

Relationship between Performance Based Pay, Interactional Justice and Job Satisfaction: A Mediating Model Approach

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Abstract

This study was conducted to examine the influence of interactional justice in the relationship between performance based pay and job satisfaction using 334 usable questionnaires gathered from employees who work in Malaysian private institutions of higher learning (PRIVATE INSTITUTION), Malaysia. Exploratory factor analysis confirmed that the measurement scales used in this study met the acceptable standards of validity and reliability analyses. Further, the outcomes of Stepwise Regression analysis showed two important findings: First, performance based pay (i.e., participation in pay systems and adequacy of pay) significantly correlated with job satisfaction. Second, linking performance based pay (i.e., participation in pay systems and adequacy of pay) to interactional justice significantly correlated with job satisfaction. Statistically, this result demonstrates that interactional justice does act as a partial mediating variable in the relationship between performances based pays and job satisfaction in the studied organizations. In addition, discussion, implications and conclusion are elaborated.

Keywords: Performance based pay, Interactional justice, Job satisfaction, Malaysia

1. Introduction

Compensation is equally as important as any other human resource management functions where it deals with salary and wages, remuneration, reward and/or pay system. These terms are often used interchangeably in organizations, but its significance refers to the same thing (Bergmann & Scarpello, 2002; Milkovich & Newman, 2009). In a human resource management perspective, compensation is often viewed as an employer who designs and administers the various types of pay systems to reward its employees who provide services and/or perform a certain job or jobs (Henderson, 2009; McShane & Von Glinow, 2005). Many employers design compensation programs to pay and reward their employees based on job and performance/s. Job based pay is also known as membership and seniority based rewards where an employer provides the type, level and/or amount of monetary and non monetary payments based on the merit of job (e.g., pay rates are allocated according to employees' skills, efforts, responsibilities, and job conditions) (Bergmann & Scarpello, 2002; Figart, 2000; McShane & Von Glinow, 2005). For example, the forms of job based pay implemented in organizations are time based pay, membership based pay and tenure based pay. Adoption of such pay systems, although may still be appropriate and applicable in stable and highly predictable business conditions (Wilton, 2010; Mahoney, 1992; Kanter, 1989), is gradually viewed as insufficient to attract, retain and motivate competent employees to increase organizational performance (Bergmann & Scarpello, 2002; Maurer et al, 1995).

In an era of global competition, many employers have shifted the paradigms of compensation program from a traditional job based pay to performance based pay in order to support their organizational strategy and goals (Henemen et al., 2000; Lawler, 2000). Performance based pay is also known as person based pay where an employer provides the type, level and/or amount of monetary and non monetary payments based on employees' skills, knowledge, competencies and/or merit (Bender, 2003; Blau & Kahn, 2003; Henderson, 2009). Performance based pay has two major types: pay for group performance (team based pay and gain-sharing) and pay for individual performance (e.g., merit pay, lump sum bonus, promotion based incentives and variable pay) (Milkovich & Newman, 2009). However performance based pay has different types, they use the similar criterion to allocate pays, which is when an employer rewards additional pays to basic pay in order to meet high performers' needs and expectations (Chang & Hahn, 2006; Lawler et al., 1993; Lee et al., 1999). In other words, the rules for distributing rewards, the fluctuations of pay levels and structures are now contingent upon the level of performances, skills, knowledge and/or competency exhibited by the employees and not the nature of their job structure (Amuedo-Dorantes & Mach, 2003; Appelbaum & Mackenzie, 1996; Lee et al., 1999).

Many scholars think that performance based pay and job based pay have used different treatments in allocating rewards to all employees who work in different job categories, but the ability of management to properly implement performance based pay will be able to attract, retain and motivate employees to achieve the major objectives of the organizational pay system: efficiency (i.e., improving performance, quality, customers, and labor costs), equity (i.e., fair pay treatment for employees through recognition of employee contributions and employees' needs) and compliance with laws and regulations (Gomez-Mejia & Balkin, 1992a & 1992b; Milkovich & Newman, 2009). Hence, it may lead to sustained and increased organizational competitiveness in a dynamic marketplace (Appelbaum & Mackenzie, 1996; Lawler, 2000; Beardwell & Claydon, 2007).

Performance based pay has two salient features: participation in pay systems and adequacy of pay (Brown et al., 2010; Fay & Thompson, 2001; Ismail et al., 2007; Lee et al., 1999). Extant research in pay systems shows that the ability of management to properly implement performance based pay features may have a significant impact on work attitudes and behaviors, especially job satisfaction (Brown et al., 2010; Heywood & Wei, 2006; McCausland et al., 2005). According to a high performing human resource practice, participation in pay systems is often seen as an employer who encourages employees in different hierarchical levels and categories to discuss and share information-processing, decision-making, and/or problem-solving activities related to pay systems (Belcher & Atchison, 1987; Ismail et al., 2007). Most organizations practice two major participation styles: participation in pay design (e.g., start-up stages of pay system) and participation in pay administration (e.g., operation stages of pay system) (Belfield & Marsden, 2003; Kim, 1996 & 1999; Lee et al., 1999). Participation in the design of pay systems refers to employees who are given more opportunity to provide ideas in establishing pay systems to achieve the major goals of its system, stakeholders needs and/or organizational strategy (Gomez-Mejia & Balkin, 1992a & 1992b; Lawler et al., 1993). Participation in the administration of pay systems refers to employee participation in both input and output. Participation in input means employees provide suggestions to determine the enterprise's goals, resources, and methods. Participation in output means employees are permitted to share the organization's rewards in profitability and/or the achievement of productivity objectives (Coyle-Shapiro et al., 2002; Kim, 1996 & 1999). For example, a pro-social organisational behavior literature highlights that making constructive suggestions in performance based pay system (e.g., merit pay and gain-sharing plans) will encourage employees to be honest in making personal contributions, this may lead to improved job satisfaction (Giacobbe-Miller et al., 1998; Mani, 2002).

Many scholars often interpret adequacy of pay from cultural, organizational and individual perspectives. In terms of cultural perspective, an individualistic culture perceives adequacy of pay as equity (e.g., equitable or inequitable pay) whereas a collective culture perceives adequacy of pay as equality, pay for the length of service or seniority and pay for individuals' needs (Giacobbe-Miller et al., 1998; Money & Graham, 1999). In organizations, adequacy of pay is often defined as the type, level and/or amount of pay which is provided by an employer to its employee who work in different job groups based on the organizational policy and procedures (Anthony et al., 1996; Milkovich & Newman, 2009). From an individual perspective, adequacy of pay is often viewed based on a social comparison theory, which posits that an individual perceives the adequacy of the type, level and/or amount of pay based on a comparison between what he/she receives and what he/she expects. An individual will perceive the type, level and/or amount of pay as adequate if he/she views that the pays are provided equitable with his/her contribution (e.g., ability to perform job, merit, skills and/or performance) (Adams, 1963 & 1965; Skarlicki & Folger, 1997; Sweeney & McFarlin, 1993).

Surprisingly, a thorough review of such relationships reveals that effect of pay for performance characteristics of job satisfaction is indirectly affected by feelings of interactional justice (Ismail et al., 2007; Omar & Ogenyi, 2006; Pettijohn et al., 2001). In an organizational behavior perspective, many scholars, such as Greenberg (1996, 2003), McShane and Von Glinow (2005) and Skarlicki and Folger (1997) view interactional justice as an important aspect of organizational justice theories, which states that an individual is often sensitive to the quality of interpersonal treatment that they receive from their managers during the enactment of organizational procedures. If an individual perceives that decision makers (e.g., manager or supervisor) practice fair treatments (e.g., shows respect and accountable) in performance appraisal systems, this will invoke employees' feelings of interactional justice.

Application of the justice theory in pay for performance framework shows that the ability of managers to use fair treatments in determining the type, level and/or amount of pay based on performance ratings and appreciating

employees' constructive suggestions in pay for performance plans will strongly invoke employees' feelings of interactional justice. As a result, it may lead to an increased job satisfaction (Bies et al., 1988; Greenberg, 1996 & 2003; Skarlicki & Folger, 1997). However, even though numerous studies have been done, little is known about the mediating role of interactional justice in performance based pay literature (Adams, 1963 & 1965; Ismail et al., 2007; Shaw et al., 1999). Many scholars reveal that interactional justice is less emphasized because previous studies have over emphasized on a segmented approach and the direct-effect model in analyzing performance based pay and job satisfaction relationships, as well as given less attention on the significance of interactional justice feelings in developing performance based pay models. Consequently, findings from these studies have not captured the views of employees' feelings of interactional justice in explaining the effectiveness of performance based pay models in dynamic organizations (Ismail et al., 2007; Brown et al., 2010; Omar & Ogenyi, 2006). Therefore, it motivates the researchers to explore the issue.

This study has four major objectives: First, to measure the relationship between participation in pay systems and job satisfaction. Secondly, this study is conducted to measure the relationship between adequacy of pay and job satisfaction. Thirdly, to measure the mediating effect of interactional justice in the relationship between participation in pay systems and job satisfaction. Fourth, measure the mediating effect of interactional justice in the relationship between adequacies of pays and job satisfaction.

2. Literature Review and Hypotheses Development

Many previous studies used a direct effects model to examine the type of pay system using different samples, such as 9,831 different individuals in United Kingdom (McCausland et al., 2005), respondents taken from the 1988 wave of the US National Longitudinal Study of Youth (Heywood & Wei, 2006), and 2,336 employees in a large public sector research organization (Brown et al., 2010). These studies found that the ability of managers to appropriately determine the levels of pay according to employee performance and properly design and allow employee participation in making pay decisions had increased job satisfaction in the organizations (Brown et al., 2010; Heywood & Wei, 2006; McCausland et al., 2005). Therefore, it can be hypothesized that:

H1: There is a positive relationship between participation in pay systems and job satisfaction

H2: There is a positive relationship between adequacy of pay and job satisfaction

Several recent studies used an indirect effects model to investigate pay distribution and administration systems and found that effect of performance based pay on job satisfaction is indirectly affected by interactional justice. For example, further studies about participation in pay systems were implemented using different samples, such as 115 sales people (Pettijohn et al., 2001), and 107 employees in one USA manufacturing subsidiary firm in Sama Jaya Free Industrial Zone, Sarawak (Ismail et al., 2007). Findings from these studies reported that the willingness of managers to allow employee participation in making decisions about pay rates and levels (e.g., open discussion and better explanations about evaluation methods) had increased employees' feelings of interactional justice. Consequently, it could lead to an increased job satisfaction in the organizations (Ismail et al., 2007; Pettijohn et al., 2001).

Conversely, recent studies about adequacy of pay were conducted using different samples, such as U.S. group (153 sales representatives and 146 sales managers) and Japanese group (175 of sales representatives and 93 sales managers) (Money & Graham, 1999), 248 senior managers in the Nigerian Civil Service (Omar & Ogenyi, 2006), and 107 employees in one USA manufacturing subsidiary firm in Sama Jaya Free Industrial Zone, Sarawak (Ismail et al., 2007). Outcomes of this study showed that the ability of managers to appropriately determine the levels of pay according to employee performance had increased their feelings of interactional justice about the pay systems. As a result, it could lead to an enhanced job satisfaction in the organizations (Ismail et al., 2007; Money & Graham, 1999; Omar & Ogenyi, 2006).

The performance based pay literature is consistent with the notion of interactional justice theories, namely Leventhal's (1976) self-interest model, Lind and Tyler's (1988) group value model, and Folger et al. (1992) due-process appraisal system. For example, Leventhal's (1976) self-interest model suggest six justice rules in making decisions: decisions based on accurate information, apply consistent allocation procedures, do correct decisions, suppress bias, practice moral and ethical standards in decision-making and ensure allocation process meet recipients' expectation and needs. Lind and Tyler's (1988) group value model suggest three types of relational judgments about authorities: standing or status recognition (e.g., assessments of politeness, treatment with dignity, and respect individuals' rights and entitlements), neutrality (e.g., decision-making procedures are unbiased, honest and decision based on evidence), and trust (e.g., motives of the decision-maker are fair and reasonable or otherwise).

Folger et al (1992) due-process appraisal system suggest three justice characteristics; adequate notice (e.g., explanation, discussion and feedback about performance criteria), fair hearing (e.g., informing performance assessments and their procedures through a formal review session) and judgment based on evidence (e.g., applying consistent performance criteria and honesty and fairness principles, as well as providing better explanations about performance ratings and reward allocations). If these justice decisions are properly done by managers, this may determine the adequacy of pays and respect employees' views in the process of distributing the type, level and/or amount of pay based on performance ratings. These practices will strongly invoke employees' feelings of interactional justice, where this may lead to higher job satisfaction (Money & Graham, 1999; Pettijohn et al., 2001).

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

Insert Figure 1 - here

Based on the framework, it can be hypothesized that:

H3: Interactional justice positively mediates the effect of participation in pay systems on job satisfaction

H4: Interactional justice positively mediates the effect of adequacy of pay on job satisfaction

3. Research Design

This study used a cross-sectional research design that allowed the researchers to integrate compensation management literature, the in-depth interview, the pilot study and the actual survey as a main procedure to gather data. Using such methods may gather accurate data, decrease bias and increase quality of data being collected. The main advantage of using such methods may gather accurate and less biased data (Cresswell, 1998; Sekaran, 2003). The unit of analysis for this study was employees who have worked in Malaysian private institutions of higher learning (PRIVATE INSTITUTION).

At the initial stage of this study, in-depth interviews and pilot study were conducted in the headquarters of the PRIVATE INSTITUTION at Kuala Lumpur. The in-depth interviews involved fifteen experienced academicians and non-academicians who have worked in Malaysian institutions of higher learning sector. In terms of compensation system, a performance based pay has been implemented at all levels in the organizations. In this pay system, performance appraisal is used to measure employee performance and outcomes of this appraisal will be used to determine pay rises. For example, percentages of merit increment, bonus and certain benefits are different between high performing employees (i.e., excellence service award employees) and non high performing employees (i.e., non excellence service award employees). In order to ensure equity in compensation management, the managers use standardized allocation rules to determine the type, level and/or amount of pay (e.g., recognitions, incentives and pay preferences), and recognizing employees' views when attending informal and/or formal meetings organized by the management of this organization (e.g., departmental and group work meetings). A further investigation of the interviews' results reveals that the ability of the management to appropriately allocate the type, level and /amount of pay based on employee contributions (e.g., job and/or merit) and properly use participation in pay systems in dealing with employees' demands and complaints has been a major factor that may increase employees' fairness about the design and administration of pay for performance. As a result, it may induce positive personal outcomes, especially job satisfaction. Although the nature of this relationship is interesting, little is known about the influence of feelings of interactional justice in the performance based pay models of the studied organizations.

Information gathered from the interviews was categorized and compared to the performance based pay literature. Next, outcomes of this comparison were used to develop the content of survey questionnaire for a pilot study. Thus, a pilot study was done by discussing the survey questionnaires with twenty academicians and non-academicians. Their opinions were sought to verify the content and format of survey questionnaires for an actual study. Back translation techniques were used to translate the survey questionnaires into English and Malay languages in order to increase the validity and reliability of research findings (Cresswell, 1998; Sekaran, 2003).

The survey questionnaires used in this study had four sections. First, participation in pay systems had four items that were adapted from pay administration literature (Greenberg, 1996, 2003; Milkovich & Newman, 2009; Money & Graham, 1999; Pettijohn, et al., 2001). Second, adequacy of pay had four items that were adapted from pay design literature (Milkovich & Newman, 2009; Kim, 1996 & 1999; Gomez-Mejia & Balkin, 1992a & 1992b). Third, interactional justice had four items that were adapted from organizational justice literature (Cohen-Charash & Spector, 2001; Cropanzano et al., 2001; Folger et al., 1992; Greenberg, 1996, 2003; Skarlicki & Folger, 1997). Finally, job satisfaction had nine items that were adapted from job satisfaction literature (Oldham et al., 1976; Warr et al., 1979). All items used in the questionnaires were measured using a 7-item scale ranging from "strongly disagree/dissatisfied" (1) to "strongly agree/satisfied" (7). Demographic variables (i.e., gender, age, race, status, length of service, salary and position) were used as a controlling variable because this study focused on employee attitudes.

The researchers had obtained an official approval to conduct the study from the head of the target organization and also received advice from the specific authority about the procedures of conducting the survey in the studied organization. After considering the organizational rules, a quota sampling technique was used to determine the sample size based on the length of this study and financial constraints, which were 334 employees. After that, a convenient sampling technique was used to distribute 334 survey questionnaires to employees who have worked in every department in the organizations. This sampling technique was chosen because the list of registered employees was not given to the researchers and the survey questionnaires must be distributed through the HR office. From the total number of 334 distributed questionnaires, 132 usable questionnaires were returned to the researchers, yielding 52.8 percent of the response rate. The survey questionnaires were answered by participants based on their consents and voluntarily basis.

A Statistical Package for Social Science (SPSS) version 16.0 was used to analyze the questionnaire data. Firstly, exploratory factor analysis was used to assess the validity and reliability of measurement scales (Hair et al, 2006). Secondly, Pearson correlation analysis and descriptive statistics were conducted to determine the collinearity problem, further confirm the validity and reliability of constructs and thus test research hypotheses (Tabachnick &

Fidell, 2001; Yaacob, 2008). Finally, 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 (Foster et al., 1998). Baron and Kenny (1986) suggest that a mediating variable can be considered when it meets three conditions: first, the predictor variables should be significantly correlated with the hypothesized mediator. Second, all the predictor and mediator variables should also be significantly correlated with the dependent variable. Third, a previously significant effect of predictor variables should be reduced to non-significance or reduced in terms of effect size after the inclusion of mediator variables into the analysis (Wong et al., 1995). In this regression analysis, standardized coefficients (Standardized Beta) were used for all analyses (Jaccard et al., 1990).

4. Results and Discussion

Table 1 shows the profile of respondents in the sampled PRIVATE INSTITUTION, Malaysia. Majority respondents were females (20.8%), ages between 26 to 30 years old (17.3%), Bachelor degree holders (17.6%), position as a lecturer (19.6%), work in an academic division (28.7%), workers who served between 3 to 5 years (15.5%), types of service (permanent and confirmed) (27.5%), their salary between RM1001 – 1500 (10.8%) and Malaysian citizens (36.2%).

Insert Table 1 - here

Table 2 shows the results of validity and reliability of the measurement scales. A factor analysis with direct oblimin rotation was done for four variables with 21 items. Next, the 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 et al. (2006), and Nunally and Bernstein's (1994) guideline, these statistical analyses showed that specifically, these statistical results showed that (1) all research variables exceeded the acceptable standard of Kaiser-Meyer-Olkin's value of 0.6, (2) all research variables were significant in Bartlett's Test of Sphericity, (3) all research variables had Eigen values larger than 1, (4) the items for each research variable exceeded Factor Loadings of 0.40 (Hair et al., 2006), and (5) all research variables exceeded the acceptable standard of Cronbach Alpha of 0.70 (Nunally & Bernstein, 1994). These statistical results showed that the measurement scales used in this study met the acceptable standard of validity and reliability analyses as shown in Table 2.

Insert Table 2 - here

Table 3 shows the results of Pearson Correlation analysis and descriptive statistics. The means for all variables are from 3.29 to 4.54, signifying that the level of participation in pay systems, adequacy of pay, interactional justice and job satisfaction are ranging from moderately high (3) to highest level (7). Pay for performance (i.e., participation in pay systems and adequacy of pay) positively and significantly correlated with job satisfaction ($r=0.41, p<0.01$; $r=0.36, p<0.01$, respectively), indicating that these variables are important antecedents of job satisfaction.

The correlation coefficients for the relationship between the independent variable (i.e., participation in pay systems and adequacy of pay) and the mediating variable (interactional justice) and the relationship between the dependent variable (job satisfaction) were less than 0.90, indicating the data were not affected by serious collinearity problem (Hair et al., 1998). Thus, these statistical results provide further evidence of validity and reliability for measurement scales used in this research (Hair et al., 2006; Nunally & Bernstein, 1994).

Insert Table 3 - here

Table 4 shows the results of testing hypotheses in Step 3. The inclusion of interactional justice in Step 3 of the process reveals that relationship between interactional justice and performance based pay characteristics (i.e., participation in pay systems and adequacy of pay) is positively and significantly correlated with job satisfaction ($\beta=0.31, p<0.001$), therefore H3 and H4 were supported. This relationship explains that before the inclusion of interactional justice in Step 2, both pay for performance characteristics (i.e., participation in pay systems and adequacy of pay) were found to be significant predictors of job satisfaction (**Step 2: $\beta=0.27, p<0.001$; $\beta=0.34, p<0.001$ respectively**). In terms of explanatory power, the inclusion of these variables in this step had explained **28** percent of the variance in dependent variable. As shown in Step 3 (after the inclusion of interactional justice into the analysis ($\beta=0.31, p<0.001$), the previous significant relationship between pay for performance characteristics (i.e., participation in pay systems and adequacy of pay) did not change to non significant (**Step 3: $\beta=0.12, p<0.05$; $\beta=0.29, p<0.001$ respectively**), but the strength of the relationship between such variables was decreased. In terms of explanatory power, the inclusion of interactional justice in Step 3 had explained **35** percent of the variance in dependent variable. Statistically, this result confirms that interactional justice does act as a partial mediating variable in the pay for performance models of the studied organizations.

Insert Table 4 - here

5. Summary and Conclusion

Based on theoretical considerations, this study has proposed a model linking the constructs of performance based pay and interactional justice to the job satisfaction construct. The results of this study also provide empirical evidence of a link between performance based pay and interactional justice, performance based pay and job satisfaction and interactional justice and job performance. In addition, interactional justice acts as a mediating variable on the relationship between the performances based pay and job satisfaction. In this sense, this study confirms that interactional justice does act as a mediating variable in the pay system models of the studied

organizations. Consequently, the four hypotheses of the study were supported. In the organizational context, managers use compensation policy and rules set up by the stakeholder to determine the type, level and/or amount of pay for high performers. Employees perceive that the managers able to allocate sufficient rewards based on their performance. Besides that, managers encourage employees who work in different job groups to participate in the design and administration of pay systems. Employees perceive that the managers actively practice such participation styles among employees who work in different job groups. When employees perceive that they receive adequate pays from their employers and they are actively involved in the pay systems, this has increased employees' feelings of interactional justice. As a result, it may lead to higher job satisfaction in the studied 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 highlight two major issues: firstly, participation in pay systems indirectly affects job satisfaction through feelings of interactional justice. This result is consistent with studies by Pettijohn et al. (2001), and Ismail et al. (2007). Secondly, adequacy of pay indirectly affects job satisfaction via feelings of interactional justice. This result is consistent with studies by Money and Graham (1999), Omar and Ogenyi (2006), and Ismail et al. (2007). In sum, this study has provided a great potential to understand the influence of feelings of interactional justice in the pay for performance models of the studied organizations, as well as to support and extend previous research conducted in most Western countries.

With respect to the robustness of research methodology, the survey questionnaires used in this study have exceeded a minimum standard of validity and reliability analyses; this could lead to the production of accurate findings. In terms of practical contributions, the findings of this study may be used to upgrade the efficiency of designing and administering pay for performance in organizations. The improvement efforts can be done in two major aspects: Firstly, revising the extra rewards for high performers according to current national cost of living and organizational changes. For example, the willingness of employers to provide extra rewards will increase employees' positive perceptions that such rewards can fulfill their expectations, standards of living and statuses in society. As a result, it may motivate them to achieve organizational goals. Secondly, by improving the content and method of management development programs according to the current organizational needs. For example, the ability of employers to give more focus on creative soft skills (e.g., stimulate employees' intellectuals in doing job, respect employees' voices, counsel employees to increase their potentials to achieve better career, learn new problem solving skills approach and share the organizational interests) may upgrade the ability of managers to practice comfortable interactional styles in solving employees' complaints and demands. If organizations heavily consider such suggestions, this will decrease employees' misconceptions and misjudgments, as well as increase their acceptance and understanding about the implementation of performance based pay in organizations. Thus, it can motivate employees to sustain and support organizational competitiveness in an era of global competition.

The conclusion drawn from the results of this study should consider the following limitations. Firstly, the data was only taken once during the duration of this study. Therefore, it did not capture the developmental issues such as intra-individual change and restrictions of making inference to participants and/or causal connections between variables of interest. Secondly, this study only examines the relationship between latent variables and the conclusion drawn from this study does not specify the relationship between specific indicators for the independent variable, mediating variable and dependent variable. Thirdly, this study only focused on particular elements of performance based pay and neglected other important factors (e.g., communication, pay distribution criteria and management responsibility). Fourthly, other performance based pay outcomes (e.g., job commitment, job performance, job turnover and deviant behavior) that are significant for organizations and employees are not discussed in this study. Fifthly, although a substantial amount of variance in dependent measures explained by the significant predictors is identified, there are still a number of unexplainable factors that can be incorporated to identify the causal relationship among variables and their relative explanatory power (Tabachnick & Fidell, 2001). Finally, the sample for this study was taken using a convenient sampling technique in a single public organization sector. These limitations may decrease the ability of generalizing the results of this study to other organizational settings.

The conceptual and methodology limitations of this study need to be considered when designing future research. Firstly, the organizational and personal characteristics that act as a potential variable can influence the effectiveness of performance based pay should be further explored. If organizational and personal characteristics are used in research, this may provide meaningful perspectives for understanding the individual differences and similarities that affect attitudinal and behavioral outcomes. Secondly, the weaknesses of cross sectional research design may be overcome if longitudinal studies are used to collect data and describe the patterns of change and the direction and magnitude of causal relationships between variables of interest. Thirdly, the findings of this study may produce different results if this study is done in more than one organization. Fourthly, as an extension of the interactional justice, other theoretical constructs of organizational justice theory (e.g., distributive justice and procedural justice) needs to be considered because they have been widely recognized as an important link between performance based pay and personal outcomes (Ismail, et al., 2007; Brown et al., 2010; Omar & Ogenyi, 2006). The importance of these issues needs to be further discussed in future studies.

In sum, this study used a conceptual framework/model that was developed based on the performance based pay research literature. The measurement scales used in this study satisfactorily met the standards of validity and

reliability analyses. Outcomes of stepwise regression analysis confirmed that interactional justice partially mediated the effect of performance based pay (i.e., participation in pay systems and adequacy of pay) and job satisfaction in the studied organizations. This result has also supported performance based pay literature mostly published in Western countries. Therefore, current research and practice within the pay system model needs to consider perceptions of interactional justice as a critical aspect of the pay systems. This study further suggests that HR managers and/or managers should be trained to practice consistently good and fair treatments while allocating rewards and involving employees in making reward decisions. The ability of HR managers and/or managers to practice such treatments will strongly invoke employees' feelings of interactional justice, which in turn lead to increased positive attitudinal and behavioral outcomes. Thus, such positive outcomes may help to maintain and sustain organizational strategy and goals.

References

- Adams, J.S. (1963). Towards an understanding of inequity. *Journal of Abnormal and Social Psychology*, Vol.67, pp.422-436. <http://dx.doi.org/10.1037/h0040968>
- Adams, J.S. (1965). Inequity in social exchange. In Berkowitz, L. *Advances in Experimental Social Psychology*, Vol.2, pp.267-299. New York: Academic Press. [http://dx.doi.org/10.1016/S0065-2601\(08\)60108-2](http://dx.doi.org/10.1016/S0065-2601(08)60108-2)
- Amuedo-Dorantes, C., & Mach, T. (2003). Performance pay and fringe benefits. Work incentives or compensating wage differentials?. *International Journal of Manpower*, Vol.24, No.6, pp.673-698. <http://dx.doi.org/10.1108/01437720310496157>
- Appelbaum, S.H., & Mackenzie, L. (1996). Compensation in the year 2000: Pay for performance. *Health Manpower Management*, Vol.22, No.3, pp.31-39. <http://dx.doi.org/10.1108/09552069610125919>
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, Vol.51, pp.1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
- Belcher, D.W., & Atchison, T. (1987). *Compensation administration*. Englewood Cliffs, NJ: Prentice Hall.
- Belfield, R., & Marsden, D. (2003). Performance pay, monitoring environments and establishment performance. *International Journal of Manpower*, Vol.24, No.4, pp.452-471. <http://dx.doi.org/10.1108/01437720310485933>
- Bender, K.A. (2003). Examining equality between public and private sector wage distributions. *Economic Enquiry*, Vol.41, No.1, pp.62-80. <http://dx.doi.org/10.1093/ei/41.1.62>
- Beardwell, J., & Claydon, T. (2007). *Human resource management: A contemporary approach*. Prentice Hall/Financial Times.
- Bergmann, T.J., & Scarpello, V.G. (2002). *Compensation decision making*. United States: South-Western Thomson Learning.
- Bies, R.J., Sharpiro, D.L., & Cummings, L.L. (1988). Causal accounts and managing organizational conflict: Is it enough to say it's not my fault?. *Communication Research*, Vol.15, pp.381-399. <http://dx.doi.org/10.1177/009365088015004003>
- Blau, F.D., & Kahn, L.M. (2003). Understanding international differences in the gender pay gap. *American Economic Review*, Vol.21, No.1, pp.106-145.
- Brown, M., Hyatt, D., & Benson, J. (2010). Consequences of the performance appraisal experience. *Personnel Review*, Vol.39, No.3, pp.375-396. <http://dx.doi.org/10.1108/00483481011030557>
- Chang, E., & Hahn, J. (2006). Does pay-for-performance enhance perceived distributive justice for collectivistic employees?. *Personnel Review*, Vol.35, No.4, pp.397-412. <http://dx.doi.org/10.1108/00483480610670571>
- Coyle-Shapiro, J.A.-M., Morrow, P.C., Richardson, R., & Dunn, S.R. (2002). Using profit sharing to enhance employee attitudes: A longitudinal examination of the effects on trust and commitment. *Human Resource Management*, Vol.41, No.4, pp.423-439. <http://dx.doi.org/10.1002/hrm.10052>
- Cohen-Charash, Y., & Spector, P.E. (2001). The role of justice in organization: A meta-analysis. *Organizational Behavior and Human Decision Processes*, Vol.86, pp.278-324. <http://dx.doi.org/10.1006/obhd.2001.2958>
- Cresswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. London: SAGE publications.
- Cropanzano, R., Byrne, Z.S., Bobocel, D.R., & Rupp, D.R. (2001). Moral virtues, fairness heuristics, social entities and other denizens of organizational justice. *Journal of Vocational Behavior*, Vol.58, pp.164-209. <http://dx.doi.org/10.1006/jvbe.2001.1791>
- Fay, C.H., & Thompson, M.A. (2001). Contextual determinants of reward systems' success: An exploratory study. *Human Resource Management*, Vol.40, No.3, pp.213-226. <http://dx.doi.org/10.1002/hrm.1012>
- Figart, M. (2000). Equal pay for equal work: The role of job evaluation in an evolving social norm. *Journal of Economic Issues*, Vol.34, pp.1-19.
- Folger, R., Konovsky, M.A., & Cropanzano, R. (1992). A due process metaphor for performance appraisal. *Research in Organizational Behavior*, Vol.3, pp.129-177.
- Foster, D.P., Stine, B., & Waterman, R. (1998). *Business analysis using regression: A casebook*. Springer-Verlag.
- Giacobbe-Miller, J.K., Miller, D.J., & Victorov, V.I. (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. <http://dx.doi.org/10.1111/j.1744-6570.1998.tb00719.x>
- Gomez-Mejia, L.R., & Balkin, D.B. (1992a). *Compensation, organizational strategy and firm performance*. Cincinnati, OH: South Western Publishing Co.
- Gomez-Mejia, L.R., & Balkin, D.B. (1992b). The determinants of faculty pay: An agency theory perspective. *Academy of Management Journal*, Vol.35, No.5, pp.921-955. <http://dx.doi.org/10.2307/256535>
- Greenberg, J. (1996). *The quest for justice on the job: Essays and experiments*. Thousand Oaks, CA: Sage.
- 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. [http://dx.doi.org/10.1016/S1053-4822\(02\)00098-0](http://dx.doi.org/10.1016/S1053-4822(02)00098-0)
- Hair, J.F., Anderson R.E., Tatham, R.L., & Black, W.C. (2006). *Multivariate data analysis*. New Jersey: Prentice Hall International, Inc.
- Henderson, R.I. (2009). *Compensation management in a knowledge based-world*. New Jersey: Prentice-Hall.
- Henemen, R.L., Ledford, G.E., & Gresham, M.T. (2000). The changing nature of work and its effects on compensation design and delivery. In Rynes, S. and Gerhat, B., *Compensation in Organizations: Current Research and Practice*. pp.195-240. San Francisco: Jossey-Bass.
- Heywood, J.S., & Wei, X. (2006). Performance pay and job satisfaction. *Journal of Industrial Relations (Australia)*, Vol.48, No.4, pp.523-541. <http://dx.doi.org/10.1177/0022185606066143>
- Ismail, A., Hock, W.K., & Muhammed, S. (2007). *Relationship between performance based pay features and job satisfaction: Does interactional justice act as a mediating role?*. Kota Samarahan : Universiti Malaysia Sarawak.
- Jaccard, J., Turrisi, R., & Wan, C.K (1990). *Interaction effects in multiple regression*, 72. Newsbury Park, California: SAGE Publications, Inc.
- Kanter, R.M. (1989). *When giants learn to dance. Mastering the challenges of strategy, management and careers in the 1990s*. London: Routledge.
- Kim, D.O. (1996). Factors influencing organizational performance in gainsharing programs. *Industrial Relations*, Vol.35, No.2, pp.227-244. <http://dx.doi.org/10.1111/j.1468-232X.1996.tb00404.x>
- Kim, D.O. (1999). Determinants of the survival of gain sharing programs. *Industrial and Labor Relations Review*, Vol.53, No.1, pp.21-38. <http://dx.doi.org/10.2307/2696160>
- Lawler, E.E. (2000). *Rewarding excellence: Pay strategies for the new economy*. California: Jossey-Bass.
- Lawler, E.E., Ledford, G., & Chang, L. (1993). Who uses skill-based pay and why. *Compensation and Benefits Review*, Vol. March-April, pp.22-26.
- Lee, C., Law, K.S., & Bobko, P. (1999). The importance of justice perceptions on pay effectiveness: A two-year study of a skill-based pay plan. *Journal of Management*, Vol. 25, No. 6, pp. 851-873. <http://dx.doi.org/10.1177/014920639902500604>
- Leventhal, G.S. (1976). Fairness in social relationships. In Spence, J.T. and Carson, R.C. *Contemporary Topics in Social Psychology*. pp.211-240. Morristown, New Jersey: General Learning Press.
- Lind, E.A., & Tyler, T.R. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Mahoney, T.A. (1992). Multiple pay contingencies: Strategic design of compensation. In G. Salaman (ed.) *Human Resource Strategies*. London: SAGE.
- Mani, B.G. (2002). Performance appraisal systems, productivity and motivation: A case study. *Public Personnel Management*, Vol.1, No.2, pp.141-160.
- McCausland, W.D., Pouliakas, K., & Theodossiou, I. (2005). Some are punished and some are rewarded. A study of the impact of performance pay on job satisfaction. *International Journal of Manpower*, Vol.26, No.7/8, pp.636-659. <http://dx.doi.org/10.1108/01437720510628112>
- McShane, S.L., & Von Glinow, M.A. (2005). *Organizational behavior*. Irwin: McGraw-Hill.
- Milkovich, G.T., & Newman J.M. (2009). *Compensation*. New York: McGraw Hill.
- Money, R.B., & 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*, Vol.30, pp.149-172. <http://dx.doi.org/10.1057/palgrave.jibs.8490064>
- Nunally, J.C., & Bernstein, I.H. (1994). *Psychometric theory*. New York: McGraw- Hill.
- Oldham, GR., Hackman, J.R. & Pearce, J.L. (1976). *Norms for the job diagnostic survey*. New Heaven: Yale University School of Organization and Management.
- Omar, O.E., & Ogenyi, V.O. (2006). Determinants of pay satisfaction of senior managers in the Nigerian Civil Service. *International Journal of Public Sector Management*, Vol.19, No.7, pp.687-701. <http://dx.doi.org/10.1108/09513550610704707>
- Pettijohn, C.E., Pettijohn, L.S., & d'Amico, M. (2001). Characteristics of performance appraisals and their impact on sales force satisfaction. *Human Resource Development Quarterly*, Vol.12, No.2, pp.127-146. <http://dx.doi.org/10.1002/hrdq.4>

- Sekaran, U. (2003). *Research methods for business: A skill building approach*. New York: John Wiley & Sons, Inc.
- Skarlicki, D.P., & Folger, R. (1997). Retaliation in the workplace: The roles of distributive, procedural and interactional justice. *Journal of Applied Psychology*, Vol.82, pp.434-443. <http://dx.doi.org/10.1037/0021-9010.82.3.434>
- Shaw, J.D., Duffy, M.K., Jenkins, G.D., & Gupta, N. (1999). Positive and negative affect, signal sensitivity and pay satisfaction. *Journal of Management*, Vol.25, No.2, pp.189-206. [http://dx.doi.org/10.1016/S0149-2063\(99\)80009-9](http://dx.doi.org/10.1016/S0149-2063(99)80009-9)
- Sweeney, P.D., & 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*, Vol.55, pp.23-49. <http://dx.doi.org/10.1006/obhd.1993.1022>
- Tabachnick, B.G., & Fidell, L.S. (2001). *Using multivariate statistics*. Sydney: Allyn & Bacon.
- Warr, P.B., Cook, J., & Wall, T.D. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, Vol.52, pp.129-148. <http://dx.doi.org/10.1111/j.2044-8325.1979.tb00448.x>
- Wilton, N. (2010). *An introduction to human resource management*. Sage Publications Ltd.
- Wong, C., Hui, C., & Law, K.S. (1995). Causal relationships between attitudinal antecedents to turnover. *Academy of Management Journal*, pp.342-346.
- Yaacob, M.R. (2008). *SPSS for business and social science students*. Malaysia: Pustaka Aman Press Sdn. Bhd.
- Zakaria, N. (2007). *Relationship between pay for performance and job satisfaction: the mediating role of interactional justice*. Unpublished Final Year Project. Faculty of Cognitive Sciences & Human Development, Universiti Malaysia Sarawak, Malaysia.

Table 1. Participant Characteristics (N=334)

Sample Profile	Sub-Profile	Frequency	Percentage
Gender	Male	143	15.6
	Female	191	20.8
Age	Less Than 25 years	71	7.7
	26 to 30 years	159	17.3
	31 to 35 years	53	5.8
	36 to 40 years	30	3.3
	41 to 45 years	3	0.3
	More than 46	18	2.0
Education	SRP / LCE	2	0.2
	SPM / MCE	32	3.5
	STP / HSC	11	1.2
	Diploma	74	8.1
	Bachelor	161	17.6
	Master	51	5.6
	PhD	3	0.3
Position	Professional & Management Group	85	9.3
	Supporting Group	64	7.0
	Professor & Associate Professor	2	0.2
	Lecturer	180	19.6
	Assistant Lecturer	3	0.3
Division	Academic	263	28.7
	Non-Academic	71	7.7
Length of Service	Less Than 2 years	127	13.8
	3 to 5 years	142	15.5
	6 to 8 years	40	4.4
	9 to 11 years	19	2.1
	12 to 14 years	2	0.2
	More than 15 years	4	0.4
Type of Service	Permanent & Confirmed	252	27.5
	Permanent & Probation	17	1.9
	Contract	61	6.7
	Temporary	4	0.4
Salary (Malaysian Ringgit)	Less than 1000	54	5.9
	1001 to 1500	99	10.8
	1501 to 2000	91	9.9
	2001 to 2500	30	3.3
	2501 to 3000	25	2.7
	3001 to 3500	24	2.6
	3501 to 4000	5	0.5
	4001 to 4500	3	0.3
	4501 to 5000	0	0.0
	5001 to 5500	1	0.1
	5501 to 6000	1	0.1
Citizenship	More than 6001	1	0.1
	Malaysian	332	36.2
	Non-Malaysian	2	0.2

Note: SRP/LCE: Sijil Rendah Pelajaran Malaysia / Lower Certificate of Education

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

STP/HSC: Sijil Tinggi Pelajaran / Higher School Certificate

Table 2. The Results of Validity and Reliability Analyses for Measurement Scales

Measure	Item	Factor Loadings	KMO	Bartlett's Test of Sphericity	Eigen Value	Variance Explained	Cronbach Alpha
Participation in Pay Systems	4	.59 to .91	0.79	760.99	2.94	73.54	0.88
Adequacy of Pay	4	.56 to .86	0.67	295.66	2.15	53.85	0.71
Interactional Justice	4	.77 to .91	0.82	772.88	3.02	75.52	0.89
Job Satisfaction	9	.54 to .71	0.84	991.09	4.09	45.41	0.85

Table 3. Descriptive Statistics and Pearson Correlation Analysis

Variables	Mean	Standard Deviation	Pearson Correlation (r)			
			1	2	3	4
1. Participation in Pay Systems	3.29	1.43	1			
2. Adequacy of Pay	4.30	1.17	.31**	1		
3. Interactional Justice	4.18	1.46	.30**	.52**	1	
4. Job Satisfaction	4.54	1.03	.41**	.36**	.45**	1

Note: Significant at **p<0.01

Table 4. Results of Stepwise Regression Analysis

Variable	Dependent Variable (Job Satisfaction)		
	Step 1	Step 2	Step 3
<u>Control Variables</u>			
Sex	-.03	-.03	-.02
Age	.10	.08	.09
Education	-.11	-.09	-.09
Position	.01	.06	.10
Division	.08	.11	.13
Length of Service	-.09	-.07	-.07
Service	.03	.06	.03
Salary	.13	.19**	.20**
Citizenship	.11	.06	.055
<u>Independent Variables</u>			
Participation in Pay systems		.27***	.12*
Adequacy of Pay		.34***	.29***
<u>Mediating Variable</u>			.31***
Interactional Justice			
R ²	.05	.28	.35
Adjusted R ²	.02	.26	.32
F	.05	.23	.07
Δ R ²	1.86	11.48***	14.22***
F Δ R ²	1.86	52.11***	14.22***

Note: Significance at *p<0.05;**p<0.01;***p<0.001

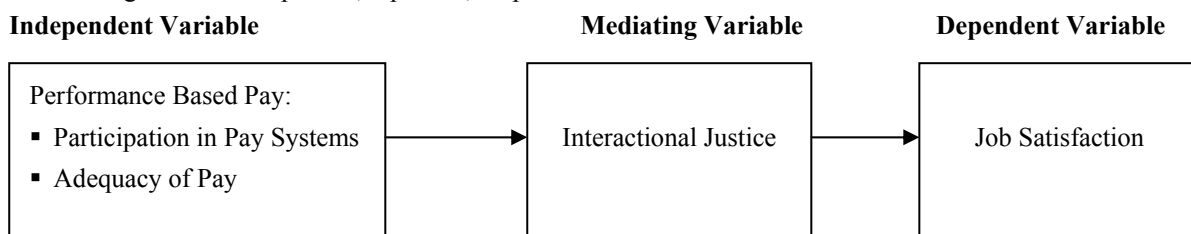


Figure 1. Conceptual Framework