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Relationship between Pay Level, Pay Structure and Job Commitment in Malaysian Public Community College: The Mediation Role of Distributive Justice

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This study was conducted to measure the mediating effect of distributive justice on the relationship between pay level, pay structure and job commitment. A survey research method was used to gather 194 usable questionnaires from academic staff of 15 Malaysian public community colleges (MPCC). Outcomes of testing mediating model using a stepwise regression analysis showed that distributive justice had increased the effect of pay design features (i.e., pay level and pay structure) on job commitment. This result confirms that distributive justice does act as a full mediating variable in the pay design models of the organizational sector sample. In addition, implications of this study to compensation theory and practice, methodological and conceptual limitations, as well as directions for future research are discussed.

Keywords: *pay level, pay structure, distributive justice, job commitment.*

Introduction

Compensation is also known as salary and wage, remuneration, reward, or pay system. The terms are often used interchangeably in organizations (Henderson, 2006; Milkovich and Newman, 2007). In a human resource management perspective, compensation is often viewed as an

employer design and manages the various types of pay systems (e.g. non monetary rewards versus monetary rewards) to rewarding its employee who performed a job or service (Maurer, Shulman, Ruwe, and Becherer, 1995; Henderson, 2006).

Pay design is a crucial issue in compensation; it requires an employer to designs the level and structure of pay to

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reward employees who work in similar and or different job groups (Henderson, 2006; Maurer et al., 1995). Many scholars advocate that the level and structure of pay design will be more efficient and effective if they are consistent with the organization's strategies and goals. Therefore, managers must have a clear idea of the goals, types and elements of pay systems because they may want to attract, retain and motivate competent employees to sustain and maintain organizational competitiveness in a global economy (Ismail, 2007; Maurer et al., 1995; Milkovich and Newman, 2007).

In the early development of pay systems, many authorities emphasized on the internal characteristics of pay design. Scholars were involved in discussing the concept, type, approach and significance of pay levels and structures in organizations. The reciprocal relationship between pay design issues, work attitude and behavior is less emphasized (Ismail, 2007; Milkovich and Newman, 2007). Recent research in this area reveals that properly designing pay systems may induce positive attitudinal and behavioral outcomes, especially job commitment. For example, if an organization determines the level and structure and level of pay based on proper rules, this may motivate employees to commit themselves to the organization (Barnby, 2002; Chang and Hahn, 2006).

Furthermore, a careful observation of such relationships reveals that effect of pay design features on job commitment is indirectly influenced by distributive justice (Adams, 1963, and 1965; Greenberg, 2003). This relationship explains that when employees perceive that the structure and level of pay that they receive from their employers as fair, this may strongly motivate them to increase their job commitment (Adams, 1963 and 1965; Ismail and Sulaiman, 2007; Ismail and Razmi, 2006). Although many studies have been done, little is known about the mediating effect of distributive justice in

compensation management system (Barber and Simmering, 2002; Greenberg, 2003; Ismail, Ismail and Sulaiman, 2007). Hence, it motivates the researchers to examine the mediating effect of distributive justice in the relationship between pay level and structure designs, and job commitment.

Literature Review

This study highlights four distinct constructs: pay structure, pay level, job commitment and distributive justice. Pay structure is often defined as the group of pay rates for different work, skills and or performance within an organization. For example, pay rates are differently allocated according to the number of job levels, differences between the job levels and job and or performance based pay criteria (Henderson, 2006; Milkovich and Newman, 2007). Pay level is the sum of basic pay, non-monetary and monetary rewards that are provided to the similar and or different job groups (Henderson, 2006; Milkovich and Newman, 2007). Most organizations implement three types of pay level policies, namely the lag policy (lower than competitor's pay), match policy (equal with competitor's pay), and or lead policy (more than competitor's pay) (Henderson, 2006; Maurer et al., 1995; Milkovich and Newman, 2007).

Job commitment is a component of work attitude and behaviors where it consists of three major components: affective (psychological or emotional attachment), continuance (cost related), and normative (obligation to stay) (Blau and Boal, 1987; Meyer and Allen, 1997). This study focuses on the global job commitment where it refers to the willingness of an individual to stay and continue his/her job in an organization. When a person wishes to remain in the organization, he/she will be committed to his/her job (Meyer and Allen, 1997). Distributive justice is a branch of

organizational justice theory, whereby an individual's perception of justice about the distribution and change of resources may affect his/her attitude and behavior (Adams, 1963, 1965; Greenberg, 2003). In a compensation framework, many scholars think that the constructs are interrelated. For example, if employees perceive that the pay levels and structures that they receive from their employers as fair, this may lead to increased job commitment in organizations (Adams, 1963, 1965; Allen and White, 2002; Ismail, 2007).

Many scholars argue that the socio-cultural differentiations are among the key factors that affect the design of pay systems in organizations (Adams, 1963, 1965; Aryee, 1999; Money and Graham, 1999). 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 norm and standard that practice large power distance (e.g. more hierarchical structure and centralized decision making) and emphasizes more group interests, co-operation, loyalty and harmony. Individualism is value and standard that practice low power distance (e.g. less hierarchy and decentralized decision making) and focuses more on individual achievement (Chang and Hahn, 2006; Farh, Dobbins and Cheng, 1991; Hofstede, 1991).

Under an individualistic culture, equitable pays are 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 important on the same outcome regardless of his/her contribution. For example, Russians, Japanese, Chinese and Malaysian perceive fair pay as equality (e.g. pays are provided based on tenure, seniority and or

needs) (Aryee, 1999; Money and Graham, 1999; Redding and Wong, 1993; Sulaiman and Mamman, 1996).

These socio-cultural differentiations strongly affect the design of pay systems in organizations. For example, in countries that uphold a collectivistic culture, such as Japan, China and Malaysia, fair pay is perceived as equality where rewards are provided based on tenure, seniority and or needs regardless of the individual's contribution (Aryee, 1999; Giacobbe-Miller, Miller and Victor, 1998; Sulaiman and Mamman, 1995). Conversely, under an individualistic culture, such as in United States, fair pay is viewed as equity whereby rewards are given based on individual merits (Gomez-Mejia, Welbourne and Wiseman, 2000; Giacobbe-Miller et al., 1998). According to reports of the Malaysian Royal Commission on salary (Aziz Report, 1968; *Pekeliling Perkhidmatan 4/2002*), compensation policies and procedures for public sector employees in Malaysia are designed, administered and monitored by a central government agency, that is, Public Service Department (PSD). For example, pay allocation rules rely very much on internal equity variables, such as qualifications, training, job categories and the ability to pay. These rules have affected the distributions of pay level and structure in the public sector.

In 1991, the New Remuneration System (SSB) was implemented in the Malaysian public sector (MPS) to strengthen the traditional job-based pay by adding merit principles as a criterion to determine extra rewards for high performing employees (Mahathir Report, 1991; *Pekeliling Perkhidmatan 9/1991*). In line with this change, Sulaiman and Mamman (1996) conducted a study about pay preference criteria in MPS and found that the majority of employees preferred to use tenure, responsibility and cost of living as criteria to determine their pay differentials. Although

performance is perceived as less preferred criterion for determining pay distribution, the employees still have positive perception that the basis of this reward may be used to complement with the collectivistic compensation principles used in the public sector.

Considering inputs from public sector employee unions and government servants, pay distribution rules as practiced in the SSB were replaced by Malaysian Remuneration System (SSM) in 2002 (Malaysian Public Service Department, 2006; *Pekeliling Perkhidmatan 4/2002*). The new pay perspectives are more flexible because it allows the government of Malaysia to make pay adjustments and revisions based on the government's 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 (COLA) 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, improving standard of living (Bernama, 2007; *Pekeliling Perkhidmatan 7/2007*). Empirical evidence supporting the effectiveness of compensation system in Malaysian public sector is limited because of the paucity of research literature in this country (Ismail et al., 2007; Sulaiman and Mamman, 1996).

The nature of MPS has strongly influenced the Malaysian public community colleges (MPCC). These colleges were structurally upgraded as institutions of higher learning to provide technical education and lifelong learning experiences. In terms of compensation system, the HR managers are not given autonomous power to design the type, level and or amount of pay, but they are allowed to use their creativities and innovations to improve the procedures for allocating the various types of pay system within the limits set up by PSD (Ismail, 2007; Ismail et al., 2007).

According to the information gathered from the in-depth interviews involving 30 academic staffs of MPCC, the majority of them felt that their working styles and workloads had increased since the upgrading of these colleges to become an institution of higher learning. Despite that, the pay systems are not adjusted to be at par with the Malaysian public universities. The majority of them perceived that the pay structures and levels are still the same as in the Malaysian secondary schools system. Furthermore, the pay differentials (e.g. pay rise and promotion) between them are strongly affected by the achievement in competency examinations regardless of seniority and ability to perform an actual job. This situation shows that employees' views may influence the credibility of pay systems in the colleges. For example, if the employees perceive that they receive inappropriate pay levels and structures from their employers, this will strongly decrease their feelings of distributive justice, which in turn, may lead to increased negative attitudinal and behavioral outcomes, especially on job commitment. Although many studies have been done, little is known about the mediating role of distributive justice in pay system models of the Malaysian public institutions of higher learning (Ismail, 2007; Ismail et al., 2007). Hence, it motivates the researchers to further investigate the nature of this relationship in the MPCC sector.

These findings are consistent with compensation research literature published in US and Malaysia settings. For example, empirical studies about pay structure (e.g. pay gaps, pay rates and pay entitlements) were conducted by Bloom (1999) in the Indiana State University, Summer and Miller (2000) in Southeastern United States, and Ismail, Ismail and Sulaiman (2007) in Malaysian public institutions of higher learning. These studies found that adequately allocating pay structures for

the similar and or different job categories based on job and or performance had strongly invoked employee perceptions of distributive justice about the pay systems. As a result, it could lead to increased job commitment (Bloom, 1999; Ismail et al., 2007; Summer and Miller, 2000).

Besides that, empirical studies about pay level (e.g. amount of merit pay, less pay level, amount of profit reward) were conducted by Mani (2002) in the East Carolina University, Allen and White (2002) in an urban public university, and Ismail and Razmi (2006) in the Headquarters of Malaysian Post Office in Sarawak. These studies showed that adequately distributing pay levels based on job and or performance had invoked employees' perceptions of distributive justice about pay systems. As a result, it could lead to higher job commitment (Allen and White, 2002; Ismail and Razmi, 2006; Mani, 2002).

The compensation research literature is consistent with fundamental social comparison based on distributive justice theories, namely Adams' (1963 and 1965) equity theory and Allen and White's (2002) equity sensitivity theory. Adams' equity theory posited that employees expect to receive fair outcomes (e.g. pay, bonus, benefits, security, recognition) when they bring inputs (e.g. education, effort, time, commitment and experiences) to their jobs. If their inputs are greater than the outputs, employees will feel that they are unfairly treated. They may become de-motivated and reciprocate by showing low commitment in their work (Adams, 1963 and 1965; Sweeney and McFarlin, 1993). Conversely, if they perceive their pay as fair, this feeling may lead to increased job commitment (Sweeney and McFarlin, 1993).

According to Allen and White (2002), relative preferences of individuals on fairness in the distribution of rewards (e.g. Entitleds and Benevolents receive pay less for their works) will also influence their

job commitment. Positive perceptions of distributive justice is associated with higher levels of job commitment (e.g. intention to stay) (Schaubroeck, May and Brown, 1994) whereas negative perceptions of distributive justice strongly lead to lower levels of job commitment (e.g. intention to search for other jobs) (Sagie, 2002; Stumpf and Hartman, 1984).

Based on the above findings, it seems reasonable to assume that fairness of pay design features will influence MPCC employees as this feeling influences Western employees. Equity theory suggests that if MPCC employees perceive fairness about pay structures and pay levels that they receive from their employers, this may lead to greater job commitment. Therefore, it was hypothesized that:

H1: Distributive justice positively mediates the effect of pay structure on job commitment

H2: Distributive justice positively mediates the effect of pay level on job commitment.

For ease of understanding, the terms contained in the above hypotheses are reproduced here.

Distributive justice is captured through individual's perceptions of fairness about pay structures, e.g. pay rate (Adams, 1963 and 1965; Allen and White, 2002), and in outcomes of allocation (Greenberg, 2003; Sweeney and McFarlin, 1993).

Pay structure is reflected in the range of pay rates that are provided for the various types of jobs, skills and or performance in an organization (Bender, 2003; Blau and Kahn, 2003; Henderson, 2007).

Job commitment is related to an employee's identification, belief in and acceptance of organizational goals and values, a willingness to put in high effort on behalf of, and a desire to remain or maintain membership with the organization (Blau and Boal, 1987; Ivancevich and Matteson, 1993; Mowday, Steers; and Porter, 1979).

Pay level is pay set relative to employees working on similar jobs in other organizations (Ivancevich, 2004). It is expressed as the sum of basic pay, non-monetary and monetary rewards that are provided to the similar and or different job groups (Henderson, 2006; Milkovich and Newman, 2007).

Methodology

Data for this study were gathered through in-depth interviews, pilot study and survey questionnaires. In-depth interviews were first conducted involving 30 academic staff of MPCC who attending a seminar in Melaka. They are selected based on purposive sampling where the academic staff who hold administration positions at faculty level and university level have good knowledge and experiences in compensation management. Information gathered from such staff help the researchers to understand the nature of compensation system practices, distributive justice facets and job commitment features in the studied organizations. After refining, categorizing and comparing the information with relevant theoretical and empirical evidence, this was used as a guideline to develop the content of survey questionnaires for a pilot study. Next, a pilot study was conducted involving 30 academic staff of MPCC. Their information was used to verify the content and format of questionnaires developed for an actual survey. Back translation technique was used to translate the content of questionnaires in Malay and English in order to increase the validity and reliability of the instrument (Hulland, 1999; Wright, 1996).

The survey questionnaires had 13 items. Pay structure had 3 items and pay level had 3 items that were modified from compensation management literature (Henderson, 2006; Milkovich and Newman, 2007). Distributive justice was measured using 3 items that were modified from organizational justice

literature (Adams, 1963, 1965; Allen and White, 2002; Greenberg, 2003). Job commitment was measured using 4 items that were modified from job commitment literature (Meyer and Allen, 1997; Meyer, Stanley, Herscovitch and Topolnytsky, 2002). These items were measured using a 7-items scale ranging from "very strongly disagree/dissatisfied" (1) to "very strongly agree/satisfied" (7). Demographic variables were used as controlling variables because this study focused on employee attitudes.

The unit analysis for this study was academic staff who have worked in the MPCC sector. The Management Division of Community College in Kuala Lumpur officially allowed the researchers to conduct the survey in any of the 35 community colleges in the country. Of the total number, 15 community colleges agreed to participate in this study. Considering the organizational rule constraints, a convenient sampling technique was used to collect data from the colleges. The researchers sent 300 questionnaires to academic staff through contact persons such as heads of departments in the participating colleges. Of the number, 194 usable questionnaires were returned to the researchers, yielding a 64.7% response rate. The survey questionnaires were answered by participants based on their consensus and on a voluntarily basis. The names of the participants were kept anonymous in order to avoid intrusiveness. A Statistical Package for Social Science (SPSS) version 14.0 was used to analyze the psychometric properties of measurement scales and thus test the mediating model.

Result and Discussion

Table 1 shows the sample profile in MPCC. Most respondents are female (51%), age between 26-30 years (53.1%), bachelor degree (60.3%), lecturers (88.1%), technical and engineering fields (60.8%), non critical allowances/incentives (56.7%),

Table 1. Sample Profile

Gender (%)	Age (%)	Qualification (%)	Field of Study (%)
Male = 49	≤ 25 years = 12.4	Diploma = 20.6	Director = 3.6
Female = 51	26 to 30 years = 53.1	Bachelor = 60.3	Senior Lecturer = 8.2
	31 to 35 years = 17.5	Masters = 19.1	Lecturer = 88.1
	36 to 40 years = 5.7		
	41 to 45 years = 3.1		
	≥ 46 years = 8.2		
Field of Study (%)	Basic Salary (%)	Length of Service (%)	Type of Service (%)
Technical and Engineering = 60.8	(RM=Malaysian Ringgit)	≤ 1 year = 17.0	Permanent and = 61.3 confirmed
Science and Technology = 39.2	RM 1000 to 2000 = 58.2	2 to 5 years = 61.9	Permanent and = 18.0 probation
	RM 2001 to 3000 = 33.5	6 to 9 years = 5.7	Temporary = 19.6
	RM 3001 to 4000 = 4.1	10 to 12 years = 1.5	Contract = 1.0
	RM 4001 to 5000 = 2.1	>12 years = 13.9	
	RM 5001 to 6000 = 2.1		

Table 2. Goodness of Data

Measure	Items	Factor Loadings	KMO	Bartlett's Test of Sphericity	Eigenvalue	Variance Explained	Cronbach Alpha
Pay Structure	3	0.67-0.87	0.69	138.89, p = 0.000	2.02	67.29	0.76
Pay Level	3	0.67-0.84	0.70	269.04, p = 0.000	2.33	77.55	0.85
Job Commitment	4	0.81-0.84	0.79	335.60, p = 0.000	2.78	69.56	0.85
Distributive Justice	3	0.73-0.88	0.72	201.75, p = 0.000	2.20	73.47	0.82

length of service between 2-5 years (61.9%), permanent and confirmed in positions (61.3%), and basic salary between RM1000 – RM2000 (58.2%).

Table 2 shows the psychometric properties of measurement scales. The original survey questionnaire consists of 35 items, which are related to the four variables in the survey questionnaire: pay structure (10 items), pay level (9 items), job commitment (8 items) and distributive justice (8 items). The factor analysis with direct oblimin rotation was done for all variables and 35 items were condensed into 13 items. The Kaiser-Mayer-Olkin Test (KMO) which is a measure of sample adequacy was conducted for each variable and the results indicated that it was acceptable. The KMO scores for the variables are: pay structure (0.692), pay level (0.703), job commitment (0.789) and distributive justice (0.718). The Bartlett's Test of Sphericity was conducted and the results showed that all the variables were significant. The eigenvalues for all variables are larger than 1: pay structure (2.019) with factor loadings in the range

of 0.67 to 0.87, pay level (2.33) with factor loadings 0.67 to 0.84, JC (2.782) with factor loadings 0.81 to 0.84 and distributive justice (2.20) with factor loadings 0.73 to 0.88. The factor loadings for the items of each variable are all above 0.50 which is the acceptable standard of validity analysis (Hair, Anderson, Tatham and Black, 1998).

The results of the reliability analysis showed that the values of Cronbach alpha for the variables were all above 0.63, indicating the relatively high reliability of the measurement scales (Nunally and Bernstein, 1994). Cronbach alpha value for pay structure is 0.76, pay level is 0.85, job commitment is 0.85 and distributive justice is 0.82. The validity and reliability analyses support the notion of distributive justice theories (see Adams, 1963, 1965; Allen and White, 2002; Greenberg, 2003) and empirical studies (see Bloom, 1999; Ismail and M. Razmi, 2006; Ismail et al., 2007; Mani, 2002). Table 2 presents all the results of the analysis done on goodness of data.

Table 3 shows the descriptive Statistics and Pearson correlation analysis. The

Table 3. Correlation Matrix Result for the Research Variable

Variable	Mean	Standard Deviation	Pearson Correlation Analysis			
			Pay Structure	Pay Level	Job Commitment	Distributive Justice
Pay Structure	4	1.3	1			
Pay Level	3	1.3	0.64***	1		
Job Commitment	6	1.0	0.03	0.01	1	
Distributive Justice	4	1.3	0.45***	0.57***	0.31***	1

means for the variables are from 3 to 6, signifying that the amount of pay level, pay structure, as well as the level of distributive justice and job commitment are ranging from moderately high (3.0) to highest (7.0). The correlation coefficients for the relationship between the independent variable (i.e., pay structure and pay level) and the mediating variable (i.e., distributive justice), and the relationship between the independent variable (i.e., pay structure and pay level) and the dependent variable (i.e., job commitment) were less than 0.90, indicating the data were not affected by serious collinearity problem (Hair et al., 1998).

Pearson correlation analysis was unable to determine the conditional mediating role of distributive justice in the hypothesized model. Stepwise regression analysis was recommended to assess the magnitude and direction of each independent variable, and vary the mediating variable in the relationship between many independent variables and one dependent variable (Berenson and Levine, 1992). Baron and Kenny (1986) suggest that a mediating variable can be considered when it meets three conditions: first, the predictor variables are significantly correlated with the hypothesized mediator. Second, the predictor and mediator variables are all significantly correlated with the dependent variable. Third, a previously significant effect of predictor variables is reduced to non-significance or reduced in terms of effect size after the inclusion of mediator variables into the analysis (Wong, Hui and Law, 1995). In this regression analysis,

standardized coefficients (standardized beta) were used for all analysis (Jaccard, Turrisi and Wan, 1990).

Table 4 shows the outcomes of testing H1 and H2 using a stepwise regression analysis. The results of hierarchical regression analysis were summarized in three steps. Step 1 showed that the respondents' characteristics were found to be not significant predictors of job commitment, accounting for 0.3 % the variance of the dependent variable. Step 2 revealed that pay structure ($\beta = 0.08$, $p < 0.5$) and pay level ($\beta = -0.06$, $p < 0.5$) were found to be not significant predictors of job commitment, accounting for 0.3 % the variance of the dependent variable. Step 3 displayed that distributive justice did act as a mediating variable in the relationship between pay design issues (i.e., pay structure and pay level) and job commitment ($\beta = 0.46$, $p < 0.001$), therefore H1 and H2 were fully accepted.

This result explains that after the inclusion of distributive justice in Step 3, the previously non significance relationship between pay structure and job commitment (Step 2: $\beta = 0.08$, $p > 0.5$) did not change to significant (Step 3: $\beta = 0.01$, $p > 0.5$), whereas the previously not significance relationship between pay level and job commitment (Step 2: $\beta = -0.06$, $p > 0.5$) had changed to significant (Step 3: $\beta = -0.29$, $p < 0.01$). However, the inclusion of distributive justice in Step 3 had decreased the strength of direct effect of pay design features (i.e., pay structure and pay level) on job commitment. This result sends a clear signal that distributive justice does act

as a full mediating role in the pay design models of the organizational sector sample.

Implications, Limitations and Directions for Future Study

This study confirms that distributive justice does act as a full mediator in the pay design models of organizational sector sample. In the MPCC sector, HR managers and or managers often determine pay levels and structures for academic staff based on the compensation policy and procedures set up by the stakeholder. Majority of employees perceive that the pay structures and levels that they receive from their employers as fair, this has invoked their feelings of distributive justice. As a result, it may lead to an enhanced job commitment in the organizations.

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 have shown two major findings: firstly, pay structure indirectly affects job commitment via feelings of distributive justice. This result is consistent with studies by Summer and Miller (2000), and Ismail, Ismail and Sulaiman (2007). Secondly, pay level indirectly affects job commitment through feelings of distributive justice. This result is consistent with studies by Allen and White (2002), Mani (2002) and Ismail and M. Razmi (2006). In sum, this study confirms that distributive justice does act as a full mediating role in the pay design models of the MPCC.

With respect to the robustness of research methodology, the data gathered from compensation management literature, the in-depth interviews and the survey questionnaire have exceeded a minimum standard of validity and reliability analysis; this can lead to the production of accurate findings. In terms of practical contribution, findings of this study may be used as guidelines by HR officers and or managers

Table 4. Result for Stepwise Regression Analysis with Distributive Justice as the Mediating Variable and Job Commitment the Dependent Variable

Variable	Dependent Variable (Job Commitment)		
	Step 1	Step 2	Step 3
Controlled Variable			
Gender	-0.09	-0.1	-0.09
Age	0.15	0.16	0.12
Qualification	-0.02	-0.03	-0.04
Designation	-0.01	0.001	0.01
Field of Study	0.15	0.16	0.12
Incentives	-0.1	-0.11	-0.1
Length of Service	-0.16	-0.17	-0.08
Type of Service	0.03	0.03	0.1
Basic Salary	0.02	0.04	0.05
Independent Variable			
Pay structure		0.08	0.01
Pay Level		-0.06	-.29**
Mediating Variable			
Distributive Justice			.46***
R Square	0.03	0.03	0.17
Adjusted R Square	-0.02	-0.03	0.11
R Square Change	0.03	0.003	0.14
F	0.6	0.54	3.03***
F Δ R Square	0.6	0.31	29.46***

Note: * p < 0.05; ** p < 0.01; *** p < 0.001= Level of Significance

to improve the design and administration of pay systems in organizations. Firstly, the level and structure of pay need to be adjusted according to the nature of job. For example, modern organizations have many types of job group and require high skills and knowledge to perform each job. In this situation, the type, level and or amount of pay need to be revised according to the current job expectations. If employees feel that pay levels and structures that they receive as equitable with the nature of their jobs, this may motivate them to improve job commitment.

Secondly, the ability of managers can be improved through proper management development program. For example, modern organizations often design compensation policies and procedures to achieve their strategies and goals. In this situation, many HR managers/managers do not understand the new pay policies and procedures implemented by their organizations. In order to increase the capability of HR managers or managers to handle pay systems, organizations should design up-to-date training contents and methods on compensation management. Using this training system may upgrade the knowledge and skills of HR managers/managers to interpret compensation rules and regulations, as well as properly implement good treatments (e.g. show accountability, honest and respect) in communication, counseling, making decisions and solving problems about pay systems. If organizations heavily consider these suggestions, this will invoke employees' positive attitudes toward the systems. As a result, it may lead to increase positive subsequent attitudinal and behavioral outcomes, such as job satisfaction, job performance, and good work ethics.

The conclusions drawn from the results of this study should consider the following limitations. Firstly, a cross-sectional research design used in this

study did not capture the developmental issues and 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 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 in-depth interviews and survey questionnaires. These limitations may decrease the ability of generalizing the results of this study to other organizational settings.

The conceptual and methodological limitations of this study should be considered when designing future research. Firstly, several organizational (e.g. type of incentive, ownership and size) and personal (e.g. gender, length of service and type of service) characteristics should be further explored, this may provide meaningful perspectives for understanding of how individual similarities and differences affect performance based pay 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 pay designs 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 studies.

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 pay design system and many aspects of work attitudes and behaviors (e.g. satisfaction, performance, turnover, trust and work ethics) (Adams, 1963 and 1965; Ismail, 2007; Milkovich and Newman, 2007). Finally, other personal outcomes of distributive justice such as job performance, turnover, and deviant behaviors should be considered because it is given more attention in compensation research literature (Ismail, Ismail and Sulaiman, 2007; Giacobbe-Miller et al., 1998; Greenberg, 2003). The importance of these issues needs to be further explained in future research.

Conclusion

This study confirms that distributive justice does act as a full mediating variable in

the pay design models of the organizational sector sample. This result is consistent with compensation research literature mostly published in US organization settings. Therefore, current research and practice within compensation management needs to consider perceptions of distributive justice as a critical issue of the pay systems. This study further suggests that the ability of HR managers and or managers to determine pay levels and structures for all employees based on proper allocation rules will strongly invoke employees' feelings of distributive justice. As a result, it may lead to increased positive attitudinal and behavioral outcomes (commitment, satisfaction, performance and thus good ethics). Thus, such positive outcomes may lead employees to support organizational and human resource management's strategies and goals.

References

- Adams, J.S. (1963), Towards an Understanding of Inequity, *Journal of Abnormal and Social Psychology*, 67 (5), 422-436.
- Adams, J.S. (1965), Inequity in Social Exchange, *Advances in Experimental Social Psychology*, L. Berkowitz, (Eds), New York: Academic Press.
- Allen, R.S., and White, C.S. (2002), Equity Sensitivity Theory: A Test of Responses of Two Types of Under-Reward Situations, *Journal of Managerial Issues*, 14 (4), 435-451.
- Aryee, S. (1999), An Examination of the Moderating Influence of Breadwinner Role Salience on the Pay-Life Satisfaction Relationship, *Human Relations*, 52 (10), 1279-1290.
- Aziz, (1968), Report of the Royal Commission on the Teaching Services, West Malaysia, *Unpublished Report*, Public Services Department, Malaysia.
- Barber, A.E., and Simmering, M.J., (2002), Understanding Pay Plan Acceptance: The Role of Distributive Justice Theory, *Human Resource Management Review*, 12, 25-42.
- Barmby, T. (2002), Worker Absenteeism: A Discrete Hazard Model with Bivariate Heterogeneity, *Labour Economics*, 9, 469-476.
- Baron, R.M., and Kenny, D.A. (1986), The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic and Statistical Considerations, *Journal of Personality and Social Psychology*, 51 (61), 1173-1182.
- Berenson, L.M., and Levine, D.M. (1992), *Basic Business Statistics: Concepts and Applications*, Englewood Cliffs, New Jersey: Prentice Hall.
- Bernama (2007), *Civil Servants to Get Pay Increase of Up to 35pct*, retrieved May 6, 2007, from <http://bigdogdotcom.wordpress.com/2007/05/22pm-announced-civil-service-payrise/>.

- Blau, G.J., and Boal, K.R. (1987), Conceptualizing How Job Involvement and Organizational Commitment Affect Turnover and Absenteeism, *Academy of Management Review*, 12 (2), 288-300.
- Bloom, M. (1999), The Performance Effects of Pay Dispersion on Individuals and Organisations, *Academy of Management Journal*, 42 (1), 25-40.
- Chang, E., and Hahn, J. (2006), Does Pay-for-Performance Enhance Perceived Distributive Justice for Collectivistic Employees? *Personnel Review*, 35(4), 397-412.
- Farh, J., Dobbins, G.H., and Cheng, B. (1991), Cultural Relativity in Action: A Comparison of Self-Rating made by Chinese and U.S. Workers, *Personnel Psychology*, 44(1), 129-147.
- Giacobbe-Miller, J.K., Miller, D.J., and Victor, V.I. (1998), A Comparison of Russian and U.S. Pay Allocation Decision, Distributive Justice Judgements, and Productivity under Different Payment Conditions, *Personnel Psychology*, 51 (1), 137-364.
- Gomez-Mejia, L.R., Welbourne, T.M., and Wiseman, R.M. (2000), The Role of Risk Sharing and Risk Taking under Gainsharing, *The Academy of Management Review*, 25 (3), 492-507.
- Greenberg, J. (2003), Creating Unfairness by Mandating Fair Procedures: The Hidden Hazards of a Pay-for- Performance Plan, *Human Resource Management Review*, 13, 41-57.
- Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W.C. (1998), *Multivariate Data Analysis*, New Jersey: Prentice Hall International Inc.
- Henderson, R.I. (2006), *Compensation Management in a Knowledge based-World*, New Jersey: Prentice-Hall.
- 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*, 20 (2): 195-204.
- Ismail, A. (2007), Relationship between Pay Distribution System, Distributive Justice and Work Attitudes and Behaviours within Malaysian Institution of Higher Learning, 2 (2). *UNITAR E-Journal*, 3 (1) 1-22, Universiti Tun Abdul Razak.
- Ismail, A., and Razmi, M. (2006), Impact of Perceived Distributive Justice on the Relationship between Pay Systems Design and Job Performance: A Study of the Headquarter of Malaysian Post Office in Kuching, Sarawak, *Journal of Social and Humanity*, 1 (2), 89-109, University of Surabaya, Indonesia.
- Ismail, A., Ismail, Y., and Sulaiman, M. (2007), Distributive Justice, Pay Structure, and Attitudes and Behavior: A Case of Malaysian Public Institutions of Higher Learning. *Proceeding of Academy for Global Business Advancement, Park Royal Hotel, Penang*, 4 (1), 619-618.
- Ivancevich, J.M. (2004), *Human Resource Management*, Ninth Edition, New York: McGraw-Hill Higher Education.
- Jaccard, J., Turrisi, R., and Wan, C.K. (1990), *Interaction Effects in Multiple Regression*. 72, Newsbury Park, California: SAGE Publications Inc.
- 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*, Retrieved September 15, 2006, www.jpa.gov.my.

- Mani, B.G. (2002), Performance Appraisal Systems, Productivity, and Motivation: A Case Study, *Public Personnel Management*, 31 (2): 141-160.
- Maurer, J.G., Shulman, J.M., Ruwe, M.C., and Becherer, R.G. (1995), *Encyclopedia of Business*, New York: Gale Research.
- Meyer, J.P., and Allen, N.J. (1997), *Commitment in the Workplace: Theory, Research and Application*, Newsbury Park, CA: Sage Publication.
- Milkovich, G.T., and Newman, J.M. (2007), *Compensation*, Boston: Irwin McGraw Hill.
- Money, R.B., and Graham, J.L. (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*, 30: 149-172.
- Nunally, J.C., and Bernstein, I.H. (1994), *Psychometric Theory*, New York: McGraw Hill.
- Pekeliling Perkhidmatan (1991, September), *Pelaksanaan Sistem Saraan Baru berdasarkan Laporan Jawatankuasa Khas Kabinet mengenai Gaji Sektor Awam 1991*, Jabatan Perkhidmatan Awam, Malaysia.
- Pekeliling Perkhidmatan Bilangan (2007, July), *Pemberian Kenaikan Gaji Kepada Pegawai Perkhidmatan Awam Persekutuan Di Bawah Sistem Saraan Malaysia*, Jabatan Perkhidmatan Awam, Malaysia.
- Redding, G., and Wong, Y.Y. (1993), The Psychology of Chinese Organizational Behaviour, *Societal Culture and Management*, T.D. Weinshall (Eds), 243-270, Walter de Gruyter, Berlin.
- Sagie, A. (2002), Employee Absenteeism, Organizational Commitment and Job Satisfaction: Another Look, *Journal of Vocational Behavior*, 52, 156-171.
- Schaubroeck, J., May, D.R., and Brown, F.W. (1994), Procedural Justice Explanations and Employee Reactions to Economic Hardship: A Field Experiment, *Journal of Applied Psychology*, 79, 455-460.
- Stumpf, S.A., and Hartman, K. (1984), Individual Exploration to Organizational Commitment or Withdrawal, *Academy of Management Journal*, 27, 308-329.
- Sulaiman, M., and Mamman, A. (1996), Managerial Attitudes to Pay System in the Malaysian Public Sector, *Malaysian Management Review*, 31 (1), 29-43.
- Summer, T.P., and Miller, J.L. (2000), Intra-and Inter-Justice Relationships: Assessing the Direction, *Human Relations*, 53 (10), 329-1347.
- Sweeney, P.D., and McFarlin, D.B. (1993), Workers' Evaluation of the 'Ends' and the 'Means': An Examination of Four Models of Distributive and Procedural Justice, *Organizational Behavior and Human Decision Processes*, 55, 23-49.
- Tabachnick, B.G., and Fidell, L.S. (2001), *Using Multivariate Statistics*, Sydney: Allyn and Bacon.
- Wright, L.L. (1996), Qualitative International Management Research, *Handbook for International Management Research*, B.J. Punnett and O. Shenkar (Eds), 63-81, Oxford, UK: Blackwell Publishers Inc.
- Wong, C., Hui, C., and Law, K.S. (1995), Causal Relationships between Attitudinal Antecedents to Turnover, *Academy of Management Journal*, 342-346.

