THE EFFECTS OF THREAT TYPE AND DURATION
ON PUBLIC RELATIONS PROFESSIONALS’ COGNITIVE,
AFFECTIVE AND CONATIVE RESPONSES IN CRISIS SITUATIONS

ABSTRACT

The contingency theory of public relations relies heavily upon the concept of threat without fully developing the concept as well as its operationalization. The current study addresses this weakness through the exposition and initial testing of a theoretical model of threat appraisal based upon perceptions of situational demands and required organizational resources. Two key dimensions of threats in crises were proposed as threat type and duration, the effects of which were empirically tested on public relations professionals’ cognitive appraisal of threats, affective responses to threats and the stances taken in threat-embedded crisis situations.

A Web-based experiment on 116 public relations practitioners was conducted using a 2 (external vs. internal threat type) x 2 (long-term vs. short-term threat duration) within-subject design. The findings revealed the main effects of threat type and threat duration on threat appraisal, emotional arousal and degrees of accommodation. Interaction effects indicated that external and long-term threat combination led to higher situational demands appraisal and more intensive emotional arousal.
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INTRODUCTION

The contingency theory of public relations relies heavily upon the concept of threat without fully developing the concept as well as its operationalization. The purpose of this study is to address this weakness through the exposition and initial testing of a theoretical model of threat appraisal based upon perceptions of situational demands and required organizational resources.

Threat, in all its variation as a noun, verb, or adjective, has been used to describe the state of seizure a nation, organization, or individual, is in during a crisis. The crisis, as defined by Kathleen Fearn-Banks (2002), is “a major occurrence with a potentially negative outcome affecting an organization” (p. 2) which “threatens the existence of the organization” (p. 2). Public relations practitioners have widely used the SWOT analysis framework (Learned et al., 1969). As one key component the assessment of threats is critical in generating a strategic plan especially when facing a complex strategic situation when reaction time is very limited. It is well agreed in situation analysis that changes in the external environment can be perceived as threats to organizations.

The contingency theory on conflict management in public relations (Cancel, Mitrook, & Cameron, 1999) further argued that threats in public relations can be not only external (Litigation; Government regulation; Potentially damaging publicity; Scarring of company’s reputation in business community and in the general public; and Legitimizing activists’ claims) but also internal, such as Economic loss or gain from implementing various stances, Marring of employees’ or stockholder’s perception of the company; and Marring of the personal reputations of the company decision makers. However, a full explication of just what threat means in the contingency theory remains to be developed.

Existing crisis and public relations literature provides a general map to understand how threats
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work, research on the antecedents of a crisis and how a perceived threat might dynamically evolve and influence the crisis situation has been scarce. Ray (1999), for instance, argued that threat could be controlled with effective crisis management. Richards (2004) equated threats as terrorism-based, and called for greater understanding on how public relations can be utilized to counter the threat of terrorism. Wrigley, Salmon, and Park (2003) argued that large corporations should make room for crisis management planning to take into account the threat of bio-terrorism. Coombs (1998) argued that an appropriate organizational response to threats in a crisis should take into account two key variables: First, if the organization has strong or weak control over the crisis; second, if the organization is perceived to be strongly or mildly responsible for the crisis. However, the concept of threat itself has not been fully explicated in terms of what is considered to be a threat, how threats can be measured, and in crisis situations what are the options available for the organization to counter the threats.

Besides the conundrum and confusion over the nature and effects of threat, it is also found that in examining a crisis, “threat,” “risk,” “fear,” and even “conflict” have been used interchangeably without sufficient distinction or operationalization.

Threats, Fear and Risks

Threat appeals have been widely used by communication practitioners in designing effective threat messages and communication campaigns (Strong, Anderson & Dubas, 1993). In their definition, a threat is a warning to recognize danger and accept the recommendation to avoid the negative consequences. They advocated the importance of differentiating between threat as a stimulus and the recipient’s cognitive and emotional responses to that stimulus. Threat appeals sometimes are used interchangeably as fear appeal or fear arousal. In other words, fear is only an outcome of perceived threat and different levels of threat may lead to different emotional responses.

Risk is another concept sometimes used as a synonym for danger or threat. However the two terms represent different concepts from each other. Risk is usually defined statistically to provide a relative measure of safety, which should be more precisely regarded as a synonym for expected loss as defined in decision theory (Oppe, 1988). Unlike threats, risk is the “expected loss” of an alternative to be chosen, which concentrated on the process of decision making and not solely on the result: Risk is not
loss but expected loss, which strongly connects with the decision-maker’s behavior. By collecting and processing information about the situation, one can reduce the uncertainty about the expected outcome of each possible action (Oppe, 1988). From the public relations professionals’ point of view, risk is the expected loss if a particular strategy is chosen, given the information available. The real loss is uncertain and is only known afterwards. A hallmark of risk communication, argue Wilcox and Cameron (2005, forthcoming), thus, is to reduce the danger and threat posed. As Oppe (1988) mentioned, the relation between the information and the choice of an action is called a strategy, and a strategy will be chosen such that, given the information, the expected loss is minimal. In this sense, the uncertainty attached to risk can be a component of a threat.

**Threats in Power Relations**

Power is essentially a structural concept, referring to certain aspects of the functional arrangements of any social system, and at the same time deals with the motivations of individuals (Cohen, 1959). Cohen defined “power” as “the ability of one party of a relationship to determine whether or not the other party is carried toward his goals or away from them, over and above the second party’s own efforts” (p. 36). In the public relations context, power can be taken as the ability of one party of a relationship to influence the behavior of the other party. As Cohen (1959) further theorized, threat may have many sources. One possibility is to put the perception of the adequacy of oneself to deal with the situation and to satisfy one’s needs on a continuum. In this sense, threat can be defined as “the state of the individual in which he feels inadequate to deal with a given situation and to satisfy his needs” (p. 36). Combining the definition of power and threat, it seems that anyone under the power of another would experience threat, while the degree of threat one may potentially experience in a social setting is related to the degree of power which is exercised over him.

Closely related to the concept of power, “structure” refers to the degree to which a social situation provided the individual with clear and accessible cues so that he may behave in a goal-directed and need-satisfying manner. Indeed, such a structure is deemed to be essential, as evident in public relations literature, to address the imbalance caused by threat. Since communication is conceived as a “goal-directed activity” (Benoit, 1995, p. 63), the individual must, given the chance, work within the social
“structure” and context to regain one’s reputation when it is threatened, either by accusations, or an offensive act. This is because accusations affect one’s face, image and reputation, and when one’s face, image and reputation are rendered in question, it limits one’s ability to influence the other (Benoit, 1997). “When face is threatened, face works must be done” (p. 75), argued Benoit and Brinson (1994). This happens when one is held responsible for a reprehensible act, and when the act is considered offensive (Benoit, 1997). When image and reputation are threatened, as Benoit (2004) argued, one must be motivated to offer explanations, defenses, justifications, rationalizations, apologies, and excuses for one’s behavior.

**Threats and Conflicts**

How to deal with threats and the threatening situation has been an intriguing and important facet of conflict management and crisis communication research. Gordon and Arian (2001) argued that conflicts and their resolution occur at national, group, and individual levels and display recognizable, regular, and generalizable patterns, based on the fact that individuals have goals, compete over resources, feel threatened, make policy, and pursue conflicts. In the final analysis, it is individuals who make decisions about policy, whether acting on their own behalf, for a group, or for a nation.

Maslow (1943) broached the attempt of studying conflict, frustration and the theory of threat in his early work, in which the outcomes of threat were categorized into cognitive outcomes and affective outcomes manifested by fear and frustration. According to Maslow (1943), there are two kinds of conflict: threatening vs. non-threatening, depending on the nature of choice in the given situation and the importance of the given goal. In explaining of the occurrence of threats, Maslow (1943) took the view of psychopathology: The most nuclear aspects of threat are the direct deprivation, or thwarting, or danger to the basic needs. Tightened with his motivation theories, Maslow (1943) advocated that one must ultimately define a situation of threat in terms of the individual organism (in public relations context, the organization) facing its particular problem. It was also emphasized that the feeling of threat in itself should be considered a dynamic stimulation to other reactions. By the same token, to better understand threats in a conflict or crisis situation we have to examine not only their antecedents, but also their nature or dimensionality as well as the consequence on how an organization will react to deal with the situation.
Taking threats into consideration in various conflict situations, Gordon and Arian (2001) further proposed that when people feel very threatened during a conflict or a crisis, the decision making process about policy is dominated by emotion, not by logic or rational considerations; under conditions of low threat, both emotions and logic have a role in the process of decision making. Therefore, it is necessary to examine both the cognitive and affective components of threat as a construct.

Therefore, the purpose of this study is to conceptualize threats and examine the effects of threat dimensions in crisis situations. As an initial test of the conceptual model, hypotheses regarding public relations practitioners’ cognitive, affective and conative responses to a threat were tested in an experimental setting.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Studies argued that the perception of threat is not strictly a function of an environmental stimulus itself, but involves an interpretation of the stimulus (Carver, 1977). The threat appraisal has been originally proposed by psychologists (Blascovich & Mendes, 2000) as a cognitive appraisal process consisting of “primary” appraisals (of situational demands) and “secondary” appraisals (of the individual’s resources). Threat appraisal consists of the interplay between demand and resource appraisals. More specifically, demand appraisals involve the perception or assessment of danger, uncertainty (situational versus task uncertainty), and required effort inherent in the situation. On one hand, perceptions of high demand on any one of these dimensions may trigger high overall demand appraisals. On the other hand, resource appraisals involve the perception or assessment of knowledge and skills relevant to situational performance.

Psychological research demonstrated that affective cues influence the experience of threat. Blascovich and Mendes (2000) attempted to integrate purely affective and cognitive processes into their biopsychosocial model of threat. By definition, threat represents person/situation-evoked motivational states that include affective, cognitive, and physiological components. According to Blascovich, Mendes, Hunter, and Salomon (1999), as motivational states, threat is related to approach-avoidance or appetitive-aversive states. On the affective level, this involves positive and negative feelings and emotions, and on the cognitive level, it involves attention and appraisal.
Thus, threats occur when the decision maker in the organization experiences insufficient resources to meet situational demands. Threat process begins in a situation in which a decision maker expects to perform. In that sense, the person must perceive the situation as goal-relevant and evaluative, and believe that adequate performance is necessary to the organization’s continued well-being or growth as well as that he or she will undergo evaluation in this situation either by others or by oneself on some important self-relevant domain. Therefore, in crisis communication situation, the following model is proposed to understand the elements that compose a given threat (see Figure 1):

For a threat to occur to a practitioner or for an organization, there has to be some insufficiency of resources or high requirement of resources to meet situational demands. Here the resources need to be specified as resources that can be allocated at the moment; otherwise the crisis might be an unsolvable disaster. The threat appraisal process in a crisis is composed by firstly, a primary appraisal (situational demands) including Danger, Uncertainty (lack of prediction and control make it difficult for meeting adequately), Required Effort; and secondly, a secondary appraisal (resources) which includes Knowledge and Skill, Time, Finance, and the Support from the Dominant Coalition, which are key resources for a public relations decision-maker. The above appraisal model serves as the theoretical framework for understanding threat as a multi-dimensional construct. The dimensionality of a threat itself and its cognitive, affective and conative consequences were defined as following, which was the focus of this study.

**Dimensionality of Threats in Crises.**

Though in general public relations context, a threat can cause an organization to define a situation as a crisis and be used to describe the state of seizure an organization faces during a crisis, not all threats lead to an identification of crisis from an organization’s perspective. The definitions of crisis (Kathleen, 2002) emphasize that crisis is “a major occurrence with a potentially negative outcome affecting an organization” (p. 2) and “threatens the existence of the organization” (p. 2), which, in turn, disrupts and interferes with the organization’s ability to function, its ability to deliver its products and services, financial stability, its relationship with its publics, and its image and reputation. In this sense, only when threats reach a certain high level, crises occur and are identified by public relations professionals at the
strategic level and reported to the organizational management for decision-making in terms of its severity and significant influence on the survival and operation of an organization. Therefore, in this study, threats in crisis are defined as high-level and two-dimensional: given a certain high-threat level, the consequences of threats vary as a function of threat type and threat duration.

Though researchers in psychology and management proposed the dimensionality of threats in different ways with varied emphases, three overlapping dimensions of threats emerged as threat type, threat duration and threat level. Based on the commonality, the following dimensionality of threats in public relations was proposed:

**Threat Type.** Rosenthal and Kouzmin (1997) argued that the origins of threats can either be “endogenous or exogenous to the system affected” (p. 230). Some crises can be contained from within, others from without. Lanzetta, Haefner, Langham and Axelrod (1954) manipulated the threat condition as external and internal in an experimental setting, and Carver (1977) proposed two agents from which threats may come as external or self-imposed (internal). Cameron and his colleagues (1997) identified two types of threats in public relations context: external threats and internal threats. External threats include: Litigation, Government regulation, potentially damaging publicity, Scarring of organization’s reputation in community, and legitimizing activists’ claims. These threats occur in an organization’s external environment and might impact organizational leaders’ willingness toward dialogue, with a goal of resolving conflict with an external public (Reber & Cameron, 2003). Internal threats include: Economic loss or gain from implementing various stances, Marring of employees’ or stockholders’ perception of the company, and Marring of the personal reputations of the company decision makers (Image in employees’ perceptions and general public’s perception). These threats are found in an organization’s internal environment. Therefore, threat type was proposed to be external/ internal.

**Threat Duration.** According to Strong, Anderson and Dubas (1993), a threat can be categorized as immediate or delayed threat, which is closely related to public relations in terms of crisis management. Gonzalez-Herrero and Pratt’s (1996) paradigmatic development of a crisis model portrayed the crisis from Birth, Growth, Maturity, to Decline. As the stances and strategies the organization employed varies over
time, a given threat in the crisis might also move along the life cycle of the crisis, shorter or longer. Therefore, this dimension refers to the longitudinal facet of a threat, which means whether the threat is perceived as a short-term one or long-term one, in terms of the perceived duration of the threat on the organization’s well-being. Therefore, threat duration was proposed to be long-term/short-term.

Consequences of Threats in Crisis

When delineating his theory of threat, Maslow (1943) advocated that the outcome of threat could be categorized into cognitive outcomes and affective outcomes. Recently Gordon and Arian (2001) further found under conditions of low threat, both emotions and logic have a role in the process of decision making. Based on the appraisal mechanism of a threat as well as the three proposed dimensions of a threat, the possible outcomes or consequences of threats will be elaborated based on previous theoretical development and research findings. According to Strong, Anderson and Dubas (1993), threat stimuli lead to the following occurrence: perceived threat, cognitive and emotional processing, beliefs and feelings, attitude toward the threat, and intentions. And the ultimate outcome variable is behavior. In another term, a threat stimulus appears and one may perceive the threat represented by the stimulus; perceived threat leads to cognitive and subjective processing which affects specific salient beliefs (e.g. perceived severity) and relevant emotions (e.g. fear); these beliefs and emotions combine to form the consumer’s attitude toward the threat, which then leads to intention and behavior.

Lanzetta, Haefner, Langham and Axelrod (1954) mentioned that threat appears to result in a reduction of forceful, assertive, aggressive, interpersonal, as well as task-directed behavior, and in a greater concern with group acceptance, but at the same time it can result in poorer group effectiveness and greater variability in effectiveness. Strong, Anderson and Dubas (1993) argued that the perceived threat leads to two types of processing: cognitive and emotional, which demonstrated as salient beliefs about the threat and the emotional arousal. These two processes may interact with each other: cognition provides direction and continuity, while emotions provide intensity and urgency in the threatening situation. Carver (1977) further proposed that one’s attempts to deal with threats depend on the nature of the threat and the freedom on which it is imposed. Possible outcomes would be changing one’s attitude in a
direction opposite to that advocated by a threatening communication, expression of hostility toward the threatening agent, derogation of non-threatened options, and increased attraction toward threatened options.

This study hypothesized that, for a crisis situation, as a function of threat type and threat duration, three consequences of threats are likely to occur (see Figure 2): 1) Cognitive level pertains to a public relations professional’s perception of the crisis situation in terms of his or her weighing of the demands from the crisis situation and requirement of the sources the organization can allocate at the moment; 2) Affective level pertains to how a public relations professional feels about the situation: How negative he or she feels about the crisis, and what would be the arousal level or the intensity of his or her being threatened; and 3) Conative level pertains to what stance a practitioner will take for his or her organization represented by movement on the contingency continuum of accommodation in order to deal with the crisis for the organization. Therefore:

**Level 1: Cognition – Perceived Demands and Sources.** Based on earlier conceptualization, a threat occurs to public relations professionals when there is insufficiency of resources or too high requirement of resources to meet situational demands. In terms of operationalization, situational demands are composed of Danger, Uncertainty, Required Effort, while required organizational resources includes Knowledge and Skill, Time, Finance, and the Support from the Dominant Coalition, which are key resources for a public relations decision-maker.

As an initial effort of empirically testing this cognitive appraisal model, Pang, Jin and Cameron (2005) examined an ongoing issue, the issuance of terror alerts by the Department of Homeland Security (DHS), on how threat is appraised by DHS, and the conservative and liberal audiences. Findings showed a shared view by the DHS and the conservative audiences while the liberal audiences thought otherwise, and the proposed dimensions of situational resources and required organizational resources turned out to be valid and reliable.

Studies on cognitive processing of threats suggested the possible impacts of threat type and duration on how a threat might be perceived at the organizational level. According to Strong, Anderson,
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and Dubas (1993), severity and vulnerability (key indicators of situational demands), efficacy of dealing with threats and related alternative options (key indicators of organizational resources) are important beliefs determining the outcome of attitude toward the threats. Specifically, the perceived severity and vulnerability concepts are key components of perceived demands of threats: Severity beliefs are the perceived costs of the threatening situation, which corresponds to required efforts and danger aspects in the threat appraisal model proposed in this study; Vulnerability is the perceived probability of the threat occurring with higher perceived vulnerability increasing the likelihood of compliance, which partially corresponds to the uncertainty facet of threat appraisal.

Threat from different sources (external vs. internal) may impose varied perceptions of power (Cohen, 1959). From an organization’s point of view, an organization under the power of another party would perceive the threat as more severe and demanding. Further, as Cohen (1989) highlighted, the possession of power consists of the potential to withhold or to permit the gratification of a need. In that sense, external threats, can more easily put the organization under the power of the public and leave smaller leverage for the organization to maneuver its resource because of the tension between the internal operation and external constraints, as well as the uncontrollable and uncertain reactions from the publics. For the duration of threats, Gonzalez-Herrero and Pratt’s (1996) crisis model proposed that the longitudinal facet of a threat impacts an organization’s self-positioning on the life cycle of a crisis, which is closely related to the organization’s assessment of its well-being regarding its relationship with publics. For an organization in crisis situation, the longer the threat lingers, the more demanding the threat might turn out to be. Thus, for the effects of threat type and duration on situational demands,

**H1.1.1**: Higher situational demands will be perceived when exposed to external threat than internal threat.

**H2.1.1**: Higher situational demands will be perceived when exposed to long-term threat than short-term threat.

On the other hand, organization decision-makers’ self-efficacy based upon the assessment of organizational resources to deal with a given crisis is another indicator of threat perception. As Cohen’s (1959) combination of power and threat, the adequacy of oneself to deal with the situation and to satisfy
one’s needs covers another important domain of threat perception. When an organization is confronted by an external threat, its public relations professionals are likely to expect more organizational resources to back up the public relations strategies and tactics so as to more efficiently handle the organization-external public relationship given its uncontrollable and uncertain situational factors, as Cameron and his colleagues proposed. For internal threats, due to the predispositional nature of characteristics of dominant coalition (Reber & Cameron, 2003), it is easier for public relations professionals to attain managerial support and refer to internal communication precedents to address the crisis. For the duration of a threat, a long-term threat demands more time, finance, knowledge and managerial support resources compared with a short-term one. Thus, for the effects of threat type and duration on required organizational resources,

H1.1.2: More organizational resources will be required when exposed to external threat than internal threat.

H2.1.2: More organizational resources will be required when exposed to long-term threat than short-term threat.

It is also important to examine whether there are any effects of the interplay of the two dimensions of threat on situational demands and required organizational resources to deal with the crisis. Thus, for the interaction effects of threat type and duration on cognitive appraisal of threat,

H3.1.1: Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly higher perceived situational demands.

H3.1.2: Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more required organizational resources.

Level 2: Affect – Emotional Tone (Valence) and Temperature (Arousal). Jin and Cameron (2003) called for greater attention to the construct of emotion in public relations theory by providing an adapted appraisal model of emotion in public relations and a crucial dimension to the conceptualization of the contingency theory. They further propose that any given public relations stance can be assessed as a relational encounter with emotional forces that conform to a model expressed in three dimensions: firstly, emotional tone as the valence of the emotion ranging from negative to positive; secondly, emotional temperature as the intensity level of the emotion; and thirdly, emotional weight regarding the importance of the emotional stimulus in strategic consequences. So far, three dimensions have been proposed and
empirically tested by psychologists. The two most commonly cited dimensions are valence and arousal, which corresponds to emotional tone and temperature. The third dimension as dominance (which reflects the emotional weight), defined as a continuous scale whose endpoints are in control and out of control (Lang, Dhillon, & Dong, 1995), is less frequently cited.

This study thus embraced the dimension theories of emotion, which conceptualize emotional experience as having two commonly derived dimensions (Fridja, 1986; Greenwald, Cook, & Lang, 1989; Mehrabian & Russell, 1974; Osgood, Succi, & Tannenbaum, 1957) as valence and arousal. According to Detenber and Reeves (1996), valence is a dimension ranging from positive to negative, which is a continuous affective response ranging from pleasant or positive valence, to unpleasant or negative valence; arousal is defined as a dimension ranging from calm to excited, which captures emotional intensity as characterized by a continuous response ranging from energized, excited, and alert to calm, drowsy, or peaceful.

In terms of threat type, the nature of external threats is closely related to an organization’s image and reputation. As Benoit (1995) argued, communication is conceived as a “goal-directed activity” (p. 63), one must work within the social “structure” and context to regain one’s reputation when it is threatened. When an organization’s face, image and reputation are or are likely to be harmed, the organization’s ability to influence the other parties is limited. In that sense, external threats have more direct and severe impacts on the organization’s face, as seen and evaluated by different publics out side of the organization’s own system. On the other hand, the longer the threat seems to last, the more exposure to danger and accusation the organization might have to endure and struggle with. Therefore, external threats and those long-term ones are more likely to entail more negative feelings due to the danger of “losing faces” as well as more intense feeling since the higher anxiety and agitation the situation may bring compared with internal and short-term threats.

Thus, for emotional valence dimension of affect responses to threats as a function of threat type and duration,

**H1.2.1**: More negative feelings will be reported when exposed to external threat than internal threat.
H2.2.1: More negative feelings will be reported when exposed to long-term threat than short-term threat.

For emotional arousal dimension of affect responses to threats as a function of threat type and duration,

H1.2.2: More intense feeling will be reported when exposed to external threat than internal threat.

H2.2.2: More intense feeling will be reported when exposed to long-term threat than short-term threat.

It is also important to examine whether there are any effects of the interplay of the two dimensions of threat under testing. Therefore the following interaction-based hypotheses are proposed about the interaction effects of threat type and duration on affective consequence,

H3.2.1: Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more negative feelings.

H3.2.2: Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more intense feeling.

Level 3: Conation – Stance Movements on the Continuum of Accommodation. As Cameron and his colleagues proposed, stance moves along the continuum of accommodation, the position of which reflecting the degrees of accommodation. Organizations practice a variety of stances with its publics at any given point, and these stances change, depending on the circumstances. The continuum has two ends as advocacy and accommodation, which represents the willingness to make concessions or give or offer trade-offs: At one end the organization pleads its case and at the other makes overtures toward a trade-off or toward concessions.

As mentioned earlier, threat is one key situational factor that might influences the stance of a public relations practitioner on the continuum. Examining from the perspective of the contingency theory, at the stance level, Yarbrough, Cameron, Sallot and McWilliams (1998) argued that a central point of the contingency theory is that the degree of willingness of accommodation or advocacy “depends upon the weighing of many factors found in the theory” (p. 50), based on the matrix of around 90 factors suggested. Studies on the contingency theory have shown that certain key variables predispose an organization to accommodation while others prohibit any form of accommodation. Then, there are also those that are in between, depending on the prevailing circumstances, which steer the organization
towards more accommodation or advocacy. Therefore, the stances adopted when facing a threat can be measured according to the movement from pure advocacy to pure accommodation.

However, researchers did not reach consensus regarding the consequences of threats: On one hand, conflict resolution literature found that when the threat level is high in a conflict situation, there would be a tendency for the members of one group to counteract other striving group members (Mulder & Stemerding, 1963; Volkan, 1997). Similarly, Gordon and Arian (2001) found that the more threatened people feel, the more their policy choice tends to maintain or intensify the conflict; the lower the threat the more subdued the policy choice is. One the other hand, in the field of public relations, research based on contingency theory argued “greater threat a public presents to an organization, the faster the organization will respond to the public and the more accommodating the organization will be to the public” (p. 184, Cancel, Mitrook & Cameron, 1999). Taken the second position, this study proposed that the more threatening the situation is, the more accommodating the stance of the organization’s public relations decision-maker will take.

Regarding the effects of threat type on stances taken by an organization, one important perspective is to examine the locus of control in a crisis from the organization’s point of view. According to Coombs (1998), an organization’s locus of control in a crisis situation impacts the crisis communication strategies: On one hand, when the organization is deemed to have strong personal control over the crisis, more accommodative strategies like full apology are recommended for use; on the other hand, when the organization has weak control over the crisis, more defensive strategies like attack and denial are recommended. In this sense, external threats might lead to more accommodating stance compared to internal threats, which deprive the organizations’ personal control over the crisis due to the damage on human resource and managerial system, etc. Thus, for the effects of threat type on stance (degrees of accommodation as from pure advocacy to pure accommodation),

**H1.3**: More accommodating stance will be taken when exposed to external threat than internal threat.

Several studies shed light on the effects of threat duration on an organization’s stance movement in crisis situations. In their analyses of how governments balanced the multiple acts of managing the
emotions and perceptions of its multiple publics even as it attempted to deal with the evolving nature and
dynamism of a health threat, namely the Severe Acute Respiratory Syndrome (SARS), Jin, Pang, and
Cameron (2004) and Pang, Jin, and Cameron (2004) found that the health threat seemed to be the
predominant factor affecting the stances and strategies used. In their study of the Singapore and Chinese
governments’ dealing of SARS, the authors found that it had adopted different stance to different publics.
Even as there was an overall stance of movement from advocacy towards accommodation, the
government’s stances towards the different publics varied over time from more advocating to more
accommodating. These could be based on the nature of power relationships and the stakes involved. This
is consistent with Cameron and his colleagues’ argument that certain variables tend to predispose the
organization to accommodate, namely, organization’s exposure, and the top management’s decision power
(Cancel, Mitrook, & Cameron, 1999). An organization might start with a more advocating stance; but as
time goes by, facing the possibility of a long-lasting threat, the organization might reposition itself by
taking a more accommodating stance to smooth the conflicts between the parties involved. Thus, for the
effects of threat type on stance (degrees of accommodation as from pure advocacy to pure
accommodation),

**H2.3:** More accommodating stance will be taken when exposed to long-term threat than short-
term threat.

It is also important to examine whether there are any effects of the interplay of the two
dimensions of threat under testing. Thus, for the interaction effects of threat type and duration on stance,

**H3.3:** Threat type and threat duration interact such that the combination of external and long-term
threat will result in markedly more accommodating stance.

**Stance Measurement Development.** Because of the lack of any scale or inventory measuring
stance specifically, before testing the above hypotheses, a preliminary study was conducted to develop a
scale for measuring stance and evaluating the new scale’s psychometric properties in terms of its
reliability and validity in crisis communication.

In order to generate the initial pool of items for the stance scale, relevant literature on crisis
communication, conflict management and public relations was reviewed and an initial pool of 54 scale
items were compiled. Those items were mostly drawn from Shin’s (2003) study on conflict management stances and strategies and Huang’s (2004) study on measuring public relations strategies. Similar to a procedure used by Bloch, Brunel, and Arnold (2003), Bearden, Netemeyer, and Teel (1989), and Zaichowsky (1985), a group of five public relations faculty and Ph.D. students at a large Midwestern university judged the content validity of the items. Each judge was presented with a written definition of stance with the 54 candidate scale items. Judges were then asked to rate each statement as being “clearly representative,” “somewhat representative,” or “not representative” of the construct definition. Items evaluated as clearly representative by three judges and no worse than somewhat representative by a fourth judge were retained. This process resulted in a set of 12 items for further analysis. In addition, the face validity of each item was also judged by each panel member.

The first wave of data was collected via a Web survey of a random sample drawn from Public Relations Society of America (PRSA) member’s directory (2002). After testing the email links included in the sample, an initial mailing of deliverable 800 surveys was followed by a reminder email sent one week later. Usable responses were received from 103 public relations professionals resulting in an overall response rate of 13%.

Exploratory factor analyses first indicated two factors: Action-based accommodations and Qualified-rhetoric-mixed accommodations, as two clusters of enactments of stance that were operationalized as degrees of accommodation and willingness to take accommodations in this study. The resulting subscales demonstrated internal consistency coefficients (alphas) of .89 (5 items for factor 1) and .80 (5 items for factor 2), respectively, which matched with the recommendation of Clark and Watson (1995) about the coefficient alpha benchmark of .80 secured with an appropriate number of items (minimum of 4 or 5). In addition, the inter-item correlations were moderate in magnitude within factor, as Clark and Watson (1995) strongly recommended avoiding “attenuation” problems in scale development. The results indicate that the 10-item instrument measuring stance reflected satisfying internal consistency within each factor and the subscales for each cluster of stance enactments seemed reasonable and parsimonious.

A second wave Web survey was conducted to generate data for confirmatory factor analysis.
Once again, a Web survey was mailed to a random sample of PRSA members (2004) excluding names sampled in the previous survey. After testing the email links included in the sample, an initial mailing of deliverable 1340 surveys was followed by a reminder email sent one week later. Usable responses were received from 144 public relations professionals resulting in an overall response rate of 11%.

Confirmatory factor analysis of this two-factor 10-item model was examined using AMOS to evaluate the adequacy of the hypothesized factor structure, which demonstrated satisfactory fit of the data. Maximum likelihood estimation was employed. The extent to which an estimated model fits the observed data (item variance and covariance) was indicated by a variety of goodness-of-fit indices: Comparative Fit Index (CFI) = .91; Non-Normed Fit Index (NNFI) = .88; and Normed Fit Index (NFI) = .90. The two-factor oblique model appeared to fit the data best (CFI = .91, compared to .76 for the two-factor orthogonal model and .88 for the one-factor model). For model comparison, the two-factor oblique model, among its competing models, provided the smallest AIC value and Root Mean Square Error of Approximation (REMSEA) (AIC = 390.77, RMSEA = .12, compared to the orthogonal model: AIC = 868.18, RMSEA = .20, and the one-factor model: AIC = 474.40, RMSEA = .14). CFA seemed to demonstrate that stance, operationalized as degrees of accommodation and willingness of taking accommodations, was represented by two distinguishable but related clusters of enactments as Action-based accommodations (AA) and Qualified-rhetoric-mixed accommodations (QRA).

More specifically, action-based accommodations refer to stances enacted by agreeing the other party’s proposal been acceptance of the public’s suggestions, etc., while qualified-rhetoric-mixed accommodations weight more toward expressing regrets and qualifying the organization’s tendency of collaboration and so forth without explicitly taking concrete actions. The oblique nature of the inter-factor correlations reflects that both stance enactments, though each capturing different aspects of stance, are consistently measuring the degrees of accommodation toward the public as the contingency theory proposed. The corresponding coefficient alpha estimates of internal consistency reliability for the two factors were .89 for AA and .79 for QRA, which demonstrated acceptable internal consistency according to Clark and Watson (1995)’s .80 or higher Alpha standard.

The composite scores of enactment clusters of stance, AA and QRA accordingly, were used to
measure stances in terms of degrees of accommodation (See Appendix A). Therefore, the stance-related hypotheses were than expanded into more details as represented by the stance indexes reflecting the factorial structure of the new scale.

**SUMMARY OF HYPOTHESES**

Based on the proposed theoretical framework of threats in crisis communication, the purpose of this experiment was to examine the effects of the key dimensions of threats on cognition (threat appraisal), affect and conation (stance) based on the results of the stance measurement development. Sets of research hypotheses were summarized below to examine the fabric and faces of threats and how they lead to different consequences:

Firstly, for the dimension of threat type, at the cognition level,

**H1.1.1**: Higher situational demands will be perceived when exposed to external threat than internal threat.

**H1.1.2**: More organizational resources will be required when exposed to external threat than internal threat.

For the dimension of threat type, at the affect level,

**H1.2.1**: More negative feelings will be reported when exposed to external threat than internal threat.

**H1.2.2**: More intense feeling will be reported when exposed to external threat than internal threat.

For the dimension of threat type, at the conation (stance) level,

**H1.3.1**: More action-based accommodations will be taken when exposed to external threat than internal threat.

**H1.3.2**: More qualified-rhetoric-mixed accommodations will be taken when exposed to external threat than internal threat.

Secondly, for the dimension of threat duration, at the cognition level,

**H2.1.1**: Higher situational demands will be perceived when exposed to long-term threat than short-term threat.

**H2.1.2**: More organizational resources will be required when exposed to long-term threat
than short-term threat.

For the dimension of threat duration, at the affect level,

**H2.2.1:** More negative feelings will be reported when exposed to long-term threat than short-term threat.

**H2.2.2:** More intense feeling will be reported when exposed to long-term threat than short-term threat.

For the dimension of threat duration, at the conation level,

**H2.3.1:** More action-based accommodations will be taken when exposed to long-term threat than short-term threat.

**H2.3.2:** More qualified-rhetoric-mixed accommodations will be taken when exposed to long-term threat than short-term threat.

For the interaction effects on cognition,

**H3.1.1:** Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more perceived situational demands.

**H3.1.2:** Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more required organizational resources.

For the interaction effects on affect,

**H3.2.1:** Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more negative feelings.

**H3.2.2:** Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more intense feeling.

For the interaction effects on conation,

**H3.3.1:** Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more action-based accommodations.

**H3.3.2:** Threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more qualified-rhetoric-mixed accommodations.

**METHOD**

**Participants**

Based on a random sampling of the 2004 PRSA Membership directory, 124 public relations
professionals working in the United States were recruited for and participated in the experiment study. Screening questions about years of working experience in public relations and frequency of dealing with crisis communication were asked to select public relations professionals who have more than one year working experience in the field and at least “sometimes”, “often” and “very often” deal with crisis situations.

Descriptively, slightly over half of the respondents were female (57.3%). Most of them are in the age group from 40-49 years old (27.4%) and 50-59 years old (32.3%). In terms of highest educational level, half of them have some college or bachelor’s degree (52.4%), while 40.3% of them have Master’s degree and 4.8% of them have Doctorate degree. The majority of those professionals are working for public relations agency or firm (22.6%), corporation (25.8%), non-profit organization (25.0%) and government (16.9%), while the rest working for education institutes and other types of organization (9.7%). All of them have worked in the field of public relations for more than one year, with the majority having at least 10 years (75.0%) of experience. All of them have involved in dealing with conflicts and crisis, with more than half of them reported either “often” (33.1 %) or “very often” (29.8%) in terms of frequency of dealing with those situations for their organization.

Design

Given the two-dimensional definition of threats in crisis, the effects of threat type and threat duration in crisis situations were examined. A 2 × 2 within-subjects design was employed, meaning that each subject received each of the conditions for each of the two variables. The design controlled individual differences in this way, thereby greatly increasing the sensitivity of the measurements. The first factor is threat type (external vs. internal). The second factor is threat duration (long-term vs. short-term). The threat situation stimuli were presented in four different orders by using counterbalance to randomly distribute these variables. The participants were randomly assigned to one of the orders.

Because this experiment uses a within-subjects design exposing each participant to both threat types and threat durations, the individual served as his or her own control for individual differences, which means that an enormous subject pool is not needed and that extraneous variables such as IQ,
Effects of Threat Type and Duration

interest levels, familiarity levels, demographics and so on, were accounted for. Therefore the design focuses on the relative effect of threat type and threat duration on the individual.

Stimulus Materials

Among the eight factors addressing threat in the contingency matrix, threat of damaging publicity, as one of the external threats, has found to supplant all the other threats (Cancel, Mitrook, & Cameron, 1999). Therefore, damaging publicity was selected as the representative of external threats, together with activists’ claims. For the internal threats representative, marring of employees’ perception of the company and marring of the personal reputations of the company decision makers were selected and implemented. Based on the above threat items selected, four fictitious crisis situation scenarios were written by a journalism doctoral student with extensive public relations experience. Each scenario was about a different crisis situation and independently evaluated and revised by five faculty members and three doctoral students with years of professional experience in public relations and strategic communication, so as to endure clarity and consistency of writing style (see Appendix B). Consensus was achieved on the perceived type and duration of threat in each stimulus as well as the effectiveness of controlling all stimuli at the high threat level. All stimuli were revised based on the comments of the judge panel.

The stimuli were presented on an experimental Website created by using the research support service and Web platform provided by www.freeonlinesurveys.com. Recruitment emails with links to the experimental Web stimuli were sent to the participants individually. Their responses to this study were recorded and stored electronically in a database for analyses.

Procedure

After clicking on the link to the experimental site, participants were directed to the experimental page, where they were greeted upon participation and told that they would be exposed to four crisis situation descriptions and that their responses about each crises situation would be asked. If the participant agreed on the research purpose and procedure, he or she would click on the “next” button to proceed with the study.
Each participant completed the experiment protocol individually. Following each threat stimulus, participants were asked to indicate how they would perceive, feel and react to it if they found themselves in the situation by using according scales. Between each stimulus, participants were also asked to indicate how they perceive the type and duration of the threat situation they just read for the purpose of manipulation check. After finishing with four sets questions each addressing according stimulus, questions on demographics, years of working experience in public relations and frequency of dealing with crisis were asked. Afterwards, the participants were thanked for their completion of the study and left the experimental site by closing the window of the site.

**Independent Variables**

The two independent variables for this study were threat type and threat duration.

**Threat Type.** The variable “threat type” had two levels – external and internal. In the “external” condition, two crisis situations were written so that they reflected the situations when the organization faced external threats from damaging publicity and activists’ claims against the organization, respectively. In the “internal” condition, another two crisis situations were written so that they reflected the situations when the organization were confronted with damaged reputation in employees’ perception and internal rumors about the organization’s top management decision-maker, respectively.

**Threat Duration.** The variable “threat duration” has two levels – long-term and short-term. In the “long-term” condition, one external threat based and one internal-threat based crisis situations were written so that they clearly showed that the threat contained in these two scenarios were likely to last long. In the “short-term” condition, another external threat based and another internal-threat based crisis situations were written so that they clearly showed that the duration of the threats contained in these two scenarios were likely to be short.

**Manipulation Check.** To validly manipulate these two independent variables, pretests and manipulation check items were employed. In the course of material development, faculty-student-composed judge panels were invited to review and revise the four threat situations as distinct stimuli representing the combination of threat type (external vs. internal) and threat duration (long-term vs. short-term) by controlling the threat level at high. Two manipulation check items were included to determine
whether the participants perceived the threat type and threat duration in the same direction as the stimuli being manipulated.

**Dependent Measures**

After reading each threat-embedded crisis situation description on the experiment site, the dependent variables for cognition (threat appraisal: situational demands and required organizational resources), affect (emotional valence and emotional arousal), and conation (stance as degrees of accommodation: action-based accommodations and qualified-rhetoric-mixed accommodations) were measured by using six sets of indexes in the questionnaire instrument.

**Cognition: Appraisal of Threat.** The cognitive appraisal of threat comprised two indexes measuring the key dimensions related to “situational demands” and “organizational resources”, which have been conceptualized earlier in this study by adopting Blascovich and Mendes (2000)’s theoretical framework of threat appraisal model, with the items for the scales measuring the two dimensions of threats adapted from Pang, Jin and Cameron (2005)’s threat appraisal index in crisis communication.

The items measuring “situational demands” are: 1. “This crisis situation would be difficult to deal with”; 2. “This crisis situation would last a long time”; 3. “This crisis situation is very severe”; 4. “I would not be certain about how to deal with this crisis situation”; and 5. “I have not encountered a similar crisis situation such as that described.” Responses were measured on a 7-point Likert scale with “1 = Strongly Disagree, 7 = Strongly Agree.”

Principal components analysis revealed two aspects of situational demands as the proposed theoretical model hypothesized earlier (see Figure 1): Required effects and danger (item 1, 2 and 3) vs. uncertainty (item 4 and 5). Given its underlying theoretical connection, the composite scores of both aspects were used to index the scores for the situational demands. For the situational demands scale, the reliability alpha was .68. According to Hatcher and Stepanski (1994), reliabilities around and above .70 are acceptable.

The items measuring “organizational resources” are: 1. “Considerable knowledge would be needed to deal with this crisis situation”; 2. “It would be very time-consuming for me to respond to this crisis situation; 3. “A lot of financial support will be necessary to deal with this crisis situation”; and 4. “It
will be critical for top management of my organization to be supportive of my decision on how to deal with this crisis situation.” A principal components analysis revealed that the scale measured a single construct. For the organizational resources scale, the reliability alpha was .73, which is adequate according to Hatcher and Stepanski (1994).

**Affect: Valence and Arousal.** In line with the two key dimensions of affective responses, items measuring “valence” and “arousal” were adapted from the previous dimension theories of emotion, and revised to fit in with crisis communication context. Recent development in affective system research proposed the partial segregation of positive and negative affective processing or the separate positive and negative information processes (Cacioppo & Berntson, 1999). Given negative nature of threat stimuli, instead of ranging from feeling negative to positive, valence (level of negativity of threat stimuli) was measured as likelihood of feeling “Unhappy”, “Annoyed”, and “Unsatisfied”. Responses to “How likely are you to feel … if you found yourself in the situation described above?” were measured on a 7-point Likert scale where “1 = Very Unlikely, and 7 = Very Likely.” On the other hand, arousal was measured as likelihood of feeling “Alarmed”, “Agitated”, and “Aroused”. Responses to “How likely are you to feel … If you found yourself in the situation described above?” were measured on a 7-point Likert scale where “1 = Very Unlikely, and 7 = Very Likely.”

Principal components analysis for the two scales revealed that each scale measured a single dimension of emotion. The reliability coefficients for the valence scale and the arousal scale were .77 and .69, respectively, which satisfied the acceptance level of internal consistency.

**Conation: Stance as Degrees of Accommodation.** Armed with data from this multi-stage preliminary study, stance, operationalized as degrees of accommodation in this study, was represented by two distinguishable but related clusters of enactments as Action-based accommodations (AA) and Qualified-rhetoric-mixed accommodations (QRA).

Items measuring action-based accommodations were: 1. “To yield to the public's demands”; 2. “To agree to follow what the public proposed; 3. “To accept the public's propositions”; 4. “To agree with the public on future action or procedure”; and 5. “To agree to try the solutions suggested by the public.”
Responses to willingness to carry out the stated activities regarding the situation were measured on a 7-point Likert scale where “1 = Completely Unwilling and 7 = Completely Willing.”

Items measuring qualified-rhetoric-mixed accommodations were: 1. “To express regret or apologize to the public”; 2. “To collaborate with the public in order to solve the problem at hand”; 3. “To change my own position toward that of the public”; 4. “To make concessions with the public”; and 5. “To admit wrongdoing.” Responses to willingness to carry out the stated activities regarding the situation were measured on a 7-point Likert scale where “1 = Completely Unwilling and 7 = Completely Willing.”

Principal components analysis for the two scales revealed that each scale captured a distinguishable aspect of stance in terms of degrees of accommodation and willingness to take accommodations. The reliability coefficients for the AA scale and the QRA scale were .89 and .79, respectively.

RESULTS

This experiment used a within-subjects design, exposing each participant to both threat types and threat duration. This way, the individual served as his or her own control for individual differences. The design actually welcomed a diverse participant pool given the design’s focus on the relative effect of threat type and threat duration on a varied and diverse set of individuals.

Participant Comparisons

For the within-subjects analysis of this study, the differences due to different status of participants (public relations professionals) as professionals working in the industry (PR agency or firm, corporate, non-profit organization, government and others) (N = 116) or professionals working in educational institute (N = 8) were examined, since differences in practitioners and educators’ opinions on the professional standards of public relations were found in previous studies (Sallot, Cameron, & Lariscy, 1998a, 1998b, 1997).

To examine possible differences between public relations professionals working in industry and those working in educational institutes as educators that might affect any post hoc analysis between participants, one-way ANOVAs were run for measures to assess the manipulation of threat type and threat
duration, as well as measures of threat appraisal (situational demands and organizational resources), affect (valence and arousal) and stance (action-based accommodations and qualified-rhetoric-mixed accommodations) of the participants.

Significant differences were found in two key indexes of dependent variables, emotional arousal and action-based accommodations. Public relations educators were significantly less aroused when exposed to threats ($F[1, 494] = 10.87, p < .01, \text{par. } \eta^2 = .02$) as well as significantly less accommodating in terms of action-based enactments of stance ($F[1, 494] = 8.502, p < .01, \text{par. } \eta^2 = .02$). These results suggest the incomparability of the public relations professionals working in the industry and those public relations educators. In light of the prominent differences in key dependent variable performance between the two groups and considering the very small number of educators in the dataset ($N = 8$), all subsequent analysis used the new dataset ($N = 116$) with the eight educator data eliminated for this study’s purpose.

**Order Effect and Manipulation Checks**

Scheffé multiple comparisons were used in t-test statistics to determine if there was any problematic order effect on all the dependent measures and manipulation check measures. Significant differences were found in only 14 instances, in spite of the likelihood of more instances due to listwise error when 108 t tests were done. With the overall possibility of significant difference in each of the 108 t tests run for the order effects, the fact that only 14 were found suggests no problematic order effects for the measures.

To ascertain whether the experimental manipulations were effective, one-way ANOVAs were performed using the Scheffé procedure. Threat type was manipulated by embedding either external or internal threat in each crisis situation description. Participants were asked to rate “In the given situation, the threat faced by the organization is…” after their exposure to each crisis situation and completion of according set of questions following the situation description, using 7-point Likert scale ranging from 1 (Completely Internal) to 7 (Completely External). A one-way ANOVA found a significant difference between the external and internal threats in the tests ($F[1,462] = 265.99, p < .001, \text{par. } \eta^2 = .37$).

Threat duration was manipulated by emphasizing either long-term or short-term threat in each crisis situation description. Participants were asked to rate “In the given situation, the threat faced by the
organization is...” after their exposure to each crisis situation and completion of according set of questions following the situation description, using 7-point Likert scale ranging from 1 (Not Very Long) to 7 (A Long Time). A one-way ANOVA found a significant difference between the long-term and short-term threats in the tests ($F[1,462] = 171.38, p < .001, \text{par. } \eta^2 = .27$).

**Hypothesis Tests**

The repeated measures ANOVA was used for within-subjects design analysis because the participants received each condition of the dependent variables, each of which were repeatedly measured given different threat situations. Therefore, this design served to control for individual differences with ANOVA repeated measures analyses as the best and most appropriate statistical procedure to analyze data in this two-factor within-subjects design. Throughout the experiment, repeated measures ANOVA enabled isolation of the relative effect of the independent variables on the dependent variables for participants by controlling throughout the experimental design for individual differences of participants (see Table 1).

**Effects of Threat Type.**  

$H1.1.1$ and $H1.1.2$ examined the effects of threat type at the cognition level by stating that higher situational demands and more required organizational resources will be perceived when exposed to external threat than internal threat.

As a function of threat type, cognitive appraisal of threats was measured by an index of situational demands and an index of required organizational resources. A significant difference was found in the measurement of the participants’ appraisal of the situational demands of the threats ($F[1, 115] = 65.09, p < .001, \text{par. } \eta^2 = .36$). Participants perceived higher situational demands when exposed to external threats ($M = 4.27$) than internal threats ($M = 3.64$). Thus, $H1.1.1$ is supported.

In the measurement of the participants’ appraisal of the required organizational resources to deal with the threats, a significant difference was also found ($F[1, 115] = 87.95, p < .001, \text{par. } \eta^2 = .43$). Participants perceived that more organizational resources were required to deal with the threat situation when exposed to external threats ($M = 5.53$) than internal threats ($M = 4.81$). Thus, $H1.1.2$ is supported.

$H1.2.1$ and $H1.2.2$ examined the effects of threat type at the affect level by stating that more negative and more intensive feelings will be reported when exposed to external threat than internal threat.
As a function of threat type, affective responses to threats were measured by an index of valence and an index of arousal. No significant difference was found in the measurement of the participants’ emotional valence when exposed to the threats (F[1, 115] = .071, n.s). Thus, H1.2.1 is not supported.

In the measurement of the participants’ emotional arousal when exposed to the threats, a significant difference was also found (F[1, 115] = 35.98, p < .001, par. η² = .24). Participants reported higher arousal level when exposed to external threats (M = 4.05) than internal threats (M = 3.42). Thus, H1.2.2 is supported.

H1.3.1 and H1.3.2 examined the effects of threat type at the conation level by stating that, more action-based accommodations and more qualified-rhetoric-mixed accommodations will be taken when exposed to external threat than internal threat.

As a function of threat type, conative responses to threats were measured by an index of action-based accommodations and an index of qualified-rhetoric-mixed accommodations, as different clusters of enactments of stance as degrees of accommodation. No significant difference was found in the measurement of the participants’ action-based accommodations when exposed to the threats (F[1, 115] = 2.60, n.s). Thus, H1.3.1 is not supported.

In the measurement of the participants’ qualified-rhetoric-mixed accommodations when exposed to the threats, a significant difference was found (F[1, 115] = 13.81, p < .001, par. η² = .11). Participants tended to be more accommodating in terms of taking qualified-rhetoric-mixed accommodations when exposed to external threats (M = 4.23) than internal threats (M = 3.83). Thus, H1.3.2 is supported.

**Effects of Threat Duration.** H2.1.1 and H2.1.2 examined the effects of threat duration at the cognition level by stating that higher situational demands and more organization resources will be perceived when exposed to long-term threat than short-term threat.

As a function of threat duration, cognitive appraisal of threats was measured by an index of situational demands and an index of required organizational resources. A significant difference was found in the measurement of the participants’ appraisal of the situational demands of the threats (F[1, 115] = 175.65, p < .001, par. η² = .60). Participants perceived higher situational demands when exposed to long-term threats (M = 4.50) than short-term threats (M = 3.41). Thus, H2.1.1 is supported.
In the measurement of the participants’ appraisal of the required organizational resources to deal with the threats, a significant difference was also found ($F[1, 115] = 331.55, p < .001, \eta^2 = .74$). Participants perceived that more organizational resources were required to deal with the threat situation when exposed to long-term threats ($M = 5.75$) than short-term threats ($M = 4.58$). Thus, H2.1.2 is supported.

H2.2.1 and H2.2.2 examined the effects of threat duration at the affect level by stating that more negative and intensive feelings will be reported when exposed to long-term threat than short-term threat.

As a function of threat duration, affective responses to threats were measured by an index of valence and an index of arousal. A significant difference was found in the measurement of the participants’ emotional valence when exposed to the threats ($F[1, 115] = 4.78, p < .05, \eta^2 = .04$). Participants reported more negative feelings when exposed to long-term threats ($M = 4.15$) than short-term threats ($M = 3.94$). Thus, H2.2.1 is supported.

In the measurement of the participants’ emotional arousal when exposed to the threats, a significant difference was also found ($F[1, 115] = 18.83, p < .001, \eta^2 = .14$). Participants reported higher arousal level when exposed to long-term threats ($M = 3.92$) than short-term threats ($M = 3.54$). Thus, H2.2.2 is supported.

H2.3.1 and H2.3.2 examined the effects of threat type at the cognition level by stating that, more action-based accommodations and more qualified-rhetoric-mixed accommodations will be taken when exposed to long-term threat than short-term threat.

As a function of threat duration, conative responses to threats were measured by an index of action-based accommodations and an index of qualified-rhetoric-mixed accommodations, as different clusters of enactments of stance as degrees of accommodation. A significant difference was found in the measurement of the participants’ action-based accommodations when exposed to the threats ($F[1, 115] = 102.46, p < .001, \eta^2 = .47$). Participants tended to be more accommodating in terms of taking action-based accommodations when exposed to long-term threats ($M = 3.99$) than short-term threats ($M = 3.33$). Thus, H2.3.1 is supported.
In the measurement of the participants’ qualified-rhetoric-mixed accommodations when exposed to the threats, a significant difference was also found ($F[1, 115] = 114.15, p < .001, \text{par. } \eta^2 = .50$).

Participants tended to be more accommodating in terms of taking qualified-rhetoric-mixed accommodations when exposed to long-term threats ($M = 4.46$) than short-term threats ($M = 3.60$). Thus, H3.3.2 is supported.

**Interplay of Threat Type and Threat Duration.** H3.1.1 and H3.1.2 stated that threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more perceived situational demands and more required organizational resources. For the measurements of the cognitive appraisal of threats, there were significant interaction effects on situational demands ($F[1, 115] = 7.61, p < .01, \text{par. } \eta^2 = .06$). This interaction effect revealed that, situational demands measurement was scored higher when exposed to external threat at long-term duration (see Figure 1).

More specifically, when exposed to long-term threats there was greater difference (larger score drop in situational demands measurement) when the threats were external that when the threats were internal. Thus, H3.1.1 is supported. However, there were no significant interaction effects for required organizational resources and H3.1.2 is not supported.

H3.2.1 and H3.2.2 stated that threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more negative and more intense feelings. For the measurements of the affective responses to threats, there were no significant interaction effects on emotional valence. There were significant interaction effects on emotional arousal when exposed to threats ($F[1, 115] = 17.76, p < .001, \text{par. } \eta^2 = .13$). It revealed that for long-term threats, there was greater difference (emotional arousal measurement was scored much higher) when exposed to external threats than when exposed to internal threats; for short-term threats, the difference in arousal level between external and internal threats were much smaller (see Figure 2). Thus, H3.2.1 is not supported while H3.2.2 is supported.

H3.3.1 and H3.3.2 stated that threat type and threat duration interact such that the combination of external and long-term threat will result in markedly more action-based accommodations and more qualified-rhetoric-mixed accommodations. However, for measurements of stance as degrees of
accommodation, there were no significant interaction effects for threat type as a function of duration or vice versa. Thus, neither of H3.3.1 nor H3.3.2 is supported.

**DISCUSSION**

By explicating threat conceptually and then testing part of the theoretical model empirically in an experimental setting, the main purpose of the study was to elaborate the levels and dimensions, as well as some effects, of threat. Research findings revealed the main effects of threat type on threat appraisal, emotional arousal and qualified-rhetoric-mixed accommodations, the main effects of threat duration across all threat consequences, and the interactions of these two threat dimensions on situational demands appraisal and emotional arousal.

**Stronger Impacts of External and Long-term Threats**

*The Effects of External Threats.* The support for H1.1.1 and H1.1.2 indicated that public relations professionals in crisis situations perceived higher situational demands and projected more required organizational resources when exposed to external threat than internal threat.

When public relations professionals were confronted by external threats in a crisis, their cognitive processing tended to prioritize external threats with higher impacts on the survival of goal-achievement of the organization they were working for. External threats seemed to put the organization under higher danger, requiring more public relations efforts and imposing more uncertainty on the public relations professionals’ decision-making in the given crisis. One reason might lie in the perceived power relationship between an organization and the public: When an organization is exposed to external threats such as damaging publicity and activists’ hostile claims, it is at least partially under the power of the given external public. As a result, external threats tend to shorten the leverage for the organization to maneuver its resource given the tension between the internal operation and external constraints and the uncontrollable and uncertain reactions from the given external public.

In terms of the required organizational resources to deal with the crisis, the findings indicated that, when confronted by external threats, public relations professionals working for the organization tended to perceive more organizational resources, such as financial support, timely responses, human resources in crisis-handling knowledge and managerial support from top decision-makers of the
organization, to consolidate the public relations strategies and tactics in the crises. Unlike internal threats, the range and impacts of which could be more easily predicted and diluted internally by efficient operational systems and an effective response by an experienced domination coalition, external threats tend to require additional managerial supports and extra resources to handle situations of higher uncertainty.

The support for H1.2.2 indicated that public relations professionals felt more aroused when exposed to external threat than internal threat. It may be explained by the nature of external threats that is closely related to an organization’s image and reputation. Encountered by external threats such as damaging publicity and activists’ harming claims on the organization, the organization’s face, image and reputation are in peril. In those circumstances, public relations professionals have to repair the organization’s image in media and external public’s eyes by changing the way the organization is seen and evaluated by different publics. The high pressure and urgency of immediately dealing with external threats are likely to make public relations professionals feel more alarmed, agitated and aroused in terms of their affective responses to the threats.

The support for H1.3.2 indicated that public relations professionals tended to take a stance of more qualified-rhetoric-mixed accommodations when exposed to external threat than internal threat. One explanation lies in that threat type largely impacts an organization’s locus of control in a crisis, which further influences the crisis communication strategies (Coombs, 1998) and stances. When the threats are external and no critical defects exist inside the organization, the organization tends to have strong control over the crisis in terms of managerial support and internal systematic facilitation. Therefore, more accommodative stances and strategies are more likely to be employed. Specifically, for the purpose of image polishing or repairing, public relations professionals tended to take more rhetoric-based stances such as admitting wrongdoing and expressing regrets to the publics or to qualify its stances by collaborating and making concessions with the publics or changing its positions toward the publics.

It is obvious that, in this study, compared with internal threats, external threats led to more cognitive appraisal, more intense affective responses, and more qualified-rhetoric-mixed accommodations at the stance level. The lack of support for H1.2.1 and H1.3.1 indicated that threat type did not affect the
valence or level of negativity of public relations professionals’ feelings toward the threats at the affect level, nor move their action-based accommodations at the stance level. It seems that no matter whether the threat is internal or external, public relations professionals feel equivalently negative about the situation and there is no significant difference in their degrees of accommodation regarding those action-based stances.

The Effects of Long-Term Threats. The support for H2.1.1 and H2.1.2 indicated that public relations professionals perceived higher situational demands and more required organization resources when exposed to long-term threat than short-term threat. For an organization in crisis situation, the longer the threat lingers, the more demanding the threat might turn out to be. A long-term threat also required more time, finance, knowledge and managerial support resources compared with a short-term one, which impacts the organization’s self-positioning on the life cycle of the crisis.

The support for H2.2.1 and H2.2.2 indicated that public relations professionals felt more negative and more aroused about the crisis situation when exposed to long-term threat than short-term threat. The longer the threat seems to last, the more exposure to danger and accusation the organization has to endure, which makes public relations professionals feel more unhappy, more annoyed and more unsatisfied as well as more agitated, more alarmed and more aroused affective states, due to the danger of extended period of image or reputation damage. Although this may seem patently obvious, it's also conceivable that a low key, long-term situation would be preferable and result in more positive affect than a short-term threat would generate. However, this was not the case with long-term leading to greater discomfort.

The support for H2.3.1 and H2.3.2 indicated that public relations professionals tended to take both more action-based accommodations and more qualified-rhetoric-mixed accommodations when exposed to long-term threat than short-term threat. Duration of threats turns out to be an influencer of stances taken by public relations professionals for the organization. The longer the threats seem to last, the more accommodating the organization seems to behave toward the publics in the crisis along both the qualified-rhetoric-mixed stances and those more action-based. In other words, facing the possibility of a long-lasting threat, the practitioner tended to not only express regrets, admit wrong doings, make concessions and so forth, but also were more willing to agree with the public’s position or accept the
It is clear that across all the threat consequences, compared with short-term threats, long-term threats tend to lead to more cognitive appraisal, stronger affective responses and more accommodating stances.

**The Interplay of Threat Type and Threat Duration.** The support for H3.1.1 indicated that, besides the main effects of threat type and threat duration on situational demands perception, the two threat dimensions in crisis also interacted such that the combination of external and long-term threat resulted in markedly higher perceived situational demands. As Figure 6 illustrated, when exposed to long-term threats, public relations professionals perceive much lower situational demands if these threats are internal than when they are external. For short-term threats, the perceived demands difference in whether the threats are external or internal is less prominent. It seems that in the decision-making process, public relations professionals’ judgments on required efforts, danger and uncertainty may depend on the source of the threat as well on their assessment of the duration of the threat in a given situation.

The support for H3.2.2 indicated that, besides the main effects of threat type and threat duration on situational demands perception, the two threat dimensions in crisis also interacted such that the combination of external and long-term threat resulted in markedly more intense feeling. Notably, the pattern of this interaction is similar in terms of direction but stronger and more dramatic in its scope. Figure 7 illustrated that, when exposed to long-term threats, public relations professionals feel dramatically less aroused if these threats are internal than when they are external. For short-term threats, the arousal level difference in whether the threats are external or internal is less prominent. Especially when the threats are internal, the intensity of affective responses revealed little difference upon whether the threats are long-term or short-term. It seems that in public relations professionals’ affective responses, how alarmed, agitated and aroused they feel about the crisis may depend on the source of the threat and their assessment of the duration of the threat. When exposed to an external threat, public relations professionals tend to feel much more intense if the threat has long-term duration. However, when the
threat is internal, the intensity of their feelings for a long-term threat and short-term threat are much
closer (almost identical).

Implications

From a public relations researcher’s perspective, this study aims at explicating the construct of
“threat” in crisis communication by theoretically proposing a model of threat appraisal and threat
dimensionality in crisis situations, as well as hypothesizing the effects of threat type and duration on
threat consequences at the levels of cognition, affect and conation. Results indicated significant relative
effects of threat dimensions on each level of threat consequences. The effects of each threat consequence
on each other were also tested according to the propositions of most recent public relations literature and
shed light on the better understanding of the influences in threat-embedded crises.

For the threat appraisal model (Figure 1), situational demands (as manifested by difficulty,
duration, severity and uncertainty) and required organizational resources (as composed by finance, time,
knowledge and managerial support) seem to represent public relations professionals’ primary and
secondary cognitive appraisal for a given threat stimulus, the combination of which effectively captures
the domain of threat as perceived by public relations professionals.

For the dimensionality of threat, a two-dimensional model (threat type and threat duration) were
tested in crisis situation by controlling the threat level as high, according to the definitions of crisis
situations. Significant main and interaction effects of threat type and threat duration demonstrate the
driving force of threats on public relations professionals’ perception, affective reactions and stance
movement. According to this study, external and long-term threats provide the most influential
combination for each threat consequence.

Therefore, this study sheds light on the rigor and feasibility of the threat appraisal model and
propositions on crisis-related threat dimensionality. This study also highlights the imperative of
integrating cognition, emotion and conation in public relations research. The majority of existing public
relations and crisis communication theories are built upon the rationality assumptions of individual and
organizational behaviors. Explication of threats and the inter-correlated consequences calls for more
consideration of the affective systems in crisis management.
As an effort to build the bridge between public relations research in academia and how public relations is practiced in the field, this study hopes to provide insights for public relations professionals, especially those involved in crisis communication and conflict management. The threat appraisal and threat dimensionality model can be adapted in the public relations professionals’ daily crisis monitoring and threat assessment, whether done explicitly or done intuitively. Weighing situational demands and required organizational resources will assist more efficient and accurate decision-making in crisis communication and enhance the communication between public relations professionals and decision-makers at the top management level.

**Future Directions**

Given the complex nature of public relations practice and the contingent characteristics of crisis communication, there is much room for future research to revise and test threat models at different levels of consequences and different facets of threat domain.

First, the analyses and results of this study are based on the sample of public relations professionals, excluding the public relations educators. A comparative study on how educators and professionals in the field respond differently to different threats will provide insightful co-orientation-based information for both sides, which will enhance the mutual understanding and benefit public relations instruction in the classroom.

Second, the threat appraisal model can be further explicated into more depth. For example, uncertainty of the situation, currently proposed as one indicator of situational demands, might be another key pillar of threat appraisal together with situational demands and required organizational resources by adding and testing new manifest variables to tap uncertainty and its influence. Also, the threat model can be not only applied to crisis situations where threat levels tend to be high, but also applied to more general conflict management settings since threats with varying level, duration and type are everywhere in general public relations practice.

Third, methodological triangulations are strongly recommended for future research. For example, qualitative research methods such as depth interviews and focus groups may provide more insights and richer data on understanding the process of public relations professionals’ decision-making as
well as how they understand threats in complex, real-life settings. Surveys of large random samples with well-designed questions will provide great opportunities to understand how threat-embedded crises are handled by public relations professionals. Such surveys will provide a more generalizable picture of the professional standards of threat-embedded crisis management. Based on the survey data, researchers might employ structural equation modeling in data analyses to further tap the construct of “threat” and revise the threat appraisal model for better understanding of the underlying mechanism of the effects of threats at the levels of cognition, affect and conation.

REFERENCES


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Effects of Threat Type and Duration


### Table 1

*Pairwise Comparisons of Mean Scores on Indices of Dependent Variables by Threat Type and Threat Duration*

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Threat Type</th>
<th>Threat Duration</th>
<th>F [1,115]</th>
<th>Long-term</th>
<th>Short-term</th>
<th>F [1,115]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Situational</td>
<td>External</td>
<td>Internal</td>
<td>65.09***</td>
<td>4.50***</td>
<td>3.41***</td>
<td>175.65***</td>
</tr>
<tr>
<td></td>
<td>(.07)</td>
<td>(.07)</td>
<td>(.07)</td>
<td>(.07)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Organizational</td>
<td>External</td>
<td>Internal</td>
<td>87.95***</td>
<td>5.75***</td>
<td>4.58***</td>
<td>331.55***</td>
</tr>
<tr>
<td></td>
<td>(.07)</td>
<td>(.07)</td>
<td>(.06)</td>
<td>(.07)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Emotional Valence</td>
<td>External</td>
<td>Internal</td>
<td>.07</td>
<td>4.15*</td>
<td>3.94*</td>
<td>4.78*</td>
</tr>
<tr>
<td></td>
<td>(.14)</td>
<td>(.13)</td>
<td>(.14)</td>
<td>(.13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Emotional Arousal</td>
<td>External</td>
<td>Internal</td>
<td>35.984***</td>
<td>3.92***</td>
<td>3.54***</td>
<td>18.83***</td>
</tr>
<tr>
<td></td>
<td>(.13)</td>
<td>(.12)</td>
<td>(.13)</td>
<td>(.12)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Action-based</td>
<td>External</td>
<td>Internal</td>
<td>2.60</td>
<td>3.99***</td>
<td>3.33***</td>
<td>102.46***</td>
</tr>
<tr>
<td></td>
<td>(.10)</td>
<td>(.09)</td>
<td>(.09)</td>
<td>(.09)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Qualified-rhetoric-mixed</td>
<td>External</td>
<td>Internal</td>
<td>13.81***</td>
<td>4.46***</td>
<td>3.60***</td>
<td>114.15***</td>
</tr>
<tr>
<td></td>
<td>(.10)</td>
<td>(.10)</td>
<td>(.09)</td>
<td>(.10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Cell entries are estimated marginal means. Pairwise planned comparisons are adjusted for Bonferroni multiple comparisons. Standard errors are in parentheses. Significance for the multivariate F is based on estimates of the marginal means for the Wilk’s Lamda statistic.

*: p < .05  
**: p < .01  
**:**: p < .001
A Model of Threat Appraisal

Figure 2
A Model of Effects of Threat Type and Duration on Public Relations Professional’s Cognitive and Affective Responses and Stances in Crisis I

Figure 3

Interaction Effects of Threat Type and Threat Duration on Situational Demands
Note: For Threat Type, 1 = External, 2 = Internal
For Threat Duration, 1 = Long-term, 2 = Short-term

Figure 4

Interaction Effects of Threat Type and Threat Duration on Emotional Arousal
Note: For Threat Type, 1 = External, 2 = Internal
For Threat Duration, 1 = Long-term, 2 = Short-term

APPENDIX A

Stance (Degrees of Accommodation) Measurement Scale
Given the situation, I will be_________________ (1 = Completely Unwilling, 7 = Completely Willing)

AA: Action-based Accommodations:
1. To yield to the public's demands
2. To agree to follow what the public proposed
3. To accept the publics' propositions
4. To agree with the public on future action or procedure
5. To agree to try the solutions suggested by the public

QRA: Qualified-Rhetoric-mixed Accommodations:
1. To express regret or apologize to the public
2. To collaborate with the public in order to solve the problem at hand
3. To change my own position toward that of the public
4. To make concessions with the public
5. To admit wrongdoing

APPENDIX B

Stimuli Materials
Effects of Threat Type and Duration

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**Situation 1:** EL (External and Long-term threat): damaging publicity + long-term

You are a public relations professional working for a major pharmaceutical company, which is not publicly-traded. This morning a news story regarding one of your company’s brands broke out in the major media, with the headline: “Research shows *Brand A Pills* may be a major cause of breast cancer.” Inquiry phone calls from consumers have been flooding in ever since and your CEO is holding an emergency meeting to discuss how this might influence the survival of the brand and the long-term marketing plan of the whole corporation. Your task is to deal with the consumers who are concerned or angry and threatening lawsuits.

**Situation 2:** ES (External and Short-term threat): activists’ claims + short-term

You are a public relations professional working for a major clothing company. On the way to your office, you observe protests concerning your company’s use of child labor in its overseas factories. The press has reported that the protestors have indicated that they will keep up their activity through the remainder of the week which your company’s board of directors is in town.

**Situation 3:** IL (Internal and Long-term threat): employees’ marred perception of the company + long-term

You are a public relations professional working for a major personal computer company. Recently, your company was taken over by one of its major competitors. Your company’s name and brands are likely to change within three years. About 30% of the employees working for your company will be laid off in the next three years. Panic is spreading among employees and your company’s reputation in employees’ minds is seriously damaged.

**Situation 4:** IS (Internal and Short-term threat): marred CEO reputation (rumor) + short-term

You are a public relations professional working for a beauty product company. Recently, scandalous rumors about your CEO being involved in bribery in a foreign country have become widespread within the company. The media have yet to learn of this story or to give it credence. Evidence indicates that this story is actually a malicious rumor planted by a disgruntled employee. At this stage, the rumor appears to have run its course; however, you still face the challenge of how to repair the already-marred reputation of your CEO as quickly as possible.

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