Asian Academy of Management Journal, Vol. 11, No. 2, 51–72, July 2006

INFLUENCE OF CULTURAL ORIENTATION ON PERCEIVED ORGANIZATIONAL CREATIVITY CLIMATE: AN EXPLORATORY STUDY OF TWO STEEL PLANTS IN MALAYSIA*

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ABSTRACT

The study explores the relationship between cultural values and perceptions of the creativity climate. Asian culture is allegedly inimical to creativity and innovation in organizations. High power distance, high femininity, and greater orientation towards collectivity are discordant with the cultural underpinnings of the flatter, fluid, less formal, and networked organization. One hundred and seventy executives and non-executives of two steel mills were tested for the value orientation using an adaptation of Hofstede's measures for values and Ekvall's Creativity Climate Questionnaire for assessing the creativity climate of the organization. The executives' perceptions of the creativity climate in the organization were low and coincided only weakly with their value orientation. However, power distance and uncertainty avoidance stood out as the single most influential variable in creativity perceptions. Attention must be paid to the relationship and steps to ameliorate these influences by cultural profiling – a move that identify subcultures whose values may be more amenable to innovation and creativity than most.

Keywords : creativity, innovation, values and culture

INTRODUCTION

The large volume of diverse literature on the survival and growth of businesses in the new millennium has one common observation; innovation and creativity is the only key to lasting success (Drucker, 1995; Hamel, 2000; Aiman-Smith, Goodrich, Roberts, & Scinta, 2005). Observing the same *Asiaweek* declared that

* A reduced version of this paper was presented at the International Association of Management of Technology Conference in Hangzhou, People Republic of China in October 2002. The authors thank the participants for the suggestions and anonymous reviewers of the journal for the valuable comments.

"... in the information age, creativity will be the key to success – not simply the ability of governments and corporate chieftains to marshal resources more efficiently than their neighboring countries or companies" (Hornik, 2001). Leading companies have consistently higher levels of creativity and innovation than others, and they have value systems that support the innovative behavior and program (Furrer, Charharbaghi, & Wargin, 1996; Prather, 2000). The creative and innovative character of a business is ultimately dependent upon a system of values that legitimizes and energizes the individual and collective behavior towards creative endeavors (Andropoulos, 2001; Aiman-Smith et al., 2005). It is this meta-theory that has driven the quest to identify appropriate cultural systems that stimulate and habituate creative practices. Hofstede's seminal work on values represents a major conceptualization of the national culture in terms of work-related values (Bennett III, 1999). National and organizational cultural typologies have been posited in relation to innovativeness and other associated behavior (Kotter & Heskett, 1992; Sweeney & Hardakar, 1994; Lee & Yu, 2004).

The question of culture has figured quite prominently in the Asian region as more American and European firms begin to expand and invest heavily in countries like China (Li, Lam, & Fu, 2000; Jones & Teegen, 2001). Although occasional voices are heard of the need to preserve the Asian values and way of life, many aspects of the Asian culture are arguably inimical to creative needs of the information age. The Asian values tend to suppress debate and ideas, limit freedom, breeds intolerance, encourage patronage, values hierarchy, and avoid open engagement. Many family businesses built on the bedrock of these values are beginning to show cracks as the information age speeds up change and brings in new values. *Asiaweek* perceptively observed that:

> Asian elders … had long clung to the strictly vertical, top down communication pattern handed down over centuries. Fathers did not discuss the whys and wherefores of the structures they imposed on their children, Rulers told citizens what was good for them. Bosses told employees how to do their jobs (Hornik, 2001, p. 37).

The economic crisis of 1997 has resurrected the call to introduce new corporate values and practices subsumed under the rubric of corporate governance (Dyck, 2001). Implicit in this call is the need to revamp organizations to allow for greater reflection of the much cherished virtues of transparency and accountability. The role of family, traditions and respect for the elders, among others, are observable cultural traits that restrict more open management styles and systems (Hazman, 1997). Asian values broadly display high power distance, high collectivity, high uncertainty avoidance, and high femininity. Although the prosperity and exposure to the West has diluted some of the stereotypical values of the Orient, some aspects have been more tenacious. The tenacious elements of

the national cultures often override the more local and sometimes foreign organizational cultures (Gamble, 2005; Jacob, 2005).

Jacob (2005) submitted evidence of cultural variations within societies and organization in critiquing the national cultural typologies. Hofstede (2001b) also observed in a recent interview that while individualism generally rose in Asia but other dimensions of culture have remained stubbornly strong. Hence, more varied and less homogenous cultural orientations are likely to characterize most societies and organizations. Even in ostensibly monocultural settings, there is significant variation in values. A monolithic cultural view of nations and organizations is therefore incompatible with evidence. It is therefore important to ascertain the varied cultural orientations within an organization and to examine its concordance with the needs for creative and innovative behavior before crafting strategies to promote innovation and creativity. Hence, it is imperative to explore the cultural proclivities of executives of local firms to develop better insight of the innovative potential and problems (Andropoulos, 2001).

INNOVATION AND CREATIVITY IN MALAYSIA

Despite the obvious value and importance of innovation and creativity to the businesses and also to the future growth of the economy, not much is known about it in Malaysia (Razmi & Rahman, 2001; Razmi & Hazman, 2002; Meriam, 2006). The Eighth Malaysia Plan targeted total factor productivity or managerial productivity as a key driver of productivity improvements and growth (Economic Planning Unit, 2001, p. 11) and the forthcoming Ninth Malaysia Plan (2006–2010) is expected to more aggressively pursue innovation driven growth. Consequently, creativity in new business ideas, product and process development and systems are the keys to future growth and competitiveness. Indeed, the k-economy master plan relies heavily on the creative capacity of the information technology (IT) savvy population (Hazman, 2003, p. 826). The national ambitions and the plans envisage a highly creative business and organizational environment. It is however, not clear whether the national and cultural values are concordant with the needs of a creative and innovative work, and organizational environment envisaged in the plans (Hazman, 2003). The degree of concordance or discordance between the current and expected values will be critical in the achievement of the national plans through the innovativeness of the organizations. It is therefore, the objective of this study to examine relationship between the value orientations of the employees and the perceived creativity climate within the organization. It is the primary hypothesis of this study that a high premium placed on certain values will inhibit or facilitate the creation of the kind of supportive climate to nurture creative and innovative behavior in an organization. Despite the simplistic and naive national categorization of the

cultural orientation (Hofstede, 2001a, 2001b; Hampden-Turner & Trompenaars, 2000; House, Hanges, Mansour, Dorfman, & Gupta, 2004), many variations are observed within organizations and nations (Jacob, 2005, p. 515).

CONCEPTUAL FRAMEWORK

Schumpeter's work established a place for innovation in economic growth (Rahman, 1998). Innovative economies have experienced sustained growth and lead the economies of the world. Research and development intensity, the concentration of human resources in science endeavors, patents registration, and knowledge production significantly differ between developed and developing nations. There is no doubt that creativity and innovation is the key to sustained economic growth. The intensification of competition between economies and firms with expanding globalization raises sharply the need for creativity and innovation (Mandle & Ferleger, 2000). Many development economists have argued that social, cultural, and political contexts are vital to the growth of entrepreneurship and innovation, and to the rate of growth (McClelland, 1961; Baumol, 1990; Russell, 1996; Houghton & Sheehan, 2000; Stiglitz, 1999, 2002).

The cultural propensities of the people can act to impede or facilitate creativity and innovation (Shane, 1992; Nakata & Sivakumar, 1996). Both strong cultures and certain value systems influence educational absorption and the development of new mindsets. The protestant work ethic has featured prominently in the prosperity and growth in the western societies. Sociologists have explored extensively the social systems and structures that appear to promote behaviors, attitudes, and mindsets that encourage knowledge seeking and risk taking behavior. Russel (2000) for instance, postulated the relationship between the Hofstede's value dimensions and the entrepreneurial tendencies. Porter and Stern's (2001) recent study of innovation in European countries shows a strong correlation between national and locational innovative capacity and their location on Hofstede's cultural continua.

Innovation driven growth at the macro and the firm level focuses attention on the national and ethnic values systems. Firms adopting innovation seeking strategies, must be able to create a supportive organizational climate especially in the social world of the employees. The challenge for the managers is not just to create a compelling vision of the organization but must also nurture organizational culture that supports innovation (Kotter & Heskett, 1992; Fitz-enz, 1997). The efficacy of organizational cultures in stimulating innovation will be strongly moderated by the national or ethnic cultural values. Values, as Fishbein and Azjen (1975) conceptualized, condition and constrain beliefs shape one's behaviors. Values are subtle in their effect but cause distress and dissonance that evokes

negative reactions to new behaviors. Thus, innovation-seeking strategies may be mitigated by the cultural propensities that cause 'value disturbances' in people (Kedia, Keller, & Julian, 1992).

Hosfstede's seminal work on work-related values brought the general values of the society closer to the world of work (Hofstede, 1980; 1991; 2001b). He identified four main dimensions of values (a fifth one was added later) which has been widely used in culture studies. His study showed that cultures differed significantly between nations. These findings together with other similar findings legitimized cross-cultural management (Jones & Teegen, 2001). At the heart of Hofstede's work was the link between different cultures to management practices. Logically, these value positions can be linked to organizational value systems, strategies and practices. Globalization of businesses brought the cultural contrast and nuances into sharp focus. A developing body of literature suggests strongly that certain cultural characteristics may have greater propensity to support innovative activities (Jones & Teegen, 2001; Shane, 1992, 1993; Kedia et al., 1992; Nakata & Sivakumar, 1996).

Hofstede's four value dimensions capture people's value orientations on acceptability distribution of power in society, on the discomfort with risk, on self-centerdness, and general demeanor in human relations (Hofstede, 1980). These value orientations have implications for creativity and innovation seeking strategies at the organizational level. Power distance describes the extent to which power is unequally distributed in society and the level of acceptance of this social attribute. The greater acceptance also indicates the respect for authority, respect for hierarchy, and greater success of directive leadership. The respect and at times, reverence for rank, has chilling effect on creative behavior from those at the lower ranks. Appropriate behavior and adherence to norms and etiquettes are highly valued. An atmosphere of conformance to the power structure is nurtured. Innovation, invariably involving some change to the present systems and practices, must flow from the hierarchy. In innovation context, greater power distance is unlikely to provide mental assurance to players to experiment (Hofstede, 1980). People are likely to wait for orders. Experimentation and testing of new ideas may involve activities that defy the norms (Shane, 1992). High power distance societies empirically are not highly innovative.

Uncertainty avoidance indicates a society's discomfort with the unknown. People tend to avoid dealing with ambiguous situations. There is reluctance to accept competition and approve highly formalized rules that provide certainty to process and procedures. These tendencies are not consistent with innovative environment. In fact, Nakata and Sivakumar (1996) found that low uncertainty avoidance best supports new product development while high uncertainty avoidance fits the implementation stage of innovations.

Individualism-collectivism indicates the extent to which the group is preferred over the individual. Individualistic cultures display extensive personal freedom, independence and initiative, traits consistent with innovative behavior. Shane (1992, 1993) found that individualistic cultures to be more inventive than collectivistic cultures. High premium placed on the collective interest tends to discourage members from becoming non-conforming. There is a strong need to maintain the integrity of the "pack" (Bennett III, 1999).

Highly masculine cultures are task-oriented, greater focus on the task and performance, a trait usually associated with innovation. Masculine cultures promote greater direct and open communication between members of society. Masculine cultures tend to support ideas generation. Feminine cultures, on the other hand, tend to be relationship-oriented. The maintenance of group harmony through less than direct means discourages radically different ideas.

CREATIVITY AND INNOVATION

Defining creativity and innovation is precarious activity. The concepts of creativity and innovation are often used interchangeably in the literature (Martins & Terbalanche, 2003, p. 67). Creativity is portrayed as a precursor or antecedent to innovation (Amabile, 1996). Individual and group creativity gives rise to novel and new ways of conceiving products, services, processes, and even value. One of the key factors in nurturing creativity is the atmosphere or climate in the organization. Organizational climate refers to the extent to which the "mood" in the organization is suitable for or supportive of creative thinking and behavior (Morgan, 1991; Furrer et al., 1996).

The existence or provision of slack resources for experimentation and invention is a key aspect of promoting new ideas and invention (Pinchot, 1985). There must be enough scope for all types of ideas to be aired and discussed freely without too much evaluation in the early stages of creative engagement (Amabile & Gryskiewicz, 1997; Amabile, 1998; Andropoulos, 2001). Organizations marked by a strong and overt preference for order, hierarchy, and system restrict the freedom to explore. Obsessive or excessive bureaucracy kills creativity as precedence and the present become key ethos (Arad, Hanson, & Schneider, 1997; Brand, 1998; Martins & Terbalanche, 2003). The leadership style and culture must encourage and provide scope for debate at all levels about the systems and processes that are held dear (Anderson, Hardy, & West, 1992; Cook, 1998; Senge, 1992). Challenging the norm or present must also be inherent in the debates lest debate becomes marginal and trivial. The sum of this observation is an environment that is vibrant, dynamic, and shows a degree of playfulness that allows everyone to explore. Conflicts that inevitably emerge through debate are

dealt with without serious personal and professional risks. Psychologically, people should not experience tremendous discomfort in experimenting or engaging in debate about the organization. Where there is risk perception that is disproportionate to the rewards, creative behavior or engagement will be suppressed by basic individual self-preservation or instinct (Amabile, 1998).

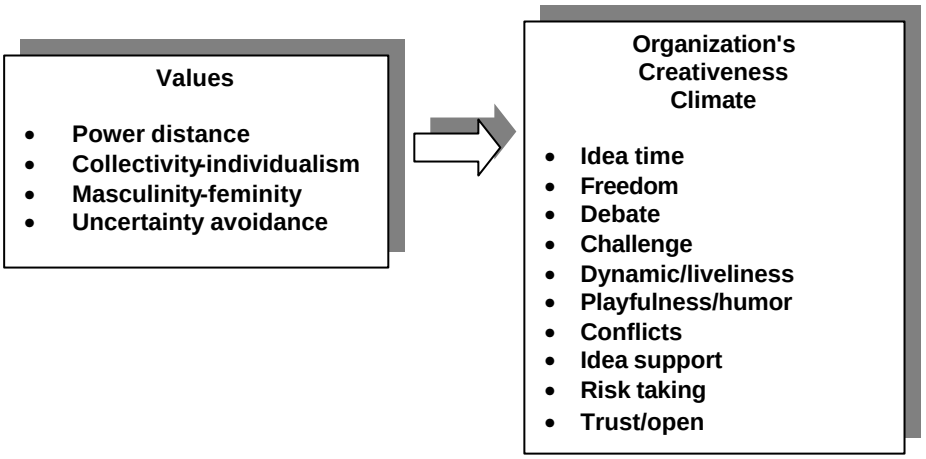

Figure 1. Research framework

METHOD

Two plants, one located in a northern state (identified as Plant A) and the other in the eastern state of Peninsula Malaysia (identified as plant B) where the nation's largest steel mills were selected. Due to the recent losses suffered by the entity, which resulted in the sale to a private group, the new owner has placed great emphasis on innovation in the product and the process to lift the company out of the malaise. The turnaround strategy rests heavily on the ability to develop a climate of creativity to improve efficiency of the operations. Both the executives and non-executives were sampled to examine further differences, if any, between two important levels within the organization. The predominance of the Malay executives also presents an opportunity to test the relationship between their values and the organization's creativity climate.

Ekvall et al.'s (1983) Creativity Climate Questionnaire (CCQ) was used to gather data on the climate for creativity in the organization. The instrument is designed to measure employees' perception of the organizational climate on 10 dimensions namely, challenge, freedom, idea-support, trust, liveliness/dynamics, playfulness/ humor, debates, conflicts, risk taking, and idea time. The 50 statements are aimed

at measuring the capacity of the organization for change and innovation and the responses range from absolutely inapplicable (0) to highly applicable (3). This measure has been found to significantly differ between innovative and less innovative departments (Talbot, Cooper, & Barrows, 1992). This measure has been used in several studies of creativity and innovation, and has been shown to have satisfactory reliability and validity (Rahman, 1998; Berg, Hansson & Hallberg, 1994; Norbergh, Hellzen, Sandman, & Asplund, 2002)

The value orientation were measured using Hofstede's (1980) four value dimensions with a 7-point scale adopted from an earlier study by Hazman and Razmi (2000). Both of the measures are essentially perceptual measures of the constructs. Perceptual measures are far more appropriate because objective indicators like new product development, research and development activities, investments, revenue from new products, patents registered, etc. are more appropriate in organizations that have an established tradition of creativity. Where the innovation initiatives are nascent, outcome-based indicators are unlikely to be useful. In nascent organizations, a process indicator is far more useful and indicative of the state of innovation. Since the construct in question related more to the climate, the perceptions of the executives are far more direct and relevant measure. Sampling the executives' perception provides fairly reliable account of their propensity to behave in a creative manner based on the perception of what the organization is. These perceptions, even if in some objective sense are inaccurate, it drives the individual's actions and behaviors. Socially constructed realities define and drive the executives' behavior (Berg, 2004). A closer epistemic correspondence is more likely when the measures of the constructs of this study are perceptually assessed.

A total of 300 questionnaires were distributed, with 50 for the plant A and the balance was sent to the plant B. The return rate was 55% and 75% for the plant A and B, respectively.

RELIABILITY AND VALIDITY

Several procedures were used to assess the reliability and the validity of the measures used in this study. The internal consistency of the items measuring both the constructs and their related dimensions were assessed using Cronbach alpha. The internal consistency of the measures varied from a low of 0.56 to a high of 0.82. This is, however, not typical of new measures as high reliabilities are achieved through iterative process refinements. However, the reliabilities were adequate for analysis (Hair, Anderson, Tatham, & Black, 1998; Nunnally, 1978).

TABLE 1
DISCRIMINANT AND CONVERGENT PROPERTIES OF THE VARIABLES

Dimensions	Factors		
	Creativity climate	Value orientation	Unknown
Value dimensions			
Power distance		0.517	
Uncertainty avoidance		0.821	
Masculinity-femininity		0.674	
Collectivity-individualism		0.771	
Creativity dimensions			
Challenge and motivation	0.815		
Idea support	0.831		
Debate	0.702		
Conflict			0.827
Risk taking	0.792		
Liveliness/dynamism	0.619		
Playfulness/humor			0.590
Trust and openness	0.811		
Time	0.802		
Freedom	0.763		
Eigen value	**5.131**	**2.308**	**1.297**

Note. Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalization

Both organizational creativity climate and value constructs are proximal constructs. Therefore, to establish that these constructs have the discriminant and convergent properties, the dimensions were factor analyzed to examine the underlying factor structure. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.854 (exceeds 0.50) while Barlett's Test of Sphericity was significant [X^2 = 1310.9, 91(df), p < 0.000] indicating adequate factorability (Hair et al., 1998). Table 1 shows the resulting factor structure. The values dimensions converged on one factor (Eigen value – 5.073), while the creativity dimensions converged on another (Eigen value 2.28) consistent with *a priori* expectations with the exception of two dimensions, which also loaded on a third unexplained factor (Eigen value – 1.297). Due to the lack of convergence, variables conflict and playfulness/humor were dropped from further analysis. The total variance extracted was 61.8%.

RESULTS

The discussion of the findings follows a brief profile of the respondents of this study (see Table 2).

TABLE 2
PROFILE OF RESPONDENTS

Characteristics	No.	Percent
Race		
Malay	210	97.7
Indian	3	1.4
Chinese	2	0.9
Rank		
Senior executive	5	2.4
Middle executive	93	45.1
Non-executive	108	52.4
Education		
University degree	65	31.3
Complete non-university education	35	16.8
Complete Form 6 or equivalent	16	7.7
Complete Form 5 or equivalent	86	41.3
Complete Form 3 or equivalent	4	1.9
Complete primary education	1	0.5
No formal education	1	0.5
Marital status		
Married	151	74
Bachelor	53	26
Religion		
Muslims	212	98.1
Hindus	1	0.5
Christians	2	0.9
Others	1	0.5
Income level		
<500	4	2
500–1000	61	31.1
1001–1500	32	16.3
1501–2000	37	18.9
2001–2500	22	11.2
2501–3000	12	6.1
>3000	28	14.4
Gender		
Male	173	81.2
Female	40	18.8
Experience (years)	7.3	5.1
Age	33	8.11

Note. Total sample size may not be same because of missing data

Malay executives form a large majority of respondents. This almost makes the sample ethnically homogenous. Such homogeneity is not necessarily a drawback as homogenous samples allow for a stronger test of the influence between variables by limiting confounding influence of ethnicity (Calder, Phillips, & Tybout, 1981).

PERCEPTION OF CREATIVITY CLIMATE

The Ekvall et al.'s CCQ scale ranges from 0 (not applicable at all) to 3 (applicable to a higher degree). Mean scores of 2 and above would indicate moderate to strong perception of the existence of the climatic dimensions. Overall, the mean scores for all the CCQ dimensions are below 2.0 (see Table 3). It is, therefore evident that there is low positive perception of the organizational climate which is consistent with the present financial condition of the firm.

TABLE 3
PERCEPTION OF CREATIVITY CLIMATE

No.	Creativity climate dimensions	Mean	Std. Dev.
1	Challenge and motivation	1.98	0.53172
2	Idea support	1.73	0.60346
3	Debate	1.86	0.49268
4	Risk taking	1.61	0.52386
5	Trust and openness	1.63	0.55066
6	Liveliness/dynamism		
7	Time	1.88	0.45484
8	Freedom	1.72	0.43827

CORRELATIONS AMONG AND BETWEEN THE DIMENSIONS

High correlations between the dimensions that constitute the creativity climate construct can be observed. As can be seen from Table 4, the correlations coefficients between and among the eight dimensions are higher than the correlations with the culture dimensions and is positive. This relationship is logically and conceptually consistent. The culture construct also displays similar relationship with higher and positive correlation coefficients between and among the dimensions when compared to the creativity dimensions.

The primary hypothesis of this study is that there is a significant correlation between cultural values and creativity and innovation. Power distance has low but significant positive relationship with conflict. The higher the prevalence of unequal distribution of power between groups (PD), the more conflict is likely to be expected or observed. The lack of significant relationship with other innovation dimensions is perplexing. Uncertainty avoidance (UA) showed significant positive relationship with challenge and motivation, trust and openness, idea support, and debate. Masculinity-femininity showed significant and positive relationship with conflict and debate, and negative relationship with liveliness and humor, and trust and openness.

Greater assertiveness is consistent with a tendency to discuss ideas, and also contributes to greater conflict when debate becomes intense and emotional. Aggressive behavior may take the fun out of the organization by creating tensions between groups. By the same token, the assertive and aggressive behavior may be culturally incompatible with people profile that does not endear one to others. This reduces the propensity to confide and confer with others on workplace matters. Collectivity orientation is only correlated with debate. The placement of group interests over the individual's is at first glance contradictory. However, the greater orientation towards group interests may spark more debate if this is promoted as serving or in the best interest of the group or firm.

Unlike the conventional Hofstedian analysis of culture on five individual dimensions, the approach of Furrer et al. (2000) was adopted. Furrer et al. (2000) combined the Hofstede's value dimensions into an index showing the total value position of an individual on a continuous scale. Hofstedian analysis conceptually permitted or at least did not consider as inappropriate, the examination of relationship between each value dimensions and other relevant constructs of interest. In fact, many studies have pursued the analysis of culture's impact on organizational or managerial variables along one of more dimensions (Kanousi, 2005). Contrary to this approach, Furrer et al. (2000) argued that value orientation of any group is a combination of the dimensions acting in concert in unique combinations. Analyzing the similarities and dissimilarities at the dimensional level assumes that the cultural proclivities can be isolated along the dimensions and viewed as separate elements. Culture theorists have always contended that the supposedly homogenous cultures, whether at the national or organizational level, conceal or contain many subcultures. Furrer et al. (2000) contended different combinations of the value orientation can give rise to identifiable and significant culture clusters with implications for management. This is consistent with the observation of different cultural subgroups within a broad national culture. However, Furrer et al.'s (2000) operationalization of the combine value variable as an index does not provide for meaningful breakdown of the homogenous culture for useful and practical analysis. Cluster analysis would identify empirically meaningful groups that can provide reasonable variations for consideration. Accordingly, while the general conceptualization of culture followed Furrer et al.'s (2000) position, the operationalisation was modified to reflect culture variation as groups rather than as an index. This modification merely affects the scaling of the values and does not affect the concept itself.

The value orientations of the executives were cluster analyzed using a hierarchical clustering procedure (see Table 5). Two resulting typologies were identified. ANOVA showed that the value clusters were significantly different on all four dimensions of culture ($p < 0.001$). One cluster, labeled as transitionalists,

displayed a lower acceptance of power distance, relatively lower uncertainty avoidance, masculinity, and collectivity orientation. Ninety-two respondents belong to this group. The traditionalists cluster displays the typical Malaysian or even Asian profile with high scores on all the cultural dimensions. This is an interesting picture because a similar study exploring the influence of cultural orientations of Malay university students on service quality also produced similar clusters (Hazman & Razmi, 2000). The empirical results coalesce with the general observation that the Malay society is experiencing tremendous and differential levels of change. This is reflected in this sample of executives who are almost entirely Malays.

TABLE 5
THE CULTURAL CLUSTERS

Value dimensions	Clusters		Sig.
	Transitionalists	Traditionalists	
Power distance	2.62	4.02	0.000
Uncertainty avoidance	4.50	5.58	0.000
Masculinity-femininity	4.21	5.30	0.000
Collectivity-individualism	4.12	5.69	0.000
Cluster membership (N)	92	124	0.000

To examine how the value clusters correlate with the eight creativity dimensions, the one-way ANOVA analysis was carried out. Table 6 shows that of the eight dimensions, there were significant difference in the variance of one dimension namely debate. The transitionalists perceive lower debate (1.79) than their traditionalists peers (1.92). ANOVA analysis showed that the two cultural clusters were significantly different on the mean scores of debate. Interestingly, the changing sections of the Malay executives perceived lower scope for debate unlike their more traditional colleagues. The traditionalists may see the 'low' debate as not as low because they may not see debate as necessary.

MODERATORS OF VALUES INFLUENCE ON CREATIVITY

To examine for possible moderators of the influence of values on perception of creativity climate in the organization even though no *a priori* assertions were made, several characteristics of the executives were tested. Gender is often expected as a moderator of the relationship (Stedham, 2004). A Chi-Square test revealed that that the membership in the value clusters was not independent of gender (see Table 7). The female executives were twice as likely to manifest the traditionalists value orientation as the male executives.

TABLE 6
CREATIVITY CLIMATE PERCEPTION BY TRANSITIONALISTS AND TRADITIONALISTS

Variables		Sum of squares	df	Mean square	F	Sig.
Trust and openness	Between groups	0.010	1	0.010	0.033	0.855
	Within groups	65.791	214	0.307		
	Total	**65.801**	**215**			
Time	Between groups	0.054	1	0.054	0.259	0.611
	Within groups	45.011	214	0.210		
	Total	**45.066**	**215**			
Freedom	Between groups	0.012	1	0.012	0.063	0.802
	Within groups	41.990	214	0.196		
	Total	**42.002**	**215**			
Risk taking	Between groups	0.010	1	0.010	0.036	0.849
	Within groups	58.860	214	0.275		
	Total	**58.870**	**215**			
Challenge and motivation	Between groups	0.257	1	0.257	0.896	0.345
	Within groups	61.273	214	0.286		
	Total	**61.529**	**215**			
Liveliness/ dynamism	Between groups	1.953E-02	1	1.953E-02	0.068	0.795
	Within groups	61.702	214	0.288		
	Total	**61.721**	**215**			
Idea support	Between groups	0.139	1	0.139	0.386	0.535
	Within groups	77.068	214	0.360		
	Total	**77.207**	**215**			
Debate	Between groups	0.893	1	0.893	3.712	0.055
	Within groups	51.480	214	0.241		
	Total	**52.373**	**215**			

TABLE 7
CROSS-TABULATION OF GENDER AND VALUE CLUSTERS

Value clusters	Gender		Total
	Male	Female	
Transitionalists	78	12	90
Traditionalists	93	28	121
Total	171	40	211*

Chi-square: 3.329 (0.068)
* The total cases is less than cases in the cluster analysis because of missing data on gender

Similarly, the position of the respondent was examined for moderating influence on the relationship. One-way ANOVA detected significant difference between the executives and non-executives only on power distance (see Table 8). The non-executives saw greater power distance than the executives. This is not surprising as those in the lower ranks tend to view power distribution as unequal while those in higher ranks view unequal power distribution as necessary for organizational management.

TABLE 8
VALUE ORIENTATIONS BETWEEN EXECUTIVE AND NON-EXECUTIVES

		Sum of Squares	df	Mean Square	F	Sig.
Power distance	Between groups	5.839	1	5.839	3.350	0.069
	Within groups	352.055	202	1.743		
	Total	**357.894**	**203**			
Uncertainty avoidance	Between groups	8.039E-03	1	8.039E-03	0.008	0.928
	Within groups	195.747	202	0.969		
	Total	**195.755**	**203**			
Masculinity-femininity	Between groups	0.637	1	0.637	0.418	0.519
	Within groups	307.525	202	1.522		
	Total	**308.162**	**203**			
Collectivity-individualism	Between groups	1.070	1	1.070	0.723	0.396
	Within groups	298.697	202	1.479		
	Total	**299.766**	**203**			

DISCUSSION AND CONCLUSION

Extensive evidence from cross-cultural and international business studies indicates that local cultures have a strong influence on the behavior of the managers and employees, hence the need to adapt western management practices to local settings (Easterby-Smith, Malina, & Yuan, 1995; Adler, 1997; Gamble, 2003, 2005). Hofstede (1980, 1990, 2001a, 2001b), Kluckhohn and Strodtbeck, (1961) and House et al. (2004) have examined and characterized national cultures along somewhat similar value dimensions. The national typologies have resulted in different postulations of strategies and culture fit or misfit. Many studies have examined and found evidence of the difference in value orientation between different countries and markets (e.g. Harvey, 1997; Lin & Miller, 2003; Stedham, 2004). As the promotion of creativity and innovation requires the nurturing of a supporting organizational culture, the role of organizational culture and the influence of national culture have become important issues (Porter & Stern, 2001; Hazman & Razmi, 2000).

These cultural orientations can potentially facilitate or inhibit the promotion of certain strategies and practices. But the approach in the cross-cultural studies has been to compare vastly or maximally different cultures to show significantly different cultural orientations and their effect on important outcomes (Lin & Miller, 2003; Stedham, 2004; Harvey, 1997; Furrer et al., 2000; Malhotra, Ulgado, Agarwal, Shainesh, & Wu, 2005). The same cultural observations can also be made of ostensibly mono-cultural national environments (Jacobs, 2005). Societies rarely experience changes uniformly across the various sections of the population (Hofstede, 2001b). There are always subcultures reflecting different types and degrees of change. Rapidly modernizing developing countries show a significant degree of heterogeneity in cultural orientations (Hazman & Razmi, 2000). The range of orientations creates special problems for managers when seeking to introduce and institutionalize innovation strategies. The empirical evidence from this study shows that the value orientations, i.e. power distance, uncertainty avoidance, masculinity-femininity, and individualism-collectivism have some, albeit low, relationship to the executives' perception of the creativity climate. Although the relationships are not as strong as expected, one should not be lulled into the belief that cultures therefore, are less of a problem. Cultures are abstract and ambiguous concepts. Measurement errors of all sorts creep in into any empirical exercise.

The stereotypical understanding of ethnic or national cultural propensities is highly simplistic and belies subcultures within each cultural unit. One is likely to find different shades of the same cultural orientations. This is especially the case when working in societies where different sections of the society are experiencing different pace of change (Hazman & Razmi, 2000). The urban and rural divide is often used to indicate cultural differences even among same ethnic groups in Malaysia. In this study, two groups – one resembling the popular image of the Malay culture, the other has less Asian or Malay like orientations. As evidenced in this study, one is likely to find a mix of cultures. This makes the cultural auditing much more challenging than usual. By the same token, introducing innovative practices also becomes more complicated. But managers can discern and astutely form groups that evince suitable orientations for innovative endeavors. In cultures that are ostensibly inclined more towards group norms, group interest, group harmony and the like, the desire to challenge existing ways of business is low. But managers can still identify groups whose value orientations are significantly different from the mainstream characterization, in an effort to promote innovation and creativity (Nakata & Sivakumar, 1996).

Conventionally, cultural studies have sought to examine the value orientation of the respondents on each of the value dimensions. These positions are individually correlated with variables of interest. This approach to culture studies views

culture as made up of value positions which can be independent of each other. In reality culture operates integratively and in a concerted way with salient dimensions becoming the major indicators of behavior. Recognizing that the values can be combined in many different and unique ways, establishing cultural groups or cluster is a sound methodology to follow. This approach results in two cultural clusters labeled *transitionalists* and *traditionalist*. These culture groups manifest the value positions that show values are in a state of flux. The evidence of the existence of groups with shades of values can help to provide a more insightful picture of the values in society. Multiculturalism can be a feature of mono-cultural settings. A good example of this is the difference in value orientation in mono-cultural setting is Japan. The new generation is overtly different from the older Japanese. The much vaunted Japanese culture is not as strongly manifested in the younger generation.

The managers cannot fall for broad and simplistic cultural categorization of nations. These simplistic categorizations conceal significant cultural variations and differences that have managerial implications. The managers should be sensitive to the cultural propensities of their executives to enhance the chance of successful innovations in the organization despite the broad national value orientation. A cultural audit is always in order to ascertain the value orientations of the employees. Aggressive pursuit of an innovation strategy requires sustained efforts to evolve an organizational culture that firmly anchors the belief and behavior of innovation in the deeper cultural bedrock of the organization. With discordant national cultures, creating an innovation supporting culture will not be easy and maybe costly. Many conflicts are likely as the two implicit cultures clash. These organizational skirmishes may present itself at different forms that understanding the causal link of the conflict to the cultural variations may be difficult. Managers can isolate groups within the organization that display value orientations more amenable to creativity and innovation. This study provides modest evidence of values clusters among mono-cultural group. These value clusters can be astutely deployed for different aspects of the innovation process as posited by Nakata and Sivakumar (1996). They observed that the creative strength of an organization may be either in its inventiveness or innovativeness. Certain cultures tend to promote radical new ideas or inventive innovations. The West is generally seen as being very inventive. The East especially the Japanese, Taiwanese, and Koreans are credited with innovativeness. Their strength lies in adaptation of the original ideas from elsewhere. For managers in countries and organizations where a certain cultural profile is present, the choice of the appropriate type of innovative initiatives may be critical. In this study, the steel managers may have a mix bag of staff. This information can be used to segment the executives into innovation classes and the innovation efforts may be modified to focus on their respective strengths.

In summary, Asian organizations are faced with a greater challenge of introducing and institutionalizing innovation. The global economy will punish those who lag behind when protective tariff walls are brought down. Rewards and reinforcements may shape actions to some extent. Enthusiastic embracement of creativity as a core competence requires a concordant value system to embed new practices and behaviors in the cultural bedrock of the organization. National or ethnic cultural values that run counter to creativity will intensify the challenge for managers. Knowing what the national or ethnic value orientations are will allow managers to deal with the change much more intelligently and contingently than they would otherwise. The value clusters can be utilized to structure the task environment so as to minimize dissonance and to maximize productivity. The measurement errors notwithstanding, this study provides some evidence of the presence of value clusters even in ostensibly homogenous groups of executives – Malays. This cultural audit should be regularly carried out to fine tune the soft side of management towards greater effectiveness especially with regard to innovation.

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