Occam’s Razor in the contingency theory: A national survey on 86 contingent variables

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Abstract

The purpose of this study is to quantify 86 contingent variables and modify the construct of the contingency theory. A nationwide survey among public relations practitioners first enabled quantitative analysis of the 86 contingent variables affecting public relations practice, divided into 12 factors on two dimensions. This test gave parsimony to the matrix of 86 contingent variables initially offered in the matrix, provided validity to the contingency theory, and suggested its theoretical evolution measured against Occam’s Razor, which holds that the simplest explanation is generally the most precise and thus the best approach to follow in building theories.

Keywords: Public relations theory; Contingency theory; Contingent factors; Occam’s Razor

The contingency theory in public relations has been developed in the past decade. Researchers have conducted interviews, case studies, content analysis and surveys to build up the construct and advance the theory’s central propositions (Cameron, 1997; Cameron, Cropp, & Reber, 2001; Cancel, Cameron, Sallot, & Mitrook, 1997; Cancel, Mitrook, & Cameron, 1999; Reber & Cameron, 2003; Shin, Cameron, & Cropp, 2002; Shin, Cheng, Jin, & Cameron, 2005; Yarbrough, Cameron, Sallot, & McWilliams, 1998).

One of the propositions in the contingency theory, grounded on empirical studies, is that “organizational effectiveness and ethical consideration of its public result from fitting many variables to explain the stances or strategies of an organization and its public” (Shin, 2004, p. 192). Cancel et al. (1997) proposed a matrix of 86 variables that affect the stance which public relations professionals may adopt in deciding whether more advocacy or more accommodation will be effective in accomplishing organizational goals. The 86 variables were thematically organized into 11 categories on internal and external dimensions.

Researchers have not yet quantified all of the 86 contingent variables for the construction of 11 categories on two dimensions. A number of variables contribute to the complexity of the theory and call for a more streamlined approach. This study is an attempt to construct the 86 variables into the thematically categorized contingent factors to give simplicity or parsimony according to Occam’s Razor, which holds that the simplest explanation is generally most...
precise and thus the best approach to follow in building theories (Shoemaker & Tankard, 2004; Wimmer & Domnick, 2006).

1. Literature review

1.1. Development of the contingency theory in public relations

Cameron and his colleagues have developed a schema for associating the 86 contingent variables with public relations practice. Yarbrough et al. (1998) conducted case studies that demonstrate how accommodation is qualified when working with multiple publics. Cancel et al. (1997) suggested “the practice of public relations is too complex, too fluid, and impinged by far too many variables for the academy to force it into the four boxes known as the four models of public relations” (p. 32). Through an extensive literature review, they offered a matrix of 86 contingent variables divided into 11 categories on two dimensions of external and internal variables. The external variables consist of threats, industry environment, political/social/cultural environment, external publics and issue under question categories, while the internal variables include organization’s characteristics, PR department characteristics, management characteristics, internal threats, individual characteristics and relationship characteristics.

Cancel et al. (1999) further sorted the contingent variables into predisposing variables and situational variables through ground-up interviews with public relations professionals. Predisposing variables already exist, and situational variables add dynamics that affect whether an organization and its public are accommodating or advocating in the relationship between the organization and its public. Later, Cameron et al. (2001) grouped the contingent variables affecting accommodation to six proscriptive factors such as moral conviction, multiple publics, regulatory constraints, management pressure, jurisdictional issues, and legal constraints as a start towards parsimony.

Cameron et al. (2001) noted, “it is one thing, however, for practitioners to monitor the environment and to weight many factors in arriving at a stance. It is another for teachers and theorists to manage over 80 distinct factors in any useful way. Parsimony or simplification is needed” (p. 247). For further research direction, they also suggested, “at some point, extensive surveys need to be conducted to generalize about the contingency variables and to determine the effectiveness of accommodative or symmetrical strategies” (p. 257).

1.2. Testing the validity of the contingency theory: quantification of the 86 contingent variables

In developing the contingency theory, researchers recently have begun to apply quantitative research to generalize about the contingent variables and offer the validity and generality to the contingency theory. Shin et al. (2002) conducted a national survey among public relations practitioners, which suggested the dimensions of contingent variables. Public relations practitioners evaluated organizational- and individual-level contingent variables as dominant to their public relations practice.

Quantifying parts of the theory, Reber and Cameron (2003) constructed the contingency scale that includes external threats, organizational characteristics, public relations department characteristics, and dominant coalition characteristics. They identified organizational characteristics and external public characteristics as the most influential situational variables. The characteristics of top management were found as dominant in public relations practice.

Shin et al. (2005) further associated the contingent variables with the stances or strategies of an organization and its public through content analysis. They found that the stances or strategies of an organization and its public are associated with the contingent factors such as internal threats, external threats, external public, organization’s characteristics, general political/economic/cultural environment and industry environment. Both internal and external threats are most correlated with the stances or strategies of an organization and its public during their conflict management process.

Following the previous studies that test contingency theory, this study conducted a national survey among public relations practitioners to provide contingent variables with external validity and examine how the contingent variables are combined in public relations practice. This study employed the 86 variables, all of which have been qualitatively investigated, and the 11 categories, which were thematically developed in the previous studies. The purpose of this study is to quantify all of the contingent 86 variables to construct a simple matrix of contingent factors through factor analysis.
RQ1. Which of the 86 contingent variables dominate on public relations activities?
RQ2. Which of the 86 contingent variables are combined in public relations practice?

2. Method

This study employed a Web survey because most public relations practitioners use the Internet for their practice (Marlow, 1996). A random sample of 1000 public relations practitioners, with a margin of error of 1%, was drawn from the Public Relations Society of America Member’s Directory (2003). The sampling frame was selected because the directory includes a large pool of nationwide professionals, and the members are expected to have a high level of experience, competence, professional standards, and ethical conduct.

Each of the survey questions employed one of the 86 contingent variables identified by Cameron and his colleagues (Cancel et al., 1997; Cameron et al., 2001). Each question asked respondents to evaluate how influential each variable is to their public relations activities. Respondents were asked to use a 1–5 scale, where 1 is not influential, and 5 is very influential.

A Web survey was conducted among public relations practitioners from October to November 2004. Of the 1000 public relations practitioners surveyed, the survey yielded 359 total usable responses for a 36% return rate. According to Wimmer and Dominick (2006), the click through rate which Internet users click on a link to participate in a survey is 1–30%. Of the 359 practitioners participating in the survey, 68% were female (n = 244), and 32% were male (n = 115). The largest group of the respondents was aged 40–49 years (n = 102), followed by 50–59 years (n = 84), 30–39 years (n = 81), 20–29 years (n = 60), and more than 60 years (n = 32). About two-thirds of the professionals possessed bachelor’s degrees (n = 209) and 31.5% had master’s degree (n = 113). About one-third majored in journalism (n = 118), 15% in public relations (n = 54), and 9.5% in business or marketing (n = 34). Almost one-fourth reported practicing public relations for 6–10 years (n = 89); 18.1% for 1–5 years (n = 65); 15.3% for 11–15 years (n = 55); 12.8% for 16–20 years (n = 46); 12.5% for 21–25 years (n = 45); and the rest for more than 20 years.

Descriptive statistics suggests which of the 86 contingent variables are perceived as most dominant in public relations practice. An exploratory factor analysis was conducted to combine the 86 contingent variables into a simple matrix of factors and to explore the second research question.

3. Results

3.1. The influence of contingent variables on public relations

Public relations practitioners indicated that individual and organizational variables are perceived as most influential to public relations activities ranging from the mean value of 4.36 (individual communication competency), on a 5-point scale, where 1 is not influential, and 5 is very influential.

Most practitioners reported the dominant influences of individual-level variables on public relations practice: individual communication competency (4.36), personal ethical value (4.31), ability to handle complex problems (4.23), ability to recognize potential or existing problems (4.18), and familiarity with external public or its representatives (4.16). Other high-ranking individual-level variables include: openness to innovation (3.98), how to receive, process, and use information (3.89), grasp of others’ world-views (3.89), tolerance with uncertainty (3.85), and experience in handling conflict (3.75).

They also indicated the importance of organizational-level variables: top management support of public relations (4.19), public relations department’s communication competency (4.06), representation in top management (3.86), top management’s frequency of external contact (3.84), PR department’s perception of external environment (3.83), department funding (3.77), and organization’s experience with the public (3.73). Some external variables were highly assessed: scarring of organization’s reputation (4.12), potentially damaging publicity (3.99), and marring of the personal reputation of the company decision makers (3.71).

Several variables out of the 86 were perceived as having little influence on their practice: homogeneity or heterogeneity of employees in organization (2.72), total number of practitioners with college degrees in organization (2.70), age of organization (2.68), physical placement of PR department in organization’s building (2.54), number of rules defining the job descriptions of employees in organization (2.44), percentage of female upper-level staff in PR department in organization (2.31) and gender (2.03).
3.2. Quantification of the contingent factors on two dimensions

The 86 contingent variables were grouped into 12 factors on two dimensions through an exploratory factor analysis. Initial data reduction with Varimax provided a solution with eigen values above 1.0 and accounted for 59.77% of variance. This offered the two-factor solution of internal dimension and external dimension. The Cronbach alpha coefficients of both internal dimension (0.73) and external dimension (0.71) suggest a strong reliability.

Five external factors were produced on the external dimension. The factors were named based on the commonalities among variables, following the semantic categories from the previous studies: external threats (litigation, government regulation, potentially damaging publicity, scarring of organization’s reputation, and legitimizing activists’ causes), industry environment (changing or static industry, industry competitors/competition, and industry resources), political/social/cultural environment (political support of business, social support of business, and powerful members or connections), public power (public size, organization’s advocacy, and public’s communication), public relationships (past successes or failures of public, whether the public has public relations counselors, community’s perception of public, past media coverage of public, whether the public representatives know/like organization’s representatives, public’s willingness to dilute its cause, and public moves and countermoves). The thematic category of external publics was divided into two factors and named as public power and public relationships. The Cronbach alpha coefficients of five external factors suggest a strong reliability: industry environment (0.85), public relationships (0.80), political/social/cultural environment (0.78), external threats (0.74), and public power (0.69).

On the internal dimension, seven factors were produced: organization’s development (geographical dispersion/centralization, organization’s use of technology, employees’ homogeneity/heterogeneity, organization’s age, and organization’s knowledge growth), organization’s structure (distribution of decision-making power, job rules of employees, and hierarchy of positions), PR department independence (past training of employees, hierarchical location of PR department, representation in top management, practitioners’ experience in handling conflict, PR department’s communication competency, and PR department autonomy), PR department government (PR department funding, top management support, and PR department of external environment), top management characteristics (political value of top management, management style, and management altruism level), individual characteristics (personal ethical value, tolerance with uncertainty, comfort level with change, comfort level with conflict, ability to recognize potential or existing problems, openness to innovation, grasp of others’ world-views, dogmatic personality, and predisposition towards negotiation), and individual capabilities (individual communication competency, ability to handle complex problems, how to receive, and process and use information). The thematic categories on internal dimension were divided into seven factors. The top management characteristics category is combined as one factor, but the organization’s characteristics category is divided into two factors of organization’s development and organization’s structure; public relations department characteristics is grouped into PR department independence and PR department government; and individual characteristics is categorized into individual characteristics and individual capabilities. The seven factors are reliable with Cronbach alpha coefficients above 0.70: organization’s development (0.79), organization’s structure (0.74), PR department independence (0.84), PR department governance (0.72), management characteristics (0.77), individual capabilities (0.92), and individual characteristics (0.79).

4. Discussion

As the first attempt, this study quantitatively tested all of the 86 contingent variables and grouped them into 12 factors on two dimensions. It provided the validity and reliability of contingent factors as a further development towards parsimony. As thematically combined in the contingency literature, external factors included external threats, industry environment, political/social/cultural environment and external publics, and internal factors comprised of organization’s characteristics, PR department characteristics, management characteristics and individual characteristics. This supports the assumptions that the contingent variables are valid, and the thematic categories were sound to construct the contingency theory of public relations.

External publics, organization’s characteristics, PR department characteristics, and individual characteristics are, respectively, grouped into more than one factor, which calls for attention for further investigation. The external public category was highly supported as situational variables (Reber & Cameron, 2003), while organization’s characteristics,
PR department characteristics, and individual characteristics were well supported as predisposing variables in the previous research (Cancel et al., 1997). The next step will be a test of how situational variables interplay with predisposing variables within internal and external factors.

The three thematic categories of under question, internal threats and relationship characteristics are not combined into internal or external dimension. They may need to be considered as another dimension that is beyond an organizational boundary. Combined to the prior research (Cancel et al., 1997), it may reflect layers of contingency constructs including predisposing and situational variables as well as internal and external variables. The power among variables should be further explained in each construct and analyzed between levels.

This study also confirmed the validity of each contingent variable in public relations practice following the previous study (Shin et al., 2002). Public relations practitioners suggested that public relations activities are contingent in nature insofar as they are affected by a number of variables. They consider individual-level variables as predominantly influential to their practice, indicating that individual characteristics or professional capabilities are associated with the successes or failures of public relations practice. They seem to acknowledge the value of individual qualifications in public relations activities. This can be further examined in relation to the extent to which they are confident in contingent situations of public relations practice.

Practitioners also pointed out the influence of organizational-level variables. One possibility is that public relations is inextricably linked to the organization that imposes the inherent roles. The umbrella notion of public relations as an extension of the management function may provide a possible explanation for the profession’s inherent state. A related topic is how individual public relations practitioners are qualified and empowered to practice autonomously. Public relations practitioners should understand the practical opportunities and challenges of public relations practice by identifying what constraints they have in their activities and recognizing that their professional qualifications are important assets. Further explication is needed of the external contingencies which constrain public relations practice beyond individual characteristics or organizational boundaries, considering that situational variables are often more challenging than predisposing variables (Cancel et al., 1997).

The findings require replication studies to corroborate a newly modified matrix of contingent factors. Further studies should elaborate precisely how contingent factors associate or dissociate with each other. A series of surveys or experiments and statistical modeling process should be undertaken in an attempt to explicate how the power differences among contingent variables influence public relations activities in internal and external dimensions. It may be meaningful to test the internal and external factors in different predisposing and situational contexts. This would help develop comprehensive constructs of the contingency theory in public relations and further practical implications for public relations practitioners to understand the contingencies of public relations and develop a stance and strategies for dealing with a given public.

References