

# **THE INFLUENCE OF CORPORATE CULTURE ON ORGANIZATIONAL COMMITMENT: CASE STUDY OF SEMICONDUCTOR ORGANIZATIONS IN MALAYSIA**

OOI KENG BOON<sup>a</sup>

Business and Advanced Technology Centre, Universiti Teknologi Malaysia

VEERI ARUMUGAM<sup>b</sup>

School of Management, Universiti Sains Malaysia

---

## **ABSTRACT**

The purpose of this study was to investigate the influence of four dimensions of corporate culture (teamwork, communication, reward and recognition, and training and development) on employees' organizational commitment within six major Malaysian semiconductor packaging organizations. Despite extensive research on corporate culture, very little empirical research has examined this area of study. Hierarchical regression analyses were employed to test the research hypotheses. The results of this study revealed that communication, training and development, reward and recognition, and teamwork are positively associated with employees' commitment. Also, communication was perceived as a dominant corporate culture dimension; it was associated with significant improvements in employees' organizational commitment. This study contributes to a better understanding of the influence of corporate culture on organizational commitment among employees within the context of the Malaysian semiconductor sector. Suggestions for future research are discussed.

Key words: Corporate culture, Malaysia, semiconductor packaging industry, organizational commitment.

---

## **INTRODUCTION**

Corporate culture has been “an important theme in management and business research for the past few decades due to its potential to affect a range of organizationally and individually desired outcomes such as commitment, loyalty, turnover intent, and satisfaction” (Chow et al., 2001). There is also a consensus that corporate culture is a management philosophy and a way of managing organizations to improve their overall effectiveness and performance (Kotter and Heskett, 1992). In today's manufacturing environment, corporate culture is used as a powerful tool to quantify the way a business functions (Gray et al., 2003). Research has confirmed that corporate culture is able to influence the thoughts, feelings, interactions, and organizational performance (Yusof & Ali, 2000; Saeed and Hassan, 2000).

At present, there is very little empirical literature on corporate culture within the context of the Malaysian semiconductor packaging industry, particularly on how organizational commitment among employees is affected by corporate culture dimensions that have

attracted considerable attention in the organizational literature. Because the semiconductor packaging industry is considered to be one of the major contributors to the global economy, corporate culture is strategically and tactically important for gaining a competitive advantage. Moreover, this industry differs from other industries in its organizational structures, responses to the environment, and managerial styles, as well as in how firms compete. Since employees' commitment is likely to be influenced by aspects of corporate culture, we aimed to provide organizations with practical assistance in dealing with this issue. Thus, this research was aimed at examining whether the application of four dimensions of corporate culture—teamwork, communication, reward and recognition, and training and development—results in an improvement in employees' working conditions, thereby contributing towards their commitment.

In the next section, we review the literature on theories of corporate culture and organizational commitment, and of the link between corporate culture and employees' organizational commitment. This review leads to the development of the hypotheses to be tested in this study. We then give details concerning the data used in this study, including some descriptive information on our sample of the Malaysian semiconductor packaging industry. Next, we discuss our results, the limitations of our study, and recommendations for future research. Finally, we discuss our conclusions and the implications of our work.

## **LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **Corporate Culture**

In the organizational behavior literature, corporate culture has been defined in many ways by various authors and researchers. However, many researchers would agree that corporate culture can be referred to as a set of values, beliefs, and behavior patterns that form the key identity of organizations and that help in determining their employees' manners (Rashid et al., 2003; Lund, 2003; Pool, 2000; Schein, 1992). Corporate culture is not just any "thoughts, values, and actions, but rather the unifying patterns that are shared, learned, aggregated at the group level, and internalized only by organizational members" (Lawson and Shen (1998). Corporate culture can also be defined "as a pattern of basic assumptions invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration" (Schein, 1992). These values are then taught to new members in the organization as the correct way to think and feel in relation to those problems.

### **Organizational Commitment**

Organizational commitment, as an attitude, has been defined as the relative strength of an individual's identification with, and involvement in, a particular organization (Mowday et al., 1979; Allan and Meyer, 1990). This definition, reflecting an individual's affective commitment, represents a major approach to the study of organizational commitment (Meyer et al., 2002), and appears to be the most desired form of commitment. Employees with strong organizational commitment continue employment with the organization because

they want to do so (Ghani et al., 2004). In order to achieve organizational commitment, employers need to help their employees value involvement in the organization. The more the employees value being part of the organization, the more likely they are to stay with the organization.

### **The Link between Corporate Culture and Organizational Commitment**

To date, the literature examining the relationship between corporate culture and employees' workplace attitudes has been mainly anecdotal. In previous work, there seems to be a general understanding regarding the type of corporate culture values and activities that contribute to the development of "business excellence." Recardo and Jolly (1997) have identified eight established dimensions of corporate culture relevant to corporate excellence: communication, training and development, rewards, effective decision making, risk-taking for creativity and innovation, proactive planning, teamwork, and fairness and consistency in management practices. In this paper we base our discussion of corporate culture dimensions on a slightly modified version of Recardo and Jolly's (1997) work. After conducting the factor analysis, four core dimensions of corporate culture have been adopted in this study, namely, teamwork, communication, training and development, and the emphasis on rewards. In order to understand whether different corporate culture dimensions have different effects on employees' commitment, the effects of each individual dimension are discussed next.

### **Training and Development**

Training and development can be defined as the process of providing employees with specific skills or helping those correct deficiencies in their performance (Poh, 2001). Previous empirical studies have provided extensive evidence that training and development facilitate the updating of skills, and lead to increased commitment, well-being, and sense of belonging, thus directly strengthening the organization's competitiveness (Acton and Golden, 2000; Karia and Ahmad, 2000; Karia, 1999). Bartlett (2001) studied the association between employee attitudes towards training, and feelings of organizational commitment, with a sample of 337 registered nurses from five hospitals, using social exchange theory as a model for examining the relationship. He found that perceived access to training, social impact of training, motivation to learn, and perceived benefits of training are positively related with organizational commitment. According to Cherrinton (1995), a successful training and education program would create more-favourable employee attitudes and loyalty, and help employees in their personal development and advancement. Moreover, Deming (1986) stressed the vital of training and development for continual updating and improvement, identifying one source of human motivation at work as intrinsic motivation: the desire to grow; learn, and to develop oneself. Cherrington (1995) also stated that most learning situations are fundamentally reinforcing because of the satisfaction and commitment associated with the acquiring new knowledge or skills. Thus, we propose the following hypothesis:

- H1: Employees perceive that training and development will be positively related to their organizational commitment within their organizations.

### **Reward and Recognition**

Reward and recognition can be defined as benefits as increased salary, bonuses, and promotion, which are conferred as public acknowledgement of superior performance with respect to company's objectives (Juran and Gryna, 1993). Rewards for quality efforts appear to have a significantly positive relation to employee morale (Kassicieh and Yourstone, 1998). According to Herzberg's (1996) hygiene/motivator theory, "recognition is one of the four motivators, which can contribute to employee commitment when it is present". Reward and recognition activities are valued by employees, and therefore provide motivation or incentives; if executed appropriately, these activities can, to a certain degree, secure employees' commitment to their jobs and make their jobs more enjoyable, thus creating an overall commitment within the organization (Zhang, 2000). A study of a sample of 350 daily workers in Ireland and New Zealand (O'Driscoll and Randall, 1999) indicated that the rewards offered by an organization have a powerful effect on employees' attitudes towards their job and their company. Thus, we propose the following hypothesis:

- H2: Employees perceive that reward and recognition will be positively related to their organizational commitment within their organizations.

### **Organizational Communication**

Organizational communication refers to the process whereby individuals and groups transact in a variety of ways and within different areas with the objective of carrying out organizational goals (Smidts et al., 2001; Brunetto and Farr-Wharton, 2004). Several authors note that communication is important for improving employees' commitment and for positive outcomes (Goris et al., 2000; Pettitt et al., 1997; Guimaraes, 1996; Guimaraes, 1997). Stuart (1999) argued that communication can affect empowerment of employees, which in turn affects organizational commitment. Moreover, the manner in which the organizational goals—and the employees' role in advancing these goals—are communicated to employees strongly affects organizational commitment (Anderson and Martin, 1995; Brunetto and Farr-Wharton, 2004). Robbins (2001) suggested that there is a relationship between the quality of management-employee communication and the resultant level of employee motivation and commitment. Therefore, we propose the following hypothesis:

- H3: Employees perceive that organizational communication will be positively related to their organizational commitment within their organizations.

## **Teamwork**

The concept of teams and teamwork is increasingly important to productivity and employees' organizational commitment in the contemporary workplace (Adebanjo and Kehoe, 2001; Stough et al., 2000). Teamwork facilitates the meeting of affiliate needs within the workplace and has been directly connected to organizational commitment (Karia and Ahmad, 2000; Karia and Asaari, 2006). A case study by Osland (1997) in Central America showed that working together within a production unit led to better employee attitudes. Anschutz (1995) stated that participation in teamwork, continuous learning, and flexibility were the major factors for success within organizations in achieving a partnership between workers and managers. Karia and Ahmad (2000) studied the impact of Empowerment and Teamwork (E&T) practices on 104 employees in five Malaysian public and private organizations that have implemented some level of E&T practices; they found that an organization that practiced some level of teamwork experienced an increase in employees' organizational commitment. Silos (1999) stated that the key to Japanese efficiency was in how the people work together, and also suggested that teamwork will result in more commitment and involvement of employees within the organization. Therefore, we propose the following hypothesis:

- H4: Employees perceive that teamwork will be positively related to their organizational commitment within their organizations.

The above review indicates that corporate culture dimensions significantly impact employees' organizational commitment. We have chosen to examine the relationship between corporate culture dimensions and employees' commitment specifically within Malaysian semiconductor packaging organizations because of the limited amount of research in this area.

## **METHODOLOGY**

In this section we describe our sample and our data collection procedures. We also discuss the operational measures of variables used in the study, as well as the statistical tests used to evaluate the hypotheses.

### **Sample and Survey Procedures**

The target population of this study was the semiconductor contract manufacturing industry in Malaysia. From this industry, six major organizations located in Malaysia were selected on the basis of stratified random sampling: 4 assembly and test organizations and 2 assembly organizations. All six were drawn from the SIRIM QAS Directory of Certified Products and Companies, 2003, and all six have been accredited with ISO certification. Stratification was used to improve sample estimates of population characteristics (Agus,

2000). The number of employees in each of the firms ranged from 1,000 to 4,000. The locations of these organizations were confined to only three areas: Perak, Penang and Melaka, which are known as Malaysia's Silicon States. These three states are among the world's biggest producers and exporters of semiconductors, and make some of the industry's most sophisticated microchips and electronics equipment (MIDA, 2004). The organizations selected are viewed as the best and most valid representatives of the semiconductor contract manufacturing industry in Malaysia for two main reasons. Firstly, these organizations are Malaysia's largest "foundry," their sales revenues ranking among the top in the country (Khadpe, 2002). Secondly, these companies were chosen because corporate culture dimensions were likely to be sophisticated and established.

The study was conducted on individual job function. We tested our hypotheses using only full-time employees. Part-time and independent contract workers were excluded. Thus, our sampling strategy should give more conservative tests of hypotheses than a strategy whereby these other types of workers were also included. Employees from four types of occupational groups were represented in the sample: operators,  $n = 173$ ; staff,  $n = 101$ ; executives,  $n = 87$ ; and managers,  $n = 16$ . The operator positions included resource and production group workers. The staff positions included the administrative personnel and general clerks. The executive classification included engineers, supervisors, accountants, and programmers. The managerial group included middle and senior managers responsible for a single section or several work areas.

The mail survey was the main form of data collection. The viability of the questionnaire was established by a pilot study carried out in a large semiconductor contract manufacturing firm in the state of Perak, Malaysia. Following a small number of minor revisions to improve comprehensibility, the final version was mailed to 500 employees from different job levels and functions in the six selected organizations. The questionnaires were distributed through an officer from the Human Resources Department within each organization. A cover letter explained the purpose of this study, assured the employees of confidentiality, and provided instructions on how to complete the questions, and to seal and return the completed questionnaires in the attached envelope. Of the 500 questionnaires distributed to employees in these organizations, 386 were returned. However, only 377 questionnaires were usable, 9 of which were incomplete, yielding a response rate of 75.4%.

## **Variable Measurements**

### ***Independent Variables: Corporate Culture Dimensions***

This measure is based on the four dimensions of corporate culture developed by Lau and Idris (2001). According to Cooke and Rousseau (1998), corporate culture is a multidimensional construct, and therefore it is essential to evaluate each dimension. The four dimensions, which consist of 16 items, are communication, rewards, training and development, and teamwork. These dimensions of corporate culture have been selected because they have previously been identified as those likely to have the greatest effects on employee behavior and attitudes (Recardo and Jolly, 1997; Lau and Idris, 2001). Sample items included "I am more comfortable working in a team rather than individually" (*teamwork*); "The company's employees' organizational communication is effective in

communicating things that are relevant to them” (*communication*); “Top management arranges adequate resources for employees’ training and development” (*training and development*); and “The Company’s compensation system encourages team and individual contributions” (*reward and recognition*). Responses to these items were measured on a 5-point Likert scale from 1 = “strongly disagree” to 5 = “strongly agree.”

### ***Dependent Variable: Employees’ Organizational Commitment***

This measure was operationalized by a five-item scale adopted from Mowday et al. (1979). Guess (1997) suggested that organizational commitment should be measured using the standard measure developed by Mowday et al. (1979)—the organizational commitment questionnaire (OCQ)—because this scale captures the extent to which the employees identify with the organization, their desire to remain in the organization, and their willingness to exert effort on behalf of the organization (Edger and Geare, 2005). Sample items included “I am very loyal to this organization” and “I really care about the fate of my organization.” The responses to these items were measured on a scale from 1 = “strongly disagree” to 5 = “strongly agree.” The internal consistency reliability coefficient for the scale was 0.88.

## **RESULTS**

### **Analyses of Data**

Factor analyses were initially undertaken for the study variables. Descriptive statistics such as mean, standard deviations, reliability coefficients, and intercorrelations were computed to understand the variability and interdependence of the subscales derived from the factor analyses. The hypotheses were tested using hierarchical regression. Because previous researchers (Lum et al., 1998; Guest, 1999; Ghiselli et al., 2001; Hemdi and Nasuridin, 2005) have noted that age, gender, marital status, education, and organizational tenure may influence organizational commitment, these variables were controlled in the statistical analyses.

### **Profile of Respondents**

There were 212 (56.23%) female and 165 (43.77%) male respondents. Among the respondents, 2.9% were aged less than 21 years, 21.75% were between 21 to 25 years old, 27% were between 26 to 30 years old, and the remaining 48.35% were aged over 31 years. From the age distribution, these organizations’ employees consisted of a rather young population with about 48.54% of the respondents being 30 years of age or younger. Fifty-five percent of the respondents were married, and 93 (over 24%) had achieved at least a Diploma qualification.

## Factor Analysis and Scale Reliabilities

A principal component factor analysis with varimax rotation was conducted to validate the underlying structure of corporate culture dimensions (Table 1). In interpreting the factor, only a loading of 0.5 or greater on the factor and 0.35 or lower on the other factors were considered (Igarria et al., 1995). The results of the varimax rotated analysis indicate the existence of four significant factors with eigenvalues greater than 1 that explained 59.125% of the variance. The KMO measure of sampling adequacy value for the item was 0.912 (i.e., > 0.6), indicating sufficient intercorrelations with the Bartlett's Test of Sphericity, which was also found to be significant (Chi square = 2689.99,  $p < 0.001$ ). These factors were named training and development (4 items), reward and recognition (5 items), teamwork (4 items), and organizational communication (3 items). Thus, a model with four factors may be adequate to represent the data because the results of the analysis can be considered satisfactory, given that these factors do not exceed 60 per cent of the explained variance recommended in social sciences (Hair et al., 1998).

Similarly, another factor analysis was undertaken to see the dimensionality of the dependent variable, organizational commitment (Table 2). A single-factor solution emerged with eigenvalue of 3.01 explaining 60.22% of variance in the data. The KMO measure of sampling adequacy was 0.863, indicating sufficient intercorrelations, while the Bartlett's Test of Sphericity was significant (Chi square = 960.39,  $p < 0.01$ ).

The reliability of the questionnaire was tested according to Cronbach's Alpha measurements. The reliability coefficient (Alpha) of each element of corporate culture was as follows: communication (0.77), training and development (0.79), reward and recognition (0.85), and teamwork (0.78). The reliability coefficients of all the four elements of corporate culture were above 0.70, which concurs with the suggestion made by Nunnally (1978).

## Correlation Analysis: Relationships between the Variables

The correlation matrix in Table 3 displays correlation coefficients between the four independent variables measured by using multiple-item scales. The correlation coefficients indicate the strength of the association between the variables. A coefficient is considered significant if the p-value is less than 0.05. There is significant correlation between all the independent variables, as listed in Table 3. Out of 10 correlations, all coefficients are larger than 0.4. There are no high correlations of 0.90 or above. Bryman and Cramer (1997, p.257) suggest 0.80 instead of 0.90 as the threshold: "The Pearson's  $r$  between each pair of independent variables should not exceed 0.80; otherwise the independent variables that show a relationship at or in excess of 0.80 may be suspected of exhibiting multicollinearity." The highest coefficient of correlation we found, however, is 0.67, which is below the cut-off of 0.80 for the collinearity problem. Hence, collinearity and multicollinearity do not present data problems in this research (Hair et al., 1998; Gottschalk, 1998). Our results show that the dependent variable—employees' organizational commitment—was most highly correlated with communication, with a coefficient of 0.65. This shows that communication was perceived as a dominant corporate culture practice. Our findings indicate that



respondents who perceived a greater awareness of corporate culture dimensions exhibited more positive reactions towards organizational commitment.

Table 1: Factor Analysis and Scale Reliabilities—Independent Variables (N = 377)

Variable	Items	Factor Loading	A Set of Items	Reliability
Training and Development	• Employees are encouraged to accept education and training within the company.	0.690	4	0.79
	• Resources are available for employees' education and training within the company.	0.690		
	• Most employees in this company are trained on how to use quality management methods (tools).	0.761		
	• Specific work-skills training are given to all employees.	0.666		
Reward and Recognition	• This Company improves working conditions in order to recognize employee quality improvement efforts.	0.634	5	0.73
	• The company's compensation system encourages team and individual contributions.	0.739		
	• Reward and Recognition system within the company rewards relationship and task accomplishments based on work quality.	0.792		
	• All suggestions are appropriately rewarded in cash and kind.	0.737		
	• Employees' rewards and penalties are clearly communicated.	0.740		
	• Work within this department is appointed around groups.	0.708		
Teamwork	• I am more comfortable working in a team rather than individually.	0.674	5	0.78
	• In this company, workplace decisions are made through consensus.	0.723		
	• Other units or departments always co-operate with me when I need assistance.	0.650		
	• Management regularly provides customer/supplier feedback and sets up opportunities for direct, face-to-face meetings between team members and customers/suppliers. These communication linkages are regularly used to identify process and product improvement.	0.646		
Organizational Communication	• Continuously improve communications between management and staff is stated as an important company objective and is being practiced.	0.812	3	0.77
	• The company employees' communication is effective in communicating things that are relevant to them.	0.725		
	Eigenvalues			
Percentage of Variance Explained			59.152	

KMO Measure of Sampling Adequacy  
Approximate Chi Square

0.912  
2689.99

Table 2: Factor Analysis and Scale Reliabilities—Dependent Variable (N = 377)

Variable	Items	Factor Loading	A Set of Items	Reliability
Employees' Commitment	• I am willing to put in a great deal of effort beyond what is normally expected in order to help this organization be successful. (AF1)	0.679	5	0.88
	• I speak highly of this organization to my friends as a great organization to work for. (AF2)	0.769		
	• I am very loyal to this organization. (AF3)	0.815		
	• I would accept almost any type of job assignment in order to keep working for this organization. (AF4)	0.787		
	• I really care about the fate of my organization. (AF5)	0.822		
Eigenvalues			3.011	
Percentage of Variance Explained			60.22	
KMO Measure of Sampling Adequacy			0.863	
Approximate Chi Square			960.397	

Table 3: Means, Standard Deviations, and Correlations of Corporate Culture Dimensions and Employees' Commitment (N = 377)

	Mean	SD	1	2	3	4
Training & Development	3.79	0.59				
Reward & Recognition	3.64	0.67	0.61**			
Teamwork	3.85	0.61	0.49**	0.51**		
Communication	3.83	0.63	0.57**	0.56**	0.67**	
Commitment	3.83	0.64	0.54**	0.55**	0.62**	0.65**

Note: \*\* Correlation is significant at  $p < 0.01$  level (2-tailed).

Table 4. Summary of Regression for the Cultural Dimensions and Their Association with Employees' Commitment (Panel A = Dependent Variable Coefficients and Statistics, Panel B = Collinearity Statistics)

<b>PANEL A</b>						
Independent Variable	Dependent Variable					
	Step 1			Step 2		
	Beta	t	Sig.	Beta	t	Sig.
<i>Controlling Variables</i>						
Gender <sup>a</sup>	0.206	2.617	0.009**	0.050	0.867	0.386
Age	0.575	5.817	0.000**	0.155	2.036	0.042*
Education	0.017	0.209	0.835	0.027	0.451	0.652
Position	0.003	0.035	0.972	0.027	0.462	0.645
Length of Service	-0.451	-5.075	0.000**	-0.119	-1.766	0.078
<i>Response Variables</i>						
Training & Development				0.144	2.894	0.004**
Reward & Recognition				0.142	2.910	0.004**
Teamwork				0.259	5.158	0.000**
Org. Communication				0.289	5.417	0.000**
R Squared		0.118			0.537	
Adjusted R <sup>2</sup>		0.106			0.526	
Sig. F Change		0.000			0.000	
R <sup>2</sup> Change		0.118			0.419	
F Change		9.907			83.147	
Durbin-Watson = 1.827						
<b>PANEL B</b>						
Independent Variable	Collinearity Statistics					
	Tolerance		VIF			
	Step 1	Step 2	Step 1	Step 2		
<i>Controlling Variables</i>						
Gender <sup>a</sup>	0.384	0.375	2.601	2.668		
Age	0.244	0.219	4.106	4.577		
Education	0.346	0.341	2.891	2.931		
Position	0.365	0.363	2.739	2.757		
Length of Service	0.301	0.276	3.322	3.628		
<i>Response Variables</i>						
Training & Development		0.511		1.958		
Reward & Recognition		0.529		1.892		
Teamwork		0.499		2.006		
Org. Communication		0.442		2.260		

Note: Significant correlations = \*p < 0.05 (2-tailed); \*\*p < 0.01 (2-tailed).

<sup>a</sup>Dummy coded: male = 0, female = 1.

## Multiple Hierarchical Regression Analysis

The research hypotheses were tested using a multiple hierarchical regression analysis, which can be used to analyze the relationship between a single dependent (criterion) variable and several independent (predictor or explanatory) variables at one time. In this analysis, a set of independent variables are weighted to form the regression variate (regression equation or model) that may be used to explain their relative contributions to one dependent variable (Berenson and Levine, 1992; Hair et al., 1998). Our analysis showed the relationship between variables in two steps. First, respondents' characteristics were entered into Step 1 as controlling variables. Second, corporate culture dimensions were entered into Step 2 as response variables (main effect). Organizational commitment was used as the dependent variable in the regression analysis. Table 4 summarizes the results.

From Table 4, it can be seen that five control variables explained 11.8% of the variation in organizational commitment ( $F$  change = 9.353,  $p < 0.01$ ). Of the five control variables (Step 1), gender ( $\beta = 0.206$ ,  $p < 0.01$ ), age ( $\beta = 0.575$ ,  $p < 0.01$ ), and length of service ( $\beta = -0.451$ ,  $p < 0.01$ ) were found to significantly impact organizational commitment. In terms of gender (dummy coded), male employees had higher organizational commitment compared to female employees. The age results indicate that older employees had higher organizational commitment than younger employees. On the other hand, length of service had a significant and negative relationship with organizational commitment. This suggests that employees who had been in service for shorter times had higher organizational commitment compared to those with longer service. When the model variables (corporate culture dimensions) were added into Step 1, the additional variance explained was 41.9% ( $F$  change = 53.7), which was significant at 1% significance level (Sig.  $F = 0.000$ ), thus confirming the fitness of the model. The Durbin–Watson of 1.827 falls within the acceptable range ( $1.5 < D < 2.5$ ), indicating that there is no autocorrelation problem in the data and that the error term is independent. The results indicate no multicollinearity problem: the multicollinearity statistics show that the tolerances for all elements of corporate culture are greater than 0.1, and that the Variation Inflation Factors (VIF) are all less than 10 (Hair et al., 1998). Histogram and normal P-P plots of the standardized residuals also indicate normality of the error term, while a scatter plot shows consistent variance of error terms (homoscedasticity). A partial regression plot indicates linearity of the relationship between independent and dependent variables. From these analyses, it can be concluded that the multiple regression analysis model generated in this study meets the five assumptions required to ensure validity of its significance test (Ooi et al., 2005). Thus, there is a statistically significant relationship between corporate culture dimensions and employees' organizational commitment.

The results also indicate that the four dimensions of corporate culture—teamwork ( $\beta = 0.259$ ,  $p < 0.01$ ), communication ( $\beta = 0.289$ ,  $p < 0.01$ ), reward and recognition ( $\beta = 0.142$ ,  $p < 0.01$ ), and training and development ( $\beta = 0.144$ ,  $p < 0.01$ )—are positively associated with employees' organizational commitment. Therefore, it can be argued that all these dimensions of corporate culture are directly involved in improvements in employees' organizational commitment. Moreover, the findings also indicate that the most important corporate culture dimension that explains the variance in employees' organizational

commitment was communication, which was significant at the 0.00 ( $p < 0.01$ ) levels. Thus, hypotheses H1, H2, H3, and H4 are supported.

## **DISCUSSION**

The overall objective of this study was to investigate the influence of four dimensions of corporate culture on employees' organizational commitment within the context of the Malaysian semiconductor packaging organizations. The results of this study revealed that employees' perceptions of the four dimensions of corporate culture are positively related to employees' work commitment, with those perceiving a greater degree of awareness of corporate culture dimensions exhibiting the more positive reactions towards their commitment. The results indicate that communication was perceived as a dominant dimension of corporate culture since there was a strong association with employees' organizational commitment. This study is consistent with previous research which found that communication is important for improving employee commitment (Varona, 1996).

However, the findings also indicate the importance of training and development, reward and recognition, and teamwork, for predicting employees' organizational commitment. For instance, teamwork was found to be positively associated with commitment. The result implies that corporate culture recognizes and emphasizes the importance of teamwork in facilitating employees' ability to work together to get a job done (Morrow, 1997). The results also support the views of Osland (1997), who found that working together within a production unit led to better employee attitudes.

Reward and recognition were found to have significant contributions towards employees' organizational commitment. This indicates that both recognition and rewards have motivating effects on people at work. Further, aspects of rewards such as fairness, opportunities for professional growth, high pay, and praise for good performance appear to influence employees' organizational commitment in this study. The present results are consistent with the findings of O'Driscoll and Randall (1999), who found that the rewards offered by an organization have a positive effect on employees' commitment towards their job and their organization.

Providing employees with proper training and development saves time and enables employees to do the right thing right the first time, thereby increasing their productivity and efficiency and, ultimately, their commitment (Karia, 1999). Our results are consistent with those of Karia and Asaari (2006), who emphasized that training and development led to increased job satisfaction and commitment towards the organization.

Further, the multiple regression analyses confirmed that employees' organizational commitment was significantly related to perceptions of corporate culture dimensions and therefore that implementing corporate culture does pay off. This study also supports the findings of Saeed and Hassan (2000), who found that there was a strong positive relationship between corporate culture and commitment to the organization. Our finding stresses the need to monitor culture and to evolve between management practices so that employees' organizational commitment is maintained at high levels.

## **LIMITATIONS AND FUTURE RESEARCH**

We realize that there are some limitations which must be considered for future research. Firstly, we excluded non-ISO certified organizations in our selection of semiconductor packaging firms in Malaysia, making this a possibly biased selection. Secondly, the findings are based on the use of self-reported survey data, which may be affected by response biases. Thirdly, cross-sectional data analysis cannot confirm the direction of causality implied in our research model, so it is necessary to be cautious in conclusions regarding causality. For example, despite the significant relationship shown between corporate culture dimensions and employees' organizational commitment, the cross-sectional nature of this research precludes any conclusion of causality between the dimensions of corporate culture and employees' organizational commitment. For this reason, longitudinal studies of corporate culture dimensions are strongly recommended and long overdue. Finally, it is also important that other major constructs related to corporate culture dimensions (including innovation, effective decision making, risk-taking for creativity, supportiveness, and stability) should be added to the conceptual framework underlying this study. It is also proposed that future research be conducted in other types of organizations, such as manufacturing and service, using a similar approach. Furthermore, because this study chose to cover only one type of employee attitude, a wider range of employees' work-related outcomes such as task characteristics, role ambiguity, role conflict, career satisfaction, and job satisfaction can be incorporated into a more comprehensive study.

## **CONCLUSIONS AND IMPLICATIONS**

In summary, this paper reports on an exploratory investigation of the relationship between corporate culture and employees' organizational commitment within the context of the Malaysian semiconductor packaging organizations. As claimed by some authors (e.g., Saeed and Hassan, 2000; Chow et al., 2001), organizational culture does have significant effects on personnel attitudes towards their commitment within the organizations. The six major Malaysian semiconductor packaging organizations yield test revealed that employees' perceptions of four corporate culture dimensions are positively related to their commitment, with those perceiving a greater awareness of these dimensions exhibiting the more satisfactory reactions towards their commitment. The findings are considered to have made a significant contribution by advancing the corporate culture literature to a better understanding of the influence of corporate culture contexts on commitment among employees in the semiconductor packaging manufacturing sector. The authors purport that practicing these dimensions in such organizations is able to yield better and long-lasting results in this prominent area. The findings also make a contribution in creating awareness and understanding of the development of a theoretical base for application of the four dimensions of corporate culture resulting in an improvement of employees' working conditions that inevitably contributes towards their commitment. In addition, the findings prescribe potential implications for top management to review their corporate culture dimensions, consistent with the training needs of the employees within the organizations. Hence, employees will be more likely to perform better and to feel a higher level of commitment towards the organizations. To the best of the authors' knowledge, this is the first study that examines the association between corporate culture and employees'

organizational commitment within the Malaysian semiconductor packaging work environment.

## ACKNOWLEDGEMENTS

The authors would like to thank the reviewer, Prof Han Chun Kwong for insightful and constructive criticisms of earlier version of this manuscript. The authors would also like to thank Mr. Yeong Chee Wah, the Risk Management Director of Uni-Asia Life Assurance Bhd for his useful comments and suggestions.

## REFERENCES

- Acton, T., & Golden, W. (2002). Training: The way to retain valuable IT employees? Conference Proceedings, *Informing Science*, 1–12. Retrieved from <http://proceedings.informingscience.org/IS2002Proceedings/papers/acton140train.pdf>.
- Adebanjo, D., & Kehoe, D. (2001). An evaluation of factors influencing teamwork and customer focus. *Managing Service Quality*, 11, 49–56.
- Agus, A. (2000). Reducing the effects of multicollinearity through principal component analysis: A study on TQM practices. *Malaysian Management Review*, 35(1), 43–50.
- Allan, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1–18.
- Anderson, C., & Martin, M. (1995). Why employees speak to coworkers and bosses. *Journal of Business Communication*, 32(3), 249–265.
- Anschutz, E.E. (1995). *TQM America*. Bradenton, FL: McGuinn & McGuinn Publishing.
- Bartlett, K. R. (2001). The relationship between training and organizational commitment: A study of healthcare field. *Human Resource Development Quarterly*, 12(4), 335–352.
- Berenson, L. M., & Levine, D. M (1992). *Basic Business Statistics: Concepts and Applications*. Englewood Cliffs, NJ: Prentice-Hall.
- Brunetto, Y., & Farr-Wharton, R. (2004). Does the talk affect your decision to walk: A comparative pilot study examining the effect of communication practices on employee commitment post-managerialism. *Management Decision*, 42(3/4), 579–600.
- Bryman, A., & Cramer, D. (1997). *Quantitative Data Analysis with SPSS for Windows*. London, UK: Routledge.
- Cherrington, D. J. (1995). *The management of human resources* (4<sup>th</sup> ed.). Englewood Cliff, NJ: Prentice-Hall.
- Chow, C.W, Harrison, G.L, Mckinnon, J.L and Wu, A. (2001). Organisational culture: Association with affective commitment, job satisfaction, propensity to remain and information sharing in a Chinese cultural context. CIBER working paper. San Diego State University
- Cooke, R. A., & Rousseau, D. M. (1998). Behavioural norms and expectations: A quantitative approach to the assessment of organizational culture. *Group & Organizational Studies*, 13(3), 245–273.
- Deming, W. E (1986). *Out of the Crisis*. Cambridge, MA: MIT Press.
- Ghani, R. A., Nordin, F., & Mamat, L. (2004). Organizational commitment among the academic staff in the Distance Education Program. *The International Journal of Education Development*, 1, 29–43.

- Ghiselli, R. F., Lalopa, J. M., & Bai, B. (2001). Job satisfaction, life satisfaction and turnover intent among food-service managers. *Cornell Hotel and Restaurant Administration Quarterly*, 42(2), 28–37.
- Goris, J. R., Vaught, B. C., & Pettit, J. D., (2000). Effects of communication direction on job performance and satisfaction: A moderated regression analysis. *Journal of Business Communication*, 37(4), 348–368.
- Gottschalk, P. (1998). *Content characteristics of formal information technology strategy as implementation predictors in Norwegian organizations*. Sandvika, Norway: Department of Technology Management, Norwegian School of Management.
- Gray, J. H., Densten, I. L., & Sarros, J. C. (2003). *A matter of size: Does organizational culture predict satisfaction in small organizations?* Melbourne, Australia: Working paper 65/03, September, Faculty of Business and Economics, Monash University.
- Guest, D. E. (1999). Human resource management—the workers' verdict. *Human Resource Management Journal*, 9(3), 5–26.
- Guimaraes, T. (1996). TQM's impact on employee attitude. *The TQM Magazine*, 8(5), 20–25.
- Guimaraes, T. (1997). Assessing employee turnover intentions before and after TQM. *International Journal of Quality & Reliability Management*, 14(1), 46–63.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Hemdi, M. A., & Nasurdin, A. M. (2005). Human resource management practices, affective commitment and turnover intentions: A test of mediation. *The 6th Asian Academy of Management Conference Proceedings*, 9–11, December, pp. 59–64.
- Herzberg, F. (1996). *Work and the nature of man*. Cleveland, OH: World Publishing.
- Igbaria, M., Iivari, J., & Maragahh, H. (1995). Why do individuals use computer technology? A Finnish case study. *Information and Management*, 5, 227–238.
- Juran, J. M., & Gryna, F. M. (1993). *Quality planning and analysis: From product development through use*. New York, NY: McGraw-Hill.
- Karia, N. (1999). *The impact of TQM practice on employees' work-related attitude*. MBA Unpublished Research Report. Penang, Malaysia: University Science Malaysia.
- Karia, N., & Ahmad, Z. A. (2000). Quality practices that pay: Empowerment and teamwork. *Malaysian Management Review*, 35(2), 66–76.
- Karia, N., & Asaari, M. H. A. H. (2006). The effects of total quality management practices on employees' work-related attitudes. *The TQM Magazine*, 18(1), 30–43.
- Kassiech, S. K., & Yourstone, S. A. (1998). Training, performance evaluation, rewards, and TQM implementation success. *Journal of Quality Management*, 3(1), 25–38.
- Khadpe, S. (2002). The global packaging foundry business 2002: Units up, profits taking a slow boat to China. *Chip Scale Review Magazine*.
- Kotter, J.R and Heskett, J.L. (1992). *Corporate culture and performance*. New York: Free Pr
- Lau, H. C., & Idris, M. A. (2001). Research and concepts: The soft foundation of the critical success factors on TQM implementation in Malaysia. *The TQM Magazine*, 13(1), 51–60.
- Lawson, R. B., & Shen, Z. (1998). *Organizational psychology: Foundation and applications*. New York, NY: Oxford University Press.
- Lum, L., Kervin, J., Clark, K., Reid, F., & Sirola, W. (1998). Exploring nursing turnover intent: Job satisfaction, pay satisfaction, and organization commitment. *Journal of Organizational Behavior*, 19, 305–320.
- Lund, D. B (2003). Organizational culture and job satisfaction. *Journal of Business and Industrial Marketing*, 18(3), 219–231.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolaytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61, 20–52.



- MIDA (Malaysian Industrial Development Authority) (2004). *Opportunities for growth in Malaysia*, pp. 1–12.
- Morrow, P. C. (1997). The measurement of TQM principles and work-related outcomes. *Journal of Organizational Behaviors*, 18, 363–396.
- Mowday, R. T., Porter, L.W., & Stress, R. M. (1979). The measures of organizational commitment. *Journal of Vocational Behaviour*, 22(8), 90–6.
- Nunnally, J. (1978). *Psychometric theory*. New York, NY: McGraw-Hill.
- O’Driscoll, M. P., Randall, D. M., (1999). Perceived organizational support, satisfaction with rewards and employee job involvement and organizational commitment. *Applied Psychology: An International Review*, 48, 197–209.
- Ooi, J. E., Ismail, I., & Wahid, N. A. (2005). Determinants of customer satisfaction in local retail banking: A case of Penang. *The 6<sup>th</sup> Asian Academy of Management Conference*. Proceeding Vol. 1, Ipoh, Perak, Malaysia, 9–12 December, pp. 171–8.
- Osland, A. (1997). Impact of total quality attitude management and training and work context on attitude supervisor. *International Journal of Organization Analysis*, 5(3), 1–9.
- Pettit, J. D., Goris, J. R., Vaught, B. C. (1997). An examination of organizational communication as a moderator of the relationship between job performance and job satisfaction. *The Journal of Business Communication*, 34(1), 81–98.
- Poh, J. P., (2001). *Total quality management (TQM) in Malaysia—A comparative study on employees’ perception of management practices in TQM and non-TQM companies*. MBA unpublished thesis, Universiti Tun Abdul Razak, Malaysia.
- Pool, S. W. (2000). Organizational culture and its relationship between jobs tension in measuring outcomes among business executives. *Journal of Management Development*, 9(1), 32–49.
- Rashid, M. Z. A., Sambasivan, M., & Johari, J. (2003). The influence of corporate culture and organizational commitment on performance. *Journal of Management Development*, 22(8), 708–728.
- Recardo, R., & Jolly, J. (1997). Training of teams in the work place. *S.A.M Advanced Management Journal*, 62(2), p. 4.
- Robbins, S. (Ed.). (2001). *Organizational behavior: Concepts, controversies, applications*. Englewood Cliffs, NJ: Prentice-Hall.
- Saeed, M., & Hassan, M. (2000). Organizational culture and work outcomes: Evidence from some Malaysian organizations. *Malaysian Management Review*, 35(2), 54–59.
- Schein, E. H. (1992). *Organizational culture and leadership*, San Francisco: Jossey-Bass.
- Silos, I. M. (1999). Employee Involvement—A component of total quality management. *Production and Inventory Management Journal, Falls Church*, First Quarter.
- SIRIM QAS Directory of Certified Products and Companies, (2003). SIRIM QAS Sdn Bhd.
- Smidts, A., Pruyn, A., & van Riel, C. (2001). The impact of employee communication and perceived external prestige on organization identification. *Academy of Management Journal*, 44(5), 1051–1062.
- Stough, S., Eom, S., Buckenmyer, J. (2000), “Virtual teaming: a strategy for moving your organization into the new millennium”, *Industrial Management & Data Systems*, Vol. 100, No. 8, pp. 370-378
- Stuart, H. (1999). Towards a definite model of the corporate identity management process. *Corporate Communication*, 4(4), 200–207.
- Varona, F. (1996). Relationship between communication satisfaction and organizational commitment in three Guatemalan organizations. *Journal of Business Communication*, 33(2), 111–140.
- Zhang, Z. H. (2000). Implementation of total quality management: An empirical study of Chinese manufacturing firms. PhD unpublished thesis, University of Groningen, The Netherlands.