ISSN 1993-8233 ©2012 Academic Journals

Full Length Research Paper

Job satisfaction level among human resource employees: Malaysia's perspective

Wendy Ming-Yen TEOH1*, Kit-Wei TAN1, Siong-Choy CHONG2 and Lew-Sian WOOl3

¹Faculty of Business and Law, Multimedia University, Jalan Ayer Keroh Lama, 75450 Bukit Beruang, Malacca, Malaysia. ²Chancellery Division, Linton University College, Malaysia Persiaran UTL, Bandar Universiti Teknologi Legenda, Batu 12, 71700 Mantin, Negeri Sembilan Darul Khusus, Malaysia.

Accepted 17 October, 2011

Determining the job satisfaction level of employees is essential as job satisfaction is an important element that can affect the total operation or production of an organization. This study investigates four predictors (demographic, employee relationship with management, compensation and benefits, and working environment) as independent variables to job satisfaction among 150 human resource (HR) employees who work in the manufacturing industry in Malaysia. Job descriptive index (JDI), Minnesota satisfaction questionnaire (MSQ), employee benefits survey sample and Direct Support Professional (DSP) job satisfaction questionnaire are employed to develop the self-administered questionnaire for this study. The Pearson correlation coefficient results indicate that there is a positive relationship between all the three predictors and job satisfaction. Taking a closer look, the multiple regression results show that employee relationship with management has a greater influence on job satisfaction compare to the remaining two predictors. The analysis of variance (ANOVA) and T-test analyses suggest that, there are significant differences between the age group, the number of year of services, education level and job satisfaction. This study sheds light on the major factors affecting the level of job satisfaction among HR employees, a group that is not frequently researched. The findings imply that employers are required to formulate appropriate long term plans to avoid high turnover and/or job burnout among employees.

Key words: Job satisfaction, employee relationship with management, compensation and benefits, working environment, HR employees, manufacturing industry, Malaysia.

INTRODUCTION

Job satisfaction, as defined by Brayfield and Rothe (1951), is an individual's attitude towards their work. It has been widely acknowledged that job satisfaction is an important element affecting the performance of an organization. It therefore comes as no surprise as to why job satisfaction is one of the most researched areas in psychology and social science, and Malaysia is no exception. Wong and Teoh (2009) reported that numerous

Since the last few decades, Malaysia has witnessed a tremendous growth in the manufacturing sector. This sector has been identified as the engine of growth to the economy and one which contributes significantly to the gross domestic product (GDP) of Malaysia. As such, it is also one that employs the largest number of employees, including foreign workers. This is evident from the report by Foreign Labor Trends (2002) Malaysia, which indicates that the manufacturing industry employs about 35% of foreign workers out of a labor force of 9.9 million, of which migrant labor constitutes approximately 20%. It

³Rectorate, Linton University College, Malaysia Persiaran UTL, Bandar Universiti Teknologi Legenda, Batu 12, 71700 Mantin, Negeri Sembilan Darul Khusus, Malaysia.

studies have discussed the topic of job satisfaction among the various industrial sectors in Malaysia.

^{*}Corresponding author. E-mail: myteoh@mmu.edu.my. Tel: 606 -252 4124. Fax: 606 - 231 8869.

is not difficult to understand why the foreign workers constitute a significant percentage of those employed in this sector as most Malaysians prefer to work in foreign countries. Among the 785,000 Malaysians who work overseas, 44% are in Singapore and 28% in other parts of Asia while the rest work in other parts of the world and an estimated two out of every three are likely to be professionals (Malaysian Employers Federation, 2009). Job satisfaction is among the reasons reported, particularly through greater likelihood of promotion opportunity and better working conditions (Hsu, 2010). With the reversed trend (that is, foreign workers working in Malaysia and Malaysians working in foreign countries) and that job satisfaction has been identified as one of the main reasons for this trend, it becomes even more imperative to assess job satisfaction levels of Malaysians so that steps can be taken to retain them in the country, as well as to attract those who are currently overseas to return to work in Malaysia. This measure is amplified by the efforts undertaken by the Ministry of Human Resources Malaysia to encourage Malaysians to return to contribute to the economic development of the country.

Giving this background, the literature demonstrates that there are many factors influencing the level of job satisfaction among employees across a variety of industries. A review of prior studies fetches a conclusion that due to different perceptions of employees across different countries and economies, the level of job satisfaction is different as well (Teoh et al., 2011). Further, similar studies concentrating on HR employees are scarce to date. Every organization wants to attract, motivate and retain the most qualified employees and match them to jobs for which they are best suited. HR personnel are likely to provide this connection since they are the backbone of any organization. As a matter of fact, HR is now seen as a strategic activity of any firm, suggesting and changing HR policies whenever appropriate in face of the changing environment. In an effort to enhance morale and productivity, limit job turnover, and help organizations increase performance and improve results, it is these HR employees who will help their companies to effectively use employee skills, provide training and development opportunities to improve those skills, and increase employees' satisfaction with their jobs and working conditions. Therefore, if the HR personnel are faced with dissatisfaction, it will lead the whole organization to function ineffectively. In short, they are playing an important role for the development of the organization.

The statistical results provide evidence that job satisfaction has direct effect on turnover (Fishbein, 1980; Fishbein and Ajzen, 1975). As such, keeping employees satisfied will not only avoid high labor turnover but also overcome the challenges in hiring good employees (Hunjra et al., 2010; Teoh et al., 2011). It is on these bases that the present study is conducted to investigate the factors influencing job satisfaction among HR employees in the manufacturing industry in Malaysia, a

sector in which its importance has been documented earlier. Specifically, this study considers four predictors (demographic factors, employee relationship with management, compensation and benefits and working environment influencing) influencing job satisfaction levels of employees. Along with this, the following research questions are developed: (1) what are the relationships between employee relationship with management, compensation and benefits, working environment and job satisfaction among HR employees? (2) Do demographic factors influence the level of job satisfaction among HR employees? (3) Which is the major factor that influences the level of job satisfaction among HR employees?

From the theoretical perspective, the findings add to the rich literature concerning factors influencing job satisfaction. From the practical viewpoint, the results increase employer awareness on the importance of assessing job satisfaction of their HR employees in order to reduce the level of employee turnover and job dissatisfaction (Smith, 1992; Okpara, 2006). Guided by this principle, employers are able to take appropriate steps to arrest employee problems that have the potential to contribute to employee job dissatisfaction. At the same time, proactive steps can be taken by employers to continuously enhance the job satisfaction of their employees. These constitute the aims of this study.

LITERATURE REVIEW

Theories

A review of the theories in the field of job satisfaction reveals that there are two established theories which are widely referred to by many researchers in this area. The Herzberg's two factor theory and Maslow's needs Hierarchy theory are discussed in "Herzberg's two factor theory" sub-sections.

Herzberg's two factor theory

Herzberg (1957) developed a two factor theory which indicates that satisfaction and dissatisfaction stem from different categories of variables, termed as hygiene and motivator respectively. Hygiene factors refer to policy and administration, salary, job security, working condition, supervision and interpersonal relations. Motivators, which served as satisfiers, include achievement, recognition, the work itself, responsibility and advancement. These five motivators (satisfiers) are identified as strong determinants of job satisfaction and they are associated with the long-term positive effects on job performance. Accordingly, the theory states that an employee who has become too dissatisfied with those hygiene factors will consistently produce only short-term changes in job

attitudes and performance and generally would try to quit from the working environment (Herzberg et al., 1959).

In summary, satisfiers describe a person's relationship with what she or he does, many related to the tasks being performed. Dissatisfiers, on the other hand, deal with a person' relationship to the context or environment in which she or he performs the job. In other words, the satisfiers relate to what a person does while the dissatisfiers relate to the situation in which the person does what he or she does. Herzberg explains this by turning to the different sets of needs human beings have in a way that is very reminiscent of Maslow's as well as Anthony Robbins' division of needs into two categories (personality needs and growth needs). According to Herzberg, the factors leading to job satisfaction are separate and distinct from those that lead to job dissatisfaction. Therefore, managers who seek to eliminate factors that create job dissatisfaction can bring about peace, but not necessarily motivation (Yourcoach.be, 2010a).

Maslow's needs hierarchy theory

The focus of Abraham Maslow's theory is on observing human motivation factors (Maslow, 1970; Sharizan, 1997). It is comprehensive and does not focus on an exclusive framework, but rather concerned with the fundamental fulfillment of the five human basic needs, that is, physiological, safety (security), belongingness and love, esteem and self-actualization needs. In addition, Maslow's Needs Hierarchy Theory represents a motivator which leads an employee to be satisfied with their jobs. A study of Lindner (1998) revealed that the ranked order of motivating factors were: (a) interesting work, (b) good wages, (c) full appreciation of work done, (d) job security, (e) good working conditions, (f) promotions and growth in the organization, (g) feeling of being in on things, (h) personal loyalty to employees, (i) tactful discipline, and (j) sympathetic help with personal problems.

There is evidence of linkages between Herzberg's Two Factor Theory and Maslow's Needs Hierarchy Theory (Wong and Teoh, 2009). Herzberg's theory was built upon two separate sets of conditions, that is, satisfiers and dissatisfiers. The dissatisfiers in Herzberg's theory corresponded to the lower order human needs enumerated in Maslow's theory, while the satisfiers correspond to the higher order human needs in Maslow's theory. Employees, either satisfiers or dissatisfiers have different needs at different times. This implies that managers ought to carefully understand the needs of their employees and adjust rewards and other performance outcomes accordingly (Hill and McShane, 2008). The strongest needs are determined from a combination of the emotions generated and the person's values, social norms, and past experiences. Besides, today's educated workforce resents "command and control" management, thus, managers need to search for more contemporary

ways to motivate staff. This is because the new generation of employees, especially Generation X and Generation Y has brought different expectations to the workplace. According to Lachnit (2002), 40% of employees aged 25 to 34 sometimes or frequently feel demotivated compared to 30% of 35 to 44-year-olds and just 18% among the bracket of those between 45 to 54 year olds. As such, job satisfaction is expected to become a more important issue to be addressed in the future, if not now. Employees who are satisfied and less stressed with their jobs generally help to increase the quality of talent in the workplace (Hill and McShane, 2008).

In short, this study employs three variables arising from the hygiene issue (Herzberg et al., 1959): employee relationship with management (interpersonal relations), compensation and benefits (salary) and working environment (working condition). The following "Demographic factors and job satisfaction" sub-sections explain the demographic variables and the three predictors influencing job satisfaction to greater detail.

Demographic factors and job satisfaction

In assessing the level of job satisfaction, demographic factors or personal characteristics such as gender, educational level, age, number of year of services and marital status have been considered in previous studies (Santhapparaj et al., 2005; Scott et al., 2005; Ramayah et al., 2001; Oshagbemi, 2000; Bowen et al., 1994; Fetsch and Kennington, 1997; Riggs and Beus, 1993). However, the findings derived are rather mixed and inconsistent.

For instance, the relationship between gender and job satisfaction has not led to any definitive conclusion. An earlier study by Herzberg et al. (1975), as cited in Scott et al. (2005) found that, males are more satisfied with their jobs. In contrast, Riggs and Beus (1993) and Bowen et al. (1994) discovered that, females have higher levels of job satisfaction. Yet, there are studies that indicate no significant relationship between gender and job satisfaction levels (Nestor and Leary, 2000). Interestingly, there are findings which conclude that, both genders were equally satisfied with their job (Castillo et al., 1999).

Similarly, the relationship between age and job satisfaction has yielded mixed results. Greenberg and Baron (1995) found that, older workers are generally happier with their jobs compared to the younger ones. This is because older workers tend to have richer work experience and more realistic views of work and life compared to the younger workers. However, Hunt and Saul (1975) discovered that there is a positive and linear relationship between age and job satisfaction where there is a high level of correlation among overall job satisfaction with the age of employees under 25. Saleh and Otis (1964) reported that, general satisfaction of an employee increased up to age 60 and declined until

retirement. Nevertheless, another study by Oshagbemi (2003) revealed that age is found insignificant with job satisfaction of employees in UK universities.

Likewise, there appears to be no conclusive evidence on the relationship between educational level and the level of job satisfaction. There are studies which show that workers with higher education qualifications had a higher job satisfaction level (Andrews, 1990; Berns, 1989) while other studies indicate that workers with higher education level had lower job satisfaction level and that some of the studies show that there is no relationship between both of them (Herzberg et al., 1957; Ramayah et al., 2001; Scott et al., 2005). As far as age is concerned, Berns (1989), as cited in Ramayah et al. (2001) found that, as the age of teachers increases, so did his or her overall job satisfaction level, while Grady (1985) found that as the number of years of teaching experience increases, overall job satisfaction increases as well. In contrast, Cano and Miller (1992) found that, the teacher's age, years in current position, total years teaching were not significantly related to overall job satisfaction. Moreover, there are findings which imply that older or younger teachers were not necessarily more or less satisfied with their jobs (Cano and Miller, 1992; Castillo et al., 1999). However, according to Wiles (1967), as cited in Tan et al. (2010), those teachers who are approaching the age of retirement have lower levels of job satisfaction. In a nutshell, it can be concluded that there are no identical views between age, number of year of services and job satisfaction.

Contradictory findings are recorded between marital status and job satisfaction level as well. Herzberg et al. (1957), as cited in Ramayah et al. (2001) insist that a clear conclusion cannot be drawn concerning job satisfaction and its relationship with marital status. Nevertheless, marital status was related to the job satisfaction levels as argued by Bowen et al. (1994) who found that married extension agents, that is, 4-H agents were more satisfied with their jobs than those who were single. Similarly, a study by Fetsch and Kennington (1997) also found that there is a relationship between marital status and job satisfaction levels. They point out that both divorced and married agents tend to be more satisfied with their jobs than agents who were never married, remarried, or widowed. However, the findings were refuted Gazioglu and Tansel (2006) who concluded from their study that married individuals have lower job satisfaction than the unmarried ones.

An observation on the demographic characteristics yield two conclusions. It reaffirms our beliefs that a concrete conclusion is yet to emerge. Regardless of the first conclusion, however, literature has provided evidence on the significant relationships between the demographic characteristics and job satisfaction. This study is therefore undertaken to determine whether there is a significant relationship between the demographic factors and job satisfaction levels. Specific attention is

provided to five demographics such as gender, educational level, age, number of year of services, and marital status.

Employee relationship with management and job satisfaction

According to the Employee Job Satisfaction Survey Report by the Society for Human Resource Management (SHRM) (2009) which reinforced the findings of Morrison (2004), employee relationship with management is one of the factors that influence job satisfaction of employees. Employee relationship with management can be separated into two elements, that is, relationship with immediate supervisor (leadership) and communication between junior and senior employees (communication satisfaction). The immediate supervisor, especially the first-line supervisor is the physical personification for most of the employees (Daley, 1997). As such, strong leadership is an important element for the success of organizations where it directly influences the effective use of human capital towards achieving organizational missions and goals (Globe, 1972; Voon et al., 2009; Wu and Shiu, 2009). On the other hand, under poor leadership, employees may be unwilling to change as they view change as a threat rather than an opportunity to their career. As result, if the immediate supervisor does not have a strong leadership it may lead to the subordinates feeling dissatisfied with their jobs (Menon, 2004). Because of this, it is suggested that the immediately supervisor should be able to spend time listening to their employees, able to give employees fair reviews and promote them, able to provide feedback to employees from time to time, able to train their subordinates when necessary, and able to back up the employees in order to raise up their job satisfaction (Branham, 2005).

At the same time, communication satisfaction is considered as a main determinant of job satisfaction (Zedeck, 1971). Many studies have provided evidence that satisfaction with communication is correlated with high levels of both job performance and job satisfaction (Chien, 2004; Reguena, 2003; Coopman, 2001; Miles et al., 1996; Clampitt and Downs, 1993; Downs, 1988; Pincus, 1986). Downs and Hazen (1977) highlight that there are several arguments on the topic of communication satisfaction. First, the area of greatest employee satisfaction is the supervisory communication and subordinate communication compared to personal feedback which has the least satisfaction. Secondly, employees in managerial roles tend to be more satisfied with communication than those who are not. Thirdly, communication satisfaction is positively and significantly related to job satisfaction (Clampitt and Girard, 1993; Lee, 1989; Varona, 2002). In general, the quality of communication relationship between employees and supervisors are the main source of job satisfaction or dissatisfaction (Varona, 2002).

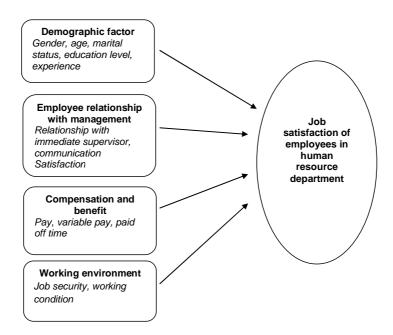


Figure 1. Research framework on factors influencing job satisfaction among hr employees.

Compensation and benefits and job satisfaction

A review of the literature indicates that the level of earnings is substantial and has a positive effect on job satisfaction (Carvajal and Hardigan, 1999). This argument is supported by Kazooli's Lenses (2010) who underline that pay is one of the most important factors influencing workers' level of job satisfaction. Accordingly, Handel (2000) found that most employees were satisfied with their compensation which is associated with incentives, stock option, cash recognition and so forth, while Miller (1980) identified that job satisfaction is greater among workers who are more secure and highly paid.

The report by SHRM (2009) indicates that benefits remained among the top two most important contributors of job satisfaction to employees, while differences emerged based on employees' tenure and organisations' staff size. Additionally, the substitution between wages and benefits can have a negative impact on job satisfaction, for instance, when workers find they must sacrifice wages and accept provision of a benefit they do not necessarily desire (Artz, 2003).

Working environment and job satisfaction

There are a variety of studies which found that working environment is linked with job satisfaction (http://www.marshall.edu/jrcp/DeStefano.pdf; Oraman, 2011). Specifically, job security and working condition are the elements clustered under the working environment (SHRM, 2009).

Job security is feeling safe at work which is a basic requirement that must be addressed before high level needs can be met, at least on a systematic basis (Lockwood, 2009). When there is feeling of insecure at work, it will lead to a lower level of job satisfaction (Eurobarometer Surveys, 1996; Blanchflower and Oswald, 2000). Because of this argument, many studies have found a positive relationship between job security and job satisfaction (Nikolaou et al., 2005) which imply that employees may have the poor performance if they insecure in their jobs (Rosow and Zager, 1985).

Similarly, working conditions such as lighting, heating, air circulation and noise is also an important determinant which influences job satisfaction (Kebriaei and Moteghedi, 2009). As such, it must be suitable for personal needs, their expectations and aspirations because working conditions and factors that affect them are the most important issues affecting productivity (Kebriaei and Moteghedi, 2009). In fact, poor working conditions could cause physiological and psychological stress (Aksu and Aktas, 2005). In other words, job satisfaction is strongly influenced by working conditions in which individuals works has a great effect on their level of pride in themselves and the work they do (Kinzl et al., 2004).

RESEARCH METHODOLOGY

Research framework

As a result of the literature review, Figure 1 shows the relationships between the independent and dependent variables. Based on the framework, it is posited that the dependent variable (job satisfaction)

Table 1. Reliability analysis, mean and standard deviation scores.

Variables	Cronbach's alpha	N of items	Mean	Standard deviation
Job Satisfaction	0.928	17	4.1612	0.67958
Employee Relationship with Management	0.944	21	4.5016	0.56023
Compensation and Benefit	0.914	15	4.2107	0.66029
Working Environment	0.949	10	4.63730	0.69345

is influenced by the demographic factors, employee relationship with management, compensation and benefit and working environment which are the independent variables of the study. Thus, the following hypotheses are constructed for the present study:

- H₁: There is a significant difference between the levels of job satisfaction among male and female employees
- $\ensuremath{\text{H}}_2\!\!:$ There is significant difference between age levels of employees and job satisfaction
- H_3 : There is no significant difference between marital status and the level of job satisfaction among the employees
- H₄: There is significant difference between the number of years of service regarding and the level of job satisfaction of the employees
- H_5 : There is significant difference among employees with different levels of formal education level and their job satisfaction level
- H_{6} : There is a positive relationship between employee relationship with management and job satisfaction
- $\ensuremath{\text{H}_{7}}\xspace$ There is a positive relationship between compensation and benefits and job satisfaction
- H_8 : There is a positive relationship between working environment and job satisfaction

Sampling method

This study utilises convenience sampling method. About 150 sets of questionnaires are distributed to the employees working in the Human Resources Departments in the manufacturing industry upon getting the approval from the management of respective firms. The self-administered questionnaires are collected immediately upon completion.

Survey instrument

The questionnaire consists 72 items. Besides the 9 items designed to obtain demographic information of the respondents, the remaining 63 items were modified from the JDI developed by Smith et al. (1969) which were concerned with factors that can affect job satisfaction and MSQ developed by Weiss et al. (1967). JDI was chosen as it has been shown by prior research to be reliable and a valid measurement of job satisfaction. MSQ is easy to use and understand and can be applied to managers, supervisors and employees. All of the statements are ranked using a 6-point Likert scale ranging from (1) "strongly disagree" to (6) "strongly agree". In addition, 'employee benefits survey sample' and 'DSP job satisfaction questionnaire' are also referred to in the development of questions for this study.

Assessing validity and reliability

In order to achieve content validity, the instrument was piloted on 30 HR employees on a random basis prior to dissemination. Consequently, minor corrections were made. The Cronbach's alpha values for all of the variables are higher than 0.60 (Sekaran and Bougie, 2010) which imply that all the items are reliable.

Demographic profiles of the respondent

Table 2 shows the demographic profiles of the 150 respondents. The majority of the respondents are female (69.3%) and between the age of 20 to 29 years old (55.3%). Slightly more than half of the respondents are Chinese (n=86, 57.3%), followed by 22.0% of Indians and 20.7% of Malays. Additionally, there were 78 employees who reported that they are married. About 45.3% of the respondents have worked in their current company between 1 and 5 years, with 41 of the employees have 6 to 10 years of working experiences in their respective company. Only 3.3% of the respondents have worked in the same company for between 11 to 15 years. This makes sense in view of the respondents' age. In addition, about 36.7% of the respondents earn more than RM2000 monthly. Only 19 (12.7%) of the HR personnel involved in this study are holding the position of managers whereas the majority of respondents are in the category of junior level 28.7% (n=22), again, corroborating the age groups of the respondents surveyed. Almost half of the respondents have bachelor degrees. that the majority of respondents reported working more than 40 h a week, followed by those who work 33 to 40 h a week (43.3%).

Mean and standard deviation scores of the independent and dependent variables

The mean and standard deviation scores for all independent and dependent variables are shown in Table 1 with the exception of the demographic factors. Among the three independent variables, working environment scored the highest mean with an overall mean of 4.6373. This is followed by relationship with management, and compensation and benefits, with mean scores of 4.5016 and 4.2107 respectively. In term of the dependent variable, job satisfaction scores a mean value of 4.1612 which implies a moderate satisfaction on the job. The standard deviation scores for all the independent and dependent variables are less than 1.00, suggesting consistencies in the respondents' answers.

RESULTS

In order to test the hypotheses 1, 2, 3 and 4, independent T-test is used to test the significant difference between the levels of job satisfaction among the male and female HR employees while One-way ANOVA used to determine the significant difference between age, marital status, number of year service, and the level of job satisfaction of the employees. The results are shown in Table 3 and 4 respectively.

Table 3 indicates that there is no significant difference between the level of job satisfaction among male and female. Thus, hypothesis 1 is rejected. The One-way ANOVA results show that there are significant differences between age, working experience, education level and job satisfaction as three of the variables' p-values are

 Table 2. Demographic background of the respondents.

Variable	Classification variable	Frequency	Percentage
Gender	Male	46	30.70
Gender	Female	104	69.30
	<20	1	0.70
	20-29	83	55.30
Age	30-39	41	27.30
	40-49	24	16.00
	>49	1	0.70
	Malay	31	20.70
Race	Chinese	86	57.30
	Indian	33	22.00
	Single	69	46.00
Marital status	Married	78	52.00
	Divorce	3	2.00
	<rm 1000<="" td=""><td>6</td><td>4.00</td></rm>	6	4.00
	RM 1000- RM 1999	51	34.00
la como la col	RM 2000 - RM 2999	55	36.70
Income level	RM 3000- RM 3999	17	11.30
	RM 4000 - RM 4999	20	13.30
	> RM 5000	1	11.30
	Managerial Level	19	12.70
	Executive Level	33	22.00
Position	Senior Officer	33	22.00
	Junior Officer	43	28.70
	Clerical Level	22	14.70
	SPM	15	10.00
	STPM	19	12.70
Education level	Diploma	37	24.70
	Degree	73	48.70
	Master	6	4.00
	< 1 year	36	24.00
Working experience	1 – 5 years	68	45.30
working expendice	6 – 10 years	41	27.30
	11 – 15 years	5	3.30
	17 – 24 h	1	0.70
Average working hours	25 – 32 h	3	2.00
(per week)	33 – 40 h	65	43.30
	> 40 h	81	54.00

Table 3. Independent T-test.

	Gender	Mean	Std. Dev.	Sig.
Job Satisfaction	Male	4.2980	0.73663	.078
	Female	4.1007	0.64728	

Table 4. One-way ANOVA.

Test	Personal characteristics	F	Sig.
	Age	3.868	0.005
One-way ANOVA	Marital status	1.552	0.215
	Working experience	3.540	0.016
	Education level	2.798	0.028

Table 5. Duncan post hoc test – working experience.

TJS				
Working experience	N	Subset for alpha = 0.05		
	N	1		
< 1	36	4.0392		
1 - 5	68	4.0476		
6 - 10	41	4.4118		
11 - 15	5	4.5294		
Sig.		.065		

Table 6. Duncan post hoc test – education level.

TJS				
Education level		Subset for alpha = 0.05		
	N	1	2	
Diploma	37	3.9459		
SPM	15	4.0902		
STPM	19	4.1920		
Degree	73	4.2200		
Master	6		4.8529	
Sig.		0.305	1.000	

less than 0.05. However, no significant difference was found between marital status and job satisfaction. As such, hypotheses 2, 4 and 5 are accepted, and hypothesis 3 is rejected.

In terms of working experience, the results in Table 5 suggest that no matter how many years the HR employees worked for in their respective organizations, it influences their degrees of job satisfaction. Therefore, a conclusion can be made here, that is, the level of job satisfaction of HR employees is significantly influenced by working experience regardless of tenure.

From the results in Table 6, it can be concluded that employees who have higher academic qualifications seem to have higher level of job satisfaction. This can be seen from the findings that master degree holders tend to enjoy higher job satisfaction compare to others who have secondary, diploma, and, degree education backgrounds.

Table 7 presents the Pearson correlation coefficient results. As shown, all of the three independent variables

(relationship with management, compensation and benefit and working environment) are significantly correlated with job satisfaction. As such, hypotheses 6, 7 and 8 are accepted.

The multiple regression results between the three independent variables and job satisfaction is shown in Table 8. The variation inflation factor (VIF) is less than 10 and therefore, multicollinearity is not an issue. Consistent with the Pearson correlation coefficient results, it appears all the three predictors (employee relationship with management, compensation and benefits and working environment) have significant relationships with job satisfaction. The three independent variables explain 43.3% of the variance in job satisfaction among the HR employees. However, total employee relationship with management recorded a strongest relationship with the level of job satisfaction, followed by total compensation and benefits. Working environment scored the lowest beta. It can therefore be deduced from the findings that employee relationship with management has the largest influence

Table 7. Pearson correlation coefficient results between independent variables and job satisfaction.

Variable	r	Sig.
Employee relationship with management	0.580**	0.000
Compensation and benefit	0.472**	0.000
Working environment	0.483**	0.000

Table 8. Regression results between independent variables and job satisfaction.

Model	Unstandardized coefficients		Standardized Coefficients			Collinearity statistics	
	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	0.121	0.385		.315	0.754		
Employee Relationship with Management	0.435	0.099	0.359	4.394	0.000	0.582	1.718
Compensation and Benefits	0.292	0.069	0.284	4.207	0.000	0.852	1.173
Working Environment	0.183	0.077	0.187	2.375	0.019	0.629	1.591

R=0.658; R²=0.433; Adjusted R²=0.421; Std. Error of the estimate=0.51712.

on the level of job satisfaction.

DISCUSSION AND IMPLICATIONS

The aim of this study, which is to investigate the factors influencing job satisfaction among the HR personnel, has been achieved. Specifically, it has provided answers to all the three objectives set forth using both a valid and reliable instrument. As far as the job satisfaction level is concerned, the results show that HR personnel are moderately satisfied with their jobs (mean=4.16: S.D.=0.68). The statement "I work very hard at my job and I am very conscientious about doing it well" scored the highest mean (4.46; S.D.=0.77), while "I enjoy thinking about my job when I'm not at work" (mean=3.53; S.D.=1.19) scored the lowest. The findings imply that employers should look at all the items measuring job satisfaction as a guide to enhance the same, with particular emphasis given to items which scored low mean ratings.

The first research question which is to examine whether a significant relationship exists between the three predictors (employee relationship with management, compensation and benefits, and working environment) and job satisfaction levels among the HR personnel. As indicated by the Pearson correlation coefficient and multiple regression results, all the three predictors are significantly associated with job satisfaction. The findings are in line with prior studies (Akkirman and Harris, 2005; Artz, 2003; Handel, 2000; Kliebenstein et al., 2006; Moyes et al., 2007; Tierney, 1999). The findings imply that management must pay attention to all the predictors as they plan job satisfaction programs.

The second research question relates to the determination of which demographic factors are related to the level of job satisfaction among the HR employees. Out of the five characteristics investigated, gender and marital status do not

affect job satisfaction. The remaining three demographics, namely age, tenure, and education level are found to significantly influence job satisfaction, consistent with some of the prior studies (Alia et al., 2009: Fetsch and Kennington, 1997; Greenberg and Baron, 1995; Nestor and Leary, 2000). While the results reinforced prior findings on the existence of relationships between the demographic variables and job satisfaction level, is inconclusive and mixed findings remained. One of the possible reasons is the different cultural background and the nature of the employees studied. As cited in Alia Azalea et al. (2009), Von Glinow and Teagarden (1988) and McCormick (1992) put it that, different demographic backgrounds usually resulted in different types of employees and how they are managed. Specifically, two interesting findings are recorded. First, the level of job satis-faction of HR employees is significantly influenced by working experience regardless of their tenure. Second, those with higher academic qualifications tend to have higher satisfaction on their jobs. The findings will have implications on management as they plan their recruitment and training and development strategies.

The third research question has been answered as well. It aims to identify the major factors contributing towards the level of job satisfaction among the employees working in the HR Department. Out of the three predictors, employee relationship with management is a major factor influencing HR employees. As highlighted in the literature, there are two sub-factors under employee relationship with management, that is, (1) employee relationship towards immediate supervisor, and (2) communication satisfaction. Both of the factors scored means of 4.3894 and 4.6511 respectively. A higher rating on communication satisfaction corroborates the literature in which this sub-factor is a moderator of individual job satisfaction (Goris, 2007; Proctor and Doukakis, 2003). Although, the mean score for employee relationship with immediate supervisor is lower than communication satisfaction, it is also an important issue that must be taken into account when considering the employees' job satisfaction levels (Harmer and Findlay, 2005; Morrison, 2004).

Some recommendations are suggested in light of the findings. In overall, the literature has pointed out the importance of identifying the job satisfaction level of employees for obvious reasons: to enhance individual productivity, reduce turnover, and improve organizationalwide performance. This is even more important for the respondents surveyed in question since they are known to subject to numerous stressors due to their extensive dealings with co-workers of other departments. Perhaps a good way to start the exercise would be to determine the employees who are likely to be affected, as in the case of this study, those within specific age groups, educational levels, and tenure. Besides, a good understanding of the predictors allows management to develop an appropriate instrument for job satisfaction evaluation. Action plans can then be formulated in order to address any issue arising from the survey findings.

The results reveal that employee relationship with management is a major factor contributing to job satisfaction. The HR employees seem more satisfied with the general communication that occurs in their organizations but not with their immediate supervisors. As such, any action plan must begin with the management evaluating the current relationship their immediate supervisors had with their subordinates. This is because immediate supervisors of employees usually play an important role in determining employees' job satisfaction (SHRM, 2009). An open discussion is warranted, preferably on a weekly basis for the immediate supervisors to listen to their subordinates and take into account their judgements when addressing work-related matters with them. This is because employees want to perceive that their immediate superiors allow them to talk and express themselves. The presence of this practice may help to increase the job satisfaction level of employees.

One particular interesting findings emerged from this study is the relationship between education level and job satisfaction. With the exception of sample size (4% of which possess masters degrees), assuming that the findings can be generalized, the results imply that organizations should consider few possibilities. One immediate thought would be to hire HR personnel with master's degrees. Nevertheless, those with a master's degree in human resources, labor relations, or in business administration with a concentration in human resources management are normally those seeking for general and top management positions which are usually very limited. Further, such additional hirings may not be possible since it will increase the overhead of the organizations. As such, two other possibilities emerged, either organizations send their HR personnel for higher qualifications or provide training to them. Training seems to be the best possible strategy in this case for both turnover and performance reasons. Communication skills, motivation, emotional intelligence are among the important areas as far as training is concerned.

Although work conditions and compensation and benefits are not the most important predictors of job satisfaction, these are indeed significant predictors. It is not unusual for many HR personnel to work a standard 40 h a week (Table 2). As such, clean, pleasant and a comfortable office setting is needed to increase their job efficiency as well as their job satisfaction level. Furthermore, a clear policy on salaries, raises and bonuses with constant salary surveys is imperative so that the HR personnel perceive their package as comparable to those of other peers in different industries (Syptak et al., 1999). This will definitely help them in retaining their job satisfaction level.

CONCLUSION AND RECOMMENDATIONS

Job satisfaction is one hot topic that has been discussed globally. However, despite its popularity, little research has been attempted on HR personnel. Being the front liner in terms of determining quality employees are hired and developed, their contributions cannot be overlooked. This study has therefore been conducted to close the gap by investigating their job satisfaction levels in the manufacturing sector in Malaysia, a sector which its importance and contributions has been well-documented. A number of interesting findings emerged and it is hoped that the findings shed lights on what the employers must do in order to improve the job satisfaction level of their employees. Additionally, the findings are beneficial to the HR personnel as well. Knowing the predictors would allow them to raise the pertinent issues to management. The raising awareness among the management on the predictors allows them to appreciate employees' problems and take appropriate steps to address them. More importantly, awareness of the issues surrounding employees and measures taken to overcome them can

help management to retain talent. In a wider perspective, talents could be retained in Malaysia, and that those who are currently overseas can be attracted to return to work for the country.

Nevertheless, the results should be interpreted with care. The small sample size of 150 does not allow the findings to be generalized. Future studies should consider a bigger sample size, possibly employees across different departments so that comparisons can be made. The R² of 43.3% imply that there are other factors which may influence job satisfaction level of employees but were not considered in this study. For example, the inclusion of variables such as career advancement, professional development recognition, opportunity (Salary.com, 2007), corporate culture (SHRM, 2009), coworkers (Joyce, 2009) in future studies could yield different, yet interesting results. Further, this is a crosssectional study. Since job satisfaction changes over time, particularly after measures have been taken by management to improve them, longitudinal study is necessary to capture the details.

REFERENCES

- Akkirman AD, Harris, DL (2005). Organizational communication satisfaction in the virtual workplace, J. Manage. Dev., 24(5): 397–409.
- Aksu AA, Aktas A (2005). Job satisfaction of managers in tourism. Cases in the Antalya region of Turkey. Manag. Audit. J., 20(5): 479–88.
- Alia A, Fatimah O, Khairul AM (2009). The role of individual differences in job satisfaction among Indonesians and Malaysians. Eur. J. Soc. Sci., 10(4): 496-511.
- Andrews GL (1990). An assessment of the interaction of selected personal characteristics and perceptions of selected aspects of job satisfaction by Wisconsin Cooperative Extension agricultural agents. Summary of Research in Extension, 5,151.
- Artz B (2003). Fringe Benefits and Job Satisfaction. University of Wisconsin Milwaukee.
- Berns RG (1989). Job satisfaction of vocational education teachers in Northwest Ohio. Bowling Green, OH: Bowling Green State University, Northwest Ohio Vocational Education Personnel Development Regional Center.
- Blanchflower DG, Oswald AJ (2000). Is the UK Moving Up the International Wellbeing Rankings? [Online] Available: http://www2.warwick.ac.uk/fac/soc/economics/staff/academic/oswald/bonber.pdf (December 23, 2010).
- Bowen CF, Radhakrishna RB, Keyser R (1994). Job satisfaction and commitment of 4-H agents. [Online] Available: http://www.joe.org/joe/1994june/rb2.html (January 12, 2011).
- Branham L (2005). The 7 Hidden Reasons Employees Leave: How to recognize the subtle signs and act before it's too late. New York:
- Brayfield AH, Rothe HF (1951). An index of job satisfaction. J. App. Psychol., 35: 307-311.
- Cano J, Miller G (1992). A gender analysis of job satisfaction, job satisfier factors, and job dissatisfier factors of agricultural education teachers. J. Agric. Educ., 33(3): 40-46.
- Carvajal MJ, Hardigan PC (1999). Estimation of pharmacy students' expected job satisfaction functions: Inter-gender differences. The Americ. J. Pharma. Educa., 63: 285-289.
- Castillo JX, Conklin EA, Cano J (1999). Job satisfaction of Ohio agricultural education teachers. J. Agric. Educ., 40(2): 19-27.
- Chien M (2004). A study to improve organizational performance: a review from SHRM. J. Am. Acad. Bus. Camb., 4(1): 289-300.

- Clampitt PG, Downs CW (1993), Employee perceptions of the relationship between communication and productivity: A field study. J. Bus. Comm., 30(1): 5-28.
- Clampitt PG, Girard DM (1993). Communication satisfaction: A useful construct? New Jersey J. Comm., 1(2): 84-102.
- Coopman SJ (2001). Democracy, performance, and outcomes in interdisciplinary health care. J. Comm. Res., 12(3): 395-419.
- Daley DM (1997). Putting the super in supervisor: determinants of federal employee evaluation of supervisors. J. Publ. Personn. Manage., 26(3): 301-311.
- DeStefano TJ, Clark H, Gavin M, Potter T (n.d.). The relationship between work environment factors and job satisfaction among rural behavioral health professionals. [Online] Available: http://www.marshall.edu/jrcp/DeStefano.pdf (December 20, 2010).
- Downs, C.W. (1988). Communication audits. Glenview, Illinois: Scott, Foresman, and Company.
- Downs CW, Hazen MD (1977). A factor analytic study of communication satisfaction. J. Bus. Comm., 14(3): 63-74.
- Fetsch RJ, Kennington MS. (1997). Balancing work and family in cooperative extension: History, effective programs, and future directions. [Online] Available: http://www.joe.org/joe/1997february/a2.php (November 20, 2010).
- Fishbein M (1980). Theory of Reasoned Action: Some Applications and Implications. In H. Howe & M. Page (Eds), Nebraska symposium on motivation, 1979 (pp. 65-116). Lincoln, NE: University of Nebraska Press.
- Fishbein M, Ajzen I (1975). Belief, attitude, intention, and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley.
- Foreign Labor Trends: Malaysia (2002). Federal Publication. Paper 104. [Online] Available: http://digitalcommons.ilr.cornell.edu/key_workplace/104 (January 12, 2011).
- Gazioglu S, Tansel A (2006). Job satisfaction in Britain: Individual and job related factors. J. App. Econ., 38: 1163-1171.
- Globe F (1972). Excellence in leadership. American Management Association. Thomas Jefferson Research Center.
- Goris JR (2007). Effects of satisfaction with communication on the relationship between individual-job congruence and job performance/satisfaction. J. Manage. Dev., 26(8): 737–752.
- Grady TL (1985). Job satisfaction of vocational agriculture teachers in Louisiana. J. Am. Assoc. Teach. Educ. Agric., 26(3): 70-78.
- Greenberg J, Baron RA (Eds). (1995). Behavior in organizations: Understanding and managing the human side of work. Trenton: Prentice-Hall International, Inc.
- Handel J (2000). Job value: Employees are in the driver's seat. J. Workspace, 46(6): 28-32.
- Harmer RJ, Findlay BM (2005). The effect of workplace relationships on employee job satisfaction for 25 to 35 year olds. [Online] Available: http://www.richardharmer.com/articles/Jobsatisfactionandworkplacere lationships.pdf (December 11, 2010).
- Herzberg F (1957). Job attitudes: Review of research and opinion. Pittsburgh: Psychological Services of Pittsburgh.
- Herzberg F, Mausner B, Snyderman BB (1959). The motivation to work. New York: John Wiley & Sons.
- Herzberg F, Mausner B, Peterson RO, Capwell DF (1957). Job attitudes: Review of research and opinion. Pittsburgh: Psychological Service of Pittsburgh.
- Hill CWL, McShane ŠL (2008). Principles of Management. McGrawHill: New York.
- Hsu D (2010). The dilemma of overseas Malaysian students. [Online] Available: http://hsudarren.wordpress.com/2010/01/07/the-dilemmaof-overseas-malaysian-students/(October 11, 2010).
- Hunjra AI, Chani MI, Aslam S, Azam M, Ur-Rehman, K (2010). Factors affecting job satisfaction of employees in Pakistani banking sector, Afr. J. Bus. Manage., 4(10): 2157-2163.
- Hunt J W, Saul PN (1975). The relationship of age, tenure and job satisfaction. Acad. Manage. J., 18(4): 690-702.
- Joyce L (2009). What elements contribute to job satisfaction?. [Online] Available: http://www.helium.com/items/1509889-what-elements-contribute-to-job-satisfaction (December 21, 2010).
- Kazooli's Lenses (2010), Job Satisfaction Questionnaire. [Online] Available: http://www.squidoo.com/job-satisfaction-questionnaire.

- Kebriaei A, Moteghedi MS (2009). Job satisfaction among community health workers in Zahedan District, Islamic Republic of Iran. East. Mediterr. Health J., 15(5): 1156-1163.
- Kinzl JF, Knotzer H, Traweger C, Lederer W, Heidegger T, Benzer A (2004). Influence of working conditions on job satisfaction in anaesthetists. Br. J. Anaesthesia, 94(2): 211-215.
 Kliebenstein J, Hurley T, Orazem P, Miller D, May S (2006).
- Kliebenstein J, Hurley T, Orazem P, Miller D, May S (2006). Work Environment, Job Satisfaction, Top Employees Work Interests – A.S. Leaflet R2166. [Online] Available: http://www2.econ.iastate.edu/research/webpapers/paper_12614.pdf (December 20, 2011).
- Lachnit C (2002). The young and dispirited. [Online] Available: http://www.allbusiness.com/accounting/3494252-1.html (December 11, 2010).
- Lee Y (1989). A study of the relationship between communication and job satisfaction among faculty at the junior colleges of technology in Republic of China. Unpublished doctoral dissertation, Drake University, Des Moines, IA.
- Lindner JR (1998). Understanding employee motivation. J. Ext., 36(3): 1-8.
- Lockwood NR (2009). 2009 Employee Job Satisfaction: Understanding the Factors That Make Work Gratifying. A Survey Report by the Society for Human Resource Management. [Online] Available: http://www.shrm.org/Research/SurveyFindings/Articles/Documents/0 9-0282_Emp_Job_Sat_Survey_FINAL.pdf (December 11, 2010).
- Malaysian Employers Federation (2009). [Online] Available: http://asiancorrespondent.com/24470/brain-drain-impedesinvestment-in-malaysia/ (January 12, 2011).
- Maslow A (1970). Motivation and Personality (2ed.). New York: Harper and Row.
- McCormick BJ (1992). Human resource management in Europe: Evidence from ten countries. Int. J. Hum. Resour. Manage., 3(3): 409-434.
- Menon AS (2004), Leadership. [Online] Available: http://usefularticles.blogspot.com/2004_12_01_archive.html (January 20, 2011).
- Miles EW, Patrick SL, King WC (1996). Job level as a systematic variable in predicting the relationship between supervisory communication and job satisfaction. J. Occup. Organ. Psychol., 69(3):277-293.
- Miller J (1980). Individual and occupational determinants of job satisfaction. Socio. Work. Occup., 7: 337-366
- Morrison R (2004). Informal relationships in the workplace: Associations with job satisfaction, organisational commitment and turnover intentions, New Zeal. J. Psychol., 33: 114-129.
- Moyes GD, Cortes AC, Lin P (2007). Determinants of job satisfaction and retention Of Mexican-American Accounting Professionals, J. Bus. Econ. Res., 5(5): 77-88.
- Nestor PI, Leary P (2000). The relationship between tenure and non-tenure track status of Extension faculty and job satisfaction. J. Ext., 38(4): 295-310.
- Nikolaou A, Theodossios I, Vasileiou E (2005). Does Job Security Increase Job Satisfaction? A Study of the European Experience. [Online] Available: http://www.abdn.ac.uk/epicurus/epicnews3.pdf (December 14, 2010).
- Okpara JO (2006). Gender and the relationship between perceived fairness in pay, promotion, and job satisfaction in a sub-Saharan African economy. Wom. Manage. Rev., 21(3): 224-240.
- Oraman Y (2011). Work motivation and job satisfaction dynamics of textile employees. Afr. J. Bus. Manage., 5(8): 3361-3368.
- Oshagbemi T (2000). Satisfaction with co-workers' behavior. J. Empl.
- Relat., 22(1): 88-105.
 Oshagbemi T (2003). Personal Correlates of Job Satisfaction: Empirical Evidence from UK Universities, Int. J. Soc. Econ., 30(12): 1210 -
- Pincus JD (1986).Communication satisfaction, job satisfaction, and job performance. Hum. Comm. Res., 12(3): 395-419.
- Proctor T, Dukakis I (2003). Change environment: The role of internal Ccommunication and employee development. Corp. Comm. Int. J., 8(4): 268-277.
- Ramayah T, Muhamad Jantan, Tadisina SK (2001). Job satisfaction: Empirical evidence for alternatives to JDI. National Decision

- Sciences Conference, San Francisco, November 2001.
- Requena F (2003). Social capital, satisfaction and quality of life in the workplace. Soc. Indic. Res., 61(3): 331-360.
- Riggs K, Beus KM (1993). Job satisfaction in extension. [Online] Available: http://www.joe.org/joe/1993summer/a5.html (December 11, 2010).
- Rosow JM, Zager R (1985). The case for employment security. J. Across Board, 22(1): 34–41.
- Salary.com. (2007). An employer versus employee overview. [Online] Available: http://www.salary.com/docs/resources/ JobSatSurvey_08.pdf (December 11, 2010).
- Saleh SD, Otis JL (1964). Age and level of job satisfaction. Person. Psychol., 17: 425-431.
- Santhapparaj AS, Srineevasan J, Koh LL (2005). Job satisfaction among women managers in Malaysian automobile manufacturing sector. J. Appl. Sci., 5(9): 153-158.
- Scott M, Swortzel KA, Taylor, WN (2005). The relationships between selected demographic factors and the level of job satisfaction of extension agents. J. South. Agric. Educ. Res., 55(1): 102-115.
- Sekaran U, Bougie R (2010). Research methods for business: A skill building approach, 5th ed., West Sussex: John Wiley and Sons. Sharizan AK (1997). Teachers' job satisfaction. A Project Submitted in
- Sharizan AK (1997). Teachers' job satisfaction. A Project Submitted in Partial Fulfillment of the Requirement for the Degree of Master of Management. Management Center, International Islamic University. [Online] Available: http://lib.iium.edu.my/mom2/cm/content/view/view.jsp?key=YYalmWR
- WLLvkE38RGBXW2wzd39I2odRo20070213151659093 (December 10, 2010).
 Smith PC (1992). In Pursuit of Happiness: Why Study General Job
- Satisfaction? in C.J Cranny, P.C. Smith & E. F. Stone (eds.), Job Satisfaction 5-19, New York: Lexington Books.
- Smith PC, Kendall LM, Hulin CL (1969). The measurement of satisfaction in work and retirement. Chicago: Rand McNally.
- Society for Human Resource Management (SHRM) (2009). Employee job satisfaction:Understanding the factors that make work gratifying. [Online] Available: http://www.shrm.org/Research/SurveyFindings/Articles/Documents/0 9-0282_Emp_Job_Sat_Survey_FINAL.pdf (January 12, 2011).
- Syptak MJ, Marshland DW, Ulmer D (1999). Job satisfaction: Putting theory into practice. American Academy of Family Practices: News and Publications. [Online] Available: http://www.aafp.org/fpm/991000fm/26.html (August 1, 2011).
- Tan MCJ, Athirah BD, Muhamad HH (2010). Factors contributing towards job satisfaction among IPBA lecturers. [Online] Available: http://halimlading21.files.wordpress.com/2010/10/article155.pdf.
- Teoh WMY, Loh HS, Chong SC. (2011). Factors affecting job satisfaction among employees in multinational banks. Proceedings of the 9th International Conference on Multinational Enterprises (MNES) 2011, 28th-30th March 2011, Grand Hotel, Chinese Culture University, Taipei, Taiwan, R.O.C., pp. 653-677.
- Tierney P (1999). Work relations as a precursor to a psychological climate for change: The role of work group supervisors and peers. J. Organ. Change Manage., 12(2): 120–134.
- Ting Y (1997). Determinants of job satisfaction of federal government employees. Publ. Pers. Manage., 26(3): 313-334.
- Varona F (2002). Conceptualization and management of communication satisfaction and organizational commitment in three Guatemalan organizations. [Online] Available: http://www.acjournal.org/holdings/vol5/iss3/articles/concept.pdf.
- Von Glinow MA, Teagarden MB (1988). The transfer of human resource management technology in Sino-U.S. cooperative ventures: Problems and solutions. Hum. Resour. Manage., 27(2): 201-229.
- Voon ML, Lo MC, Ngui KS, Songan P (2009). Leadership styles in context of institution of higher education in Malaysia. [Online] Available: http://de.scientificcommons.org/57397721 (November 26, 2010).
- Weiss DJ, Dawis RV, England GW, Logquist LH (1967). Manual for the Minnesota satisfaction questionnaire. (Minnesota Studies in Vocational Rehabilitation, No. 22). University of Minnesota, Minneapolis.
- Wiles K (1967). Supervision for better schools (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

- Wong EKS, Teoh GH (2009). Case study of factors influencing jobs satisfaction in two Malaysian universities. J. Int. Bus. Res., 2(2): 86-98
- Wu FY, Shiu C (2009). The relationship between leadership styles and foreign English teachers job satisfaction in adult English Cram Schools: Evidences in Taiwan. [Online] Available: http://www.jaabc.com/jaabcv14n2preview.html.
- Zedeck S (1971). Problems with the use of 'moderator' variables. J. Psychol. Bull., 76: 295-310.