# Perceptions of Competency Norms in the Workplace: A Scale Development

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## ABSTRACT

This study developed and tested a theory-based measure of an individual's perceptions of social norms of showing competency at work (i.e., perceptions of competency norms) with 644 working professionals in two samples. Following item generation and content adequacy assessment, exploratory factor analyses and confirmatory factor analysis provided evidence of its construct validity, resulting in a multidimensional instrument comprising four conditions under which perceptions of competency norms may be elicited: toward profession, toward stakeholders, when competent, and when incompetent. Finally, structural equation modeling demonstrated predictive validity for the measure of perceptions of competency norms with three impression management tactics: self-promotion, ingratiation, and exemplification. Implications for practice and directions for future research are discussed.

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## INTRODUCTION

To keep pace with growing competition and rapidly shifting conditions in technologies, business organizations require continual development of employee competencies ranging from technological skills to knowledge acquisition (Maurer, 2001). As concern with competency – defined as knowledge, skill, and intelligence (ability) – has grown within organizations, competency has gone beyond its traditional role in job analysis and improvement of human performance (Blancero, Boroski, & Dyer, 1996). There is an increasing need for employees to be more functionally and cognitively fluid, and to be able to work across many kinds of task domains and situations (Fisher, 2000; Heerwagan & Kampschroer, 2005). In fact, competency-based assessments are now the basis for many key human resource decisions at both the individual and the organizational levels, and they serve as an important element in training and

development efforts, recruitment, performance management, compensation, rewards, and business strategy (Ey, 2006). As a result, many employees expend a considerable amount of time and effort in projecting a desirable image of competency, defined herein as being perceived by oneself or others as skilled, knowledgeable, and intelligent (Ey, 2006).

Ybarra (2001) asserts that in most day-to-day social situations people tend to process information about others that contains competence-related (e.g., intelligent, unimaginative) and morality-related (e.g., honest, unhelpful) behaviors and characteristics. Consequently, a common human concern for inferring competence and making judgments of others and oneself appears to exist in social interactions (Jamieson, 2004). Moreover, in organizational life, situational factors may trigger a desire to project an image of competency. Such factors include organizational climate, group dynamics, professional pressures, and job role expectations (e.g., Theriault, 2003). These forces have been conceptualized as collective pressures or social norms that are integral to organizational life and are important elements for explaining behavior (Jasso & Opp, 1997).

Collective expectations of appearing competent on a job may increase the use of impression management (IM) (Ferris & Judge, 1991; Ferris, Russ, & Fandt, 1989; Rosenfeld, Giacalone, & Riordan, 1995), which is a tendency to improve one's image and public perception (Rosenfeld et al., 1995; Schlenker, 1980). Hence, when people are placed into work situations in which they perceive that they are expected to perform and to appear competent, often without sufficient experience or preparation, they may rely on IM tactics for conveying the desired image of competence.

Although both injunctive (attitudinal) and descriptive (behavioral) norms have been widely examined in social norms research (Berkowitz, 2004), social norms for showing competency in the workplace have not been examined. Conforming to competency norms and projecting the desired competency image may yield benefits ranging from increased credibility (Carey and Nahavandi, 1996) to higher status and respect for the individual (Jamieson, 2004;Theriault, 2003; Von Hippel, Von Hippel, Conway, Preacher, Schooler, & Radvansky, 2005).

However, producing an impression of competency may also inadvertently generate negative consequences (Carey & Nahavandi, 1996; Jamieson, 2004; Lee, 2002) such as the potentially destructive and inhibiting impact on help-seeking behavior (Lee, 2002; DePaulo & Fisher, 1980), bullying of incompetent coworkers (Jamieson, 2004), the stereotyped threat of being perceived as incompetent (Tomkiewicz & Bass, 1999; Tomkiewicz, Bass, & Vaicys, 2005), denial of the importance of competency (von Hippel et al., 2005), and/or strain and anxiety (Beehr, 1995). Such pressures may also elicit negative emotional experiences including the fear of appearing incompetent (Good & Good, 1973; Tomkiewicz et al., 2005), feelings of incompetency (Jamieson, 2004; Thériault, 2003), the fear of negative evaluation (Leary, 1983), and the fear of self-promotion (Dudley, Goodson, & Weissenburger, 1993).

Despite increasing demands for competency in the knowledge economy, the resultant pressures for employees to appear competent, and the potentially negative effects of engaging in actions intended to promote impressions of competency, little research has been found that addresses the impact, of the perception of normative pressures of showing competence on the job (e.g., Rousseau, 1990; Cooke and Rousseau, 1988; Xenikou & Furnham, 1996). Moreover, no scale exists to measure such pressures.

Therefore, in this paper we begin by developing and testing the construct validity of a multidimensional, theory-based *perceptions of competency norms scale* (Jasso & Opt, 1997). Thereafter, we demonstrate the utility of this scale by testing its ability to uniquely predict organizationally relevant IM tactics. Finally, we build the case for the critical importance of impressions of competency in organizations and encourage researchers to systematically explore the phenomenon in order to ultimately minimize any negative impact in the workplace.

## STUDY APPROACH

To guide the process of developing an instrument to measure perceptions of competency norms, the scale development steps, proposed by Hair, Anderson, Tatham, & Black (1998) and Hinkin, Tracey, and Enz (1997), were adopted by this study: These steps are summarized in Table 1. Study 1 comprised of steps (a) through (f) and Study 2 comprised of steps (g) and (h).

*Table 1 Stepwise approach for Studies 1 and 2*

| ***Study 1*** | | |
|---|---|---|
| | Step | Approach |
| | (a) | Construct definition |
| | (b) | Item generation. |
| | (c) | Content adequacy assessment. |
| | (d) | Questionnaire administration. |
| | (e) | Construct validity assessment. |
| | (f) | Internal validity assessment. |
| ***Study 2*** | | |
| | Step | Approach |
| | (g) | Replication of construct validity and reliability. |
| | (h) | Predictive validity assessment. |

### Study 1

The perceptions of competency norms (PCN) instrument was developed and tested in the first study through ontological definition, item development, scale administration, and exploratory factor analysis. The definition of the concept is drawn from the competency literature and the theoretical background related to the role of competency norms in organizations and their impact on individuals.

Competency is a broad, multidimensional concept (McLagan, 1997). Ey (2006) summarized the existing taxonomies of individual competencies ranging from knowledge, skills, ability,

interests, self-concepts, and attitudes to characteristics differentiating the superior from the average performer. Amid the circular and inbred terminology developments, four common synonyms used for individual competence have emerged: skill, knowledge, intelligence, and performance (Ey, 2006).

Although the terms “competence” and “performance” have often been used interchangeably, it is necessary to differentiate them for this study. “Performance” describes both the prior (i.e., competence) and subsequent (i.e., results) aspects of an individual performing a task (Ey, 2006, p 23). Further, Vonk (1999) argues that performance cannot exceed one‘s abilities and thus is informative only about the underlying ability. Performance has often been used as a proxy for assessing competence on a job despite such factors as motivation, which may also influence performance outcome. “Competence,” then, refers to the set of skills, knowledge, and abilities that enables one to perform, coupled with, for example, motivation and resources. Therefore, in our research, competency is specifically based on the three non-task-specific dimensions—knowledge, skill, and intelligence (ability), where knowledge is required to obtain skills linked to a specific task, and intelligence (i.e., cognitive ability) is used to transfer the knowledge across tasks in order to achieve competency (McClelland, 1973).

In addition, the conceptualization of collective pressures to appear competent at work is grounded primarily in the social norms literature. Social norms, a group-level system-oriented concept, are considered the building blocks of organizational culture, (Payne, 2000; Reichers & Schneider, 1990). Organizational culture, in turn, refers to a common set of shared normative (“what should be done”) beliefs and understandings about the organization. Normative beliefs, also known as system norms, refer to explicit, system-sanctioned behaviors that are expected from members (James, James, & Ashe, 1990). Social norms thus involve the felt obligation to behave according to a configuration of attitudes, emotional expressions, decisions and behaviors integral in an organizational life, which are important elements in explaining behavior in organizations (Jasso & Opp, 1997).

Direction, strength, and conditionality are three key attributes of norms and culture. Direction refers to the actual content of the cultural values, behavioral norms, and cognition, while strength is the extent of its emphasis on the content (Cooke & Rousseau, 1988), or —the extent to which members of a unit agree on the norms, values, or other culture content associated with the unit (Rousseau, 1990, p. 181). The conditionality attribute captures various conditions, or settings and circumstances, under which individuals are enticed to subscribe to these norms (Jasso & Opp, 1997). For example, the pressure to appear competent might be stronger when interacting with clients and less when interacting with co-workers. Two types of social expectations have been proposed to serve as key factors in guiding social interactions: first-order expectation (held by oneself) and second-order expectation (perceptions of expectations held by others) (Troyer & Younts, 1997). When a discrepancy exists between first- and second-order expectations, second-order expectations dominate social interactions suggesting a prevailing strength of social norms over an individual’s motives. This can be present in a workplace with strong display norms for competency, when individuals try to appear competent on a job despite their feelings of, and a sense of, being incompetent.

Taken together, the concept of “perceptions of competency norm” is defined as the perceived collective pressure at work that prescribes normative behaviors, attitudes, and appearances regarding how members should project their knowledge, skills and intelligence (i.e., competence) in their jobs. It is pertinent to measure one‘s perceptions of competency norms

rather than the norms themselves because individuals react to their perceptions of reality, not the reality itself (Lewin, 1939).

***Item Development***

A deductive scale development methodology (Hinkin, 1995) was employed to generate items for showing competency at work. This approach entailed first developing a theoretical definition of the construct, which was then used to guide the creation of the items. Jasso and Opt (1997) argue that any methodology for measuring social norms (which is challenging) should focus on at least three norm dimensions: (a) polarity, which captures the "positive" and/or "negative" direction of a norm to be either prescriptive (dictating certain behavior), proscriptive (intolerant of certain behavior), or bipolar; (b) conditionality, or the extent to which the norm applies in all circumstances; and (c) strength, which is the degree to which individuals subscribe to the norm Norm strength is also referred to as intensity. We established the focal construct by integrating the three components: (a) perceptions of social norms, (b) competency image, and (c) the act of showing competency. Taken together, the perceptions of competency norms are operationalized as the strength, conditionality, and prescriptive polarity of the perceptions of collective pressures dictating the extent to which employees feel obliged to project competency, i.e., knowledge, skills, and intelligence, without relying on explicit performance outcome measures.

Scale items were generated to capture norm conditionality. Item content, drawn from the literature, reflects various work settings that may elicit perceptions of competency norms: (a) outcome-based motives (Vroom, 1964), (b) social interactions (Baumeister & Leary, 1995), (c) change, and (d) criticality. Outcome-based conditionality referres to identifying motives and conditions under which individuals actively subscribe to these norms. The focus on anticipated outcomes from a particular behavior is grounded in Expectancy Theory (Vroom, 1964). Ayres (2005) validated a 10-item scale to quantify employees' motives for attending continuing education at work; this scale captured similar motives for engaging in impressions of competency. Six of those items were selected to assess outcome-based conditionality for showing competency at work: (a) getting a pay increase, (b) promotion, (c) special recognition at work, (d) respect from superiors, (e) more favorable assignments, and (f) respect from peers. Similarly, the researchers generated six additional items in regard to (a) gaining a positive performance evaluation, (b) subordinates' respect, (c) respect from clients, (d) respect from co-workers of the same and (e) opposite genders, and (f) saving face after making a mistake, In summary, these 12 items, six adapted from Ayres and six developed by the researchers, covered two subsets of outcome-based conditions: personal outcomes (e.g., achieving a positive performance evaluation) and social outcomes (e.g., gaining respect from peers).

In addition to the 12 outcome-based conditions, 10 items representing three situational categories were generated to complete the operationalization process of norm conditionality: social interactions, change, and criticality,. In creating additional new items, we followed a scale development process similar to Jasso and Opp's (1997) vignette approach. Three additional situational contexts were identified in which professionals may perceive competency norms in the workplace. The social interactions category, which involved situations in which people interact with each other at work, included three items referring to public speaking events, meetings with more than five people, and meetings with fewer than five people. The change category described events that bring change and newness in a job; it consisted of four items referring to new job assignments, working with new clients, working with new peers, and facing new field or technological advancements. The criticality category consisted of instances when one's competency may be scrutinized; it included three items referring to lacking necessary

skills, knowledge, or experience; inability to communicate one's incompetency; and handling high-stakes assignments. Therefore, a total of 22 items reflected the four aspects of conditionality.

While the conditionality dimension was embedded within the content of the items, the prescriptive polarity was measured by a sentence prompt at the beginning of the survey: "I must create the impression that I am competent (i.e., look like I am skillful, knowledgeable, and intelligent)". The respondents were instructed to rate items in terms of their perceptions of the pressures to appear competent at work, in contrast to proscriptive polarity, which would ask respondents to rate items in terms of the perception of pressures to avoid being seen as incompetent. The strength of the prescriptive polarity was determined by values entered on a Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

Even though the survey items were generated at the individual level, the structure of the prompt played a key role in eliciting perceptions of collective normative pressures to appear competent that the individuals may or may not subscribe to when rating the items. Specifically, the phrase "'I must"' was purposely designed to elicit individual perceptions of social norms that indicate pressures to show competency on a collective level

***Content Validity Assessment***

The instrument was reviewed by a panel comprised of 11 content experts: five well-published professors, three of whom have specific expertise in IM; five doctoral students in their third and fourth year of conducting organizational behavior research at prominent U.S. research-focused universities; and one professional executive responsible for managing the development of competencies in her division. The panel was asked to assess threats to content validity (Hinkin, 1995), classify each item to one of four conditional categories, and provide suggestions for enhancing the overall scale.

Based on the panel's feedback, an initial instrument comprising 26 items in five distinct categories was developed. The five categories are summarized in Table 2

*Table 2. Study 1: Categories Generated after the Content Validity Assessment*

| **Category** | **Definition** | **Sample Item** |
|---|---|---|
| 1. Individual outcome motives | Motivating factors for subscribing to social norms | To get more favorable assignments for me. |
| 2. Collective outcome motives | Goals and expectations set by an organization, profession, group or job as motivating factors for appearing competent | To meet expectations of my profession |
| 3. Social settings | Types of interpersonal interactions at work where professionals are likely to be pressured to demonstrate competency | In meetings with superiors at work |

| | | |
|---|---|---|
| 4. Times of change | Changes at work or newly arisen circumstances on the job that may trigger the necessity to appear competent | To handle changes at work due to technological advancements |
| 5. Self-perception | The impact of an individual's awareness of or feelings about their own skills, knowledge and intelligence on the need to display competency | When I do not have the requisite skills to do the job |

***Participants and Procedures***

The survey was conducted using professionals in order to study actual work settings with high levels of competency expectations. The study aimed to capture working professionals' actual propensity for behavioral and emotional reactions to competency norms in recalling actual working experiences rather than from outcomes based on hypothetical reactions to hypothetical situations by nonemployees (e.g., the college student sample population in the work of Good & Good, 1973, and Schimel, Pyszczynski, Greenberg, O'Mahen, & Arndt, 2000).

To allow flexibility and convenience for the respondents, data were collected online through a self-reported survey. To ensure statistically significant scale validation and internal reliability assessment of the 26 items, it was determined that at least five observations per item were required (Hair et al., 1998, p. 99; Tabachnick & Fidell, 2007).

The data were collected through respondent-driven sampling (RDS), a variation of a snowball sampling technique (Salganik & Heckathorn, 2004). RDS has been found to be effective in penetrating hidden populations (e.g., illegal immigrants, artists) (Salganik & Heckathorn, 2004) but also to access non-hidden populations in a large-scale application (Wejnert, 2009). Utilizing the RDS approach, this survey targeted professionals in various occupations ranging from publishing, engineering, academia, law, and medicine to consulting, accounting, finance, and science to ensure wide generalizability of the instrument. An email message with an invitation to participate in the survey was sent to 40professional contacts, who were also asked to forward the invitation to five other qualified professionals in their social network. The study involved a first and second wave of respondents. Over the course of 8 weeks, 160 professionals started the survey and 81% of them completed all of the items.

*Table 3. Studies 1 and 2: Participants and Demographics*

| | | |
|---|---|---|
| ***Study 1: Demographics*** | | |
| Sample | N | 160 |
| | Response Rate | 81% |
| Age and Tenure | Average Age | 44.7 |
| (in years) | Average Org Tenure | 9.1 |
| | Average Professional Tenure | 12.7 |
| Education | Doctorate degree | 13% |
| | Master's degree | 43% |
| | Undergraduate degree | 33% |
| | Other education degree | 12% |
| Gender and ethnicity | Male | 47% |
| | Female | 53% |
| | White | 91% |
| Industries | Professional Services | 14.4% |
| | Healthcare | 16.5% |
| | Academia/Education | 18.6% |
| | Legal/Finance | 15.5% |
| | Technology/Engineering | 19.6% |
| | Human Resource | 4.1% |
| | Marketing | 11.3% |
| ***Study 2: Demographics*** | | |
| Sample | N | 514 |
| | Response Rate | 13.3% |
| Age and Tenure | Average Age | 37.6 |
| (in years) | Average Org Tenure | 5.5 |
| | Average Professional Tenure | 8 |
| Gender and ethnicity | Male | 54% |
| | Female | 46% |
| | White | 70% |
| | Asian | 18% |
| | Other | 12% |
| Industries | Physician Residents | 22% |
| | Working Medical Students | 22% |
| | Management Consultant/Senior Mgmt Level | 20% |
| | Self-employed Consultants | 19% |
| | Entry Level Consultants | 16% |

Table 3 provides the detailed composition of the sample. The sample represented a generally diverse distribution across key demographic characteristics, except for ethnicity (91% of respondents were White). Sixty percent of the participants held management positions, of which 23% were senior management, 25% middle management, and 13% supervisors.

***Exploratory Factor Analysis***

Following the steps of the scale development process, we used data from the initial survey to perform exploratory factor analysis (EFA) to test the construct validity— the relationship of the measure to the underlying attributes it is attempting to assess (Hinkin, 1995). Three steps were undertaken: assessment of the suitability of the data for factor analysis, factor extraction, and factor rotation and interpretation (Pallant, 2007). Inspection of the correlation matrix revealed the presence of majority coefficients of 0.3 and above, justifying the application of factor analysis. The computation of the Kaiser-Meyer Olkin measure of sampling adequacy (0.895) and significance of Bartlett's test of sphericity (Bartlett, 1954) supported the factorability of the correlation matrix

Factor extraction based on principal axis factor analysis (PAF) using SPSS was conducted next. It involved determining the number of dimensions that can best represent the interrelations among the variables while tapping into the same underlying construct (Pallant, 2007). Specifically, Tabachnick and Fidell (2007) recommend three techniques: Kaiser's criterion (eigenvalues), scree plot tests, and parallel analysis using Monte Carlo boot strapping. PAF revealed the presence of five components with eigenvalues exceeding the value of 1 that cumulatively explained 74.7% of total variance. An inspection of the scree plot further revealed a decline in slope between the fifth and sixth components. The results of parallel analysis with 100 replications confirmed the five-component structure with eigenvalues exceeding the corresponding criterion values. Thus, a five-factor structure appeared to be the preferred solution for the scale.

As part of the next step, the oblique oblimin rotational method was used to examine items for removal – those with a significantly low and cross-loading potential (Hair et al., 1998). Oblique oblimin rotation assumes components to be correlated, whereas the orthogonal varimax method does not require correlation among the components. Since the component correlation matrix revealed higher than 0.3 correlations, oblique oblimin rotation was selected (Pallant, 2007).

The cutoff of 0.45 for a significant loading was based on the recommendation by Hair et al. (1998) for the sample size. Three items, "working with new superiors," "getting a positive performance evaluation," and "during informal encounters with external stakeholders," were removed because of double loading. A fourth item, "after making a significant mistake on the job," was eliminated due to insufficient loading. In addition, comments from the respondents pointed out four items that were not widely applicable and these items were also removed. As a result, 18 items remained.

The scale was tested again through PAF with oblimin rotation to validate construct and reaffirm the 18-item measure with five components. The Kaiser-Meyer-Olkin value was recalculated, reaching 0.811, and Bartlett's test of sphericity retained statistical significance. The newly emerged factors differed from the factors proposed in the initial instrument, which warrants a discussion about the differences. The individual-outcome-motives category disappeared. The personal motives, social settings, and times of change categories were overshadowed by the

strength of norms directed towards a specific target such as superiors and external stakeholders. Collective-outcome motives were found to be attributable specifically to one's profession.

The difference between formal and informal social settings did not appear in any unique contribution or classification. Further, the self-perception of competency category was split into two factors: one driven by the perception of competency and the other by incompetency. The findings suggest that individuals experience perceptions of competency norms at work differently depending on their perception of their own competency. Consequently, five components emerged. The profession category was composed of five items that were intended to capture the extent of the demonstration of competency expected in a job and profession. The self-perception of one's incompetency at work category included three items that described lack of skills, knowledge, and experience. In contrast, the third dimension, with three items, focused on self-perception of one's own competency level. Perceptions of collective pressure to appear competent in front of superiors were assessed by four items. Last, three items measured the perceived expectation for demonstration of competency when interacting with external stakeholders, such as patients, clients, and customers.

The last step of the scale development process involved conducting internal consistency reliability tests (Hinkin, 1995). Cronbach's alpha within this sample reached 0.90, which indicated good internal consistency reliability. The inter-item correlations were assessed for any negative or low values; the mean of inter-item correlations was an acceptable 0.347; and the item-to-total statistics did not reveal any values below 0.3, confirming satisfactory reliability. The resulting questionnaire assessing the perceptions of competency norms is presented in Table 4.

*Table 4. Study 1: Perceptions of Competency Norms Instrument*

| **Keeping your profession in mind, please rate each statement after completing the sentence:**<br><br>**—I must create the impression that I am competent (i.e., look like I am skillful, knowledgeable, and intelligent)…** | | | | | | |
|---|---|---|---|---|---|---|
| | | □Disagree | | | | Agree□ |
| 1. | In meetings with superiors at work. | 1 | 2 | 3 | 4 | 5 |
| 2. | To get more favorable assignments. | 1 | 2 | 3 | 4 | 5 |
| 3. | To gain respect from superiors. | 1 | 2 | 3 | 4 | 5 |
| 4. | During informal get-togethers at work with superiors. | 1 | 2 | 3 | 4 | 5 |
| 5. | In meetings with clients. | 1 | 2 | 3 | 4 | 5 |
| 6. | To achieve my professional goals. | 1 | 2 | 3 | 4 | 5 |
| 7. | To gain respect from clients. | 1 | 2 | 3 | 4 | 5 |
| 8. | When on a new job assignment. | 1 | 2 | 3 | 4 | 5 |
| 9. | To meet requirements of my job. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 10. | To handle changes at work due to technological advancements. | 1 | 2 | 3 | 4 | 5 |
| 11. | To meet expectations of my profession. | 1 | 2 | 3 | 4 | 5 |
| 12. | To handle changes at work due to field advancements. | 1 | 2 | 3 | 4 | 5 |
| 13. | When I do not have the experience to do the job. | 1 | 2 | 3 | 4 | 5 |
| 14. | When I do have the experience to do the job. | 1 | 2 | 3 | 4 | 5 |
| 15. | When I do not have the requisite skills to do the job. | 1 | 2 | 3 | 4 | 5 |
| 16. | When I do have the requisite skills to do the job. | 1 | 2 | 3 | 4 | 5 |
| 17. | When I do not have the knowledge to do the job. | 1 | 2 | 3 | 4 | 5 |
| 18. | When I do have the knowledge to do the job. | 1 | 2 | 3 | 4 | 5 |

## Study 2

While Study 1 provided initial validation of the instrument, Study 2 aimed to complete the comprehensive scale development process by establishing construct, criterion, and predictive validity. To accomplish these objectives, we developed a predictive model with five hypotheses, confirmed the component structure of the new measure, tested the convergent and discriminant validity of both the predictive model and the perceptions of competency norms instrument, and assessed the predictive utility by using structural equation modeling (SEM) to test the hypotheses.

### *Predictive Validity*

As part of the rigorous scale development effort, it was important to examine the ability of the competency norms to predict and perhaps elicit other organizationally relevant outcomes. Collective expectations of appearing competent on a job may contribute to various behaviors, such as IM, within an organizational setting. IM refers to people's concern about attaining an overall desired public image, e.g., likeability, attractiveness, virtue, strong effort-level, and competence (Rosenfeld et al., 1995). This study is specifically focused on examining the use of IM tactics (Rosenfeld et al., 1995) to understand the behavior and reactions of people seeking to attain a positive image. Individuals who perceive high collective norms for appearing competent on a job may engage in more IM behaviors in order to be accepted in the workplace. Baumeister and Leary (1995) argued that people engage in socially prescribed normative behaviors in order to belong. That is, people have a drive to maintain quality relationships with others and thus engage in conformity behaviors such as impression management to achieve these relationships. Therefore, individuals might rely on IM to show their work colleagues that they are indeed competent and thus belong with the work group.

As the IM literature has identified various behavioral and attitudinal strategies (IM tactics), we propose that perceptions of competency norms in the workplace can predict a number of these tactics: self-promotion, ingratiation, exemplification, supplication, and intimidation (Kacmar, Harris, & Nagy, 2007). Self-promotion includes exaggerating or highlighting one's accomplishments and abilities in order to be seen as competent (Rosenfeld et al., 1995). Self-promotion tactics have been consistently identified in the literature as having a direct influence on attaining a competency outcome image (Jones & Pittman, 1982; Pfeffer, Fong, Cialdini, &

Portnoy, 2006). Giacalone and Rosenfeld (1986) conducted a field experiment that showed that the occurrence of self-promotion increased when the target was a higher status. Based on this premise, we propose the following:

*Hypothesis 1. Perceptions of competency norms at work are positively related to self-promotion.*

Ingratiation tactics attempt to elicit an attribution of one's attractiveness and likability and can also serve as an indirect way for achieving positive impressions of competency. There are a variety of verbal and attitudinal ingratiation tactics, such as self-enhancement, other-enhancement, favor-rendering, and opinion-conformity (Bolino, Kacmar, Turnley, & Gilstrap, 2008). People tend to engage in self-enhancement by assigning favorable traits and characteristics to themselves, which certainly may include one's cognitive capabilities' reflecting a positive competency image (Yun, Takeuchi, & Liu, 2007). To increase their likeability, people express opinions consistent with others', do favors, and praise others.

Researchers assert that successful ingratiation may be as significant as actual performance in attributions of competency and performance appraisals (Rosenfeld et al., 1995; Kacmar, Carlson, & Bratton, 2004). The premise that those who are more likeable and attractive are perceived more favorably on a variety of attributes than those who are less liked, also holds for making impressions of competency. Therefore, we propose that when individuals perceive pressures to show competency (i.e., perceptions of competency norms), they will use ingratiation to increase their competency image.

*Hypothesis 2. Perceptions of competency norms at work are positively related to ingratiation.*

Rosenfeld et al. (1995) defined exemplification as making others perceive actions as exemplary and worthy of serving as a role model. Exemplification is "managing impression of integrity, self-sacrifice and moral worthiness by advertised behavior" (p. 54). Although many IM tactics, such as exemplification, have not yet been investigated in relation to competency pressures, the preliminary reasoning for the next hypothesis arises from the premise that individuals who perceive strong collective pressures to show competency at work will engage in exemplification behavior (e.g., working late hours) to appear competent. That is, individuals will try to portray themselves as worthy and exemplary in order to appear competent.

*Hypothesis 3. Perceptions of competency norms at work are positively related to exemplification.*

Supplication has been conceptualized as an opposite of self-promotion, where the supplicator exploits his own weakness to influence others (Rosenfeld et al., 1995, p. 56) by appearing to be in need and asking for help. Jones & Pittman (1982), in their seminal work on a general theory of strategic self-presentation, attributed the image outcome of "needy" to supplication. Thus, supplicators are actually trying to create an image of incompetence. Therefore, we propose that individuals will be less likely to appear "needy" in a work environment in which they perceive strong competency norms.

*Hypothesis 4. Perceptions of competency norms at work are negatively related to supplication.*

Another way of responding to social pressures to display competency at work involves intimidation tactics directed towards increasing the perception of one's power and status.

Within the domain of IM research, intimidation involves verbally aggressive use of influence in order to achieve desired outcomes (Bolino & Turnley, 1999). It involves the use of power, force, or coercion in aggressive communication with others at work to get one's way. Intimidation tactics are presumed to have an indirect effect on being perceived as more confident and more competent in the workplace. For example, if someone is pressed to be seen as competent, they may choose to aggressively argue their point in order to hide their incompetence. Based on this premise, we propose the following:

*Hypothesis 5. Perceptions of competency norms at work are positively related to intimidation.*

***Participants and Procedures***

For this study, we conducted an online survey with 514 respondents composed of management consultants and medical professionals. Approximately 3,400 survey invitations were emailed to medical professionals at a large urban teaching hospital in the Northeastern United States and to management consultants in three major consulting organizations, with a total response rate of 15%. The response rate is satisfactory for online survey administration, (e.g., Hamilton's (2009), meta-data sample analysis consisting of 199 online surveys with a total of 523,790 invitations sent to potential respondents resulted in a 13.3% total response rate). Table 3 provides further details of the sample composition.

***Measures***

*Impression management.* Bolino and Turnley's (1999) scale, originally developed by Jones and Pittman (1982), was selected to measure the IM construct because it is one of the most common validated scales in the IM literature and it embodies the five known tactics: self-promotion , ingratiation, exemplification, intimidation, and supplication. Each tactic is measured with five items for a total of 25 items in the scale. Representative items for each tactic are as follows: for self-promotion, "I talk proudly about my experience or education"; for ingratiation, "I use flattery and favor to make my colleagues like me more"; for exemplification, "I try to appear like a hard-working, dedicated employee"; for intimidation, "I deal forcefully with colleagues when they hamper my ability to get my job done"; and for supplication, "I act like I know less than I do so people will help me out". This five-dimensional structure of IM achieved reliability of 0.89.

*Perceptions of Competency Norms*. Competency norms were measured using the 18-item scale developed in Study 1 (shown in Table 4).

*Control Variables.* To eliminate any undesired effects in measuring the relationship between competency norms and IM tactics, we controlled for four variables: occupation, age, gender, and ethnicity. Single questions to capture data for these control measures were included at the beginning of the survey. Since two major populations were surveyed, a dichotomous variable was used to control for occupation. Numerous studies have shown that age is specifically important to engaging in IM tactics (Schlenker, 1980; Strutton, Pelton, & Lumpkin, 1995). Research indicates that gender also plays an important role in IM; males are more likely to use assertive self-presentation tactics (Lee, Quigley, Nesler, Corbett, & Tedeschi, 1999). Last, because IM is a socially defined behavior, different cultures and ethnic backgrounds may explain differences in engagement in IM (Booth-Kewley, Rosenfeld, and Edwards, 1992) and in interpretation of perceptions of social norms and competency images.

## RESULTS

Another exploratory factor analysis was administered, this time with a dataset of 514 responses, before the data were analyzed. Principal component analysis (PCA) was used to locate the minimum number of items and factors in the competency norms measure. Extracted variance from PCA showed that four components cumulatively explained 71.7% of total variance, and the oblimin rotation demonstrated that items measuring competency norms towards superiors and external stakeholders formed a newly combined factor: stakeholders. The Kaiser-Meyer-Olkin value reached 0.886 and Bartlett's test of sphericity retained statistical significance.

Table 5 shows all item loadings meeting the required criteria as well as their communalities, indicating satisfactory levels of variance explained in each item (Hair et al., 1998). The four-factor structure solution with 18 items was validated for the competency norms instrument (alpha = 0.88).

*Table 5. Study 2: EFA Pattern Matrix and Communalities*

| | **Pattern Matrix** | | | | **Communalities** |
|---|---|---|---|---|---|
| Items | Components | | | | |
| | 1 | 2 | 3 | 4 | |
| | Stake | Incom | Comp | Prof | |
| In meetings with superiors at work. | **.847** | | | | .630 |
| To gain respect from superiors. | **.815** | | | | .643 |
| In meetings with clients. | **.792** | | .154 | -.145 | .622 |
| To gain respect from clients. | **.774** | | | | .638 |
| When on a new job assignment. | **.747** | | | | .639 |
| To get more favorable assignments / challenging cases. | **.631** | | | | .435 |
| To achieve my professional goals. | **.622** | | | .179 | .590 |
| During informal get-togethers with superiors. | **.502** | | | .163 | .395 |
| When I do not have the requisite skills to do the job. | | **.976** | | | .951 |
| When I do not have the knowledge to do the job. | | **.974** | | | .946 |
| When I do not have the experience to do the job. | | **.939** | | | .893 |
| When I do have the knowledge to do the job. | | | **.940** | | .913 |
| When I do have the experience to do the job. | | | **.930** | | .878 |
| When I do have the requisite skills to do the job. | | | **.920** | | .905 |
| To handle changes at work due to technological advancements. | | | -.109 | **.883** | .724 |

| | | | | |
|---|---|---|---|---|
| To handle changes at work due to field advancements. | | .130 | **.848** | .775 |
| To meet expectations of my profession. | | .246 | **.644** | .678 |
| To meet requirements of my job. | .257 | | **.635** | .659 |

*Note: Principal Component Analysis, Oblimin Rotation. All items loadings above .10 are shown. Component 1 – Toward Stakeholders; 2 – When Incompetent, 3 – When Competent, 4 – Toward Profession*.

***Descriptive Statistics***

Descriptive statistics including means, standard deviations, and bivariate zero-order correlations for demographic and key constructs presented in Table 6 offer some interesting insights. The incompetent factor failed to correlate significantly with the other competency norm dimensions except for the stakeholders' subscale ($r$ = 0.17). All IM tactics are slightly correlated with each other; self-promotion and supplication correlated the least ($r$ =*0*.09).

*Table 6. Study 2: Means and Bivariate Correlations for Key Factors*

| Variable | Mean | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. CN Stakeholders | 4.33 | .56 | | | | | | | | |
| 2. CN Profession | 4.00 | .69 | .64** | | | | | | | |
| 3. CN Incompetent | 2.90 | 1.15 | .17** | .04 | | | | | | |
| 4. CN Competent | 4.20 | .73 | .49** | .51** | .05 | | | | | |
| 5. Self-Prom | 3.42 | .80 | .19** | .18** | .04 | .08 | | | | |
| 6. Ingratiation | 3.03 | .84 | .12** | .05 | .15** | .04 | .24** | | | |
| 7. Exemplif. | 2.69 | .76 | .17** | .08 | .27** | .04 | .10* | .53** | | |
| 8. Intimidation | 2.04 | .79 | .02 | -.02 | .11* | -.07 | .25** | .26** | .27** | |
| 9. Supplication | 1.72 | .72 | -.05 | -.02 | .19** | -.08 | .09* | .28** | .35** | .50** |

*Note: *p < .05, **p < .01. CN = competency norms.*

Because all data in the study were self-reported and collected through the same questionnaire during the same period of time using a cross-sectional research design, we examined common method variance (CMV). Although no single or general factor emerged from the Harman's one-factor test, another, more robust, technique was carried out to assess CMV. Podsakoff, MacKenzie, Lee, and Podsakoff (2003) recommended a single-common-method factor approach for studies that measure predictor and criterion variables in the same context and whose sources of method bias cannot not be identified or measured. Using this approach,

also referred to as the ULMC technique by Richardson, Simmering, and Sturman (2009), we examined the significance of structural parameters with and without the latent CMV factor across four models. The resulting fit of these four nested models indicated that a small amount of CMV was present in the dataset. The method variance was estimated at 15% on average with a 5% median. Because the magnitude of the corrected correlations and CMV was considerably lower than the 25% median reported by Williams, Cote, and Buckley (1989) and confirmed by Richardson et al. (2009), it can be assumed that CMV will not confound the interpretations of results in the study.

***Confirmatory Factor Analysis of Perceptions of Competency Norms***

Following the satisfactory results from EFA, validation of the multidimensional perceptions of competency norms model continued through CFA, using AMOS 17.0 maximum likelihood procedure to confirm whether the four-factor structure is the preferred model The fit of the model was assessed using selected statistics and their criteria: chi-square/df values less than 0.3 indicate good model fit (Schumacker & Lomax, 2004); normalized fit index (NFI), incremental fit index (IFI), and comparative fit index (CFI) values greater than .90 signify good model fit; root mean squared error (RMSEA) values less than .06 indicate a good fit (Hu & Bentler, 1999) while values ranging from .08 to .10 indicate a mediocre fit and those greater than 0.10 indicate a poor fit (Byrne, 2001).

The fit of two different factor structures was compared for the sample. First was a one-factor model, in which all 18 items were indicative of one larger construct. The second was a four-factor model in which items were allowed to load onto their respective factors (i.e., profession, stakeholder, competency, and incompetency) and the factors were allowed to correlate with each other. The fit statistics of the two models are shown in Table 7.

*Table 7. Study 2: CFA of Four-Factor Structure of Competency Norms*

| Structure | $X^2$ | DF | $X^2$/DF | $_{\Delta}X^2$/DF | CFI | NFI | RMSEA |
|---|---|---|---|---|---|---|---|
| (N = 514) | | | | | | | |
| One-factor model | 3,946.28 | 135 | 29.23 | | .46 | .45 | .24 |
| Four-factor model | 558.64 | 129 | 4.33 | 3,387.64** | .94 | .92 | .08 |

*Note: All chi-square are significant at p <.001. CFI = comparative fit index. NFI = normative fit index. RMSEA = root mean square error of approximation. ** p < .01 (two tailed)*

There was considerable improvement in the chi-square/df, CFI, NFI, and RMSEA for the four-factor model, and the chi-square test resulted in a significant chi-square difference (3,387.67 at $p < .001$, $df = 6$) between the one-factor and four-factor models. The four-factor model fit the data reasonably well (chi-square = 558.64, $p < .001$, $df = 129$, chi-square/df = 4.33; RMSEA = .08, CFI = .94, NFI = .92). Although the RMSEA value of .08 may indicate a moderate fit, the

relatively high values of CFI and NFI—above .90—combined with the reasonable model fit indicated by the chi-square/df value slightly above 4.0 suggest that the overall model fit appears to be adequate.

***Criterion-based Validity***

This section is dedicated to the examination of the overall measurement model fit through CFA and their convergent and discriminant validities. The measurement model for the study contained six factors (i.e., perceptions of competency norms and five IM tactics). The model fit the data reasonably well. NFI and CFI values met the acceptable criterion of 0.90 (NFI = 0.90, CFI = 0.93), the chi-square/degrees of freedom ratio reached the value of 2.70 and RMSEA was found in the range of 0.058; all of which indicate a good model fit.

As suggested by Hair et al. (1998), the convergent validity of the new instrument was assessed by examining the factor loadings and computing the composite reliability. Constructs have convergent validity when the factor loadings are statistically significant, the composite reliability exceeds the criterion of .70, and the average variance extracted is above .50. All factor loadings were statically significant and the measure demonstrated an acceptable composite reliability of .70. The average variance extracted reached 0.42; however, this should be acceptable within the exploratory perspective undertaken in this study for this new measure.

Discriminant validity of the measurement model was tested by comparing the six-factor model (chi-square = 976.5) with two other nested models (e.g., Ng, Ang, & Chan, 2008). The first nested model included three factors and consisted of competency norms, combined items from self-promotion, ingratiation, and exemplification, and combined items from supplication and intimidation (chi-square = 4,065.3). The second nested model included a highly restricted single-factor structure (chi-square = 6,143.5). The results of chi-square difference tests indicated consistently large and significant values and a considerably worse fit of key indices (shown respectively): the chi-square / df (2.7; 10.9; 16.3), RMSEA (0.06; 0.14; 0.17), and CFI (0.90; 0.60; 0.40). The six-factor model appeared to be superior and confirmed the discriminant validity of the measurement model. Discriminant validity of the six instruments was also evident by squared correlations lower than their average variance extracted (Fornell & Larcker, 1981; Kline, 2005). In summary, the results indicate a successful confirmation of the validity of the measurement model and the perceptions of competency norms construct prior to testing the predictive validity.

***Predictive Validity***

SEM was used to test the five hypotheses that proposed that the perceptions of competency norms measure predicts five IM tactics: self-promotion, ingratiation, exemplification, supplication, and intimidation. The indices show an acceptable fit to the structural model data: chi-square ($N$ = 514) = 1,917.6 at $p < 0.01$ ($df$ = 474, chi-square / df = 4.05, CFI = 0.85, NFI = 0.81, and RMSEA = 0.07). The findings related to the hypotheses are shown in Figure 1.

The results indicate that H1 is supported and that the perceptions of competency norms measure was positively related to self-promotion. This indicates that when individuals perceive high competency norm demands in the workplace, they intensify self-promotion behaviors such as exaggerating or highlighting one's performance. Similarly, results indicated that H2 was also supported where perceptions of competency norms was positively related to ingratiation. This indicates that when individuals perceive high competency norm demands in the workplace, they intensify their ingratiating behaviors such as self-enhancement or favor tending.

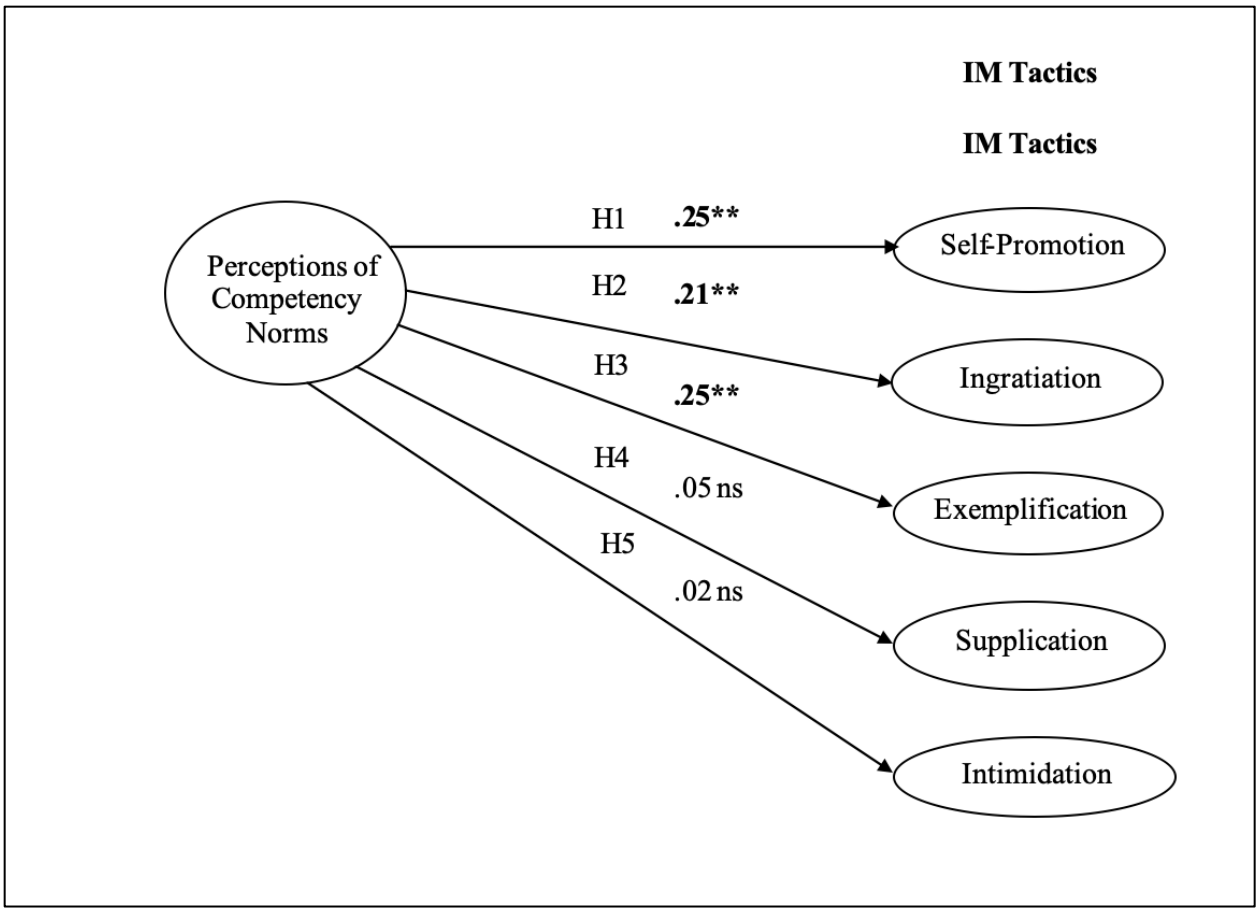


*Figure 1. Study 2: Predictive Validity Results through Structural Equation Modeling*

*Note. All standardized beta coefficients. ** p < .001. ns = not significant. Control variables are occupation, gender, age, and ethnicity*

Final support was found for H3 where perceptions of competency norms was found to be positively associated with exemplification. This indicated that when individuals perceive high competency norm demands in the workplace, they intensify behaviors that manage impressions of integrity and moral worthiness. The findings reveal that the four-factor structure satisfactorily predicted self-promotion, with beta = 0.25 at p < .001; ingratiation, with beta = 0.21 at $p < .001$; and exemplification, with beta = 0.25 at $p < .001$. Interestingly, no significant effects were detected for intimidation or supplication, with regression weights being insignificant ($p > .05$). Thus, hypotheses 4, supplication, and 5, intimidation, are not supported.

## GENERAL DISCUSSION

The perceptions of competency norms construct was initially validated with 18 items and a five-factor structure. Items were generated, content adequacy was assessed, and construct validity was examined through EFA and internal reliability analysis. Study 1 provided the foundation for further examination of the construct validity and criterion validity (i.e., convergent and discriminant validity), which were performed on another data sample collected for Study 2.

Results from Study 2 confirmed a four-factor structure of the perceptions of competency norms with satisfactory reliability levels and with discriminant, convergent, and predictive validity. The

overall measure was significantly associated self-promotion, ingratiation, and exemplification, such that individuals who perceive themselves to be under collective pressure to appear competent may be more likely to engage in these IM tactics. The findings offer some initial insights regarding the potential power of perceptions of competency norms in the workplace.

## Contribution

This paper addresses an important yet unexamined phenomenon in organizational life: individual perceptions of competency norms. Collective pressures to show competency are abundant on many levels in organizational life and vary across professional roles and organizations (e.g., Jamieson, 2004; Thériault, 2003). The full extent of the implications of perceptions of competency norms is still not well understood amid scarce organizational research. Therefore, introducing and validating the construct and examining its implications on behavior in the organizational context are important research endeavors. Based on two samples and rigorous scale development methods, utilizing a research design that is empirical and cross-sectional, the current study however, represents only a first step.

## Limitations and Future Research

This endeavor provides numerous directions for future research that are prompted by the study‘s limitations. As with any new measure, given that scale development is an iterative process, further research is needed to refine the construct. For example, other norm conditions should be examined (e.g., targeting co-workers or subordinates). Prescriptive behavior (avoiding being seen as incompetent) may be a critical component of perceptions of competency norms that should be explored. Furthermore, additional research can expand beyond the professional work setting.

Even though perceptions of competency norms are defined as “collective pressures” which make employees exert an effort to look competent, the scale addressed individual perceptions or sensitivity to the different contexts of the need to be seen as competent or to avoid being seen as incompetent in organizational life. In other words, the items were developed and tested at the individual level with the assumption of informing the collective aspect of competency pressures in the workplace. It is recommended that future studies validate the measure at a higher level, affirming that the competency norms construct actually resides in the collective level.

A serious limitation is the reliance on self-report variables measured from the same sources in both studies. Adherence to competency norms may not always be freely expressed. For example, admitting to showing competency when being incompetent may imply one’s inauthenticity, especially when these norms go against personal inner beliefs and values of being authentic. Self-reporting may also be affected by the social desirability of the respondents. These potential response biases were partially overcome by a procedural remedy of creating an anonymous and scientifically important environment (Podsakoff et al., 2003). By realizing that the objective of the study is to further science and not to be critical of their answers, respondents should be more open to admit to yielding to the competency norms. Future research could collect ratings from multiple samples, sources, at different points in time, or include experimental designs in which causality can be inferred under more tightly controlled circumstances. Researchers should be encouraged to examine different types and the extent of response biases that may affect competency norms assessment.

Because of limited research on behaviors and attitudes specifically identified for attaining a desired competency image in organizational settings (Rosenfeld et al., 1995), Study 2 relied on five IM tactics as the sole outcome behaviors related to impressions of competency. Only one particular tactic, self-promotion, has been systematically studied with respect to competency (Jones & Pittman, 1982; Kacmar et al., 2004). This research supports it but also sheds light on other tactics such as ingratiation and exemplification, that are used for attaining a desired image of competency. Future research should focus on classifying behaviors and attitudes that contribute to making impressions of competency.

In addition to IM behavior, it is also important to investigate the outcomes of perceptions of competency norms on individuals' emotional experiences. Emotion is an undertone of a pervasive force in the workplace that has the capacity to significantly influence the organization and its members (Ashforth & Humphrey, 1995). A handful of emotional experiences may relate to impressions of competency in various ways; however, the concept of the fear of appearing incompetent (Good & Good, 1983; Tomkiewicz et al., 2005) may be of particular importance to competency norms because individuals may be more susceptible to this fear when working in environments with a high concern for impressions of competence. Future investigations should also address the potentially destructive impact of impressions of competency on organizational outcomes: inhibited help-seeking behavior, bullying, mistakes, decreased performance, and negative team dynamics and on individual experiences in terms of stress, withdrawal, and in-authenticity.

To further our understanding of impressions of competency in organizational life, future research could be advanced through a systematic focus on expanding four areas: (1) antecedents (e.g., collective pressures, individual drive) leading to (2) the actual act of making impressions of competency (e.g., IM tactics), which may affect (3) individual experience (e.g., fear of appearing incompetent, stress, job satisfaction) and may result in (4) organizational outcomes (e.g., errors, performance). The current research explored just two aspects of this framework.

## Implications for Practice

This and future work contribute to practice twofold. This investigation was aimed at giving organizations a better understanding of the implications of the perceptions of normative work pressures for showing competence on individuals' behavioral and emotional responses. The significant contribution to the practitioner field is the development of a preliminary instrument to measure competency norms in the work environment. As a result, organizations can be empowered to monitor their employees' perceptions of norms and change them accordingly to mitigate undesired consequences.

Second, this study brings attention to a more extensive concept of the phenomenon of impressions of competency in organizations. Practitioners can address perceptions of competency norms to enrich their organizational culture, training programs, performance evaluations, and promotions. Future research may even identify individual predispositions for engaging in excessive (or subdued) impressions of competency behaviors. In fact, perceptions of competency norms may play an important role in gaining a competitive advantage for organizations necessitating strategic HR and organization development efforts in acknowledging, confronting, and re-creating competency norms.

## CONCLUSION

The study is important for several reasons. It provides a tool to both researchers and practitioners for measuring perceptions of collective pressures of competency on the job. It addresses relatively unexplored territory regarding the consequences of perceptions of competency norms on individual behavior in organizations. Lastly, it emphasizes the importance of studying impressions of competency in organizational life.

## REFERENCES


Ashforth, B. E, & Humphrey, R. H. (1995). Emotion in the workplace: A reappraisal. Human Relations, 48, 97-125.

Ayres, H. W. (2005). Factors related to motivation to learn and motivation to transfer learning in a nursing population. Doctoral dissertation, North Carolina State University. ProQuest Digital Dissertations Database, Publication No. AAT 3162411.

Bartlett, M. S. (1954). A note on the multiplying factors for various χ 2 approximations. Journal of the Royal Statistical Society. Series B (Methodological), 296-298.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117, 497-529.

Beehr, T. A. (1995). Psychological stress in the workplace. London, UK: Routledge.

Berkowitz, A. D. (2004). Social Norms Approach: Theory, Research, and Annotated Bibliography. Retrieved on February 13, 2009 from www.socialnorms.org.

Blancero, D., Boroski, J., & Dyer, L. (1996). Key competencies for a transformed human resource organization: Results of a field study. Human Resources Management, 35, 383-403.

Bolino, M. C., & Turnley, W .H. (1999). Measuring impression management in organizations: A scale development based on the Jones and Pittman taxonomy. Organizational Research Methods, 2, 187-206.

Bolino, M. C., Kacmar, M. K., Turnley, W. H., & Gilstrap, J. B. (2008). A multi-level review of impression management motives and behaviors. Journal of Management, 34, 1081-1109.

Booth-Kewley, S., Rosenfeld, P., & Edwards, J. E. (1992). Impression management and selfdeceptive enhancement among Hispanic and non-Hispanic white Navy recruits. Journal of Social Psychology, 132, 323-329.

Bozeman, D. P., & Kacmar, K. M. (1997). A cybernetic model of impression management processes in organizations. Organizational Behavior and Human Decision Processes, 69, 9-30.

Byrne, B. N. (2001). Structural equation modeling with AMOS. Mahwah, NJ: Lawrence Erlbaum.

Carey, J. M. & Nahavandi, A. (1996). Using impression management to establish successful service-level agreements. In J.W. Bear (Ed.), Impression management and information technology (pp. 51-64). Westport, CT: Quorum Books.

Cooke, R. A. & Rousseau, D. M. (1988). Behavioral norms and expectations: A quantitative approach to the assessment of organizational culture. Group and Organization Studies, 13, 245-273.

DePaulo, B., & Fisher, J. (1980). The cost of asking for help. Basic and Applied Social Psychology, 1, 23-35.

Dudley, G. W., Goodson, S. L., & Weissenburger, D. A. (1993). Overcoming fear in salespeople. Training & Development, 47(12), 34-38.

Ey, P. (2006). A Track-by-level approach to performance competency modeling. Doctoral dissertation, Touro University International. ProQuest Digital Dissertations Database, Publication No. ATT 3220531.

Ferris, G. R., & Judge, T. A. (1991). Personnel/human resources management: A political influence perspective. Journal of Management, 17, 447-488.

Ferris, G. R., Russ, G. S., & Fandt, P. M. (1989). Politics in organizations. In R. A. Giacalone & P. Rosenfeld (Eds.). Impression management in the organizations (pp. 143-170). Hillsdale, NJ: Erlbaum.

Fisher, K. (2000). Leading Self-Directed Work Teams: A Guide to developing new team leadership skills. New York: McGraw-Hill Professional.

Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.

Giacalone, R. A., & Rosenfeld, P. (1986). Self-presentation and self-promotion in an organizational setting. Journal of Social Psychology, 126, 321-326.

Good, L., & Good, K. (1973). An objective measure to avoid appearing incompetent. Psychological Reports, 32, 1075-1078.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate Data Analysis (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Hamilton, M. B. (2009). Online survey response rates and times: Background and guidance for industry. Retrieved November 5, 2009 from Supersurvey Web-Site at http://www.supersurvey.com/papers/supersurvey_white_paper_response_rates.pdf

Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. Journal of Management, 21, 967-988.

Hinkin, T. R., Tracey, J. B., & Enz, C.A. (1997). Scale construction: Developing reliable and valid measurement instruments. Journal of Hospitality and Tourism Research, 21, 100-120.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1-55.

James, L. R., James, L. A., & Ashe, D. K. (1990). The meaning of organizations: The role of cognition and values. In B. Schneider (Ed.), Organizational culture and climate (pp. 40-84). San Francisco, CA: Jossey-Bass.

Jamieson, A .M. (2004). The social construction of competence and 'incompetence': Problematics of hospital nursing work in the era of restructuring. Doctoral dissertation, University of British Columbia, Canada. ProQuest Digital Dissertations Database, Publication No. AAT NQ90201.

Jasso, G., & Opp, K.D. (1997). Probing the character of norms: A factorial survey analysis of the norms of political action. American Sociological Review, 62, 947-964.

Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic self-presentation. In

J. Suls (Ed.), Psychological perspective on the self (pp. 231-261). Hillsdale, NJ: Erlbaum.

Kacmar, K. M., Carlson, D. S., & Bratton, V. K. (2004). Situational and dispositional factors as antecedents of ingratiatory behaviors in organizational settings. Journal of Vocational Behavior, 65, 309-331.

Kacmar, K. M., Harris, K. J., & Nagy, B. G. (2007). Further validation of the Bolino and Turnley Impression Management Scale. Journal of Applied Behavioral Management, 9, 16-32.

Kline, R. B. (2015). Principles and practice of structural equation modeling. Guilford publications.

Leary, M. R. (1983). A brief version of the Fear of Negative Evaluation Scale. Personality and Social Psychology Bulletin, 9, 371-375.

Lee, F. (2002). Social costs of seeking help. Journal of Applied Behavioral Science, 38, 17-35.

Lee, S., Quigley, B. M., Nesler, M. S. Corbett, A. B., & Tedeschi, J. T. (1999). Development of a self-presentation tactics scale. Personality and Individual Differences, 26, 701-722.

Lewin, K. (1936). Principles of topological psychology. New York: McGraw-Hill.

Maurer, T. (2001). Career-relevant learning and development, worker age, and beliefs about self-efficacy for development. Journal of Management, 27, 123-140.

McClelland, D. C. (1973). Testing for competence rather than for "intelligence." American Psychologist, 28(1), 1-14.

McLagan, P. (1997). Competencies: The next generation. Training & Development, 51(5), 4047.

Ng, K., Ang, S., & Chan, K. (2008). Personality and leader effectiveness: A moderated mediation model of leadership self-efficacy, job demands, and job autonomy. Journal of Applied Psychology, 4, 733-743.

Pallant, J. (2007). SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (3rd ed.). New York: Open University Press.

Payne, R. L. (2000). Climate and culture. In N. M. Ashkanasy, C. Wilderom, & M. F.Peterson (Eds.). Handbook of organizational culture and climate (pp. 163-176). Thousand Oaks, CA: Sage.

Pfeffer J., Fong, C. T., Cialdini, R. B., & Portnoy, R. R. (2006). Overcoming the selfpromotion dilemma: Interpersonal attraction and extra help as a consequence of who signs one's praises. Personality and Social Psychology Bulletin, 32, 1362-1375.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88, 879-903.

Reichers, A. E., & Schneider, B. (1990). Climate and culture: An evolution of constructs. In B.

Schneider (Ed.), Organizational culture and climate (pp. 5-39). San Francisco: Jossey-Bass.

Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. Organizational Research Methods, 12, 762-800.

Rosenfeld, P., Giacalone, R. A., & Riordan, C. A. (1995). Impression management in organizations: Theory, measurement practice. London, UK: Routledge.

Rousseau, D. M. (1990). Assessing organizational culture. In B. Schneider (Ed.), Organizational culture and climate (pp. 153-192). San Francisco, CA: Jossey-Bass.

Salganik, M. J. & Heckathorn, D. D. (2004). Sampling and estimation in hidden populations using respondent-driven sampling. Sociological Methodology, 34, 193–239.

Schlenker, B. R. (1980). Impression management: The self-concept, social identity, and interpersonal relations. Monterey, CA: Brooks/Cole.

Schimel, J., Pyszczynski, T., Greenberg, J., O'Mahen, H., & Arndt, J. (2000). Running from the shadow: Psychological distancing from others to deny characteristics people fear in themselves. Journal of Personality and Social Psychology, 78, 446-462.

Schumacker, R. E. and Lomax, R. G. (2004). A beginner's guide to structural equation modeling (2nd ed.). Mahwah, NJ: Erlbaum.

Strutton, D., Pelton, L. E., & Lumpkin, J. R. (1995). Sex differences in ingratiatory behavior: An investigation of influence tactics in the salesperson-customer dyad. Journal of business research, 34(1), 35-45.

Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics (5th ed.). Boston: Pearson Education.

Thériault, A. (2003). Therapist's feelings of incompetence: A grounded theory analysis of experienced therapists. Doctoral dissertation, McGill University, Montreal, Canada. ProQuest Digital Dissertations database, Publication No. AAT NQ88590.

Tomkiewicz. J., & Bass, K. (1999). Changes in women‘s fear of success and fear of appearing incompetent in business. Psychological Reports, 85, 1003-1010.

Tomkiewicz. J., Bass, K., & Vaicys, C. (2005). Comparing fear of success and fear of appearing incompetent among African Americans‘ and White‘s business candidates. Equal Opportunities International, 24(2), 19-29.

Troyer, L., & Younts, C. W. (1997). Whose expectations matter? The relative power of first- and second-order expectations in determining social influence. American Journal of Sociology, 103, 692-732.

Van Iddekinge, C. H., McFarland, L. A., & Raymark, P. H. (2007). Antecedents of impression management use and effectiveness in a structured interview. Journal of Management, 33, 752-773.

Von Hippel, W., Von Hippel C., Conway, L., Preacher, K.J., Schooler, J.W., Radvansky, G.A. (2005). Coping with stereotype threat: Denial as an impression management strategy. Journal of Personality and Social Psychology, 89, 22-35.

Vonk, R. (1999). Impression formation and impression management: Motives, traits, and likeability inferred from self-promoting and self-deprecating behavior. Social Cognition, 17, 390-412.

Vroom, V. H. (1964). Work & motivation. New York: John Wiley.

Wejnert, C. (2009). An empirical test of respondent-driven sampling: Point estimates, variance, degree measures, and out-of-equilibrium data. Sociological Methodology, 39, 73-118.

Williams, L. J., Cote, J. A., & Buckley, M. (1989). The lack of method variance in selfreported affect and perceptions at work: Reality or artifact? Journal of Applied Psychology, 74, 462-468.

Xenikou, A., & Furnham, A. (1996). A correlational and factor analytic study of four questionnaire measures of organizational culture. Human Relations, 4, 349-371.

Ybarra, O. (2001). When first impressions don't last: The role of isolation and adaptation processes in the revision of evaluative impressions. Social Cognition, 19, 491-520.

Yun, S., Takeuchi, R., & Liu, W. (2007). Employee self-enhancement motives and job performance behaviors: Investigating the moderating effects of employee role ambiguity and managerial perceptions of employee commitment. Journal of Applied Psychology, 92, 745-756.