas" from strongly disagree to strongly agree on a five-point Likert scale. Instead of asking a single question, future studies can examine purchase intent from various aspects such as asking participants to respond to "I am willing to recommend my friends to buy its products", to make measurement of purchase intent more dependable.

Another limitation with the study is that the pizza restaurant is fictional so no previous relationship has been established between participants and the restaurant. It is suggested that transparency efforts influence trust positively, and then trust impacts customer purchase intent according to literature related to organization-public relationship. The prerequisite to apply past research findings to the study is the existence of relationship between participants and the organization. However, since no relationship actually exist between participants and the fictional pizza restaurant, research studies exploring organization-public relationship are less relevant to the study. In future studies, the problem can be avoided by using a real brand in the made-up crisis events. By comparing attitudes of participants before being exposed to transparency letters

to attitudes of them after being exposed to transparency letters, previous perceptions towards the real brand can be ruled out and the effect of transparency efforts can be tested validly.

Informational transparency and trust

In both crisis scenarios, participants' trust in the pizza restaurant was impacted by how they perceive it in terms of providing complete and reliable information. The result provides evidence to the common standard in crisis communication of telling it all. In addition, it adds justification to the findings of Hagar (2010) saying that stakeholders need to identify trusted information sources to acquire crisis information.

However, in both crisis scenarios, there was no effect on trust found with how participants evaluate the restaurant with regards to providing accurate information, offering information that is easy to understand, and providing information that can be compared to previous standards. The results question bolstering as a well-recognized crisis communication strategy. By providing information that can be compared to previous standards, the negative effects of the crisis can be mitigated according to Benoit's image restoration theory (1997). This study implies that bolstering may not work in some crisis scenarios, which needs further exploration in future research.

Furthermore, the effect of informational transparency efforts on trust in the pizza restaurant is stronger in the vendor crisis scenario than in the employee crisis scenario. None of the past research addressed the issue but it implies that different types of crisis scenarios have diverse degrees of demand for informational transparency efforts. In the vendor crisis scenario, participants were only informed the accident was caused by vendor's supply of bad ground beef

without further explanation of why this happened and why out-of-date beef was not inspected by both parties, and how it can be prevented from occurrence in the future. Meanwhile, in the employee crisis scenario, the cause of the crisis is straightforward. The accident occurred because an employee forgot to turn up the oven temperature and meat was undercooked. In these two cases, participants may have a stronger desire to know more information about the accident in the former and have fewer information demands in the latter.

The findings provide some insights for professionals, reminding that the need for information about a crisis among stakeholders is affected by the nature of a crisis. Practitioners may look into traits of a crisis such as the complexity of its cause to decide how fast to tell and how much to tell when carrying out efforts to be transparent.

Participatory transparency and trust

In both crisis scenarios, trust in the pizza restaurant is influenced by the perception of participants towards the restaurant “making it easy to find information and taking the time to understand them”. The findings stay consistent with previous research results (Jahansoozi, 2006); however, the other aspects of participatory transparency efforts only influence trust in the pizza restaurant in the employee crisis scenario. It implies that the nature of a crisis has an influence on the necessity of each aspect of participatory transparency in post-crisis communication.

The effect of participatory transparency on trust in the pizza restaurant is much stronger in the employee crisis scenario compared to the vendor crisis scenario. It is possible that participants have a stronger desire for getting involved with the pizza restaurant because one of its employees caused the accident directly. When a third party such as a vendor caused the crisis,

participants may feel less desire to engage with the pizza restaurant. The study also suffers from a limitation related to participatory transparency efforts. Due to the experimental design of the study, it is very difficult to accomplish the real engagement of participants to help the pizza restaurant identify information that participants need. The presentation of participatory transparency efforts is limited to organizational rhetoric. Future research can expand the scope of this study to real crisis cases to explore the relationship between participatory transparency efforts and trust.

Accountability transparency and trust

The effect of freely admitting mistakes on trust found in the employee crisis scenario adds support to an apologia strategy according to Benoit's image restoration theory (1997). In the vendor crisis scenario, no effect on trust is found. The influence of accountability transparency is much stronger in the employee crisis scenario, which is in accordance with findings related to participatory transparency. Researchers should also investigate traits of a crisis and explore the relationship between the nature of a crisis and aspects of accountability transparency in future studies.

REFERENCES

- Allen, W. M., & Caillouet, R. H. (1994). Legitimation endeavors: Impression management strategies used by an organization in crisis. *Communication Monographs*, 61, pp. 44–62.
- Arpan, L., & Roskos-Ewoldsen, D. (2005). Stealing thunder: Analysis of the effects of proactive disclosure of crisis information. *Public Relations Review*, 31(3), pp. 425-433.
- Balkin, J. M. (1999). How mass media simulate political transparency. *Cultural Values*, 3, pp. 393–413.
- Baum, J. R. (2009). The Impact of Bureaucratic Openness on Public Trust in South Korea. *Democratization*, 16(5), pp. 969-997
- Benoit, W. L. (1997). Image repair discourse and crisis communication. *Public Relations Review*, 23, pp. 177–186.
- Bruning, S. D., & Ledingham, J. A. (Eds.). (2000). Organization and key public relationships: Testing the influence of the relationship dimensions in a business-to-business context. In J. A. Ledingham & S. D. Bruning (Eds.), *Public relations as relationship management* (pp. 159–173). Mahwah, NJ: Lawrence Erlbaum Associates.
- Carpenter, D. (2009). Building Trust in a Time of Crisis. *H&HN: Hospitals & Health Networks*, 83(5), pp. 4-8.
- Carr, N. (2006). From Transparency to Trust. *American School Board Journal*, 193(9), pp. 68-69.
- Cheney, G., & Lair, D. J. (2005). Theorizing About Rhetoric and Organizations: Classical,

- Interpretive, and Critical Aspects. In S. May, & D. K. Mumby (Eds.), *Engaging organizational theory & research: Multiple perspectives* (pp. 55–84). Thousand Oaks, CA: Sage.
- Chou Y. J., Teng C. I., & Lo S. K. (2009). Mutual Self-disclosure Online in the B2C Context. *Internet Research*, 19(5), pp.466-478.
- Clarke, K. (2009). Uses of a research diary: learning reflectively, developing understanding and establishing transparency. *Nurse Researcher*, 17(1), pp. 68-76.
- Coombs, W. T. (1998). An analytic framework for crisis situations: Better responses from a better understanding of the situation. *Journal of Public Relations Research*, 10, pp. 177–191.
- Cotterrell, R. (2000). Transparency, mass media, ideology and community. *Cultural Values*, 3, pp. 414–426.
- Carvalho, S. W., & De Oliveira Mota, M. (2010) The Role of Trust in Creating Value and Student Loyalty in Relational Exchanges Between Higher Education Institutions and Their Students. *Journal of Marketing for Higher Education*, 20 (1), p145-165
- De Cremer, D. and Dewitte, S. (2002), “Effects of trust and accountability in mixed-motive situations”, *Journal of Social Psychology*, Vol. 142 No. 4, pp. 541-3.
- Dillenschneider, R., & Hyde, R. (1985, January–February). Crisis communications: Planning for the unplanned. *Business Horizons*, pp. 35–38.
- Edelman Public Relations (2007). 2007 Annual Edelman Trust Barometer. Chicago: Author.
- Eijffinger, S., & Hoeberichts, M. (2002). Central bank accountability and transparency: Theory and some evidence. *International Finance*, 8, pp. 73–96.
- Elwood, W. N. (1995). Public relations is a rhetorical experience: The integral principle in case study analysis. In W. N. Elwood (Ed.), *Public relations inquiry as rhetorical criticism:*

Case studies of corporate discourse and social influence (pp. 3–12). Westport, CT: Praeger.

Fearn-Banks, K. (2007). *Crisis communications: A casebook approach*. Mahwah, NJ: Erlbaum.

Fitzpatrick, K., & Bronstein, C. (Eds.). (2006). *Ethics in public relations: Responsible advocacy*. Thousand Oaks, CA: Sage.

Fitzpatrick, K. R., & Rubin, M. S. (1995). Public relations vs. legal strategies in organizational crisis decisions. *Public Relations Review*, 21, pp. 21–33.

Gower, K. K. (2006). Truth and transparency. In K. Fitzpatrick & C. Bronstein (Eds.), *Ethics in public relations* (pp. 89–105). Thousand Oaks, CA: Sage.

Grimmelikhuijsen, S. (2009). Do Transparent Government Agencies Strengthen Trust? *Information Polity*, 14(3), pp. 173-186.

Grunig, J. E., & Huang, Y. (2000). From organization effectiveness to relationship indicators: Antecedents of relationships, public relations strategies, and relationship outcomes. In J. A. Ledingham & S. D. Bruning (Eds.), *Public relations as relationship management* (pp. 23–53). Mahwah, NJ: Lawrence Erlbaum Associates.

Hagar, C. (2010). Whom Do You Trust? Information Seeking During the U.K. Foot and Mouth Crisis. *Library & Archival Security*, 23(1), pp. 3-18.

Heath, R. (2001), “Shifting foundations: public relations as relationship building”, in Heath, R.(Ed.), *Handbook of Public Relations*, Sage, Thousand Oaks, CA, pp. 1-9.

Heise, J. A. (1985). Toward closing the confidence gap: An alternative approach to communication between public and government. *Public Affairs Quarterly*, 9, pp. 196–217.

- Huang, Y. (2001), "OPRA: a cross-cultural, multiple-item scale for measuring organization-public relationships", *Journal of Public Relations Research*, Vol. 13 No. 1, pp. 61-90.
- Jahansoozi, J. (2006). Organization-stakeholder relationships: Exploring trust and transparency. *Journal of Management Development*, 25, pp. 942–955.
- Jahansoozi, J. (2006), "Relationships, transparency, and evaluation: the implications for public relations", in L'Etang, J.Y. and Pieczka, M. (Eds), *Public Relations: Critical Debates and Contemporary Practice*, Lawrence Erlbaum Associates, Mahwah, pp. 61-91.
- Kent, M.L. and Taylor, M. (2002), "Toward a dialogic theory of public relations", *Public Relations Review*, Vol. 28, pp. 21-37.
- Ledingham, J. A. and S. D. Bruning (1998). "Relationship management in public relations: dimensions of an organization-public relationship." *Public Relations Review*, 24(1), pp. 55-65.
- Ledingham, J. A., & Bruning, S. D. (Eds.). (2000b). *Public relations as relationship management*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Meyers, G. C., & Holusha, J. (1986). *When it hits the fan: Managing the nine crises of business*. Boston: Houghton Mifflin.
- Nafziger, R., & Maak, L. (2008). Increasing public participation, understanding, and transparency of the legislative process through the use of web dialogue. *National Civic Review*, 97(2), pp. 31-37.
- Rawlins, B. (2009). Give the Emperor a Mirror: Toward Developing a Stakeholder Measurement of Organizational Transparency. *Journal of Public Relations Research*, 21(1), pp. 71-99.

- Seeger, M.W. and Ulmer, R.R. (2001), “Virtuous responses to organizational crisis: Aaron Feuerstein and Milt Cole”, *Journal of Business Ethics*, Vol. 31, pp. 369-76.
- Seeger, M. W., Ulmer, R. R., Novak, J. M., & Sellnow, T. L. (2005). Post-crisis discourse and organizational change, failure and renewal. *Journal of Organizational Change Management*, 18, pp. 78–95.
- Sellnow, T. L., & Ulmer, R. R. (1995). Ambiguous Argument As Advocacy in Organizational Crisis Communication. *Argumentation and Advocacy*, 31, pp. 138–150.
- Ulmer, R. R. (2001). Effective crisis management through established stakeholder relationships: Malden Mills as a case study. *Management Communication Quarterly*, 14, pp. 590–615.
- Ulmer, R., Seeger, M., & Sellnow, T. (2007). Post-crisis communication and renewal: Expanding the parameters of post-crisis discourse. *Public Relations Review*, 33(2), pp. 130-134.
- Wall, S. (1996). Public justification and the transparency argument. *The Philosophical Quarterly*, 46, pp. 501–507.

APPENDIX

News article for employee crisis scenario

Red and Black January 7, 2010

Inadequate oven cooking temperatures have been blamed for a food poisoning outbreak at a popular pizza restaurant in Athens that affected at least eight people. Six were students at the University of Georgia.

According to the manager of the Dawg pizza restaurant, one of his employees forgot to turn up the oven cooking temperature, which caused chicken and ground beef to be undercooked. The pizza restaurant on Bloomfield Road closed on Thursday, January 4 to allow cleaning and removal of all the food. It reopened yesterday after health authorities said that food safety standards were adequate.

Athens-Clarke County Health Department Officer, Dr. Anderson Hall, said eight people who ate at the pizza shop in the first week of January suffered from food poisoning.

Eight had been confirmed as having food poisoning, which can cause vomiting, diarrhea and dehydration. Three were admitted to St. Mary's hospital for treatment. All were later discharged. The victims ate a range of ingredients including chicken and ground beef.

Dr Hall said the Health Department was notified of the patients in the hospital and where they were eating. They took food samples and ordered a clean-up on January 3. They later found out that inadequate oven cooking temperature in the pizza shop resulted in the food poisoning.

News article for vendor crisis scenario

Red and Black January 7, 2010

Bad ground beef has been blamed for a food poisoning outbreak at a popular pizza restaurant in Athens that affected at least eight people. Six are students at the University of Georgia.

According to the manager of the Dawg Pizza restaurant, one of its vendors provided them with bad ground beef, which might cause the food poisoning of eight people. The cause was later confirmed by Athens-Clarke County Health Department Officer Dr. Anderson Hall. The pizza shop on Bloomfield Road closed on Thursday, January 4 to allow cleaning and removal of all the food in case of a bacterial infection. It reopened yesterday after health authorities said that food safety standards were adequate.

Dr. Hall said eight people who ate at the pizza restaurant in the first week of January suffered from food poisoning.

Eight had been confirmed as having food poisoning, which can cause vomiting, diarrhea and dehydration. Three were admitted to St. Mary's hospital for treatment. All were later discharged. The victims ate a range of ingredients including chicken and ground beef.

Dr. Hall said the Health Department was notified of the patients in the hospital and where they were eating. They took food samples and ordered a clean-up on January 3. They later found out that the ground beef used as a pizza topping was the main cause of the food poisoning outbreak.

Informational transparency and employee crisis scenario

A Letter from the Manager of the Dawg Pizza Shop

Dear Customers:

We are very sorry to inform you that a food poisoning outbreak happened in our pizza shop during the first week of January. Athens-Clarke County Health Department took food samples and ordered a clean-up. We closed on Thursday, January 4, cleaned and removed all the food. According to information provided by Athens-Clarke County Health Department, eight people suffered food poisoning after they ate at our pizza shop during the first week of January. Three were admitted to St. Mary Hospital and were later discharged. The health authorities found out that inadequate oven cooking temperature caused the food poisoning. One of our employees forgot to turn up the oven cooking temperature, which results in the ground beef and chicken were undercooked. The Dawg pizza shop has not had any hygiene problems before. Our restaurant inspection score stayed high during the past three years, and we scored 97 last year. We reopened on January 6 after health authorities said all the food safety standards were adequate.

Best Regards,

Hill Cobb
Store Manager
The Dawg Pizza Shop
180 Bloomfield St.
Athens, GA 30605

Participatory transparency and employee crisis scenario

A Letter from the Manager of the Dawg Pizza Shop

Dear Customers:

We are very sorry to inform you that a food poisoning outbreak happened in our restaurant during the first week of January. According to information provided by the Athens-Clarke County Health Department, eight people suffered from food poisoning after they ate at our restaurant during the first week of January. Three were admitted to St. Mary's Hospital and were later discharged. The health authorities found out that inadequate oven cooking temperature caused the food poisoning. One of our employees failed to turn up the oven cooking temperature, which resulted in the ground beef and chicken being undercooked.

We feel deeply sorry for our customers who have been affected by this accident. We would love to know your concerns with the case. Your opinions are valuable for us and will help us improve the food safety standards in the future. If you have concerns about any safety issues in our restaurant, you are welcome to stop by and inquire of our employees, call us at 706 207 5555 or send us an email at info@dawgpizza.net. We would love to provide further information to resolve your concerns.

Best Regards,

Hill Cobb
Store Manager
The Dawg Pizza Shop
180 Bloomfield St.
Athens, GA 30605

Accountability transparency and employee crisis scenario

A Letter from the Manager of the Dawg Pizza Shop

Dear Customers:

We are very sorry to inform you that a food poisoning outbreak happened in our restaurant during the first week of January. According to information provided by the Athens-Clarke County Health Department, eight people suffered from food poisoning after they ate at our restaurant during the first week of January. Three were admitted to St. Mary's Hospital and were later discharged. The health authorities found out that inadequate oven cooking temperature caused the food poisoning. One of our employees failed to turn up the oven cooking temperature, which resulted in the ground beef and chicken being undercooked.

We promise we will inform our customers about the food safety accident whenever there is new progress. To prevent further food safety problems, we will require our employees to take specific training in the future. We apologize to our customers who have been affected by the food safety accident. We are open to advice and criticism to improve food safety in our pizza shop. Our restaurant inspection score stayed high during the past three years, and we scored 97 last year. We guarantee that we will always provide good and delicious pizzas to our customers.

Best Regards,

Hill Cobb
Store Manager
The Dawg Pizza Shop
180 Bloomfield St.
Athens, GA 30605

Informational transparency and vendor crisis scenario

A Letter from the Manager of the Dawg Pizza Shop

Dear Customers:

We are very sorry to inform you that a food poisoning outbreak happened in our restaurant during the first week of January. The Athens-Clarke County Health Department took food samples and ordered a clean-up. We closed on Thursday, January 4 to make sure all the steps were being followed. According to information provided by the Athens-Clarke County Health Department, eight people suffered from food poisoning after they ate at our restaurant during the first week of January. Three were admitted to St. Mary's Hospital and were later discharged. One of our vendors provided us bad ground beef, which was confirmed by the Athens-Clarke County Health Department as the main cause of the food poisoning outbreak. The Dawg Pizza Shop has not had any hygiene problems before. Our restaurant inspection score has stayed high during the past three years, and we scored 97 last year. We reopened on January 6 after authorities confirmed food safety standards were adequate.

Best Regards,

Hill Cobb
Store Manager
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Participatory transparency and vendor crisis scenario

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