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## Article

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Pakistan Journal of Commerce and Social Sciences (PJCSS)

## Provided in Cooperation with:

Johar Education Society, Pakistan (JESPK)

*Suggested Citation:* Ismail, Azman; Girardi, Antonia; Ali Boerhannoeddin (2009) : Empirically testing the mediating effect of distributive justice in the relationship between adequacy of benefits and personal outcomes, Pakistan Journal of Commerce and Social Sciences (PJCSS), ISSN 2309-8619, Johar Education Society, Pakistan (JESPK), Lahore, Vol. 2, pp. 1-15

This Version is available at:

<https://hdl.handle.net/10419/187985>

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# Empirically Testing the Mediating Effect of Distributive Justice in the Relationship between Adequacy of Benefits and Personal Outcomes

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## Abstract

This study was conducted to examine the effect of adequacy of benefits and distributive justice on personal outcomes (i.e., job satisfaction and organizational commitment) using 583 usable questionnaires gathered from Malaysian public institutions of higher learning (PLEARNINGINSTITUTE sector). The outcomes of step-wise regression analysis showed that the inclusion of distributive justice in the analysis has increased the effect of adequacy of benefits on both job satisfaction and organizational commitment. Furthermore, the findings of this study confirm that distributive justice do act as a partial mediating variable in the benefits program models of the organizational sector sample. In addition, implications and limitations, as well as directions for future research are discussed.

**Keywords:** Adequacy of Benefits, Distributive Justice, Personal Outcomes.

## 1. Introduction

Benefit programs are an interesting topic in compensation management. Benefits are often defined as fringe benefits, non-monetary rewards, non-cash payments and/or indirect payments (e.g., leave, health care, loan and pension plans). These terms are often used interchangeably in organizations (Henderson, 2007; Milkovich & Newman, 2008). In organizations, benefits are often provided to complement monetary rewards, protect people's health and safety, as well as increase their self-satisfaction and productivity (Beam and McFadden, 1996; Miceli and Lane, 1991). Traditionally, in a stable marketplace environment, organizations design a standard benefits package that is bestowed to employees as membership rewards (Belcher and Atchinson, 1987; Bergmann and Scarpello, 2002). In an era of global competition, many organizations have shifted their paradigms of compensation program from a traditional job to organizational culture and strategy (Gomez-Mejia and Balkin, 1992a, 1992b; Lawler, 2000). Under a strategic compensation program, the benefits program has been aligned to meet dynamic changes that occur outside and inside organizations. Outside organizational factors are also known as external competitiveness variables, which deal with economic pressures, government policies, laws and regulations, ownership, custom and practices. Organizational factors are also seen as internal alignment variables, such as corporate strategy, management philosophy, type of job and productivity level (Anthony, Perrewe and Kacmar, 1996; Milkovich and Newman, 2008). Many scholars think that the variables strongly affect many organizations to design benefit allocation rules based on three major criteria: job, needs and/or performance. If benefit programs are properly allocated to such criteria, this will attract, retain and motivate good employees to support the ultimate goals of the compensation system (i.e., efficiency, fairness and compliance). Hence, it may lead to support for organizational strategy and goals (Lawler, 2000; Milkovich and Newman, 2008).

### 1.1 Adequacy of Benefits

Adequacy of benefits is a crucial aspect of the benefits management system which it is often interpreted from two major perspectives: economics and human behavior. From an economic perspective, adequacy of benefits is viewed based on a mathematical formula (Belcher and Atkinson, 1987; Henderson, 2007). Conversely, in a human behavior perspective, benefits program is often defined based on human perceptions (Greenberg, 2003; Skarlicki and Folger, 1997), that is, physiological needs (Maslow, 1943, 1954), and hygiene factors (Herzberg, 1959, 1968). If an employer determines the type, level and/or amount of benefits based on proper rules, this may invoke employee perceptions that they receive sufficient benefits program (Adams, 1963, 1965; Allen and White, 2002; Lawler, 1971).

Extant research in benefits management highlights that the adequacy of benefits received has a significant impact on personal outcomes, especially job satisfaction and organizational commitment (Barber, Dunham and Formisano, 1990; Belcher and Atchinson, 1987; Miceli and Lane, 1991; William, 1995). Job satisfaction is often viewed as an employee's general attitude toward his or her job (Hodson, 1991, Weiss and Cropanzano, 1996), a result of employees' perception or appraisal of their jobs (Luthans, 1989), a pleasurable or emotional state (Locke and Latham, 1990a, 1990b; McShane and Von Glinow, 2005), a positive reaction (Maathis and Jackson, 2000), and action tendencies toward work (Vecchio, 1991; Vecchio, Hearn and Southey, 1992). Organizational commitment is often seen as the outcome of how individual interacts with his/her job within organizations. Organizational commitment is a multi-dimensional construct that has three important ingredients: affective commitment, normative commitment, and continuance commitment (Allen & Meyer, 1990; Meyer, Allen, & Gellatly, 1990; Meyer, Allen, Gellatly, Gofin, & Jackson, 1989). Affective commitment is seen as an "employee's emotional attachment to, identification with, and involvement in the organization" (Allen & Meyer, 1990:1). Normative commitment is viewed as an "employee's feelings of obligation to remain with the organisation" (Allen & Meyer (1990: 1). Continuance commitment (also known as calculative commitment) is defined as "commitment based on the costs that employees associate with leaving the organisation" (Allen & Meyer, 1990:1).

The various types of commitment will invoke different motives which may produce distinct outcomes (Meyer et al., 1990; Meyer et al., 1989). For example, strong affective commitment may exert employees' intention to remain in an organization because they feel that they want to. Meanwhile, strong normative commitment may motivate employees to remain in an organization because they feel that they ought to. Similarly, strong continuance commitment may increase employees' intention to remain in an organization because they feel that they need to (Mathieu & Zajac, 1990; Mellor, Mathieu, Barness-Farrell and Rogelberg, 2001). The discussion shows that employees who possess values that are consistent with their organization's values, have strong feelings of obligation and a high desire to stay in order to gain benefits may have an increased notion of organizational commitment (Johnson, Korgaard & Sapienza, 2002; Mellor et al., 2001; Mowday, Steers & Porter, 1979).

Further, a thorough investigation of such relationships reveals that effect of adequacy of benefits on personal outcomes is indirectly affected by perceptions of distributive justice (Adams, 1963, 1965; Buffardi, Smith, O'Brien and Erdwis, 2002; William, Malos and Palmer, 2002). Distributive justice is a segment of organizational justice theory, which emphasizes perceptions of fairness in terms of outcome allocation (Adams, 1963, 1965; Greenberg, 2003). In a benefits system framework, distributive justice is often related to how individuals perceive fairness about the type, level and/or amount of benefits that they receive from their employers (Adams, 1963, 1965; Allen and White, 2002; Lawler, 1971). Many scholars believe that adequacy of benefits, distributive justice, job satisfaction and organizational commitment are distinct, but highly interrelated constructs. For example, if one perceives fairness about the benefits that one receives from one's employer, this may lead to higher job satisfaction and organizational commitment (Buffardi et al., 2002; Dickhart, 2005; William and Dreher, 1992). Even though numerous studies have been reported, little is known about the mediating role of distributive justice in an organizational benefits program (Ismail, Guat Leng, Cheekiong and Marzuki, 2008; Royalty and Abraham, 2006; Wiliam *et al.*, 2002). Thus, it motivates the researchers to examine the mediating role of distributive justice in the relationship between adequacy of benefits and personal outcomes (i.e., job satisfaction and organizational commitment) that occurs in PLEARNINGINSTITUTE sector. For confidential reasons, names of individual institutions in the organizational sector are kept anonymous.

### 1.2 Context of the Study

Many scholars argue that national socio-cultural differentiations are among the key factors that affect the design and administration of benefits program in organizations (Money and Graham, 1999; Rosenblum and Hallman, 1981). For example, one dimension of culture that can have implications for attitudes to pay distribution system is the concept of collectivism and individualism. Collectivism is a norm and standard that practice large power distance (e.g., more hierarchical structure and centralized decision making) and emphasizes more on group interests, co-operation, loyalty and harmony. Individualism is a value and standard that practices low power distance (e.g., less hierarchy and decentralized decision making) and focuses more on individual achievement (Farh, Dobbins and Cheng, 1991; Hofstede, 1991). Under an individualistic culture, equitable pay is determined based on an individual's input-output ratio. For example, Americans perceive fair pay as equity (e.g., pay for performance) (Gomez-Mejia, Welbourne and Wiseman, 2000; Giacobbe-Miller, Miller and Victor, 1998). Under a collectivistic culture, individuals perceive importance on the same outcome regardless of their contributions. For example, Russians, Japanese, Chinese and Malaysian perceive fair pay as equality (e.g., pay is provided based on tenure, seniority and/or needs) (Aryee, 1999; Money and Graham, 1999; Sulaiman and Mamman, 1996).

The literature suggests that Malaysians tend to reflect a collectivism culture. The influence of a collectivism culture in the Malaysian public sector can be traced in the reports of the Malaysian royal commission on salary. In these reports, pay systems of the Malaysian public sector has been established based on internal equity variables (the rate for different jobs, qualification and training) as the basis for determining non-monetary and monetary rewards (see Aziz Report, 1968; Bain Report, 1956; Benham Report, 1950; Harun Report, 1972; Ibrahim Ali Report, 1975; Mahathir Report, 1976, 1991; Pekeliling Perkhidmatan Bilangan 4 Tahun 2002; Sheikh Abdullah Report, 1972; Suffian Report, 1967; Watson Report, 1963). Beginning in the early 1990s, the fundamental changes in the Malaysian public service sector were implemented to strengthen the traditional job based pay system by adding merit principles as a criterion to determine extra rewards for high performing employees (Mahathir Report, 1991; Pekeliling Perkhidmatan Bilangan 9 Tahun 1991; Pekeliling Perkhidmatan Bilangan 4 Tahun 2002). The inclusion of merit principles complement the collectivistic compensation management principles used in the public sector (Ismail, Ismail and Sulaiman, 2007; Mohd Najib, 1995; Sulaiman and Mamman, 1996).

In order to improve public sector competitiveness, the government of Malaysia has changed the pay distribution rules as practiced in the New Remuneration System to the Malaysian Remuneration System in 2002 (Malaysian Public Service Department, 2006; Pekeliling Perkhidmatan Bilangan 4 Tahun 2002). This pay perspective is more flexible because it allows the government to make pay adjustments and revisions based on its capability to pay. For example, effective 1 July 2007, all public sector employees will receive a pay rise of between 7.5 to 35.0 %. A 100% increase in cost of living allowances is also allocated for certain cities in the country. This is in line with the government's aspiration of narrowing down the pay gaps among job categories, helping employees to fulfill basic necessities, improving employee welfare and standard of living (Bernama, 2007; Pekeliling Perkhidmatan Bilangan 7 Tahun 2007). These changes are implemented to attract, retain and motivate public employees to enhance public sector performance; this will help to achieve the national development strategy and goals (Abdul Halim, 2006; Ismail et al., 2007; Azmi, 2006).

This change has influenced the management of benefits programs in the Malaysian public service agencies, including PLEARNINGINSTITUTE sector. In order to understand the nature of the benefits program in the organizational sector, in-depth interviews were conducted involving 15 non-academic and academic employees during and before the pilot study. Based on this information, all employees in the studied organizations are entitled to receive core benefits, that is health treatment, leave, loan and pension plans based on two major principles: the ability of organization to pay and national employment laws. Theses principles are used as guidelines by HR managers to establish procedures for allocating benefits to all employees based on job (position and seniority), performance (contribution or merit) and/or needs (e.g., motivating employees through staff recognition programs). Implementation of such benefits distribution rules may directly affect perceptions of fairness, and this may positively or negatively affect personal outcomes of job satisfaction and organizational commitment. Although the nature of this relationship is interesting, empirical evidence supporting the mediating role of distributive justice in the organizational sector is limited because of the paucity of research literature in this country (Ismail et al., 2007; Sulaiman & Mamman, 1996).

### 3. Literature Review

#### 3.1 Relationship between Adequacy of Benefits, Distributive Justice and Personal Outcomes

The mediating effect of distributive justice in the benefits management of the PLEARNINGINSTITUTE sector is consistent with benefits program literature mostly published in Western countries. For example, many studies about benefits program in US organizational settings showed that the type, level and/or amount of benefit differ according to job, need and/or performance (Henderson, 2007; Miceli and Lane, 1991). If employees perceived that such benefits were adequately allocated based on their contributions this could invoke positive individual attitudes and behaviors, such as job satisfaction and organizational commitment (Barber et al., 1992; Sinclair, Leo & Wright, 2005; Sterling, 1994). Interestingly, a careful observation about such relationships revealed that effect of adequacy of benefits on individual attitudes and behaviors was indirectly affected by employees' perceptions of distributive justice in organizations (Arnold and Spell, 2006; Gomez-Mejia & Balkin, 1992a, 199b). For example, studies about benefits coverage based on a sample of 389 employees in three manufacturing and manufacturing related companies (William et al., 2002), leave benefits and work-family balance based on a sample 18,120 federal employees in dual-income households (Buffardi et al., 2002), equitable benefits and flexible working hours based on a sample of 347 U.S. nurses (Carr & Kazanowski, 1994), and adequacy of benefits (i.e., length of annual leave, types of leave, benefits entitlements, and total benefit package based on a sample of 190 employees in Malaysian public community colleges (Ismail et al., 2008) showed that feelings of fairness about the adequacy of benefits were an important predictor of job satisfaction (Buffardi et al., 2002; Carr & Kazanowski, 1994; William et al., 2002).

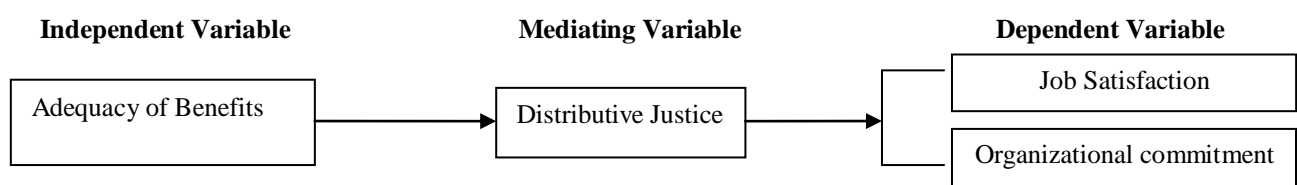
Besides that, studies about benefits cost strategies (e.g., health and safety) based on a sample of 118 New Jersey local governments (Roberts, 2001), health insurance based on the data taken from Round 1 of the Household Component (HC) from the 1996, 1997, and 1998 Medical Expenditure Panel Surveys (Royalty & Abraham, 2005), medical benefits for part-time or temporary teachers and their families in U.S. schools (Dickhart, 2005), and self-satisfaction benefits (i.e., promotion and training) (Ismail & Joon, 2006), and adequacy of benefits (i.e., length of annual leave, types of leave, benefits entitlements, and total benefit package) based on a sample of 190 employees in Malaysian public community colleges (Ismail et al., 2008) found that feelings of justice about the adequacy of benefits plans were an essential factor of increasing organizational commitment (Dickhart, 2005; Roberts, 2001; Royalty & Abraham, 2005). Some scholars view that human perceptions are more effective to predict employees' feelings of justice about the adequacy of benefits better than the actual adequacy of benefits (Williams, 1995), but the indirect effect of distributive justice in benefit program models is less emphasized in past research studies (Danehower & Lust, 1995; Sinclair et al., 2005).

These findings are consistent with the notion of distributive justice theories, namely Adams' (1963, 1965) equity theory, Allen and White's (2002) equity sensitivity theory and Lawler's (1971) discrepancy theory. These theories explicitly posit that individuals' perceptions of justice about the distribution and change of resources may affect their attitudes and behaviours (Adams, 1963, 1965; Allen & White, 2002; Lawler, 1971). Although the justice theories have used different treatments in studying compensation issues, the notion of expectations and perceptions of one actual received can be applied in benefits program (Arnold & Spell, 2006; Dyer & Theriault, 1976; Miceli & Lane, 1991; Sterling, 1994). For example, an individual often compares outputs (e.g. benefits) received with inputs that contributed (e.g. education, experience, skills and effort). If individuals feel that they receive an equitable benefits-contribution ratio, this will invoke their feelings of distributive justice. As a result, it may lead to higher job satisfaction and organizational commitment (Harris & Fink, 1994; Tremblay, Sire & Pelchat, 1998; William & Dreher, 1992).

#### 3.2 Conceptual Framework and Research Hypotheses

The literature has been used as foundation to develop a conceptual framework as shown in Figure 1.

**Figure1: Distributive Justice Mediates the Relationship between Adequacy of Benefits and Personal Outcomes**



Based on the evidence, it seems reasonable to assume that fairness of benefits program will influence PLEARNINGINSTITUTE sector employees as this feeling influences US employees. Equity theory suggests that if PLEARNINGINSTITUTE sector employees perceive fairness about the benefits program that they receive from their employers, this may lead to greater job satisfaction and organizational commitment. Therefore, it was hypothesized that:

H1: Distributive justice mediates the effect of adequacy of benefits on job satisfaction.

H2: Distributive justice mediates the effect of adequacy of benefits on organizational commitment.

## **4 Methodology**

### *4.1 Research Design*

This study used a cross-sectional research design, which allowed the researchers to integrate literature review, in-depth interview, pilot study and survey questionnaire as a main procedure to gather data from employees in PLEARNINGINSTITUTE sector. At the initial stage, in-depth interviews were conducted involving 15 non-academic and academic employees who held management and non-management positions in the Malaysian higher educational sector. They are selected based on purposive sampling where the employees have good knowledge and experiences in benefits program management. Information gathered from such employees helped the researchers to understand the nature of their benefits program, distributive justice features, and personal outcomes characteristics, as well as the correlation between such variables in PLEARNINGINSTITUTE sector. After refining, categorizing and comparing the information with relevant theoretical and empirical evidence, this was used as a guideline to develop the content of a survey questionnaire for a pilot study. Next, a pilot study was conducted involving 20 experienced employees who had worked in the higher educational sector. Their feedback was used to verify the content of a questionnaire developed for an actual survey.

### *4.2 Measures*

Back translation technique was used to translate the content of questionnaires in Malay and English languages to increase instrument validity and reliability (Hulland, 1999; Wright, 1996). The survey questionnaire had four sections. Firstly, adequacy of benefits was measured using 4 items that were modified from compensation management literature (see Henderson, 2007; Miceli and Lane, 1991; Milkovich and Newman, 2008; William, 1995). These items were the number of days for annual leave, the types of health benefits, the types of loans available, and the time to repay loans. Secondly, distributive justice had 4 items that were developed based on organizational justice literature (see Adams, 1963, 1965; Allen and White, 2002; Milkovich and Newman, 2008). These items were fairness perceptions about the rules for allocating the amount of non-monetary rewards paid based on performance, the level of non-monetary rewards paid based on best practice, the benefit rises for the job, and the level of non-monetary rewards for productive workers. Thirdly, job satisfaction was measured using a 6-item job satisfaction scale developed by Warr, Cook, and Wall (1979). These items are individuals' satisfaction about the job characteristics: The amount of responsibility given, opportunity to use your abilities, industrial relations between management and workers, attention paid to suggestions, the amount of variety in your job, and your job security. Finally, organizational commitment was measured using a 3-item organizational commitment scale developed by Mowday, Steers, and Porter (1979). These items are this organisation is a great organisation to work for, my values and the organisation's values are very similar, and this organisation really inspires the very best in me in the way of job performance. These items were measured using a 7-point scale ranging from "very strongly disagree/dissatisfied" (1) to "very strongly agree/satisfied" (7). Demographic variables were used as a controlling variable because this study focused on employee attitudes.

### *4.3 Sample*

The unit of analysis for this study is employees who have worked in the PLEARNINGINSTITUTE sector. Based on the website of the Ministry of Higher Education, Malaysia (Statistik IPTA, 2006), the researchers contacted 10 established public universities in Peninsular Malaysia to obtain official permission to conduct a survey. Only 7 of the higher institutions agreed to participate in this study. In the first step of data collection procedure, the researchers met the division/department heads in the participating higher educational institutions to find out about the rules for distributing survey questionnaires in their divisions/departments. Considering the constraints of organizational rule, a convenient sampling technique was used to distribute approximately 3000 questionnaires to employees through contact persons (e.g., secretary of department heads, assistant managers and/or human resource managers) of the institutions. Of that total, 583 usable questionnaires were returned to the researchers, yielding 19.4 percent response rate. The survey questionnaires were answered by participants based on their consent and voluntary basis. A Statistical Package for Social Sciences (SPSS) version 14.0 was used to analyze the psychometric properties of questionnaire data and thus test the research hypotheses.

## 5 Findings

### 5.1 Sample Profile

Table 1 presents the personal characteristics of respondents. In terms of the gender structure, there were a greater number of males (53 percent) than females (47 percent). Less than a quarter (22 percent) of the respondents belong to 31 to 35 years old age group. A large number of respondents had a Malaysia Certificate of Education (MCE) qualification (28 percent). The majority of respondents were supporting staff (52 percent). Most respondents worked in an academic division (65 percent). Respondents who had worked for more than 15 years (28 percent) constitute about one third of the sample. The biggest group of respondents served as permanent and confirmed staff (66 percent). The salaries of a quarter of respondents were less than RM1001-1500 (25 percent). Almost all of the respondents were Malaysians (99 percent).

**Table 1: Sample Profile (N=583)**

<u>Gender (%)</u>	<u>Education (%)</u>	<u>Position (%)</u>	<u>Length of Service (%)</u>	<u>Salary (%)</u>
Male=53	SRP/LCE=8	Professional &	Less than 2 years=22	Less than 1000=20
Female=47	SPM/MCE=28	Management Group=11	3 to 5 years=18	1001 to 1500=25
<u>Age (%)</u>	STP/HSC=4	Supporting Group=52	6 to 8 years=16	1501 to 2000=14
Less than 25 years=13	Diploma=14	Professor=1	9 to 11 years=8	2001 to 2500=11
26 to 30 years=20	Bachelor=19	Associate Professor=4	12 to 14 years=8	2501 to 3000=8
31 to 35 years=22	Master=22	Lecturer=29	More than 15 years=28	3001 to 3500=7
36 to 40 years=18	PhD=5	Assistant Lecturer=3	<u>Type of Service (%)</u>	3501 to 4000=3
41 to 45 years=15	<u>Division (%)</u>	<u>Citizenship (%)</u>	Permanent &	4001 to 4500=3
More than 46=12	Academic=65	Malaysian=99	Confirmed=66	4501 to 5000=2
	Non-Academic=35	Non-Malaysian=1	Permanent &	5001 to 5500=1
			Probation=20	5501 to 6000=1
			Contract=8	More than 6001=5
			Temporary=6	

Note:

SRP/LCE: *Sijil Pelajaran Malaysia*/Lower Certificate of Education

SPM/MCE: *Sijil Pelajaran Malaysia*/Malaysia Certificate of Education

STP/HSC: *Sijil Tinggi Pelajaran*/Higher School Certificate

### 5.2 Validity and Reliability Analyses for Measurement Scales

Table 2 and Table 3 show that results of validity and reliability analyses for measurement scales. The factor analysis with direct oblimin rotation was first done for four variables with 17 items. After that, Kaiser-Meyer-Olkin Test (KMO) which is a measure of sampling adequacy was conducted for each variable and the results indicated that it was acceptable. Relying on Hair, Anderson, Tatham, and Black's (1998) guideline, these statistical analyses showed that 1) the value of factor analysis for all items that represent each research variable was 0.4 and more, indicating the items met the acceptable standard of validity analysis, (2) all research variables exceeded the acceptable standard of Kaiser-Meyer-Olkin's value of 0.6, were significant in Bartlett's test of sphericity, (3) all research variables had eigenvalues larger than 1, (4) the items for each research variable exceeded factor loadings of 0.40. Besides that, all research variables exceeded the acceptable standard of reliability analysis of 0.70 (Nunally and Bernstein, 1994). These statistical results confirmed that the measurement scales used in this study met the acceptable standard of validity and reliability analyses.

**Table 2: Item Validity**

Variable	Item	Component			
		1	3	4	5
Adequacy of Benefits	The number of days for my annual leave is enough.		.51		
	The types of health benefits available to me are sufficient.		.78		
	The types of loans available through this organisation are adequate.		.84		
	I am given a reasonable time to pay back my loans to my organisation.		.72		
Job Satisfaction	The amount of responsibility you are given.	.79			
	Your opportunity to use your abilities.	.78			
	Industrial relations between management and workers in your organisation.	.68			
	The attention paid to suggestions you make.	.58			
Organization Commitment	The amount of variety in your job.	.76			
	Your job security.	.64			
	When I do my work well, it gives me a feeling of accomplishment.				.42
	When I perform my job well, it contributes to my personal growth and development.				.73
Distributive Justice	I feel a great sense of personal satisfaction when I do my job well.				.71
	Doing my job well increases my feelings of self-esteem.			.88	
	My perception is that my organisation reward system in my organisation is consistent with best practice.			.81	
	There is strong link between how well I perform my job and the likelihood of my receiving a raise in salary.			.51	
	The most productive workers in my organisation receive the highest rewards.			.52	



**Table 3: The Results of Validity and Reliability Analyses for Measurement Scales**

Measure	Items	Factor Loadings	KMO	Bartlett's Test of Sphericity	Eigenvalue	Variance Explained	Cronbach Alpha
Adequacy of Benefits	4	.51 to .84	.721	484.44, p=.000	2.185	54.630	.72
Distributive Justice	4	.51 to .88	.671	605.33, p=.000	2.265	56.625	.74
Job Satisfaction	6	.61 to .79	.843	1191.37, p=.000	3.283	54.716	.83
Organizational commitment	3	.42 to .71	.661	370.65, p=.000	1.939	64.627	.73

Table 4 shows the results of Pearson correlation analysis and descriptive statistics. Means for all variables are between 4.7 and 5.2, signifying the levels of benefits, distributive justice, job satisfaction and organizational commitment ranging from high (4) to highest (7). The correlation coefficients for the relationship between the independent variable (i.e., adequacy of benefits) and the mediating variables (i.e. distributive justice) and the relationship between the independent variable (i.e., adequacy of benefits) and dependent variable (i.e., job satisfaction and organizational commitment) were less than 0.90, indicating the data were not affected by any serious colinearity problem (Hair et al., 1998).

**Table 4: Pearson Correlation Analysis and Descriptive Statistics**

Variable	Mean	Standard Deviation	Pearson Correlation Analysis			
			1	2	3	4
1. Adequacy of Benefits	5.2	1.1	(1)			
2. Distributive Justice	4.7	1.2	.33**	(1)		
3. Job Satisfaction	5.1	1.0	.34**	.46**	(1)	
4. Organizational commitment	5.1	1.2	.34**	.51**	.50**	(1)

Note: \*\* Correlation is significant at the 0.01 level (2-tailed). Reliability estimation is shown in parentheses

### 5.3 Outcomes of Testing Research Hypotheses

Pearson correlation analysis was unable to determine the mediating role of distributive justice in the hypothesized model. Stepwise regression analysis was undertaken to test the mediator hypothesis. This method can assess the magnitude and direction of each independent variable, and vary the mediating variable relationship between many independent variables and one dependent variable (Foster, Stine and Waterman, 1998). According to Baron and Kenny (1986), the mediator variable can be clearly judged when a previously significant effect of predictor variables is reduced to non-significant or reduced in terms of effect size after the inclusion of mediator variables into the analysis. The results of testing research hypotheses are shown in Table 5.

**Table 5: Result for Stepwise Regression Analyses with Distributive Justice as the Mediating Variable, Adequacy of Benefits as the Independent Variable and Personal Outcomes as the Dependent Variable**

Variable	Job Satisfaction			Organizational commitment		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
<u>Control Variables</u>						
Sex	-.05	-.05	-.04	-.01	-.01	-.01
Age	.12	.08	.06	.22***	.18**	.15**
Education	-.01	.05	.14*	-.06	.01	.106
Position	-.08	-.02	-.01	-.10	-.04	-.02
Division	.14**	.12**	.09*	.06	.04	.01
Length of Service	-.07	-.02	-.00	-.13**	-.09	-.06
Type of Service	.07	.05	.02	.16**	.14**	.10*
Salary	.03	-.08	-.08	-.01	-.11	-.12
Citizenship	-.07	-.054	-.02	-.11*	-.10**	-.05
<u>Independent Variable</u>						
Benefits Level		.32**	.21**		.32***	.20***
<u>Mediating Variable</u>						
Distributive Justice			.39**			.43***
R Squared	.05	.15	.27	.07	.32	.32
Adjusted R <sup>2</sup>	.04	.13	.25	.06	.31	.32
F	3.49***	9.93***	18.79***	5.08***	24.35***	22.43***
R Square Change	3.49	64.41	91.68	.07***	.25***	.00
F Change R <sup>2</sup>	3.49***	64.41***	91.68***	5.08***	102.95***	1.18

Note: \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

The table shows the outcomes of testing hypothesis in Step 3. Firstly, relationship between distributive justice and adequacy of benefits positively and significantly correlated with job satisfaction ( $\beta = .39$ ,  $p = .00$ ), therefore H1 was supported. This relationship explains that before the inclusion of distributive justice into Step 2, adequacy of benefits was significantly correlated with job satisfaction ( $\beta = .32$ ,  $p < 0.01$ ). After the inclusion of distributive justice into Step 3, the previous significant relationship between distributive justice and adequacy of benefits did not change to non-significant (Step 3:  $\beta = .21$ ,  $p < 0.01$ ), but the strength of such relationships was decreased. These results send a signal that distributive justice does act as a mediating variable in the relationship between such variables. Secondly, relationship between distributive justice and adequacy of benefits positively and significantly correlated with organizational commitment ( $\beta = .43$ ,  $p < 0.000$ ), therefore H2 was supported. This relationship explains that before the inclusion of distributive justice into Step 2, adequacy of benefits ( $\beta = .32$ ,  $p < 0.001$ ) was significantly correlated with organizational commitment. After the inclusion of distributive justice into this Step 3, the previous significant relationship between distributive justice and adequacy of benefits did not change to non-significant (step 3:  $\beta = .20$ ,  $p < 0.001$ ), but the strength of such relationships was decreased. These results send a message that distributive justice does act as a partial mediating variable in the relationship between such variables.

## 6. Discussion and Implications

The findings of this study confirm that distributive justice does act as a partial mediating variable in the relationship between adequacy of benefits and personal outcomes in the organizational sector sample. In the PUBLIC INSTITUTION sector, HR managers or managers have determined the type, level and/or amount of benefits to their employees based on the compensation policies and rules set up by the stakeholder (a central agency of Malaysian government, i.e., Public Service Department). When employees perceive that such benefits are adequately provided by the organizations, this has increased their feelings of distributive justice. As a result, it may lead to increased job satisfaction and organizational commitment in the workplace.

The implications of this study can be divided into three categories: theoretical contribution, robustness of research methodology and practical contribution. In terms of theoretical contribution, the findings of this study show that adequately allocating benefits to employees has invoked their feelings of distributive justice, and this may lead to higher job satisfaction. This result is consistent with studies by Buffardi et al. (2002), Carr and Kazanowski (1994), and William *et al.* (2002). Besides that, adequately distributing benefits to employees has invoked their feelings of distributive justice, which in turn, lead to higher organizational commitment. This result gains strong support from studies done by Dickhart (2005), Roberts (2001), and Royalty and Abraham (2006). These findings have extended previous research conducted in most Western countries and provided great potential to understand the notion of distributive justice in the PLEARNINGINSTITUTE sector—benefits system models. With respect to robustness of research methodology, the data gathered from compensation literature, the in-depth interviews, the pilot study and the survey questionnaires have exceeded a minimum standard of validity and reliability and this led to the production of accurate and reliable findings.

In terms of practical contributions, HR officers or managers can use the findings of this study as guidelines to improve the management of benefits programs. In order to achieve the objectives, the improvements should cover some important aspects: firstly, the rule for allocating the type, level and/or amount of benefits needs to be adjusted according to the current national standard of living. If the level of benefits program is determined based on national cost of living, this may protect employee welfare, increase their purchasing power, and decrease their burdens in fulfilling family and personal needs. Secondly, the rule for allocating the type, level and amount of benefits needs to consider an individual's condition. For example, benefit levels for married employees and those with children need to be higher than that for single employees to improve their quality of work life. If these employees are given better benefit levels, this will invoke their self-fulfillments and thus may lead to increased satisfaction, commitment and performance. Thirdly, the content and method of benefits training programs should be updated according to current organizational expectations. For example, managers need to be exposed with up-to-date knowledge about benefit policies and procedures, as well as human oriented problem solving skills (e.g., interpersonal communication and helping skills). These learning orientations will upgrade the capabilities of managers to practice equity when dealing with employee demands; this may lead to appreciation and support for implementation of the benefits program. Finally, recruitment policies need to be changed from hiring employees based on academic qualifications to knowledge and experience. Knowledgeable and experience individuals have the capability to provide better explanations about compensation systems, and can counsel and advise employees who are not satisfied with pay criteria, as well as propose creative pay systems to top management in order to induce positive work attitudes and behaviors in organizations. If organizations consider the above suggestions, this may strongly motivate employees to support organizational and human resource management's strategies and goals.

## **7. Limitations**

The conclusions drawn from this study should consider the following limitations. Firstly, a cross-sectional research design used to gather data at one time within the period of study might not capture the developmental issues or causal connections between variables of interest. Secondly, this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Thirdly, the outcomes of multiple regression analysis have only focused on the level of performance variation explained by the regression equations (Tabachnick and Fidell, 2001), but there are still a number of unexplained factors that need to be incorporated to identify the causal relationship among variables and their relative explanatory power. Finally, the sample for this study was taken from one organizational sector that allowed the researchers to gather data via survey questionnaires. These limitations may decrease the generalizability of the results of this study to other organizational settings.

## **8. Directions for Future Research**

The conceptual and methodological limitations of this study should be considered when designing future research. Firstly, several organizational (e.g., type and size) and personal (e.g., length of service and type of service) characteristics should be further explored, as this may provide meaningful perspectives for understanding how individual similarities and differences affect the benefits program within an organization. Secondly, other research designs (e.g., longitudinal studies) should be used to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest. Thirdly, to fully understand the effect of benefits level on individual attitudes and behaviors via its impact upon feelings of distributive justice, more organizational sectors need to be used as a pay referent in future study. Fourthly, other theoretical constructs of organizational justice theory, such as procedural justice and interactional justice need to be considered because it has widely been recognized as an important link between benefits level and many aspects of personal outcomes (e.g., satisfaction, commitment, performance and work ethics) (Adams,

1963, 1965; Harris and Fink, 1994; Miceli and Lane, 1991; William *et al.*, 2002). Finally, other personal outcomes of distributive justice (e.g., job performance, turnover, and deviant behaviors) should be considered given their prominence in benefits management research literature (Harris and Fink, 1994; Ismail *et al.*, 2008; Sterling, 1994; William and Dreher, 1992). The importance of these issues needs to be further explained in future research.

### 1. Conclusion

This study has confirmed that distributive justice does act as a partial mediating variable in the relationship between adequacy of benefits and personal outcomes. This result is consistent with the benefits program literature mostly published in Western countries. Therefore, current research and practice within benefits management needs to consider perceptions of distributive justice as a critical aspect of the system. This study further suggests that a properly designed and administered benefits program will strongly invoke feelings of distributive justice, and this may enhance positive subsequent personal outcomes (e.g., satisfaction, commitment, performance and thus good work ethics). Hence, these positive outcomes may lead to increased organizational competitiveness in a global economy.

### References

- Abdul Halim, Y (2006), Insentif Khas Pensyarah IPTA. *Berita Harian*, <http://www.bharian.com.my/m/Bharian/Saturday/Nasional/20060819003434/Article/>, [Accessed 24.8.2006].
- Adam, J. S (1963). Toward an understanding of inequity. *Journal of Abnormal and Social Psychology*, Vol. 67, pp. 422-436.
- Adams, J. S (1965). Inequity in social exchange , (in: L Berkowitz. *Advances in experimental social psychology*. Vol. 2, pp. 267-299. New York: Academic Press.
- Allen, N.J and J.P Meyer (1990). The measurement and antecedent of affective, continuance, and normative commitment to the organization, *Journal of Occupational Psychology*, Vol. 63, pp. 1-18.
- Allen, R. S and C.S White (2002). Equity sensitivity theory: A test of responses of two types of under-reward situations, *Journal of Managerial Issues*, Vol. 14, No. 4, pp. 435-452.
- Anthony, W. P, P.L Perrew & K.M Kacmar (1996). *Strategic Human Resource Management*. New York: Harcourt.
- Arnold, T and C.S. Spell (2006). Relationship between justice and benefits satisfaction. *Journal of Business and Psychology*, Vol. 20, No. 4, pp. 599-617.
- Aryee, S (1999). An examination of the moderating influence of breadwinner role salience on the pay-life satisfaction relationship, *Human Relations*, Vol. 52, pp. 1279-1290.
- Aziz Report (1968). Report of the royal commission on the teaching services, West Malaysia. [Unpublished Report] Public Services Department, Malaysia.
- Azmi, M. D (2006). Pensyarah Naik Gaji, *Berita Harian*,
- Bain Report (1956). Report of the commission on public services of the Governments of Sarawak, North Borneo and Brunei. [Unpublished Report], Public Services Department, Malaysia.
- Barber, A. E, R.B Dunham and R.A Formisano (1990). The impact of flexible benefits on employee benefit satisfaction: A field study. Presented at the 50<sup>th</sup> Annual Meeting of the Academy of Management, San Francisco.
- Baron, R. M and D.A Kenny (1986). The mediator-variables variable distinction in social psychological research: conceptual, strategic, and statistical considerations, *Journal of Personality and Social Psychology*, Vol. 51, pp. 1173-1182.
- Beam, B and J.J McFadden (1996). *Employee Benefits*. Chicago: Dearborn Financial.
- Belcher, D. W and T. Atchison (1987). *Compensation Administration*. Englewood Cliffs, NJ: Prentice Hall.

- Benham Report (1950). Report of the special committee on salaries in the Federation of Malaya. [Unpublished Report], Public Services Department, Malaysia.
- Bergmann, T.J and V.G Scarpello (2002). *Compensation Decision Making*. Australia: South-Western Thomson Learning.
- Bernama (2007), Civil Servants to Get Pay Increase of Up to 35pct, <http://bigdogdotcom.wordpress.com/2007/05/22pm-announced-civil-service-payrise/>, [Accessed 6.3.2007].
- Buffardi, L. C, J.L Smith, A.S O'Brien and S.J Erdwins (2002). The impact of dependent-care responsibility and gender on work attitudes, *Journal of Occupational Health Psychology*, Vol. 4, pp. 356-267.
2. <http://www.bharian.com.my/m/Bharian/Sunday/Nasional/20060819231630/Article/>, (Accessed 24.8.2006).
- Carr, K. K and M.S Kazanowski (1994). Factors affecting job satisfaction of nurses who work in long term care, *J Adv Nuts*, Vol. 19, pp. 878-883.
- Danehower, C and J.A Lust (1995). Understanding and measuring employee benefit satisfaction. *Benefits Quarterly*, 11, 69-75.
- Dickhart, R (2005). Affordable health benefits for part-time school employees, *School Administrator*, Vol. 62, No. 10, pp. 6-7.
- Dyer, L and R Theriault (1976). The determinants of pay satisfaction, *Journal of Applied Psychology*, Vol. 61, pp. 596-604.
- Farh, J, D.H Dobbins and B Cheng (1991). Cultural relativity in action: A comparison of self-rating made by Chinese and U.S. workers, *Personnel Psychology*, Vol. 44, No. 1, pp. 129-147.
- Foster, D. P, B. Stine and R. Waterman (1998). *Business Analysis Using Regression: A Casebook*. Berlin: Springer-Verlag.
- Giacobbe-Miller, J. K, D.J Miller and V.I Victorov (1998). A comparison of Russian and U.S. pay allocation decisions, distributive justice judgements, and productivity under different payment conditions, *Personnel Psychology*, Vol. 51, No. 1, pp. 137-364.
- Gomez-Mejia, L.R, and D.B Balkin (1992a). *Compensation, Organizational Strategy, and Firm Performance*. Cincinnati, OH: South Western Publishing Co.
- Gomez-Mejia, L.R and D.B Balkin (1992b). The determinants of faculty pay: An agency theory perspective, *Academy of Management Journal*, Vol. 35, No. 5, 921-955.
- Greenberg, J (2003). Creating unfairness by mandating fair procedures: The hidden words of a pay-for-performance plan, *Human Resource Management Review*, Vol. 13, pp. 41-57.
- Gomez-Mejia, L. R, T.M Welbourne and R.M Wiseman (2000). The role of risk sharing and risk taking under gainsharing, *The Academic of Management Review*, Vol. 25, pp. 492-507.
- Hair, J. F, R.E Anderson, R.L Tatham and W.C Black (1998). *Multivariate Data Analysis*. Englewood Cliffs, NJ: Prentice Hall.
- Harun Report (1972). Report of the Royal Commission on the remunerations and conditions of service in local authorities and statutory authorities. [Unpublished Report] Public Services Department, Malaysia.
- Harris, M.H and L.S Fink (1994). Employee benefit programs and attitudinal and behavioral outcomes: A preliminary model, *Human Resource Management Review*, Vol. 4, No. 2, pp. 117-129.
- Henderson, R. I (2007). *Compensation Management in a Knowledge based World*. Englewood Cliffs, NJ: Prentice Hall.
- Herzberg, F (1959). *The Motivation to Wor*. New York: Wiley.

- Herzberg, F (1968). One more time: How do you motivate employees?, *Harvard Business Review*, Vol. 46, No. 1, pp. 53-62.
- Hodson, R (1991). Workplace behaviors: Good soldiers, smooth operators, and saboteurs, *Work and Occupations*, Vol. 18, No. 3, pp. 271-290.
- Hofstede, G (1991). *Cultures and Organizations: Software of the Mind*. New York: McGraw-Hill.
- Hulland, J (1999). Use of Partial Least Square (PLS) in strategic management research: A review of four recent studies, *Strategic Management Journal*, Vol. 20, No. 2, pp. 195-204.
- Ibrahim Ali Report (1975). Revised report of the Royal Salaries Commission. [Unpublished Report] Public Services Department, Malaysia.
- Ismail, A, Y Ismail and M Sulaiman (2007). Distributive justice, pay structure, and attitudes and behavior: A case of Malaysian public institutions of higher learning. Proceeding of the *Academy for Global Business Advancement*, Vol. 4, No. 1, pp. 619-618.
- Ismail, A. And C.S Joon (2006). Effect of distributive justice on the relationship between the forms of benefit program, *Jurnal Siasat Business*, Vol. 11, No. 3, pp. 189-202.
- Ismail, A., Guat Leng, C.O., Cheekiong, T., & Marzuki, E. (2008). Adequacy of benefits, distributive justice and individual attitudes and behaviors: A case of public community colleges staff, *Intangible Capital*, Vol. 4, No. 4, pp. 212-236.
- Johnson, J. P, M.A Korgaard and H.J Sapienza (2002). Perceived fairness, decision control, and commitment in international joint venture management teams, *Strategic Management Journal*, Vol. 23, pp. 1141-1160.
- Lawler, E. E (1971). *Pay and Organisational Effectiveness: A Psychological View*. New York: McGraw-Hill.
- Lawler, E.E (2000). *Rewarding Excellence: Pay Strategies for the New-Economy*. San Francisco: Jossey-Bass.
- Locke, E. A and G.P Latham (1990a). *A Theory of Goal Setting and Task Performance*. Englewood Cliffs, NJ: Prentice Hall.
- Locke, E. A and G.P Latham (1990b). Work motivation and satisfaction: Light at the end of the tunnel, *Psychological Science*, Vol. 1, No. 4, pp. 240-246.
- Luthans, F (1989). *Organizational Behavior*. New York: McGraw-Hill.
- Maathis, R. L and J.H Jackson (2000). *Human Resource Management*. Australia: South-Western.
- Mahathir Report (1976). Report on the cabinet committee appointed by cabinet to examine Royal Salaries Commission, Vol. I & II on the remuneration and terms and conditions of service in the public sector. [Unpublished Report] Public Services Department, Malaysia.
- Mahathir Report (1991). Report of the special committee of the cabinet on salaries for the public sector (a translated version). [Unpublished Report] Public Services Department, Malaysia.
- Malaysian Public Service Department (2006), *Panduan PTK*, [www.jpa.gov.my](http://www.jpa.gov.my), [Accessed 15.9.2006].
- Maslow, A. H (1943). A theory of human motivation, *Psychological Review*, Vol. 50, pp. 370-396.
- Maslow, A. H (1954). *Motivation and Personality*. New York: Harper.

- Mathieu, J.E and D Zajac (1990). A review and meta-analysis of the antecedents, correlates and consequences of organizational commitment, *Psychological Bulletin*, Vol. 108, pp. 171-94.
- McShane, S. L and M.A Von Glinow (2005). *Organizational Behavior*. Boston: McGraw-Hill.
- Meyer, J. P, N.J Allen and I.R Gellatly (1990). Affective and continuance commitment to the organization: Evaluation of measures and analysis of concurrent and time-lagged relations, *Journal of Applied Psychology*, Vol. 75, pp. 710-720.
- Meyer, J.P, N.J Allen, I.R Gellatly, R.D Goffin and D.N Jackson (1989). Organizational commitment and job performance: It's the nature of the commitment that counts, *Journal of Applied Psychology*, Vol. 74, pp. 152-6.
- Mellor, S, J Mathieu, J.L Barnes-Farrell and S.G Rogelberg (2001). Employees' nonwork obligations and organizational commitment: A new way to look at the relationships. Impact of group discussion on job evaluation ratings, *The Journal of Psychology*, Vol. 131, No. 4, pp. 417-426.
- Miceli, M. P and M.C Lane (1991). Antecedents of pay satisfaction: A review and extension, *Research in Personnel Resources Management*, Vol. 9, pp. 235-309.
- Milkovich, G.T and J.M Newman (2008). *Compensation*. Boston: Irwin.
- Mohd. Najib, A. R (1995). Rang undang-undang universiti dan kolej universiti (pindaan) 1995. Bacaan kali yang kedua dan ketiga di Dewan Rakyat. *Kertas Kerja Tidak Diterbitkan*, Parlimen Malaysia.
- Money, R. B and J.L Graham (1999). Salesperson performance, pay and job satisfaction: Test of a model using data collected in the United States and Japan, *Journal of International Business Studies*, Vol. 30, pp. 149-172.
- Mowday, R. T, R.M Steers and L.W Porter (1979). The measurement of organisational commitment, *Journal Vocational Behavior*, Vol. 14, pp. 224-247.
- Nunally, J. C and I.H Bernstein (1994). *Psychometric Theory*. New York: McGraw-Hill.
- Pekeliling Perkhidmatan Bilangan 9 Tahun 1991: Pelaksanaan Sistem Saraan Baru Berdasarkan Laporan Jawatankuasa Khas Kabinet Mengenai Gaji Sektor Awam 1991, Jabatan Perkhidmatan Awam Malaysia.
- Pekeliling Perkhidmatan Bilangan 4 Tahun 2002, Jabatan Perkhidmatan Awam Malaysia.
- Pekeliling Perkhidmatan Bilangan 7 Tahun 2007: Pemberian Kenaikan Gaji Kepada Pegawai Perkhidmatan Awam Persekutuan Di Bawah Sistem Saraan Malaysia, Jabatan Perkhidmatan Awam, Malaysia.
- Roberts, G. E (2001). An examination of employee benefits cost control strategies in New Jersey local governments, *Public Personnel Management*, Vol. 30, No. 3, pp. 303-322.
- Rosenblum, J and G.V Hallman (1981). *Employee Benefit Planning*. Englewood Cliffs, NJ: Prentice Hall.
- Royalty, A. B and J.M Abraham (2006). Health insurance and labor market outcomes: Joint decision-making within households, *Journal of Public Economics*, Vol. 90, No. 8-9, pp. 1561-1577.
- Sheikh Abdullah Report (1972). Report of the commission set up to review the pay, allowances, pensions, gratuities and other terms of service of members of the Malaysian armed forces. [Unpublished Report] Public Services Department, Malaysia.
- Skarlicki, D. P and R Folger (1997). Retaliation in the workplace: The roles of distributive, Procedural, and interactional justice, *Journal of Applied Psychology*, Vol. 82, pp. 434-443.

- Sterling, C.L (1994). The role of multiple expectations in determining satisfaction with severance pay benefits, *Human Resource Management Review*, Vol. 4, No. 2, pp. 161-175.
- Sinclair, R.R, M.C Leo and C Wright (2005). Benefit system effects on employees' benefit knowledge, use, and Organizational commitment. *Journal of Business and Psychology*, Vol. 20, No. 1, pp. 3-29.
- Suffian Report (1967). Report of the Royal Commission on the review of salaries and conditions of service in the public Services. [Unpublished Report] Public Services Department, Malaysia.
- Statistik IPTA (2006), *Kementerian Pengajian Tinggi Malaysia*.  
[http://www.mohe.gov.my/info\\_kpt\\_senarai.php?navcode=NAV004&subcode=SUB001](http://www.mohe.gov.my/info_kpt_senarai.php?navcode=NAV004&subcode=SUB001), [Accessed 27.7.2006].
- Sulaiman, M and A Mamman (1996). Managerial attitudes to pay system in the Malaysian public sector", *Malaysian Management Review*, Vol. 31, No. 1, pp. 29-43.
- Tabachnick, B. G and L.S Fidell (2001). *Using Multivariate Statistics*. Sydney: Allyn & Bacon.
- Tremblay, M, B Sire and A Pelchat (1998). A study of the determinants and of the impact of flexibility on employee benefit satisfaction. *Human Relations*, Vol. 51, No. 5, pp. 667-687.
- Vecchio, R. P (1991). *Organizational behavior*. Fort Worth, TX: The Dryden Press.
- Vecchio, P. R, G. Hearn and G Southey (1992). *Organizational Behavior*. Sydney: Harcourt.
- Warr, P. B, J Cook and T.D Wall (1979). Scales for the measurement of some work attitudes and Aspects of psychological well-being, *Journal of Occupational Psychology*, Vol. 52, pp. 129-148.
- Williams, M. L (1995). Antecedents of employee benefit level satisfaction: A test of a model, *Journal of Management*, Vol. 21, pp. 1097-1128.
- Watson Report (1963). Report of the Commission to examine the structure of the public services of Sarawak and North Borneo. [Unpublished Report] Public Services Department, Malaysia.
- Weiss, H. M and R Cropanzano (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work, (in: B. M Staw and L. L Cummings. *Research in organizational behavior*. Vol. 18), Greenwich, CT: JAI Press, pp. 1-3.
- William, M and G Dreher (1992). Compensation system attributes and applicant pool characteristics, *Academy of Management Journal*, Vol. 35, pp. 571-595.
- William, M. L, S.B Malos and D.K Palmer (2002). Benefit system and benefit level satisfaction: An expanded model of antecedents and Ccnsequences, *Journal of Management*, Vol. 28, No. 2, pp. 195-215.
- Wright, L. L (1996). Qualitative international management research, (in: B. J Punnett and O. Shenkar. *Handbook for international management research*. Oxford, UK: Blackwell, pp. 63-81.