

Adequacy of benefits, distributive justice and individual attitudes and behaviors: A case of public community colleges staff

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Received September, 2008

Accepted October, 2008

Abstract:

This study was conducted to examine the indirect effect of distributive justice in the relationship between adequacy of benefits and individual attitudes and behaviors (*i.e.*, job satisfaction and organizational commitment) using 190 usable questionnaires gathered from employees in Malaysian public community colleges (MPCOLLEGE sector). The outcomes of stepwise regression analysis showed that the inclusion of distributive justice in the analysis had increased the effect of adequacy of benefits on job satisfaction and organizational commitment. Furthermore, this finding confirms that distributive justice does act as a full mediating variable in the benefits program model of the organizational sector sample. In addition, implications and limitations of this study, as well as directions for future research are discussed.

Keywords: adequacy of benefits, distributive justice, job satisfaction, organizational commitment

1. Introducción

Benefits program has been an interesting topic in compensation management. It is 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, but their meanings refer to the same thing (Henderson, 2007; Milkovich & Newman, 2008). In organizations, benefits program is often provided to complement monetary rewards, protect individuals' health and safety as well as increase their self-satisfaction and productivity (Beam & McFadden, 1996; Miceli & Lane, 1991). Traditionally, in a stable marketplace environment, organizations design a standard benefits package that is bestowed to employees as membership rewards (Belcher & Atchison, 1987; Bergmann & 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 & Balkin, 1992a, 1992b; Lawler, 2000). Under a strategic compensation program, 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, law and regulations, ownership, custom and practices. Inside organizational factors are also seen as internal alignment variables, such as corporate strategy, management philosophy, type of job and productivity level (Anthony, Perrewe & Kacmar, 1996; Milkovich & 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 (Bergmann & Scarpello, 2002; Miceli & Lane, 1991; William, 1995). If benefits 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 & Newman, 2008).

Adequacy of benefits is a crucial aspect of the benefits management system where it is often interpreted from two major perspectives: economics and human behavior. In an economic perspective, adequacy of benefits is viewed based on mathematical formula (Belcher & Atkinson, 1987; Henderson, 2007). Conversely, in a human behavior perspective, benefits program is often defined based on

human perceptions (Greenberg, 2003; Skarlicki & Folger, 1997), that is, physiological needs (Maslow, 1943, 1954), and hygiene factors (Herzberg, 1959, 1968). If an employer determined 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 & White, 2002; Lawler, 1971).

Extant research in benefits management highlights that adequacy of benefits has a significant impact on individual attitudes and behaviors, especially job satisfaction and organizational commitment (Barber, Dunham & Formisano, 1990; Belcher & Atchison, 1987; Miceli & Lane, 1991; William, 1995). Job satisfaction is often viewed as an employee's general attitude toward his or her job (Hodson, 1991, Weiss & Cropanzano, 1996), a result of employees' perception or appraisal of their jobs (Luthans, 1989), a pleasurable or emotional state (Locke & Latham, 1990a, 1990b; McShane & Von Glinow, 2005), a positive reaction (Maathis & Jackson, 2000), and action tendencies towards work (Vecchio, 1991; Vecchio, Hearn & Southey, 1992). 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 organization" (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, & Rogelberg, 2001). The discussion shows that employees who possess values that are consistent with their organization's values, have high feeling of obligation and high desire to stay in

order to gain benefits may have increased notion of organizational commitment (Johnson, Korgaard & Sapienza, 2002; Mellor et al., 2001; Mowday, Steers & Porter, 1979). In a benefits management, the ability of managers to adequately distribute the type, level and/or amount of benefits based on proper rules (*i.e.*, job and/or performance) may directly increase job satisfaction and organizational commitment (Miceli & Lane, 1991; Milkovich & Newman, 2008; William, 1995).

Furthermore, a thorough investigation of such relationships reveal that the effect of adequacy of benefits on individual attitudes and behaviors is indirectly affected by perceptions of distributive justice (Adams, 1963, 1965; Ismail & Joon, 2006; Royalty & Abraham, 2006). Distributive justice is a segment of organizational justice theory, which emphasizes on perceptions of fairness in outcomes 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 & 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 perceived fairness about the benefits that one received from one's employer, this may lead to higher job satisfaction and organizational commitment (Buffardi, Smith, O'Brien & Erdwins, 2002; Dickhart, 2005; William & Dreher, 1992). Even though numerous studies have been done, little is known about the mediating role of distributive justice in an organizational benefits program (Ismail & Boerhannoeddin, 2008; Royalty & Abraham, 2006; William, Malos & Palmer, 2002). Thus, it motivates the researchers to examine the mediating role of distributive justice in the relationship between adequacy of benefits and individual attitudes and behaviors that occurs in the Malaysian public community colleges (MPCOLLEGE sector).

2. Context of the study

Many researchers argue that the nature of Malaysian public administration system has become one of the key factors that strongly affect the design of rewards (monetary and non-monetary) allocation of government agencies (Guat Leng, Ismail & Cheekiong, 2007; Ismail, Ismail & Sulaiman, 2007; Sulaiman & Mamman, 1996). For example, several reports of the Malaysian Royal Commission on salary

(Aziz Report, 1968; Jabatan Perkhidmatan Awam, 2002; Suffian Report, 1967) revealed that compensation policies and procedures for public sector employees in Malaysia are designed, administered and monitored by a central government agency, the Public Service Department (PSD). Under this system, monetary rewards and benefits program are allocated based on internal equity variables, such as qualifications, training, job categories and the ability to pay.

In 1991, the New Remuneration System (SSB) was implemented in the Malaysian public sector to strengthen the traditional job-based pay by adding merit principles as a criterion to determine extra rewards for high performing employees (Jabatan Perkhidmatan Awam, 1991; Mahathir Report, 1991). In accordance with the current national challenges, pay distribution rules as practiced in the SSB were replaced by the Malaysian Remuneration System in 2002 (Jabatan Perkhidmatan Awam, 2002; Malaysian Public Service Department, 2006). The new pay perspectives in the SSB are 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, a 100% increase in the cost of living allowances is allocated for certain cities in the country. This is in line with the government's aspiration to improve public employees' welfares and their standards of living (Bernama, 2007; Jabatan Perkhidmatan Awam, 2007).

The nature of Malaysian public sector has strongly influenced the MPCOLLEGE sector. These colleges were recently upgraded as institutions of higher learning to provide technical education and lifelong learning experiences. In terms of compensation system, the HR managers of this sector are not given autonomous power to design the type, level and/or amount of non-monetary rewards, but they are allowed to use their creativity and innovation in improving the procedures for allocating the various types of non-monetary rewards within the limits set up by PSD (Guat Leng et al., 2007).

In order to understand the nature of benefits program in the organizational sector, in-depth interviews were conducted involving 30 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 the organization to pay and national employment laws. These 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). Academic employees who work in different and/or similar job groups have different views about the implementation of such benefits distribution rules (Jabatan Perkhidmatan Awam, 2007). For example, if employees perceived that the allocation of benefits (e.g., leave, health treatment, loan and pension plans) is adequately or inadequately distributed based on proper rules, this will affect their feelings of distributive justice. As a result, it may lead to increased or decreased job satisfaction and organizational commitment. Although the nature of this relationship is interesting, empirical evidence supporting the mediating effect of distributive justice in the benefits system of MPCOLLEGE Sector is limited because of the paucity of research literature in this country (Guat Leng et al., 2007; Ismail, Omar Lim, Joon & Guat Leng, 2007).

3. Relationship between adequacy of benefits, distributive justice, job satisfaction and organizational commitment

The mediating effect of distributive justice in the MMPCOLLEGE 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 & 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 & 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), and equitable benefits and flexible working hours based on a sample of 347 U.S. nurses (Carr & Kazanowski, 1994) 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), and medical benefits for part-time or temporary teachers and their families in U.S. schools (Dickhart, 2005) 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, 2004; William & Dreher, 1992).

4. Conceptual framework and research hypotheses

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

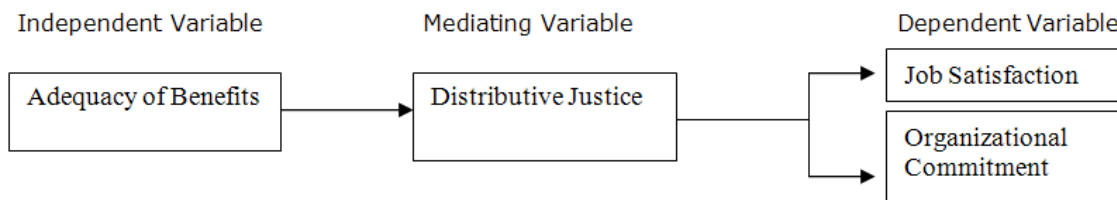


Figure 1: Distributive Justice Mediates the Relationship between Adequacy of Benefits and Individual Attitudes and Behaviors

Based on the evidence, it seems reasonable to assume that fairness of benefits program will influence MPCOLLEGE sector employees the way this feeling influences US employees. Equity theory suggests that if MPCOLLEGE sector employees perceived 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 job dad organizational commitment.

5. Methodology

This study used a cross-sectional research design which allowed the researchers to integrate literature review, in-depth interviews, pilot study and survey questionnaires as the main procedures to gather data for this study. The main advantage of using this procedure is the potential to gather more accurate and less biased data (Cresswell, 1998; Sekaran, 2000). At the initial stage of data collection, in-depth interviews were conducted involving 30 academic employees from community colleges in Kuching and employees of other community colleges who were attending a seminar in Peninsular Malaysia. The interviews were conducted based on the guidelines established by Easterby-Smith, Thorpe and

Lowe (1991), Wright (1996), and Usunier (1998). For the first step in this interview, the researchers designed flexible interview questions which were related to six issues: type, level and/or amount of benefits program available to employees, adequacy of benefit characteristics, distributive justice features, attitudinal and behavioral outcomes, effect of adequacy of benefits on employees' feelings of distributive justice, and effect of employees' feelings of justice about the adequacy of benefits on employees' attitudes and behavior. Second, a purposive sampling technique was used to identify 30 interviewees (academic employees) who possessed good knowledge and experiences about compensation system practiced in the organizations. Information gathered from such employees helped the researchers to understand the nature of compensation policies and procedures, employees' perceptions about the adequacy of benefits, distributive justice features, job satisfaction and organizational commitment characteristics, as well as the relationship between such variables in the studied organizations. Third, information gathered from such interviewees was constantly compared to the related literature review in order to put the research results in a proper context. The results of the triangulated information were presented in a content analysis table in order to clearly understand the particular phenomena under study. Finally, the categorized information was used as a guideline to develop the content of survey questionnaires for a pilot study. A pilot study was later conducted by discussing the survey questionnaires with 30 academic employees who worked in the community colleges in Sarawak. Their feedbacks were used to verify the content and format of questionnaires developed for the 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 four sections. First, the adequacy of benefits section had 4 items that were modified from benefits management literature (Henderson, 2007; Milkovich & Newman, 2008). The dimensions used to measure adequacy of benefits were (1) length of annual leave, (2) types of leave, (3) benefits entitlements, and (4) total benefit package. Second, the distributive justice section had 4 items that were modified from organizational justice literature (Adams, 1963, 1965; Allen & White, 2002; Moorman, 1991). The dimensions used to measure distributive justice dealt with the extent of which individuals perceived to be fair or unfair about: (1) distribution of benefits level based on position, (2)

distribution about benefits type based on experience and skills, (3) distribution of benefits form received based on highest educational qualification, and (4) distribution of benefits amount based on superiors' evaluations and recommendations.

Third, the job satisfaction section had 4 items that were modified from the job satisfaction scale developed by Warr, Cook and Wall (1979). The dimensions used to measure job satisfaction were (1) enjoyment in working, (2) freedom to choose methods of working, (3) job responsibility, and (4) physical working conditions. Finally, the organizational commitment section had 4 items that were modified from an organizational commitment scale developed by Mowday, Steers and Porter (1979). The dimensions used to measure this variable were (1) loyalty to college, (2) importance of organizational commitment, (3) being part of the college, and (4) making significant efforts for the organization. These items were measured using a 7-item 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 of analysis for this study was academic employees who have worked in the MPCOLLEGE sector. The researchers obtained official permission from the Headquarters of community colleges in Kuala Lumpur to conduct this study in any of the 35 community colleges throughout the country. After contacting all the targeted colleges, 15 of them formally agreed to participate in this study. A convenient sampling technique was used to distribute 300 questionnaires to academic employees through contact persons such as HR managers and/or assistant HR managers in the participating colleges. Out of that total, 190 usable questionnaires were returned to the researchers, yielding a 63 percent response rate. The survey questionnaires were answered by participants based on their consent and on a voluntary basis. A Statistical Package for Social Science (SPSS) version 14.0 was used to analyze the construct validity and reliability and thus test the research hypotheses.

6. Results and Discussion about findings

In terms of sample profile, the personal characteristics of respondents in MPCOLLEGE were shown in Table 1. Most respondents were aged between 26 to 30

years (53.2 percent). A large number of respondents had a bachelor degree (61.1 percent). The majority of respondents were lecturers (88.4 percent). Most of the respondents were in the field of Technical and Engineering (61.1 percent). The biggest group of respondents served as permanent and confirmed staff (62.1 percent). Respondents who had worked from 2 to 5 years (61.6 percent) were the majority group. Majority of the respondents did not receive incentives (56.6 percent). Finally the salaries of the majority of respondents were in between 1000 to 2000 (57.4 percent).

Age (%) Less than 25years old=11. 26 to 30 years old=53.2 31 to 35 years old=17.4 36 to 40 years old=5.8 41 to 45 years old=3.2 More than 46 years old=8.9	Field of study (%) Technical & =61.1 Engineering Science & =38.9 Technology	Type of service (%) Permanent & =62.1 confirmed Permanent & =17.9 probation Temporary =18.9 Contract =.5	Incentives (%) Critical allowances =39.7 Incentives for science, mathematics & engineering lecturers =3.7 Non above =56.6
Qualification (%) Diploma=19.5 Bachelor=61.1 Masters=19.5	Designation (%) Director =2.6 Senior lecturer=8.9 Lecturer =88.4	Length of service (%) Less than 1 year=16.3 2 to 5 years=61.6 6 to 9 years=5.8 9 to 12 years=1.6 More than 12 years =14.	Basic salary (%) 1000 to 2000=57.4 2001 to 3000=34.7 3001 to 4000=4.2 4001 to 5000=2.1 5001 to 6000=1.6

Table 1: Respondent Characteristics

Table 2 shows the results of validity and reliability analyses for measurement scales. A factor analysis with direct oblimin rotation was first done for four variables with 16 items. After that, Kaiser-Mayer-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 representing each research variable was 0.5 and more, indicating that 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, and (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 & Bernstein, 1994). These statistical analyses confirmed that measurement scales used in this study have met the acceptable standard of validity and reliability analyses as shown in Table 2.

Measure	Items	Factor Loadings	KMO	Bartlett's Test of Sphericity	Eigenvalue	Variance Explained	Cronbach Alpha
Adeq. of Ben.	4	.65 to .91	.76	363.32	2.78	69.49	.85
Distrib. Justice	4	.75 to .85	.81	331.37	2.77	69.83	.86
Job Satisfaction	4	.69 to .78	.79	229.02	2.51	62.71	.80
OC	4	.71 to .88	.79	325.96	2.77	69.34	.85

Table 2: The Validity and Reliability Analyses for Measurement scales

Table 3 shows the results of Pearson correlation analysis and descriptive statistics. Means for all variables are between 3.4 and 5.7, signifying the levels of benefits, distributive justice, job satisfaction and organizational commitment ranging from moderately high (3) 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 co linearity problem (Hair et al., 1998).

Variable	Mean	Standard Deviation	Pearson Correlation Analysis			
			1	2	3	4
1. Adequacy of Benefits	3.4	1.4	(1)			
2. Distributive Justice	3.7	1.2	.52**	(1)		
3. Job Satisfaction	4.7	1.2	.38**	.40**	(1)	
4. OC	5.7	1.0	.24**	.27**	.51**	(1)

Note: *Significant at 5%; **Significant at 1%; ***Significant at .01%
Reliability estimation is shown in parentheses (1)

Table 3: The Pearson Correlation Analysis and Descriptive Statistics

Stepwise regression analysis was recommended by several scholars, such as Aiken, West and Reno (1991), Berenson and Levine (1992), Fox (1991) and Kleinbaum, Kupper and Muller (1988) as an appropriate statistical tool to examine the mediating effect of distributive justice in the hypothesized model. By using this regression analysis, one may assess the direct relationship between variables as well as show the causal relationship and the nature of relationship between variables. It can accurately quantify the magnitude and direction of each independent variable, and vary the mediating variable relationship between many independent variables and one dependent variable (Aiken et al., 1991; Foster,

Stine, & Waterman, 1998; Kleinbaum et al., 1988). 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.

Variable	Job Satisfaction			Organizational commitment		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
<u>Controlling variable</u>						
Age	.18	.18	.17	.19	.19	.18
Qualification	-.07	-.12	-.11	-.01	-.03	-.03
Designation	.01	.07	.06	-.05	-.01	-.01
Field of study	.02	-.02	-.04	.14	.12	.11
Incentives	-.08	.01	.02	-.15	-.10	-.09
Length of service	-.06	-.01	.05	-.22	-.19	-.15
Type of service	.15	.20*	.20*	-.00	.03	.02
Basic salary	.07	.10	.07	.03	.05	.02
<u>Independent variable</u>						
Adequacy of benefits		.42***	.28***		.23**	.13
<u>Mediating variable</u>						
Distributive justice			.27***			.19*
R Squared	.04	.21	.26	.03	.08	.11
Adjusted R ²	.001	.17	.22	.01	.03	.06
F	.97	5.2***	6.27***	.71	1.70	2.10*
R Square Change	.04	.17	.05	.03	.05	.03
F Change R ²	.97	37.66***	12.69***	.71	9.38**	5.30*

Table 4: The Pearson Correlation Analysis and Descriptive Statistics Result for Stepwise Regression Analyses with Distributive Justice as the Mediating Variable, Adequacy of Benefits as the Independent Variable and Job Satisfaction and Organizational Commitment as the Dependent Variables

The results of testing mediating model using a stepwise regression analysis are shown in Table 4. In this model testing, demographic variables were entered in Step 1 and then followed by entering independent variable in Step 2, and mediating variable in Step 3. An examination of multicollinearity in the coefficients table shows that the tolerance values for the relationship between the independent variable (*i.e.*, adequacy of benefits) and the dependent variable (*i.e.*, job satisfaction and organizational commitment) were .93. While, the tolerance values for the relationship between the independent variable (*i.e.*, adequacy of benefits), the mediating variable (*i.e.*, distributive justice) and the dependent variable (*i.e.*, job satisfaction and organizational commitment) were .71. These tolerance values were more than tolerance value of .20 (as a rule of thumb), indicating the variables

were not affected by multicollinearity problem (Fox, 1991; Tabachnick, Barbara & Fidell, 2001).

The table shows the outcomes of testing hypotheses in Step 3: first, relationship between distributive justice and adequacy of benefits positively and significantly correlated with job satisfaction ($\beta=.27$, $p<0.001$), therefore H1 was supported. This relationship explains that before the inclusion of distributive justice into Step 2, adequacy of benefits significantly correlated with job satisfaction ($\beta=.42$, $p<0.001$). In terms of explanatory power, the inclusion of adequacy of benefits in this step had explained 21 percent of the variance in dependent variable. As shown in Step 3, (after the inclusion of distributive justice into this step), the previous significant relationship between adequacy of benefits did not change to non-significant ($\beta=.28$, $p<0.001$), but the strength of relationship adequacy of benefits and job satisfaction was decreased. In terms of explanatory power, the inclusion of distributive justice in this step had explained 26 percent of the variance in dependent variable. This finding demonstrates that distributive justice does act as a mediating variable in the relationship between such variables.

Second, relationship between distributive justice and adequacy of benefits positively and significantly correlated with organizational commitment ($\beta=.19$, $p<0.05$), therefore H2 was supported. This relationship explains that before the inclusion of distributive justice into Step 2, adequacy of benefits ($\beta=.23$, $p<0.01$) was significantly correlated with organizational commitment. In terms of explanatory power, the inclusion of adequacy of benefits in this step had explained 8 percent of the variance in dependent variable. As shown in Step 3, (after the inclusion of distributive justice into this step), the previous significant relationship between adequacy of benefits had changed to non-significant ($\beta=.13$, $p>0.05$). In terms of explanatory power, the inclusion of distributive justice in this step had explained 11 percent of the variance in dependent variable. This result demonstrates that distributive justice does act as a mediating variable in the relationship between such variables.

The results of this study confirmed that distributive justice does act as a full mediating variable in the relationship between adequacy of benefits and individual attitudes and behaviors in the organizational sector sample. In the MPCOLLEGE sector, the management of individual colleges has determined the type, level

and/or amount of benefits for 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 subsequently enhances their feelings of distributive justice. As a result, it may lead to increased job satisfaction and organizational commitment in the workplace.

7. Limitations of the Study

The conclusions drawn from this study should consider the following limitations. First, 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. Second, this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Third, the outcomes of multiple regression analysis have only focused on the level of performance variation explained by the regression equations (Tabachnick et *al.*, 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. Implications of the Study

Implications of this study can be divided into three major aspects: theoretical contribution, robustness of research methodology and practical contribution. In terms of theoretical contribution, the findings of this study showed that adequately allocating benefits to employees would invoke their feelings of distributive justice, and this might 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 could enhance their feelings of distributive justice, which in turn might lead to higher organizational commitment. This result was strongly supported by studies done by Dickhart (2005), Roberts (2001), and Royalty and Abraham (2005). These findings have extended previous research conducted in most Western countries and provided

great potential to understand the notion of distributive justice in the MPCOLLEGE sector—benefits system model. With respect to the 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, managers can use the findings of this study as guidelines to improve the design and management of benefits programs. In order to achieve the objectives, improvement efforts should focus on two major aspects: first, the rules for allocating the type, level and/or amount of benefits need to be adjusted according to the current national standard of living. If the level of benefits program were determined based on national cost of living, this might protect employee welfare, increase their purchasing power, and decrease their burdens in fulfilling family and personal needs. Second, the rules for allocating the type, level and amount of benefits need to consider individuals' conditions. 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 were given better benefit levels, this would invoke their self-fulfillments and thus might lead to increased satisfaction, commitment and performance.

Third, the contents and methods 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 experienced 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 considered the above suggestions, this might strongly motivate employees to support organizational and human resource management's strategies and goals.

9. Directions for Future Research

The conceptual and methodological limitations of this study should be considered when designing future research. First, several organizational and personal 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. Second, 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. Third, 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. Fourth, 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 & Fink, 1994; Miceli & 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 & Fink, 1994; Sterling, 1994; Ismail & Joon, 2006). The importance of these issues needs to be further explained in future research.

10. Conclusion

This study has confirmed that distributive justice does act as a full mediating variable in the relationship between adequacy of benefits and individual attitudes and behaviors. This result is consistent with the benefits program literature mostly published in Western countries. Therefore, current research and practice within benefits management need 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 attitudinal and behavioral 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.

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