Public Relations Journal Vol. 5, No. 1, Winter 2011
ISSN 1942-4604

Measuring Public Relations Leadership in the Trait Approach: A Second-Order Factor Model in the Dimension of Self-Dynamics

Juan Meng, Ph.D., Bruce K. Berger, Ph.D., and William C. Heyman

This research was designed to develop measures of public relations leadership from the perspective of individual capabilities, "Self-Dynamics." By conducting an online survey collected from over 200 senior public relations executives, a structural equation modeling approach was used as the analytical tool to assess the hypothetical hierarchical confirmatory model. The results empirically modeled and indicated that public relations leaders' self-attributes, visionary ability, and team collaboration ability are three key first-order factors at the individual level and comprise what the authors proposed a single second-order factor "Self-Dynamics." Therefore, the multidimensionality of the construct itself as well as the predictive power of the measurement model has been validated. The authors evaluated the results and discussed the findings, as well as concluded with suggested implications for understanding the competitive preconditions an effective public relations leader should have for effective communication management.

The study of leadership has been an important and central part of the literature on management and organization behavior over the past 40 years. Researchers of leadership have historically developed a number of complex concepts and theories in the attempt to explain and predict leadership effectiveness and organization performance. Major theories, topics, and controversies in this area have encompassed leader traits and skills, leader behavior and activities, leader power and influence, situational determinants of leader behavior, and leadership as an attributional process (e.g., Bass, 1985, 1990; Conger, 1999; Dansereau, Graen, & Haga, 1975; Fiedler, 1978; House, 1971, 1999; Kouzes & Posner, 1987; Stogdill, 1948, 1974; Yukl, 1989). However, relatively few studies in the field to date have explored the qualities, values, and dimensions of excellent leadership in public relations. Specifically, leadership in public relations has not been subjected to quantitative measurement. Measurement issue has particularly perplexed public relations researchers in their efforts to construct theory and to test theory.

Therefore, this research paper is an exploratory step toward such an exploration—to discover what leadership means to senior-level public relations professionals. More importantly, our objective is to develop and estimate a model that captures the dynamics of individual capabilities in achieving excellence in public relations leadership. After reviewing the trait approach in leadership research, we are interesting in gathering

experienced public relations professionals' opinions about the key and important personal attributes/skills/qualities a successful public relations leader should have and exhibit. The importance of personal attributes and qualities is strongly associated with its impact on the achievement a public relations leader could obtain and the establishment of the mutual relationship between the leaders and their subordinates.

The focus of our research is on leader attributes that are reported to be effective in communication management. The trait approach in leadership research is reviewed, and public relations leaders' widely recognized traits are discussed briefly, focusing on important findings and controversies. We then describe the proposed model in terms of a conceptual framework that examines the public relations leaders' self-dynamics as a three-dimensional construct: self-insight, shared vision, and team collaboration. Next, we introduce the research project, which involved the participation of more than 200 experienced public relations professionals nationwide, and discuss the estimation results of the hierarchical model and report on model validation. The findings regarding perceived effective leader attributes/skills/qualities are summarized and presented. Finally, we conclude by summarizing the contributions, managerial implications, and avenues for further research. In short, the anticipated theoretical and practical contributions of this paper will be reflected in its efforts in filling a substantial knowledge gap concerning excellent leadership relevant to the success of public relations practice and organizational effectiveness.

LITERATURE REVIEW

Managerial Leadership: The Trait Approach

The study of managerial leadership has been an important and central part of the literature on management and organizational behavior for several decades. The traditional discussion of leadership has been located in the form of philosophies and narratives since the beginning of recorded civilization (Clemens & Mayer, 1987). Bass (1997) argued that the study of leadership rivals in age the emergence of civilization, which shaped its leaders as much as it was shaped by them (p. 3). Over the centuries, the effort has been focusing on identifying what leaders did and why they did it. The history of leadership research has witnessed early theories of leadership being developed based on the broad discussion of personal opinions and experiences. Theorists were interested in analyzing and discovering the realities of human nature and leadership behaviors for the best methods of organizing societies and political life (Bass, 1991 & 1997). As a tradition, their definitions of leaders, their behaviors, and their expected outcomes were general and broad.

It was not until the 1950s that the theories of leadership became much narrower by focusing on specific dimension(s) of the concept. This tendency has distinguished contemporary leadership studies from the early works (Bass & Stogdill, 1990; Clemens & Mayer, 1987; Stogdill, 1974; Yukl, 1989). However, as different perspectives of leadership keep contributing to the large body of knowledge and research, it is more difficult for the researchers to agree on the universal definition of leadership. Bass

(1990), in *Bass and Stogdill's Handbook of Leadership*, devoted the entire opening chapter to discussing numerous definitions of leadership that have been used by various researchers, and his conclusion was:

"Leadership has been conceived as the focus of group processes, as a matter of personality, as a matter of inducing compliance, as the exercise of influence, as particular behaviors, as a form of persuasion, as a power relation, as an instrument to achieve goals, as an effect of interaction, as a differentiated role, as initiation of structure, and as many combinations of these definitions (Bass, 1997, p. 17)."

Bass's conclusion and definition about leadership have summarized some real progress in contemporary managerial leadership research. This definition has revealed tremendous efforts that different scholars have contributed to the conceptualization and description of the "complex, multifaceted phenomenon" (Yukl, 1989, p. 253). As a result, the literature of managerial leadership research has exhibited a broad range from trait research, to behavioral, to situational, and to transformational components of leadership. As one of the earliest research areas in leadership, the trait approach refers to leaders' attributes such as personality, motives, values, and skills (e.g., Stogdill, 1948, 1976), and it has been a dominant approach in leadership research during the first half of the twentieth century.

The focus of trait approach in leadership was concerned with identifying personal attributes, or superior qualities, that are essential to effective leadership by comparing the traits exhibited by leaders with those exhibited by non-leaders (Bratton, Grint, & Nelson, 2005; Yukl, 1989). This tradition has continued over the years, and researchers have looked for a significant correlation between traits of individual leaders and their success.

Two landmark studies of trait research were done by Stogdill (1948, 1974). As a pioneer researcher, Stogdill (1948) reviewed 124 trait studies conducted between 1904 and 1947, and identified no consistent pattern of traits that differentiated leaders from non-leaders across a variety of situations. Instead, Stogdill argued that patterns of leadership traits differ with the situation: "Leadership is a relationship that exists between persons in a social situation and that persons who are leaders in one situation may not necessarily be leaders in other situations" (p. 76). Based on his findings, Stogdill made the strong argument for the situational nature of leadership. Also, his study supplied strong evidence to indicate that leadership patterns were persistent and relatively stable. After that, the research attention has been shifted from individuals' traits to incorporating the effects of situational factors on leadership patterns.

Stogdill's (1974) second study reviewed another 163 trait studies published between 1948 and 1970. By comparing the findings of his second study to those in his first one, Stogdill acknowledged consistent results and identified complex relationships between groupings of individuals' traits and social interactions. Based on the findings, Stogdill made a more moderate argument about the relationship between individuals' traits and situational factors:

"The trait approach tended to treat personality variables in an atomistic fashion, suggesting that each trait acted singly to determine the effects of leadership; [while] the situational approach, on the other hand, denied the influences of individual differences, attributing all variance among persons to the fortuitous demands of the environment (Stogdill, 1974, p. 78)."

Stogdill suggested researchers should not treat situational factors or personal traits as the sole determined leadership status; instead, personal traits and the requirements of the situation have to be incorporated into leadership effectiveness. Although the researchers have agreed that there are certain traits (e.g. intelligence, persistence, self confidence, sociability, responsibility, etc.) that are significantly related to how individuals perceive leaders, it is clear to see the breadth of traits related to leadership and the difficulty to select certain traits as superior ones or definitive leadership traits (Lord, DeVader, & Alliger, 1986; Mann, 1959). Stogdill's suggestion has provided a more holistic view of leadership research.

In recent years, there has been a resurgence of interest in the role of traits in effective leadership. However, instead of focusing on personality traits and general intelligence, recent studies have explored answers to three questions in general: (1) what traits are related to leadership effectiveness; (2) what skills are related to leadership effectiveness; and (3) how do traits interact to influence leadership effectiveness (Yukl, 1989).

As a result, managerial motivation such as the desire for power and the desire to compete with peers (e.g., Berman & Miner, 1985; Miner, 1978), and specific skills such as technical and interpersonal skills (e.g., Bass 1981; Hosking & Morley, 1988; Boyatzis, 1982), have been identified as some of the promising predictors of leadership effectiveness. In addition, keeping the key principle of balance, or the moderate argument made by Stogdill, recent studies are more concerned with the balance between leaders within a management team: different leaders who have complementary attributes should compensate for each other's weaknesses and enhance each other's strengths to improve group performance (Yukl, 1989; Bradford & Cohen, 1984).

Although the trait approach has been an important stream in leadership research, and key findings on leadership traits have given formal organizations some benchmarks for selecting potential leaders, the trait approach has its own inherent weaknesses. First, as revealed by Stogdill (1948, 1974), the massive research effort in trait approach failed to find any traits that would guarantee leadership and succession. It also failed in identifying how leader traits relate to leader behaviors and leadership effectiveness, and has largely neglected the relevance of traits and situations. Therefore, these weaknesses led to a more balanced view to describe leaders and the nature of the situation that determines the relative importance of various traits. Furthermore, the findings led to a widespread acceptance of the assumption that the relationship between traits and leadership is moderated by situational factors (e.g., Bass, 1985;

Kirkpatrick & Locke, 1991), which is not grounded in strong and reliable research. This tendency discloses the inherent weaknesses in trait approach: there are no guidelines to indicate which trait to measure in a given situation due to the discrepancies in the theories (Yukl, 1989).

Another major criticism is that the trait approach did not recognize the importance of followers in the leadership process. Factors such as the followers' personality traits, followers' learning processes in the workplace, and followers' behaviors in work groups all affect the leadership process and its outcomes (e.g., Dansereau, Graen, & Haga, 1975; Graen & Cashman, 1975; Graen, 1976). Criticism is also derived from the cultural consideration: some researchers argued that leadership traits are culturally determined. The boundaries of acceptable and unacceptable attitudes and behaviors desired by the majority of members within a particular culture are shaped by that culture (Kakabadse & Kakabadse, 1999). Bass (1990) recognized that in an era of globalization, cross-cultural differences make a considerable contribution in leaders' traits.

Thus, the major questions raised by Stogdill, Bass, Yukl, and other researchers have challenged the trait approach. Meanwhile, attention on leadership research has shifted to incorporating the interaction of traits and situations and the impact of followers' behaviors on leadership. As a result, a variety of philosophic foundation from different disciplines has been explored by researchers, which remarkably accelerates our understanding of leadership as a complex and dynamic process.

Trait Approach in Public Relations Leadership Research

Although leadership has been little explored by public relations scholars as an essential component of excellence in communication management over the past decades, we cannot ignore the fact that the assumption of excellence in public relations has its roots in leadership and organizational studies. More valid evidence of how public relations management contributes to organizational effectiveness has been identified. At the same time, more public relations scholars have recognized the importance of applying leadership skills to develop successful communication professionals, the importance of applying appropriate leadership style in public relations practice, and the importance of leadership effectiveness in helping public relations professionals successfully influence organizational decisions, actions, and values and, eventually, in gaining stature and respect inside organizations (e.g., Aldoory & Toth, 2004; Berger & Reber, 2006; Berger, Reber, & Heyman, 2007; Choi & Choi, 2009; Grunig, Grunig, & Dozier, 2002; Holtzhausen & Werder, 2008).

As one of the most comprehensive research projects that has been done in the field of public relations, the IABC Excellence Study provides not only a conceptual framework for understanding the functions of public relations; but more importantly, the theoretical advances revealed by research findings have indicated the necessity of discussing leadership and its application in the scope of excellence in communication management (Grunig, 1992; Grunig, Grunig, & Dozier, 2002). The theory suggests that, to achieve excellence in public relations and communication management, public relations

managers (leaders) should be able to explain "*why* public relations contributes to organizational effectiveness and *to what extent* by asserting that public relations has monetary value to the organization" (Grunig, Grunig, & Dozier, 2002, p. 10). The magnitude of this influence is likely to depend both on public relations professionals' leadership skills and empowerment process.

Factors influencing public relations executives to achieve professional success and maintain their leadership positions inside organizations have been another area related to the leadership research in public relations (e.g., Berger, Reber, & Heyman, 2007). Generated from interviews with 97 senior public relations executives in the field, Berger, Reber and Heyman (2007) have identified diverse factors and patterns to be crucial in terms of contributing to the success in gaining influence, including communication skills, proactive nature, relationships and networking, and interpersonal skills.

To further advance the leadership research in public relations, Choi and Choi (2009) adopted a behavioral approach to explore what leadership means in public relations and identified six distinct public relations leadership behaviors that would influence the value of public relations in an organization, including providing organization members with a clear vision about the organization's public relations policies and strategies, exerting upward influence in the organization, acting as a changing agent, and creating alliances inside and outside of the organization. Similarly, Holtzhausen and Werder (2008) also investigated how leadership styles have been presented in public relations practice. Based on a national survey of PR professionals (N=885), their research findings indicated the prevalence of transformational leadership style and inclusive leadership style in public relations environments. More importantly, the researchers argued that, although the two prevalent leadership styles have different focuses in application (e.g., transformational leaders focus on inspiring followers through communication, while inclusive leaders engage in participative practices), they are strongly related. The application of inclusive leadership style would make a great contribution to the transformational leadership behaviors, which eventually will affect the effectiveness of public relations strategies.

Conceptualization of Self-Dynamics: A Three-Dimensional Construct

Clearly, the quest to move beyond technical functions and into the realm of communication management is a complex undertaking involving the development of leadership skills that allow the public relations practitioners to recognize, create, transform, and envision communication objectives not only at the individual level but also at the organizational level. Importantly, public relations practitioners may not be equally predisposed for successful launching and maintenance of strategic communication initiatives. Therefore, a key to understanding the success and failure of public relations practitioners' communication management within organizations is the identification and assessment of preconditions that are necessary for the effort to flourish. These preconditions are described broadly as "traits" or "personal factors" within the managerial leadership literature (e.g., Bass, 1990; Stogdill, 1948, 1974; Yukl, 1989). Utilizing the theoretical foundation, the objective of this research is to provide a

definitional and empirical context for assessing key personal capabilities that directly affect a public relations leader's drive toward excellence in communication management.

Based on previous leadership research and some specific functions associated with public relations practitioners, we theoretically termed personal capabilities "self-dynamics" in our study, which refers to the extent to which excellent leadership is perceived to be an inherent part of the leaders' personal attributes, which include the leader's personality, skills, styles, and envisioning ability. Moreover, three sub-dimensions, self-insight, shared vision, and team collaboration, enable maximization of public relations leaders' self-dynamics (Bass, 1990; Northouse, 2007; Stogdill, 1974; Yukl, 1989).

This dimension of leadership has been incorporated into many definitions and research trends as we reviewed the leadership literature. Since it emerges as one of the most important facets of leadership throughout the history of leadership research, we would like to argue it is necessary to keep the dimension when discussing excellent leadership in public relations. The traditional trait approach, skills approach, and style approach of leadership research have identified certain qualities, personalities, and attributes associated with successful leaders (e.g., Bass, 1990; Stogdill, 1948, 1972; Yukl, 1989). Consistent findings are also identified in limited research on public relations leadership. For instance, Choi and Choi (2009) identified a number of personality and skills, such as assertiveness, commitment, confidence, and responsibility, as important features in defining leadership in public relations. Berger, Reber, and Heyman's (2007) study also acknowledged the importance of positive personal traits to professional success in public relations. Some of the most desired characteristics in hiring PR professionals include enthusiasm, energy, confidence, and flexibility. The consistent findings across the literature support the conclusion that the personal attributes cannot be ignored when we define dimensions of leadership in PR. However, to define excellent leadership in public relations, the qualities and attributes associated with PR leaders are a diversity of dynamic forces. Theoretically, it is more appropriate to group those forces and propose several sub-dimensions, which eventually support and explain the dimension of leadership in public relation at a higher level.

First Sub-Dimension: Self-insight

Self-insight refers to the extent to which leaders know their strengths and weaknesses and understand public relations environments in order to adapt strategies and achieve organizational goals (London, 2002). To communicate effectively, public relations leaders must leverage their existing capabilities that favorably position themselves within organizations. Self-insight comprises a crucial element of the self-dynamic dimension needed to transform and transport communication initiatives throughout the organization. Through the linkage of self-insight and communication systems in an organization, fragmented flows of information and strategies can be integrated. These linkages can also eliminate barriers to communication that naturally occur between different parts of the organization, even inside the communication team. Leaders who

do not understand themselves are unlikely to have an accurate view of the situations or to be sensitive to the environments. Self-insight is derived from leaders' personality traits and general intelligence, but it focuses more on the managerial motivation and specific skills and role requirements for excellent communication management.

Second Sub-Dimension: Shared Vision

Shared vision refers to the extent to which organizational members are inspired by a shared vision which specifies organizational values and personal beliefs in making things happen and personal desires to change things (Leonard, 1995; Kouzes & Posner, 2002). As an important feature of being a leader across different professions, a vision can incorporate not only a vision statement that conveys a clear view of the future and desired direction of the organization, but it can also incorporate a system of organizational values (Gold, Malhotra, & Segars, 2001). More importantly, only creating a compelling vision is insufficient to significant changes: leaders should have the ability to visualize positive outcomes in the future and communicate them to followers, which is to enlist followers into that shared vision (Kouzes & Posner, 2002).

The importance of providing vision was also identified in Choi and Choi's (2009) study of PR leadership. They argued that PR leaders should be able to provide organizational members with a clear vision about the organization's public relations policies and strategies. As a single unit within an organization being aligned with other divisions, PR leaders should be able to express their distinctive functions by envisioning the corporate values, which permeate the organization and provide people with a needed sense of purpose that transcends their daily activities. Without common representation of compelling visions, it would be difficult to prompt the necessary changes for the organization to achieve its desired future goals. Therefore, it is necessary for public relations leaders to engender a sense of involvement and contribution among employees and dominant coalitions through an articulated and communicated vision.

Third Sub-Dimension: Team Collaboration

Perhaps one of the most significant hurdles to effective communication management is *team collaboration*. Team collaboration is important in leveraging the compelling visions and communication efforts. It refers to leaders' abilities to support the PR team and the organization to execute public relations strategies and to achieve excellence in communication management. Working together as an intellectual effort describes the feature of team collaboration for PR leaders. By recognizing leadership as a team effort, PR leaders have the responsibility to foster collaboration. Kouzes and Posner (2002) interpreted collaboration as "the ability to lovingly cooperate that will determine success" (p. 242). Thus, it is the PR leaders' role requirement to create a climate of trust and flexibility within the team, to facilitate positive interdependence among team members, and to support face-to-face interaction between team members and leaders. Thus, team collaboration works as an essential part to support self-dynamics of PR leaders. In the next section, we develop the measurement scales based on the elements of self-dynamics and then formally test the model.

The Hypothesized Hierarchical Model

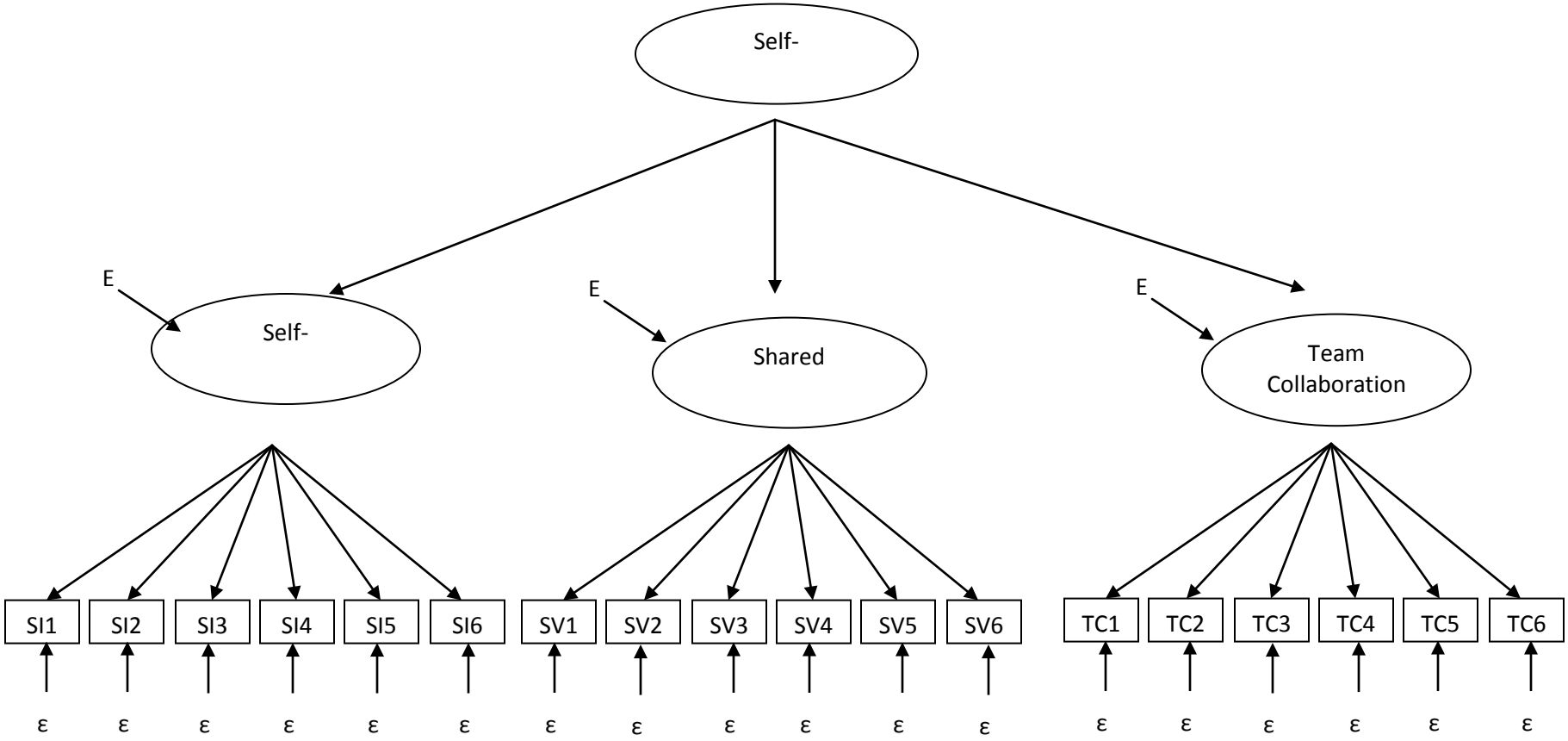
Therefore, based on the discussion in previous sections, we proposed a theoretical framework to assist the empirical investigation and quantitative measurement of leadership in public relations by applying the trait approach. The conceptual model consists of three first-order factors and one second-order factor. The three first-order factors represent the three dimensions of Self-Dynamics conceptualized for this study: Self-Insight; Shared Vision; and Team Collaboration. The second-order factor subsumes all the three first-order factors and is termed Self-Dynamics as we discussed in the conceptualizing process (See Figure 1 for the hypothesized hierarchical model). To assess the validity of the research model, measures of the single second-order factor Self-Dynamics and its three sub-dimensions (Self-Insight, Shared Vision, and Team Collaboration) are developed. The item measures are listed in Table 1.

Table 1.Items Used to Measure Each Dimension of the Self-Dynamics Construct

Component Name	Item
	An excellent public relations leader should have…
Sub-Dimension 1: Self-Insight	
SI1	The nature of being dependable.
SI2	The nature of being trustworthy.
SI3	The nature of being proactive.
SI4	The capacity for engaging in strategic decision-making.
SI5	The capacity for acting as a changing agent.
SI6	Being aware of applying diverse strategies.
Sub-Dimension 2: Shared Vision	
SV1	The nature of being forward looking.
SV2	The nature of having a vision of PR as a managerial function.
SV3	The capacity for enlisting others in a shared vision.
SV4	The capacity for providing a vision of potential changes in areas affecting the organization.
SV5	The ability to provide organizational leaders with a clear vision about PR values and role.
SV6	The ability to provide organizational leaders with a clear vision of how PR goals are congruent with organizational goals.
Sub-Dimension 3: Team Collaboration	
TC1	The ability to collaborate with members to define PR strategies.
TC2	The ability to actively cope with crisis situations.
TC3	The ability to develop a proactive and professional communication team.
TC4	The ability to facilitate positive interdependence among team members.
TC5	The ability to bring diverse groups together to collaboratively solve problems.
TC6	The ability to inspire and motivate other members.

Note: All items were measured on a 7-point Likert-type scale.

Figure 1:The Hypothesized Second-Order Confirmatory Factor Model of Self-Dynamics in Public Relations Leadership



Note: SI1-SI6 = Self-Insight items;
SV1-SV6 = Shared Vision items;
TC1-TC6 = Team Collaboration items.

METHOD

Research Design

This study is exploratory in several ways. First, it draws on past leadership research in which three sub-dimensions have been identified as key factors in forming the leadership construct but without consistent operationalization. Second, the process of item development reflects a unique communication functions and values associated with public relations practice, which have not been subjected to quantitative measurement. Third, multi-item scales are developed to capture the full meaning of the construct “Self-Dynamics” and determine its relative importance in excellent leadership in public relations. Multiple-item measures are generally thought to enhance confidence that the constructs are being accurately assessed (Churchill, 1979; Nunnally, 1978). Thus, the reliability and validity of the measures for each variable of interest can be improved. In addition, each statement involving scales in the questionnaire is used on a 7-point Likert-type scale ranging from 1 (a little bit) to 7 (a great deal), which provides the advantage of standardizing and quantifying relative effects.

Sampling Design and Strategies

Overall, a stratified sampling strategy in which three different strata (i.e., gender, job position, and organizations type) was used in this study. To ensure the representativeness and generalizability of this study, the sample was deliberately selected to more or less match the current characteristics of the public relations industry in the United States. The sampling strategy requires the respondent from the public relations industry in the U.S. meets the following criteria: (1) respondents must be key organizational informants, residing at a senior position in public relations and/or communication in the organization; (2) the distribution of organization type has to be considered to match the public relations industry; (3) the distribution of gender has to be considered to match the current status in public relations industry; and (4) multiple respondents can be obtained from organizations. By administering these criteria to separate samples from different organizations, we aimed at eliminating response bias concerning gender-related and organizational barriers. Table 2 shows the strata the researchers used to draw the sample.

Table 2. A Stratified Sampling Strategy

Public Relations Industry	Individuals holding a mid- and senior-position in PR (in percentage)		Total
Organization Type (in percentage)	Female (65%)	Male (35%)	
Corporate (35%)	228	122	350
PR agency (20%)	130	70	200
Nonprofit organization (15%)	98	52	150
Government organization (15%)	98	52	150
Education institution (10%)	65	35	100
Other (5%)	33	17	50
Total	652	348	1,000

Data Collection Procedures

The data collection was completed through an online survey of senior-level public relations professionals nationwide through Zoomerang online survey service. The online questionnaire included the measurement items for proposed constructs as listed in Table 1. Other variables of interest tested included demographic features such as years of professional experiences in PR, type of organization, organization size, size of PR employees in organization, and educational background.

Heyman Associates, a PR executive search firm in New York City, helped deliberately draw participants from their database of more than 50,000 public relations professionals. Key organizational informants were used in this study. The researchers defined key organizational informants as those held senior-level positions in the organization, residing as vice president of communication or above, and were experienced, having worked in the organization for an average of 25 years. The support for using key informants stems from their knowledge and power positions in the organization. They have access to and are able to use diverse resources in the organization. By residing at a senior level, these organizational respondents use communication knowledge for accomplishment of their tasks and can also provide commentary of the organization's communication initiatives. Therefore, their daily activities involve more leadership-oriented actions.

Eventually, 1,000 senior public relations executives nationwide with valid and active email addresses were selected and invited to participate in the study. The invitation email was sent out through Heyman Associates' main office. The purpose of the study was explained in the email invitation, and a URL link of the online survey was embedded in the email. Of the 1,000 invitations, 338 visited the survey link and 257 public relations executives subsequently participated in the online survey, resulting in a retention rate of 76.04%. After the initial screening, 222 completed questionnaires were deemed usable (35 questionnaires with partial answers were dropped), yielding a response rate of 22.2%. In sum, the first stage of data collection process yielded assessments of 222 senior public relations executives' knowledge and perceptions of excellent leadership in public relations.

Of the respondents analyzed, 59.90 percent are female public relations practitioners and 40.10 percent are male. The organization profile also indicates that the majority of them have been working in the profession of public relations for more than 15 years (n=170, 76.60%). The respondents themselves have senior representation, with the majority assuming the position of vice president for communications, director of corporate communication, and senior director of corporate affairs. Table 3 explains more detailed summary of respondents' demographic information.

Table 3. Categorical Demographic Profiles of the Respondents

	Total Sample Size (N=222)	
Categorical Variables	*Freq. (n)*	*Percentage (%)*
Gender		
Male	89	40.10
Female*	133	59.90
Age		
18-30	2	.90
31-40	42	18.90
41-50*	95	42.80
51-60	76	34.20
Over 60	7	3.20
Years of experiences in PR		
3 to 5 years	2	.90
5 to 10 years	11	5.00
10 to 15 years	39	17.60
More than 15 years*	170	76.60
Type of organization working for		
Public corporation*	83	37.40
Private corporation	43	19.40
Public relations agency	39	17.60
Nonprofit organization	27	12.20
Government organization	15	6.80
Educational institution	14	6.30
Organization size		
Fewer than 100*	49	22.10
100-499	19	8.60
500-999	13	5.90
1,000-2,499	18	8.10
2,500-4,999	22	9.90
5,000-9,999	22	9.90
10,000-24,999	20	9.00
25,000-49,999	17	7.70
50,000 or more	39	17.60
Size of PR employees inside the organization		
Fewer than 10*	62	27.90
10-19	30	13.50
20-49	42	18.90
50-99	25	11.30
100 or more	57	25.70
Don’t know	6	2.70

*Note: *Top category*

Analytical Tool and Results

As developed in the previous sections, each of the item clusters in Table 1 represents an *a priori* measurement model of the theoretical construct, Self-Dynamics. Given this theory driven approach to construct development, the analytical process of confirmatory factor analysis provides an appropriate means of assessing the efficacy of measurement items and the consistency of a pre-specified hierarchical measurement model. In essence, the expectation is that each of the developed scales will uniquely measure its associated factor and that this system of factors will represent the factor relationships illustrated in Figure 1.

A structural equation modeling (SEM) approach, specifically maximum likelihood, was employed to test statistical assumptions and to estimate the predictive power of the measurement model. Therefore, the researchers used LISREL 8.8 to process data. The reliability and validity of the measurement model were assessed in terms of individual item reliability, construct validity, convergent and discriminant validity.

Check for Statistical Assumptions

An initial analysis of the data was done to evaluate the normal distribution of the variables. To test the normality of each item, the researchers analyzed skewness and kurtosis values of each variable and observed that each variable was distributed normally. Establishing univariate normality among a collection of variables can help gain multivariate normality (Bollen, 1989; Gold, Malhotra, & Segars, 2001). Giving the strong underlying assumption of multivariate normality associated with confirmatory factor modeling, the sample statistics bear significantly on the interpretability of the findings. SEM is also known to be very sensitive to outliers, so we verified the presence of outliers by analyzing standardized residuals (SR). We observed that there was no extreme value.

Reliability and Validity Analyses

Before starting the SEM analyses, a series of tests were run on the variables to improve the reliability of the self-dynamics construct. Using the SPSS program, the data on each of the three dimensions were separately analyzed based on the values of coefficient reliability and item-total correlation (see Table 4 for detailed reports). Because the coefficient alpha of individual scales indicated that the reliability estimate of items SI2 and CT2 were marginal, a secondary analysis was conducted by dropping SI2 and CT2. Results indicated that the reliability estimates and item-total correlations of the remaining five items under the self-insight dimension and team collaboration dimension improved after dropping the two items (e.g., coefficient alpha = .801, range of item-total correlations = .652 to .831). Thus, the researchers decided to delete SI2 and CT2 to enhance Cronbach's coefficients. All other item-total correlations were reasonably high, giving support for the validity of respondent ratings. Similarly, all the Cronbach's alphas were greater than 0.70 (ranging from 0.712 to 0.801), satisfying Nunally's (1978) minimum criterion for internal consistency.

Table 4.Summary of Reliability Estimates and Item-Total Correlations

Scale/Items	Item Means	Std. Dev.	Coefficient Alpha Reliability Estimates of Scales (Standardized)	Item-Total Correlations
Self-Insight			.712	
SI1	6.35	.97		.651**
SI3	6.47	.75		.617**
SI4	6.27	.81		.604**
SI5	6.16	.95		.760**
SI6	5.69	1.07		.686**
Shared Vision			.735	
SV1	6.23	.82		.585**
SV2	5.84	1.06		.684**
SV3	5.95	.92		.663**
SV4	6.40	.86		.604**
SV5	6.42	.84		.755**
SV6	6.35	.90		.640**
Team Collaboration			.801	
TC1	6.13	.88		.652**
TC3	6.35	.73		.689**
TC4	5.79	.97		.824**
TC5	5.82	1.01		.831**
TC6	6.18	.90		.731**

*Note: **Item-total correlation is significant at the 0.01 level (2-tailed).*

Estimation Method and Fit Criteria

Based basic reliability tests, the researchers continued with hierarchical confirmatory factor analysis to assess the fit of the proposed measurement model. As indicated before, scale items showed small skewness and kurtosis. Thus, all parameters were estimated using maximum likelihood estimation and the data satisfied the assumption of multivariate normality. The parameter estimates for the proposed model were provided in Table 5. The overall goodness of fit of the *a priori* model was judged by the value of fit statistics such as the root mean square error of approximation and comparative fit index. The selected model fit indexes showed that the model fitted the factor structure of the *a priori* HCFA model: the minimum fit function Chi-square is 302.28 (df = 99, $p < .001$); NFI = .887; NNFI = .899; CFI = .917; SRMR = .072; RMSEA = .104 with the 90% confidence interval of (.092; .116). These values constituted an indication that the three-dimensional model represents an adequate fit to the data.

Table 5: Hierarchical Confirmatory Factor Analysis and Construct Reliability

Construct/Indicators	Standardized Factor Loading (*t*-value) [a]	Composite Reliability (CR)	Average Variance Extracted (AVE)
Self-Insight		.692	.312
SI1	.465 (5.87)		
SI3	.437 (6.82)		
SI4	.501 (7.12)		
SI5	.558		
SI6	.554 (7.42)		
Shared Vision		.713	.300
SV1	.477 (6.60)		
SV2	.591		
SV3	.553 (6.75)		
SV4	.317 (4.62)		
SV5	.480 (6.52)		
SV6	.506 (6.45)		
Team Collaboration		.807	.464
TC1	.434 (7.03)		
TC3	.445 (8.83)		
TC4	.786 (11.93)		
TC5	.791		
TC6	.590 (9.55)		

Note: [a.] Figures in parentheses are t values. Based on one-tailed t tests: t values>1.65, p<.05; t values>2.33, p<.01. Estimates without t values are fixed parameters.

Convergent and Discriminant Validity

In addition, the adequacy of the measurement model is also evaluated based on the criteria of convergent and discriminant validity of the constructs. Construct validity was assessed using the composite reliability (CR). According to Fornell and Larcker (1981), composite reliability is a measure of the overall reliability of a collection of heterogeneous but similar items. It estimates the extent to which a set of latent construct indicators share in their measurement of that construct. Nunally (1978) suggested that a cut-off value of .70 is appropriate for checking the internal consistency of the construct. In our study, all the constructs displayed satisfactory levels of validity, as indicated by composite reliabilities ranging from .692 to .807.

To evaluate convergent validity, the average variance extracted (AVE) was calculated. As suggested by Fornell and Larcker (1981), the average variance extracted estimates the amount of common variance among latent construct indicators; and a variance extracted of greater than the minimum value of .50 will be supportive for the convergent validity check. However, the calculation of AVE in this study did not meet the minimum value of .50, which could be explained by the existence of several indicators with lower factor loadings. Although it might be an indicator of weak convergent reliability, previous researchers still argued that it is possible to have a poor variance extracted, yet have a

high construct validity (e.g., Bagozzi, 1991; Hair et al., 1998). Moreover, all the factor loadings were significant (t-values greater than 4.62). Therefore, the researchers would like to confirm the convergent validity of the constructs (also see Table 5).

To demonstrate discriminant validity, the suggested cutoff of .90 was used as implied distinctness in construct content (Bagozzi, 1980; Bagozzi & Fornell, 1982; Gold, Malhotra, & Segars, 2001). Table 6 presented the estimated correlations between all constructs pairs as shown in the phi matrix. Almost all estimated correlations were significantly less than .90 except for one pair. The highest correlation coefficient (.98, between the dimension of self-insight and the dimension of shared vision) indicated certain degree of conceptualization overlapping. However, to be consistent with the theoretical framework we have proposed, we decided to keep the two constructs as distinct factors instead of collapsing the two dimensions into a single factor and testing a respecified model. Furthermore, the examination of the residual matrix and modification indices also supported that the two latent variables were not perfectly correlated and that discriminant validity has been achieved (Bagozzi & Phillips, 1982). Therefore, we argued that the hierarchical measurement model provided an acceptable fit to the data, and the modification did not result in a significant degradation in model fit as suggested by the residual matrix and modification indices.

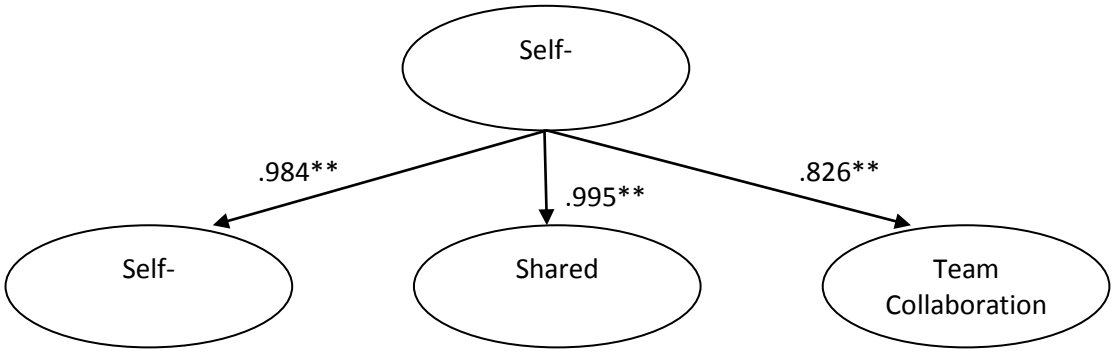
In addition, to assess the ability of the second-order model to explain the covariation among the first-order factors, target coefficient was also computed (Marsh, 1987b). Target coefficient is defined as the ratio of the chi-square of the first-order model to the chi-square of the hypothesized model. It has a maximum value of one, which implies all the covariances among the first-order factors explained by the second-order factor structure (Marsh, 1987b). In our study, the target coefficient was equal to .93, indicating that the second-order factor explained 93% of the covariation among the 3 first-order factors. Correlations among the 3 first-order factors were all consistently high, which also indicated that all the 3 first-order factors made major contributions to the second-order factor (please see Table 6). Figure 2 presented the standardized second-order factor loadings. Their values ranged from .826 to .995. The high second-order factor loadings implied that the three factors were strongly influenced by the second-order factor. Therefore, the hierarchical factor structure consisting of one single second-order factor was supported.

Table 6. Correlations among the First-Order Factors

	1	2	3
1.Self-Insight	1		
2.Shared Vision	.98	1	
3.Team Collaboration	.81	.82	1

Note: All correlations are significant at the .01 level

Figure 2: *Second-Order Confirmatory Factor Model and Factor Loadings at the Second Level*



Note: Table 5 exhibits the standardized factor loadings at the first level.

CONCLUSION

This study was motivated by a desire to understand how leadership has been defined in the field of public relations and the key dimensions an effective public relations leader should possess. Our findings offered initial insights into the construct and provided concrete directions for future research and managerial guidelines.

This article has demonstrated the application of structural equation modeling to the study of higher order factor structure in public relations practitioners' ratings of leader attributes. Based on a conceptual framework for evaluating the importance of personal attributes to the excellence in public relations leadership, the hypothetical self-dynamics construct was operationalized in terms of three dimensions (self-insight, shared vision, and team collaboration). As an exploratory study, this paper shed more light on the self-dynamics construct by confirming its multidimensionality and suggesting its importance to the success of public relations practitioners as individuals, as well as leaders in the organization.

The results of the hierarchical confirmatory factor model have provided clear support for the following two conclusions. First, personal attributes and some superior qualities are essential to effective leadership in public relations. Specifically, the discussion of the range of personal attributes and qualities are multidimensional. The feature of multidimensionality has determined that the role of traits in effective leadership is comprehensive. Basically, the breadth of traits related to the effectiveness of leadership in public relations encompasses three sub-dimensions as the conceptual model suggested. By knowing the strengths and weaknesses of themselves, effective public relations leaders should be able to leverage their existing capabilities that favorably position themselves and inspire team members and other organizational members about the value of communication efforts, as well as the desired direction of the organization. Through analysis of theory and empirical testing, this research strongly

supports the notion that public relations practitioners may possess a predisposition for successful communication management through the development of key personal attributes and qualities.

Second, the results of the analysis suggest that public relations leaders' capabilities are complex not only in definition, but also in operationalization. In the present context, theory construction dictated a confirmatory approach, and care was taken to operationalize key dimensions through multiple rounds of item purification. As a result, for self-dynamic capabilities, a second-order factor structure provides the best empirical model for capturing the variances among the collect measures. The item measures developed in this research exhibited good qualities of reliability and validity and should provide a useful tool for further inquiry into the trait-perspective of leadership effectiveness in public relations.

However, similar to many emerging concepts in the field of public relations and leadership research, the excellent leadership construct itself and theory surrounding knowledge in terms of its content and application within the organization is complex. Due to the page limitation, this paper only investigated one important aspect of the construct, which is related to public relations leaders' personal attributes and qualities. However, as a part of theory construction process, we also proposed that excellent leadership in public relations encompasses not only the self-dynamic capabilities but also other essential dimensions such as ethical consideration, relationship building capabilities, the acquisition of communication knowledge and expertise, the capabilities of getting involved in the strategic decision-making process, and the capabilities of influencing the culture and value of an organization. We believe it is important to investigate the leadership construct in an integrated and more comprehensive approach. It is valuable to note that the construct itself encompasses leader traits, behaviors, styles, and leader-follower relationship to address the magnitude and functions of leadership in terms of excellence in communication management.

Therefore, a potentially useful area of future research is to utilize the integrated perspective for establishing empirical thresholds of excellent leadership in public relations across firms and contexts. In addition, understanding the sequence of developing and testing key dimensions of leadership in public relations will provide a road map for organizations planning to undertake communication management efforts. For public relations practitioners, it seems that an understanding of how comprehensive dimensions of leadership influence their individual achievements and the communication objectives at the organizational level would benefit themselves in the practice.

REFERENCES

Aldoory, L., & Toth, E. (2004). Leadership and gender in public relations: Perceived effectiveness of transformational and transactional leadership styles. *Journal of Public Relations Research, 16*(2), 157-183.

Bagozzi, R. (1980). *Causal models in marketing*. New York: Wiley.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B. M. (1990). *Bass and Stogdill's handbook of leadership: Theory, research, and managerial applications* (3rd Ed.). New York: Free Press.

Bass, B. M. (1997). Concepts of leadership. In R. P. Vecchio (Ed.), *Leadership: Understanding of power and influence in organizations* (pp. 3-23). Notre Dame, IN: University of Notre Dame Press.

Berger, B. K. & Reber, B. H. (2006). *Gaining influence in public relations: The role of resistance in practice*. Mahwah, NJ: Lawrence Erlbaum Associates.

Berger, B. K., Reber, B. H., & Heyman, W. C. (2007). You can't homogenize success in communication management: PR leaders take diverse paths to top. *International Journal of Strategic Communication, 1*, 53-71.

Bollen, K. (1989). *Structural equations with latent variables*. New York: Wiley.

Chemers, M. M. (1997). *An integrative theory of leadership*. London: Lawrence Erlbaum.

Choi, Y., & Choi, J. (2009). Behavioral dimensions of public relations leadership in organizations. *Journal of Communication Management, 13*, 292-309.

Churchill, G. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research, 16*, 64-73.

Clemens, J. K., & Mayer, D. F. (1987). *The classic touch: Lessons in leadership-Homer to Hemingway*. Homewood, IL: Business One Irwin.

Conger, J. A. (1999). Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research. *Leadership Quarterly, 10*, 145-179.

Conger, J. A., & Kanungo, R. N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review, 12*, 637-647.

Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.

Couper, M. P. (2000). Web surveys: A review of issues and approaches. *Public Opinion Quarterly, 64*, 464-494.

Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical Dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance, 13*, 46-78.

Eisenberg, E., Goodall, H. L. J., & Tretheway, A. (2007). *Organizational communication: Balancing creativity and constraint* (5th ed.). Boston, MA: Bedford/St. Martin's.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(Februrary), 39-50.

Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information System, 18*(1), 185-214.

Graen, G. (1976). Role-making processes within complex organizations. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology* (pp. 1202-1245). Chicago: Rand McNally.

Grunig, J. E. (Ed.). (1992). *Excellence in public relations and communication management: Contributions to effective organizations*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Grunig, L. A. (1992). Power in the public relations department. In J. E. Grunig (Ed.), *Excellence in public relations and communication management: Contributions to effective organizations* (pp. 483-502). Hillsdale, NJ: Lawrence Erlbaum Associates.

Grunig, L. A., Grunig, J. E., & Dozier, D. M. (2002). *Excellent public relations and effective organizations: A study of communication management in three countries*. Mahwah, NJ: Lawrence Erlbaum Associates.

Holtzhausen, D. R., & Werder, K. P. (2008). *The emergence of new organizational structures and their relationship with public relations practice*. Paper published by The Plank Center for Leadership in Public Relations, University of Alabama.

Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance, 22*, 375-403.

Kouzes, J. M., & Posner, B. Z. (2002). *The leadership challenge* (3rd Ed.). San Francisco, CA: Jossey-Bass.

Marsh, H. W. (1987b). The hierarchical structure of self-concept and the application of hierarchical confirmatory factor analysis. *Journal of Educational Measurement, 24*, 17-39.

Northouse, P. G. (2007). *Leadership: Theory and practice*. Thousand Oaks, CA: SAGE publications.

Nunnally, J. (1978). *Psychometric theory* (2rd Ed.) New York: McGraw Hill.

Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology, 25*, 35-71.

Stogdill, R. M. (1974). *Handbook of leadership: A survey of the literature*. New York: Free Press.

Stogdill, R. M., & Coons, A. E. (Eds.). (1957). *Leader behavior: Its description and measurement*, Research Monograph No. 88. Columbus, OH: Bureau of Business Research, The Ohio State University.

Toth, E. L. (2007). *The future of excellence in public relations and communication management: Challenges for the next generation* (Ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Yukl, G. (1971). Toward a behavioral theory of leadership. *Organizational Behavior and Human Performance, 6*, 414-440.

Yukl, G. (1989). *Leadership in organizations* (2nd Ed.). Englewood Cliffs, NJ: Prentice Hall.

Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of Management, 15*(2), 251-289.

Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly, 10*(2), 285-305.

Yukl, G. (2002). *Leadership in organizations* (5th Ed.). Upper Saddle River, NJ: Prentice-Hall.