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The influence of national culture and organizational culture alignment on job stress and performance: evidence from Greece

Therese A. Joiner
La Trobe University, Bundoora, Australia

Abstract *Job-related stress has significant untoward consequences and appears to be widespread. Although job-related stress has a number of causes, the focus of this study is the stress associated with the lack of alignment between managers' societal values and the culture of the organization in which the manager works. Using a sample of 78 Greek managers, it is argued that the Eiffel Tower organizational culture, characterized by low levels of decentralization and high levels of formalization, is congruent with the Greek societal values of high power distance and strong uncertainty avoidance, reducing Greek managers' job-related stress and increasing their performance. Results indicate that an Eiffel Tower organizational culture/Greek societal culture fit is associated with lower reported job stress but not increased managerial performance. Implications of the results are discussed.*

Introduction
Job-related stress seems to have emerged as a significant workplace problem in a number of countries around the world (Robbins *et al.*, 1998; Siu *et al.*, 1999). Job-related stress can be conceptualized as an interactive imbalance between the individual and the individual's work environment (French *et al.*, 1974). This imbalance may manifest in a number of ways; however, the focus of this study is the imbalance between a manager's societal values and beliefs, and the philosophies and traditions of the organization in which the manager works. That is, incongruence between managers' national cultural values and organizational cultural values is likely to unfavorably impact on managers' job-related stress, as well as other important organizational outcome variables, such as managerial performance, absenteeism and/or turnover.

An imbalance between societal and organizational cultural values may be particularly important for organizations in less developed/developing countries. In a climate of increasing globalization and concomitant increasing competition, there is enormous pressure exerted on such organizations to restructure to enable them to compete successfully in a borderless world.

Progressive local firms in less developed /developing countries may, among a repertoire of restructuring strategies, consider changing their organizational culture to mimic the culture of successful organizations from the more industrialized nations. The implementation of an organizational cultural change, without reference to the surrounding societal values, may jeopardize the success of that change. For example, a firm with an organizational culture characterized by a more centralized decision-making structure may, in response to a rapidly changing environment, change to a culture that encourages greater decentralization of decision-making authority and responsibility. In societies where paternalistic dependent work values prevail, the resultant incongruence between the manager's societal values and the changed organization cultural values (emphasis on decentralization) may contribute to untoward outcomes in the workplace.

A number of studies have emerged examining the impact of the fit between managers' societal values and organizational processes and structures on key organizational outcomes (e.g. Chow *et al.*, 1991; Ueno and Wu, 1992; Wong and Birnberg-More, 1994; Hassel and Cunningham, 1996; Newman and Nollen, 1996; Dobbin and Boychuk, 1999). Very few studies, however, have examined the effect of this alignment on manager's job stress levels. Job stress has been related to the mental and physical well-being of the individual as well as organizational problems such as absenteeism, turnover and performance (Matteson and Ivancevich, 1979; Siu *et al.*, 1999). There is strong justification for building models to understand the causes of job stress given its important consequences and its prevalence. Thus, the aim of this study is to examine the effect of the societal/organizational culture imbalance on manager's job-related stress and managerial performance.

A concomitant aim is to test the model in an advancing (or developing) country. Research on organizations in advancing economies is important to promote their capabilities to participate effectively in the new hypercompetitive globalized business environment (Makridakis *et al.*, 1997). Thus, Greek middle managers working in manufacturing organizations in Greece were selected to test the hypotheses since Greece can be classified as an advancing economy (Makridakis *et al.*, 1997).

Organizational culture

Organizational culture can be defined as a system of shared meaning within an organization which influences how employees act (Denison, 1990). A number of organizational culture typologies have emerged in the literature. Trompenaars' (1993) organizational culture typology is adopted in this study which is based on the work of Harrison (1972) and Handy (1978). Trompenaars categorizes organizational culture into four main types based on two dimensions: equity-hierarchy and person-task orientation. Referring to Figure 1, four organizational culture types emerge, summarized as follows:

(1) *The Family (a power-oriented culture)*. This culture is characterized by strong emphasis on the hierarchy and an orientation toward the person.

Equity
(Decentralization)

INCUBATOR
(Fulfillment-oriented culture)

Sweden

GUIDED MISSILE
(Project oriented culture)

USA, UK and Canada

Person Emphasis
(Low formalization)

Task Emphasis
(High formalization)

FAMILY
(power-oriented culture)

Spain, France and Japan

EIFFEL TOWER
(Role-oriented culture)

Germany, Denmark

Hierarchy
(Centralization)

Figure 1.
Organizational culture

Individuals within this organizational form are expected to perform their tasks as directed by the leader, who may be viewed as the caring parent. Subordinates not only respect the dominant leader or father figure but they also seek guidance and approval.

(2) *The Eiffel Tower (a role-oriented culture).* A strong emphasis on the hierarchy and an orientation toward the task characterizes this culture. The "Eiffel Tower" image is intended to symbolize the typical bureaucracy – a tall organization, narrow at the top and wide at the base where roles and tasks are clearly defined and coordinated from the top. Authority is derived from a person's position or role within the organization, not the person *per se*.

(3) *The Guided Missile (a task-oriented culture).* Trompenaars' third type of organizational culture is characterized by a strong emphasis on equality and an orientation toward the task. The motto for this cultural type is "getting things done". Organization structures, processes and resources are all geared toward achieving the specified task/project goals. Power is derived from expertise rather than the formal hierarchy.

(4) *The Incubator (a fulfillment-oriented culture).* This culture is characterized by a strong emphasis on equality as well as an orientation toward the person. Trompenaars states that the purpose of the organization in such a culture is to serve as an incubator for the self-expression and self-fulfillment of its members.

Trompenaars (1993, p. 159) acknowledges that "pure types" rarely exist; however, he observed a tendency for particular organizational cultural forms to dominate in different national cultures. His research included 300 respondents

from 12 countries. A selection of countries and their respective organizational cultures are presented in Figure 1. Trompenaars (1993, p. 161) warns that his results should be interpreted with caution because the size of the organization is a confounding variable. Larger organizations require greater structuring of activities to control and coordinate a more complex organization brought about by size. Greece was not included in Trompenaars' study. It is most likely that Greece would sit in the same quadrant as France and Spain (the Family culture); however, larger Greek organizations are likely to choose an Eiffel Tower organizational culture in response to the size-induced needs for coordination and control.

Bourantas and Papalexandris (1992) empirical study of 588 Greek managers found that 74 per cent of respondents perceived that their organizations reflected either the characteristics of an Eiffel Tower culture (38 per cent) or a Family culture (36 per cent), providing support for the classification of Greek organizations as either of these two organizational culture types. Consistent with Trompenaars' work, it is probable that the size of the Greek organization differentiated between the implementation of a Family or Eiffel Tower organizational cultural form.

The two dimensions of Trompenaars' model, hierarchy/equity and person/task, can be operationalized by considering the degree of centralization and the degree of formalization, respectively. Thus, Greek organizations (the focus of this study) are likely to adopt an Eiffel Tower culture, characterized by centralization of decisions-making authority (hierarchy focus) and high reliance on formalization (task focus).

Linking organizational culture with Greek societal values

Consistent with French *et al*'s (1974) person/environment fit model of job-related stress, to the extent that Greek managers' societal values are congruent with the culture of the work environment, feelings of job stress should decline and performance should be enhanced. According to Hofstede's (1980) model of national culture, Greece is classified as high-power distance, strong uncertainty avoidance, collectivistic and masculine. Hofstede (1991, p. 140) contends that the two dimensions, power distance and uncertainty avoidance, have particular relevance for issues in organizational design. Therefore, these two dimensions, only, will be used in developing the relationship among national culture, organizational culture and job-related outcomes.

Power distance refers to the extent to which members of a society accept and expect that power is distributed unequally (Hofstede, 1980). Organizations in high-power distance cultures are characterized by the acceptance of human inequality and individuals show respect for authority that results in a paternalistic work relationship between superior and subordinate. Involvement in the decision-making process is not sought by subordinates nor encouraged by superiors. Indeed, the involvement of subordinates in decision-making processes may be viewed as a sign of poor leadership and result in greater anxiety and confusion for both parties of high-power distance cultures (Child, 1981).

Uncertainty avoidance refers to the extent to which members of a society feel threatened by uncertainty or unknown situations (Hofstede, 1980). Organizations in strong uncertainty avoidance cultures are characterized by: a strong need for rules and regulations; greater structuring of organizational activities; employee preference for clear unambiguous instruction from management, less risk-taking; intolerance toward deviant ideas and behaviors; and less individual initiative and responsibility in the workplace (Hofstede, 1980).

The hierarchy focus of the Eiffel Tower organizational culture, operationalized by centralization of decision-making authority, seems congruent with Greek managers' high-power distance societal values. Indeed, it is likely that encouraging Greek managers to increase their involvement in decision making may generate anxiety and lead to lower levels of performance. Such managers tend to prefer and respect a more non-consultative, decisive approach from their superior. Similarly, upper management inculcated with the values of a high-power distance culture, are likely to be reluctant to give up decision-making authority (perceived to be rightly bestowed upon them) to promote a relationship of greater equality in decision making (see Veiga and Yanouzas, 1991).

Similarly, centralization (or low decentralization), a characteristic of the Eiffel Tower organizational culture, tends to fit with Greek managers' strong uncertainty avoidance values. Decentralization increases the decision-making authority of subordinate managers. However, fear of making decisions is a characteristic of strong uncertainty avoidance cultures (Hofstede, 1991). Fear of making decisions or fear of responsibility among Greek subordinate managers has been documented in the literature (e.g. Bartholomew, 1995, p. 15; Bourantas *et al.*, 1990, p. 275; Cummings and Schmidt, 1972). In his attempt to restructure Olympic Airways (the Greek carrier) with a decentralization program, the ex-CEO, Rigas Doganis (an American-Greek), counted resistance, noting that "there is a wonderful Greek word: *efthynofovia*. It means 'fear of making decisions'. Many senior and middle managers are terrified of making decisions" (Bartholomew, 1995, p. 15). Subordinate managers of such cultures would most likely prefer to defer to the certainty of rules, procedures and leader directives, rather than make key decisions themselves and accept responsibility for the decision consequences. An organization culture that emphasizes hierarchy over equity in the form of centralized decision making is likely to be preferred, contributing to lower stress levels and high performance for Greek managers.

Turning to the task focus of the Eiffel Tower organizational culture, operationalized by a high reliance on formalization, such a focus seems to fit with the Greek societal values of high-power distance. Formalization limits the discretion of lower level managers by defining and specifying the boundaries of their behavior and/or actions. Input from the subordinate manager is neither expected nor encouraged. Superior and subordinate managers are likely to feel at ease with this arrangement. Superiors are provided the opportunity to exert and display their authority over subordinates, maintaining their relational power differential. The subordinate is likely to respect the directives from the superior in terms of task execution procedures.

High reliance on formalization, consistent with the task focus of the Eiffel Tower culture, also seems congruent with Greek managers' societal values of high uncertainty avoidance. The rule-based nature of formalization techniques, such as standard operating procedures, tends to reduce internal uncertainty by offering clear, unambiguous guidance on task-related matters. Subordinate managers are effectively buffered from uncertainty because they need only to refer to the rules and procedures in order to fulfill their job requirements. Thus high formalization, consistent with the Eiffel Tower organizational culture, is likely to lead to lower job stress and higher managerial performance for Greek managers.

Based on the foregoing, there appears to be an alignment between the Eiffel Tower organizational culture (higher centralization and higher reliance on formalization) and the Greek societal values of high-power distance and high-uncertainty avoidance. Such an alignment is likely to reduce Greek manager job stress and increase their performance. These arguments form the basis of the following hypotheses:

H1: The implementation of an Eiffel Tower culture (increased centralization and increased formalization) will be associated with reduced job-related stress for Greek managers.

H2: The implementation of an Eiffel Tower culture (increased centralization and increased formalization) will be associated with increased performance for Greek managers.

Research method
Data were gathered by questionnaires completed by Greek middle managers working in manufacturing organizations in Athens, Greece. The questionnaire was first written in English and subsequently translated into Greek following the procedure advocated by Hulin and Mayer (1986). The questionnaire was piloted on Greek managers and Greek academics.

Sample size and data collection
Contact was made with a Greek academic working in Greece, who coordinated the data collection in Athens. The companies contacted all employed over 100 employees and, to reduce the dilution of the Greek cultural values, a Greek CEO headed all companies. Although the companies selected manufacture a wide range of products, the sample reflects a predominance of companies from consumer products, chemical and textile industries. A total of 100 questionnaires were distributed to middle managers in 17 companies, of which 78 useable responses were returned. The most common reason for non-response was lack of time.

Measurement of variables
The Mahoney *et al.* (1963) nine-item instrument was used to measure managerial performance. The instrument requires managers to self-rate their

performance on eight main functional categories of managerial work, such as planning, coordinating and evaluating. The ninth item requires respondents to self-rate their overall effectiveness.

The 15-item index developed by Kahn *et al*. (1964), was used to assess manager's job-related stress. The index requires self-report perceptions of how frequently respondents feel "bothered" by certain aspects of the work environment. Decentralization was measured using an instrument developed by Burns and Stalker (1961) where the five questions that relate to decentralization, only, were included. The instrument requires respondents to rate their actual authority in making the following kinds of decisions: developing new products or services; hiring and firing managerial personnel; selection of large investments; budget allocations; and pricing decisions. A seven-point Likert-type scale was employed to elicit responses that range from (1) no delegation to (7) complete delegation. Thus, higher scores represent higher decentralization (or lower centralization). The formalization variable was measured using a five-item instrument aimed at capturing the extent to which rules, policies and procedures are formalized and followed within the work group based on the instrument developed by Van de Ven and Ferry (1980).

The cultural variables, power distance and uncertainty avoidance were re-measured using Hofstede's (1980) value-survey module. The re-measurement of the cultural dimensions was considered important because Hofstede obtained the index scores more than 25 years ago. The power distance score obtained for Greece was 56. Although the index score is slightly lower than that obtained by Hofstede (1980) [60], the score still places Greece in the high-power distance quadrant (Hofstede, 1991, p. 141). Similarly, the index score for uncertainty avoidance obtained here [74] is lower than the score obtained by Hofstede (1980) [112]. Again, this lowered score still places Greece in the high-uncertainty avoidance quadrant (Hofstede, 1991, p. 141).

The descriptive statistics and Cronbach (1951) alpha reliability measures for the relevant variables are contained in Table I. A correlation matrix for all relevant variables is presented in Table II.

Results

Multiple regression analysis was used to test the hypotheses. Tests for normality indicate that the residuals for each model are fairly normally distributed. Hence, the normality assumptions are not substantially violated in the regression models used in this study. The correlation matrix (Table II)

Variable	Mean	SD	Theoretical range	Actual range	Cronbach Alpha
Managerial performance	52.21	8.76	8-72	25-70	0.85
Job-related tension	40.15	8.47	15-75	16-57	0.82
Formalization	15.87	4.39	5-25	6-24	0.85
Decentralization	17.29	5.90	5-35	6-34	0.75

Table I.
Descriptive statistics

shows that the correlation between the independent variables, formalization and decentralization, are not statistically significant.

The results in Table III show that coefficient b_1 is negative and significant ($p < 0.02$) while coefficient b_2 is positive and significant ($p < 0.04$). This result supports *H1* such that, for Greek managers, an increase in formalization is associated with reduced job stress (preference for task focus) and an increase in decentralization is associated with increased job stress [or an increase in centralization is associated with reduced job stress] (preference for hierarchy focus), consistent with an Eiffel Tower organization culture. Turning to managerial performance, the results in Table IV show that coefficient b_1 is positive and significant ($p < 0.001$), while coefficient b_2 is also positive and significant ($p < 0.05$). Such a result provides partial support for *H2*. An increase in formalization is associated with an increase in managerial performance (preference for task focus), as hypothesized, but an increase in decentralization is associated with an increase in performance [or an increase in centralization is associated with a decrease in performance]. The latter result is in the opposite direction to that hypothesized, supporting an organizational culture focussed on equity rather than the Eiffel Tower hierarchy focus[1].

	1	2	3	4
1. Managerial performance	1.00			
2. Job-related tension	− 0.23*	1.00		
3. Formalization	0.33**	− 0.25*	1.00	
4. Decentralization	0.14	0.23*	0.12	1.00

Notes: *correlation is significant at the 0.05 level; **correlation is significant at the 0.01 level

Table II.
Correlation matrix for independent and dependent variables

Variable	Coefficient	Value	Std error	T	p (one-tailed)*
Intercept	a_0	42.25	4.71	8.98	0.00
Formalization	b_1	− 0.45	0.21	− 2.09	0.02
Decentralization	b_2	0.29	0.16	1.84	0.04

Notes: $R^2 = 0.11$; adjusted $R^2 = 0.08$; $F = 4.42$; $p < 0.01$; *One-tailed tests employed since all relationships are hypothesized to be uni-directional

Table III.
Results for testing the effect of formalization and decentralization on job-related tension

Variable	Coefficient	Value	Std error	t	p (one-tailed)[#]
Intercept	a_0	33.38	6.03	5.54	0.00
Formalization	b_1	0.87	0.27	3.20	0.00
Decentralization	b_2	0.34	0.20	1.66	0.05

Notes: $R^2 = 0.14$; adjusted $R^2 = 0.12$; $F = 5.94$; $p < 0.00$; *One-tailed tests employed since all relationships are hypothesized to be uni-directional

Table IV.
Results for testing the effect of formalization and decentralization on managerial performance

Although the objective of this study is not to develop a comprehensive model for predicting performance and job stress (see Note 1), a number of variables were considered for their potential impact on the relationships observed. Variables considered were: the manager's education level (not completed secondary school, completed secondary school, undergraduate degree, post-graduate degree), overseas education/work experience (years), age (years), gender, functional department (production, marketing/sales, finance, other), and length of stay with the organization (years). With respect to gender, 95 per cent of respondent managers were male, thus the main results can only be generalized to male Greek managers. With respect to functional department, regressions were re-run after removing from the sample, in turn, each functional area. The impact of managers' education was examined in the same way[2]. No differences emerged between these regression results and those observed for the full sample. With respect to managers' age, length of stay and overseas education/work experience, multiplicative interaction analysis was used to test the generalizabity of the main effect results contained in Tables III and IV (Allison, 1977; Southwood, 1978). For all regressions, the interaction coefficient was not significant, indicating that the main effect results were unaffected by the moderating variables considered.

Given the exploratory nature of the study, further analysis was undertaken to examine the association between the organizational cultural variables, formalization and decentralization, and the dimensions comprising the job-related stress instrument. A principal components factor analysis of Kahn *et al*'s (1964) job-related stress instrument was performed. Factors with eigenvalues of > 1 were retained and the factor solution as rotated using the varimax orthogonal method. Five factors emerged that were labelled: role conflict, role ambiguity, resource inadequacy, workload, and co-worker conflict (see Table V). The first four of these factors also emerged in Kahn *et al*.'s (1964) factor analysis. The fifth factor, co-worker conflict, was not identified by Kahn (1964). New variables were created from the five factors and correlated with the organizational culture variables, decentralization and formalization. The resultant correlation matrix in Table VI shows that an increase in decentralization is associated with increased Greek manager's stress with respect to role ambiguity and workload, and an increase in formalization is associated with reduced stress with respect to co-worker conflict and role conflict.

Discussion
The results of this research show that the alignment of high-power distance/strong uncertainty avoidance Greek managers' societal values with the Eiffel Tower organizational culture, characterized by a focus on hierarchy (high centralization) and a focus on the task (high formalization), reduces feelings of job-related stress. Further analysis of the job stress variable reveals that an increase in decentralization (or a reduction in centralization) is more specifically associated with role ambiguity stress and work overload stress. It appears that

Item	Role conflict	Role ambiguity	Resource inadequacy	Workload	Co-worker conflict
Too little authority to carry out responsibilities	0.83				
Unable to influence immediate superior's decisions and actions	0.68				
Do things on the job against your better judgement	0.61				
Unclear of scope and responsibilities of the job		0.77			
Not knowing what opportunities for promotion exist		0.76			
Not knowing what your superior thinks of you		0.78			
Not able to satisfy conflicting demands of various people			0.68		
Feeling your not fully qualified for the job			0.82		
Can't get the information needed to carry out the job			0.60		
Having to decide things that affect the people you know			0.43		
Too heavy a workload				0.80	
Job tends to interfere with your family life				0.77	
May not be liked by the people you work with					0.81
Not knowing what is expected of you					0.67
Amount of work may interfere with how well it gets done					0.58
% variance explained	30.1	11.8	9.8	7.6	7.2
Eigenvalue	4.5	1.7	1.5	1.14	1.07
Cronbach alpha	0.70	0.73	0.67	0.63	0.61

Table V.
Factor analysis of Kahn *et al*'s (1964) job-related stress instrument

	1	2	3	4	5	6	7
1. Role conflict	1.00						
2. Role ambiguity	0.38**	1.00					
3. Resource inadequacy	0.57**	0.35**	1.00				
4. Workload	0.29**	0.29**	0.28*	1.00			
5. Co-workers	0.37**	0.10	0.35**	0.26*	1.00		
6. Formalization	− 0.22*	− 0.15	− 0.12	− 0.14	− 0.24*	1.00	
7. Decentralization	0.18	0.28**	0.08	0.29**	− 0.01	− 0.12	1.00

Notes: *correlation is significant at the 0.05 level; **correlation is significant at the 0.01 level

Table VI.
Correlation matrix for formalization, decentralization and components of job-related stress

the devolvement of decision-making authority to high-power distance/strong uncertainty avoidance Greek middle managers creates confusion and anxiety over their work roles. In the implementation of decentralization programs there may be insufficient direction from upper management about the changed role expectations of the subordinate manager. Furthermore, the increased burden of making key decisions is perceived as creating more work for the subordinate manager, and thus a source of stress.

The additional analysis also reveals that an increase in formalization (consistent with the Eiffel Tower task focus) is related to reduced role conflict and reduced co-worker conflict. The negative formalization/role conflict relationship seems to link into the Greek cultural values of high-power distance and strong uncertainty avoidance. Rules and standardized procedures specify work/task roles and responsibilities, reducing the potential for conflict with superiors and subordinates. Turning to the co-worker conflict dimension, the question that obtained the highest factor loading score was "feeling that you may not be liked or accepted by the people you work with". Less rules generally implies a looser, more organic organization culture where work arrangements are a more negotiable process. However, Greek middle managers (the respondents in this study) indicate that they feel more uncertain about workers' acceptance in this climate. One could speculate that the impartiality of organizational rules, policies and procedures – that the middle manager can point to the rule to direct/correct worker behavior without becoming personally involved – might contribute to less stressful work relationships in Greek organizations.

With respect to managerial performance, the Eiffel Tower organization culture seems contra-indicated. The results indicate that an organizational culture characterized by formalization (task focus) and decentralization (equity focus) is associated with favourable performance for Greek managers. This combination is consistent with the Guided Missile culture. Trompenaars' model found that Anglo-American organizations tended to adopt the Guided Missile organization culture (see Figure 1). This research outcome provides some evidence for a convergence of management practices with respect to attributes of organizational culture designed to enhance managerial performance. The increased opportunities for managers to work and study abroad in this era of globalization, and the subsequent cross-fertilization of knowledge and ideas, may explain the effectiveness of the Guided Missile culture within these two diverse national cultural contexts.

In sum, the study's results reveal a consistency in the outcomes for a Greek organizational culture characterized by a reliance on formalization – an increase in rules and standard procedures both reduce job-related stress and increase managerial performance. However, the research outcomes present a dilemma for organization design theorists when considering the appropriate level of decentralization. For Greek managers, an organizational culture characterized by decentralized decision-making structures is associated with increased managerial performance, but at the same time increased job-related

stress. Given the statistically significant negative correlation between job stress and performance (see Table II), a decentralization program cannot be implemented too rigorously before the negative impact of job stress unfavourably affects managerial performance.

Clearly any implementation of a decentralization program in Greek organizations would benefit from a culture sensitive training program for both superior and subordinate managers. On the basis of the research results, such a training program should specifically address the stress relating to role ambiguity and work overload brought about by decentralization.

Finally, within the context of organizations in advancing/developing countries, an understanding of effective organizational design, including the appropriate organizational culture, is important, as such organizations may be tempted to mimic the more successful organizations from industrialized nations. To import organizational cultural characteristics without reference to the surrounding societal values may prove to be ineffective, and perhaps dysfunctional.

Limitations

A number of limitations may have influenced the results of the study. Data were drawn from only large manufacturing organizations located in Athens. The results may only be generalizable to that population. Further studies could, for example, examine regional areas outside of Athens, smaller organizations or service organizations. Further studies could also focus on organizations in other advancing countries within the Balkans region. Very little is known about these organizations, and yet there is enormous potential for economic activity in this part of the world. The results of this study can only be generalized to male middle managers. Females and front-line managers/ employees may have different preferences for organizational cultural forms that may impact on their experienced stress and/or performance. Self-report performance measures used in this study have been criticized (Venktraman and Ramanujam, 1987). The usual caveats applicable to cross-sectional survey methods must be taken into account. A number of limitations have been raised with respect to Hofstede's cultural model (see Mead, 1994; Harrison and McKinnon, 1996). In particular, the depth and diversity of culture cannot be adequately captured by Hofstede's broad quantitative national cultural dimensions. The need for qualitative research in the field is sorely needed.

Notes

1. The R^2 values reported in Tables III and IV were not very high; however, this need not be taken as a detraction. The aim of this study was not to develop a comprehensive model for predicting job-related stress and managerial performance, but rather to use regression analysis as a data analytic technique for testing selected relationships (Cohen, 1968). As noted by one of the reviewers, to build a comprehensive model for either dependent variable would be virtually impossible given the numerous and changing factors affecting these variables in real life.

2. Given the relatively low sample size ($N = 78$), analysis using sub-samples was not feasible.

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