

Effect of Management of Performance Reward Systems on Subordinates' Satisfaction with Job in Malaysian Fire and Rescue Department

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ABSTRACT

This research was to measure the correlation between management of performance reward systems on subordinates' satisfaction towards the job. A survey method was utilized to collect data from subordinates who worked at the headquarters of fire and rescue departments in Malaysia. The outcomes of SmartPLS path model analysis display two important findings. First, the implementation of information delivery and performance assessment in handling performance reward systems have enhanced subordinates' intrinsic job satisfaction, but the implementation of involvement hypothesized performance reward systems has not enhanced subordinates' intrinsic job satisfaction. Second, implementation of information delivery, involvement and performance assessment in handling performance reward systems have also enhanced subordinates' extrinsic job satisfaction.

Keywords: management of performance reward systems, job satisfaction, SmartPLS

INTRODUCTION

According to a human resource management view, the reward is also called with other terms such as compensation, remuneration, wage and salary, and payment. These terms are used interchangeably in the same or different organizations within the same or different countries (Henderson, 2006; Newman *et al.*, 2016). In organizations, human resource managers carry out the main responsibility to plan and administer reward allocations to subordinates who work in various level of job (Ismail *et al.*, 2015; Newman *et al.*, 2016). At the early stage of organizational development especially small-medium organizations, human resource managers often create

job-based reward as a mean to allocate financial and nonfinancial payments according to job structure. For example, there are tenure, seniority, the length of service, and work classifications (Azman *et al.*, 2014; Markova & Ford, 2011). Even though this reward system (REWARDS) may help to achieve organization goals, many researchers contend that it is most suitable to be implemented by small-medium organizations that operate in domestic and fewer competition environments (Aaron *et al.*, 2014; Baule & Soost, 2016).

Since decade 70s, many successful small-medium organizations in agriculture, manufacturing, mining, construction and service sector have been transformed to become international and

global organizations (Artis & Zhang, 1997). This transformation has motivated employers to shift their compensation paradigms from conventional job-based reward to performance based reward for strategies and cultures accomplishments. Under this new reward paradigm, employers have added variable pays like reward increases, incentives, and bonus to the fixed salary to recognize subordinates' performance such as merit, skills, knowledge, competence, and productivity (Ismail & Zakaria, 2009; Osterloh, 2014). Many researchers advocate that the implementation of this performance reward has brought better positive impacts than job-based reward regarding attracting, motivating and retaining competent subordinates to improve organizational efficiency, productivity and competitiveness in knowledge economy environment as described by Ahmad and Scott (2015), and Auh and Menguc (2013).

According to Anuar *et al.* (2014), a review of the current workplace REWARDS emphasizes that well-designed performance based reward cannot achieve its goals if it is not administered by competent management. Competent management refers to the ability of management to appropriately carry out its roles in administering performance based reward, namely information delivery, involvement, and performance assessment. Information delivery (IND) is broadly interpreted as an important human relation feature where it is implemented by management to communicate about policies and procedures of allocating performance based reward to its subordinates. Thus, they can deliver feedback and suggestions about the performance based reward to their employers. If this information delivery system is openly and honestly implemented, it will provide many advantages. Those advantages are disclosing the value of the reward packages quantitatively and qualitatively, helping subordinates to understand the relationship between pay and performance, welcoming ideas and suggestions for the system, improving the perceptions of equity and fair treatment within the system. Consequently, it may direct to an upgraded credibility of REWARDS (Newman *et al.*, 2016; Salim *et al.*, 2015).

Meanwhile, involvement (INV) is often interpreted as an important high commitment of management practice where management highly encourages subordinates from various hierarchical levels and categories to formally and informally participate in the management of performance REWARDS. For example, management and subordinates are often involved in the design and administration of various types of pay programs and taking part in reward allocation decisions (Ismail & Rivai, 2007). If this involvement is actively practiced, this will help management to receive valuable feedbacks from subordinates, and encourage subordinates to personally contribute to the organizations (Salim *et al.*, 2015; Shaed *et al.*, 2015).

Further, performance assessment (PA) is seen as an important performance management characteristic.

Management often designs and administers formal appraisal methods based on traits, behavior, and outcomes as important means to objectively evaluate subordinate performance. These evaluation scores are utilized by management to properly determine the form of reward according to subordinates' performance (Ismail *et al.*, 2016). If management can design performance assessment appropriately and allocate rewards based on subordinate achievement fairly, this situation strongly encourages subordinates to support and accept their organizational REWARDS goals (Newman *et al.*, 2016).

Unpredictably, many extant researches about creative reward program published in the 21st century reveal that the ability of management to appropriately implement IND, INV and PA in management of performance reward system (MPRS) may have a significant effect on subordinates' satisfaction on jobs (Khan *et al.*, 2014; Malik, 2013). Subordinates' satisfaction on jobs is often interpreted as an important organizational behavior component. It refers to individuals' perceived positive attitudes or emotional response toward global job condition and dimensions of job conditions such as intrinsic working environment (variety of tasks and work autonomy) and extrinsic working environments (facility, management, and promotion). In most organizational behaviour studies, if subordinates have positive attitudes and emotions about the whole or specific facets of job conditions, this may cause higher subordinates' satisfaction on job within organizations (Ismail *et al.*, 2015; Marlana A. Bednarska & Szczyt, 2015).

Based on performance reward model in a workplace, many researchers state that IND, INV, PA, and job satisfaction (JS) have different meanings, but highly interrelated concepts. For example, the willingness of management to openly deliver the information about REWARDS, actively encourage subordinates to take part in the design and administration of REWARDS and properly use performance assessment in determining rewards based on subordinates performance may cause higher subordinates' job satisfaction in organizations (Pacheco & Webber, 2016; Yadav & Rangnekar, 2015).

Although the nature of this relationship is important, there is little discuss the role of effective management REWARDS as an essential determinant in the workplace (Ismail *et al.*, 2011; Azman *et al.*, 2014). Many researchers debate that this condition may be caused by the several factors. First, many previous researches have largely elaborated the traditional and contemporary management roles in handling performance REWARDS like Ismail *et al.* (2011), and Ismail and Zakaria (2009). Second, most previous researches have utilized a simple correlation method to evaluate the strength and nature of the relationship between performance reward allocations and job satisfaction (Anuar *et al.*, 2014; Malik, 2013). Third, many previous researchers have employed an objectivist paradigm to develop various kinds of reward models. This approach has overlooked the emphasis

in the role of management in handling performance REWARDS. Their impact on specific facets of job satisfaction, namely intrinsic job satisfaction (INJS) and extrinsic job satisfaction (EXJS) (Pacheco & Webber, 2016; Yadav & Rangnekar, 2015). Consequently, findings from these researches have only provided general recommendations. This may not be sufficient to be used as crucial procedures by practitioners in enhancing their understanding of the complexity of REWARDS concept and developing management styles that may upgrade the effectiveness of REWARDS in market winner oriented organizations (Grille *et al.*, 2015; Sharma *et al.*, 2016). Thus, this situation inspires the researchers to quantify the impact of REWARDS on subordinates' satisfaction on jobs to contribute to the literature.

The present research is to answer two main objectives specifically. First, it is to evaluate the correlation between MPRS and INJS. Second, it is to see the relationship between MPRS and EXJS.

The relationship between MPRS and subordinates' satisfaction with the job is consistent with the notion of organizational leadership theory. For example, path-goal theory by House (1971) posited that the implementation of IND, INV, and PA was effective path in helping employees to perform jobs to achieve organizational goals. Meanwhile, role theory by Graen (1976) explained that the ability of managers to implement IND, INV and PA in allocating rewards and benefits based on subordinates' contribution might induce positive behaviors. The notion of these theories has gained strong support from the literature of MPRS.

Previous researches were conducted using a direct effects model to evaluate MPRS in different organizational samples, such as perceptions of 20,000 subordinates from electronic component manufacturing organizations of Singapore and China (Malik, 2013), 331 subordinates of one Malaysian university (Anuar *et al.*, 2014), 98 Indian business executives in India (Yadav & Rangnekar, 2015), 22,547 subordinates from 48 European countries (Pacheco & Webber, 2016). These researches revealed that the capability of management to appropriately implement IND, INV and PA in handling MPRS had enhanced subordinates' INJS and EXJS (Anuar *et al.*, 2014; Malik, 2013; Pacheco & Webber, 2016; Yadav & Rangnekar, 2015). The literature has been used to develop the theoretical framework for this research as illustrated in Figure 1.

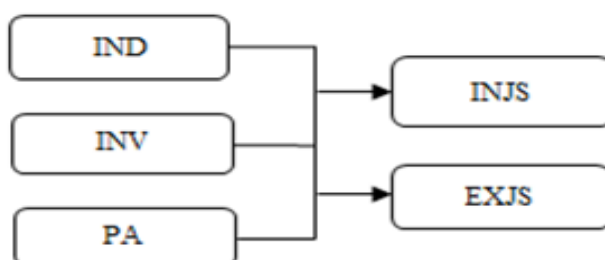


Figure 1 Conceptual Framework

There are six hypotheses established based on the framework.

- H1: There is a positive relationship between IND and INJS.
- H2: There is a positive relationship between INV and INJS.
- H3: There is a positive relationship between PA and INJS.
- H4: There is a positive relationship between IND and EXJS.
- H5: There is a positive relationship between INV and EXJS.
- H6: There is a positive relationship between PA and EXJS.

METHODS

This research applies a cross-sectional research technique to enable the researchers to integrate the MPRS literature, and the semi-structured interview and the questionnaire to collect data. These procedures allow the researchers to enhance the quality of collected data, improve the accuracy, and overcome data bias issues (Creswell, 2014; Sekaran & Bougie, 2015).

This research is conducted in Malaysian fire and rescue departments. The management of performance based reward is done based on Malaysian Remuneration System (Sistem Saraan Malaysia). It was first introduced in 2002 through Service Circular No. 4/2002, so it was implemented in all public agencies including fire and rescue departments (Jabatan Perkhidmatan Awam (JPA), 2002). This system is subject to revision done accordingly to ensure that it reflects the current requirements of performance rewards management. The latest revision of this system was done currently in early of this year and being circulated through its Service Circular No. 1/2016 to all public agencies (JPA, 2013, 2016). There are two main components of this system namely performance appraisal system and excellent service awards (Jabatan Perdana Menteri (JPM), 2002; JPA, 2002). Performance appraisal system comprises of two important elements which are performance evaluation report and target of annual works. Subordinates' performance is assessed annually by two assessors who are their immediate superior (Assessor 1) and head of division or department (Assessor 2) based on the evaluation aspects and marks allocated for each criterion. Second, it is excellent service awards which will be awarded to 8% of subordinates who have met the criterion of excellent subordinates. The MPRS implemented have included the elements of information delivery (the implementation of the system is circulated through specific circular), performance appraisal (through the performance evaluation report), and involvement of subordinates (the discussion on the target of annual works for division or unit) in the

overall system. Although the development of MPRS is important in enhancing the productivity of Malaysian public agencies, there is no empirical evidence in its effectiveness investigated in Malaysia (JPM, 2002).

In the early stage of this research, a semi-structured interview method is conducted by involving five officers having more than 10 years of working experience in the organizations. The officers involved are a Senior Fire Superintendent, two Fire Superintendents, and two Deputy Fire Superintendents. The information gathered from the interview method enhances the researchers' understanding of the characteristics and elements of MPRS, INJS, and EXJS, as well as the relationship between the variables in the organizations. Next, the information collected from the interviewees is to confirm the content of the questionnaire for the survey. Furthermore, a back translation technique is applied to translate the questionnaire into Malay and English to contribute to the reliability and validity of research outcomes (Creswell, 2014; Sekaran & Bougie, 2015).

The questionnaires are divided into four sections. First, IND is measured using four items adapted from reward literature related to IND (Anuar *et al.*, 2014; Newman *et al.*, 2016). Second, INV uses three items adapted from reward literature related to INV (Ismail *et al.*, 2011; Newman *et al.*, 2016). Third, PA is measured by three items adapted from reward literature related to PA (Ismail *et al.*, 2011; Newman *et al.*, 2016). Four, EXJS and INJS have three items adapted from job satisfaction scale of Warr, Cook, and Wall (1979). The seven range scales begin from "strongly disagree" (1) to "strongly agree" (7). It is used to measure all items. The controlling variables of this research are the demographic variables as it emphasizes on subordinate attitudes.

Moreover, the sampling technique for this research is purposive technique. It has collected 155 questionnaires. This sampling technique is considered appropriate for this research due to its policy which it does not provide the list of subordinates to the researchers. This situation can not allow the researchers to apply a random technique in selecting respondents. The participants answer the survey questionnaire voluntarily.

Then, SmartPLS package is used for data analysis. This software offers some advantages like produce latent variable scores, overcome small sample size issues, provide every complex model with many latent and manifest variables, hassle stringent assumptions about the distribution of variables and error terms, and handle both reflective and formative measurement models (Henseler & Chin, 2010). The procedure of analyzing data is divided into two steps. First, SmartPLS path model used to estimate the path coefficients for the structural model is the standardized beta (β) and t statistics. The value of R² is an indicator of the overall predictive strength of the model. The value of R² is interpreted as 0,19 (weak), 0,33 (moderate), and 0,67 (substantial) (Chin, 2001; Henseler & Chin, 2010). Second, an additional

assessment of model fit in PLS analysis tests the predictive relevant using blindfolding (Q² statistic). According to Chin (2001), the Q² statistic is a jack knife version of the R² statistic. It represents a measure of how well-observed values are reconstructed by the model and its parameter estimates. A model with Q² which is greater than zero is considered to have predictive relevant. The value of Q² is considered as 0,02 (small), 0,15 (medium), and 0,35 (large) (Hair *et al.*, 2017).

RESULTS AND DISCUSSIONS

Table 1 shows that 87,1% of the respondents are males that are 25 to 34 years old (38,1%), SPM/MCE holders (76,8%), clerical and support staff (71,6%), and have monthly salary between RM1000 and RM2499 (53,5%), and married (72,9%).

Table 1 Respondents' Profile (n=155)

Sample Profile	Sub-Profile	Percentage
Gender	Male	87,1
	Female	12,9
Age (years)	< 25	11,0
	25 – 34	38,1
	35 – 44	28,4
	45 – 54	16,1
	> 55	6,5
Level of Education	SRP / LCE	3,2
	SPM / MCE	76,8
	STPM / HSC	9,0
	Diploma	7,1
	Degree	3,9
Position	Management & professional group	14,8
	Supervisory group	8,4
	Technical staff	3,9
	Clerical & support staff	71,6
	Other	1,3
Gross Income (Monthly/ MYR)	< 1,000	4,5
	1,000 – 2,499	35,5
	2,500 – 3,999	53,5
	4,000 – 5,499	4,5
	5,500 – 6,999	1,9
Marital status	Single	27,1
	Married	72,9

Note:

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

STPM/ HSC – Sijil Tinggi Pelajaran Malaysia/ High School Certificate

Table 2 explains the outcomes for convergent and discriminant validity analyses. All constructs have the values of AVE larger than 0,5. It indicates that it has met the acceptable standard of convergent validity (Barclay *et al.*, 1995; Fornell & Larcker, 1981). Furthermore, all constructs' values of AVE in diagonal

are greater than the squared correlation with other concepts in off-diagonal, signifying that all concepts have met the acceptable standard of discriminant validity (Henseler & Chin, 2010).

Moreover, Table 3 explains the factor loadings and cross loadings for every construct. The correlation between items and factors has higher loadings than other items of different constructs. The loadings of variables are greater than 0,70 in its constructs in the model. These values are considered adequate (Henseler & Chin, 2010). In sum, the validity of the measurement model has met the criteria. While, the values of composite reliability for all constructs are greater than 0,80. It indicates that the instrument used in this research has high internal consistency (Henseler & Chin, 2010; Nunally & Bernstein, 1994).

Table 4 explains the outcomes of variance inflation factor and descriptive statistics. The means for all constructs ranged from 4,9419 to 5,2280 signifying that majority of respondents perceived that the levels of IND, INV, PA and job satisfaction from high (4) to highest level (7) in the organizations. Meanwhile, the values of variance inflation factor for the relationship

between the independent variable (IND, INV, and PA) and the dependent variable (job satisfaction) are less than 5,0. It shows that the data are not affected by serious collinearity problem (Hair *et al.*, 2017). These results further confirm that the measurements used have met the acceptable standards of validity and reliability analyses.

Then, Table 5 shows that the inclusion of MPRS in the analysis. It explains 29% of the variance in INJS. In the predictive strength of this model, it provides a weak support for the overall model (Hair *et al.*, 2017). Specifically, the results of testing the research hypothesis show that IND is significantly correlated with INJS ($\beta=0,261$; $t=3,634$). Therefore, H1 is proven. This result confirms that IND is an important determinant of INJS. Second, INV is significantly correlated with INJS ($\beta=0,072$; $t=0,923$). It implies that H2 is not supported. This result confirms that involvement is an important determinant of INJS. Third, PA has significant relationship with INJS ($\beta=0,325$; $t=3,698$). Thus, H3 is also proven. This result certifies that PA is an important determinant of INJS.

Table 2 The Results of Discriminant and Convergent Validity Analysis

Constructs	AVE	1	2	3	4	5
1. IND	0,604	0,777				
2. INV	0,677	0,412	0,823			
3. PA	0,619	0,418	0,434	0,787		
4. INJS	0,717	0,514	0,438	0,477	0,847	
5. EXJS	0,611	0,423	0,321	0,464	0,665	0,781

Table 3 The Constructs' Factor and Cross Loadings Results

Constructs	Cross Factor Loadings					Composite Reliability
	1	2	3	4	5	
1. IND	0,753-0,809					0,859
2. INV		0,782-0,867				0,863
3. PA			0,706-0,859			0,829
4. INJS				0,753-0,812		0,884
5. EXJS					0,801-0,869	0,825

Table 4 The Variance Inflation Factor Results and Descriptive Statistics

Constructs	Mean	Standard Deviation	Variance Inflation Factor	
			4	5
1. IND	5,1871	0,64629	1,317	1,317
2. INV	4,9419	0,64033	1,339	1,339
3. PA	5,1118	0,64385	1,347	1,347
4. INJS	5,0495	0,67505		
5. EXJS	5,2280	0,53012		

Table 5 The Outcomes of Testing H1, H2 & H3

Structural Path	Path Coefficient	R ²
H1: IND → INJS	$\beta=0,261, (t=3,634)^*$	0,286
H2: INV → INJS	$\beta=0,072, (t=0,923)$	
H3: PA → INJS	$\beta=0,325, (t=3,698)^*$	

Note: Significant at $* > 1,96$

Table 6 shows that the inclusion of IND, INV and PA in the analysis confirms 38% of the variance in EXJS. In the predictive strength of this model, it provides a moderate support for the overall model (Hair *et al.*, 2017) Specifically, the results of testing the research hypothesis show that IND is significantly correlated with EXJS ($\beta=0,328; t=4,300$). Therefore, H4 is proven. This result verifies that IND is an important determinant of EXJS. Then, INV is significantly correlated with EXJS ($\beta=0,194; t=2,307$). This shows that H5 is supported. This result confirms that INV is an important determinant of EXJS. Next, PA is significantly correlated with EXJS ($\beta=0,256; t=3,579$), so H6 is accepted. This result confirms that PA is an important determinant of EXJS.

Table 6 The Outcomes of Testing H4, H5 and H6

Structural Path	Path Coefficient	R ²
H4: IND → EXJS	$\beta=0,328, (t=4,300)^*$	0,37
H5: INV → EXJS	$\beta=0,194, (t=2,307)^*$	
H6: PA → EXJS	$\beta=0,256, (t=3,579)^*$	

Note: Significant at $* > 1,96$

Table 7 Summary of Hypotheses Result

Hypotheses	Result
H1: IND → INJS	Accepted
H2: INV → INJS	Rejected
H3: PA → INJS	Accepted
H4: IND → EXJS	Accepted
H5: INV → EXJS	Accepted
H6: PA → EXJS	Accepted

Table 7 summarized the results of hypotheses of this research. The hypothesised conceptual model proposes six direct relationships. Out of six hypotheses, one is rejected. The path from INV and INJS ($\beta=0,072, t < 1,96$) is not significant. Thus, H2 is rejected.

The other five hypotheses are accepted. The path from IND to INJS is significant ($\beta=0,261, t=3,634$). Thus, H1 is supported. Then, PA is significantly related to INJS ($\beta=0,325, t=3,698$), thereby it supports H3. IND has a significant relationship with EXJS ($\beta=0,328, t=4,300$). Thus, H4 is accepted. Next, the path from INV to EXJS is significant ($\beta=0,194, t=2,307$). Thus, H5 is supported. Finally, the six from PA to EXJS is also significant ($\beta=0,256, t=3,579$). Thus, H6 is also accepted.

In this research, management has played important roles in planning and administering MPRS based on the general policies and rules established by the stakeholders. Moreover, the majority of respondents agree that the levels of IND, INV, PA, INJS, and EXJS are high. This situation describes that the implementation of IND, INV, and PA may lead to higher EXJS. Meanwhile, the implementation of IND and PA may lead to higher INJS. Conversely, the implementation of INV may not INJS in the organizations.

This research also elaborates its important implications in theoretical contribution, the robustness of research methodology, and practical contribution. In terms of theoretical contribution, it has enhanced the understanding that the ability of management to appropriately implement openness of IND, active INV, and use PA to determine rewards based on performance scores has been essential determinants of EXJS. Similarly, the ability of management to appropriately implement openness of IND and use PA to determine rewards based on performance scores is essential determinants of INJS. This finding also has supported the notion of role theory by Graen (1976) and extended research done by Pacheco and Webber (2016).

However, the finding does not support the role of INV in performance based reward as an important determinant of INJS in the organizations. A thorough review of the interview outcomes shows that this result may be caused by external factors. First, the respondents have different values and judgments about the impact and advantages of implementing INV in MPRS. Second, this organization has used a centralized decision-making power at higher positions, and this situation has decreased the ability of subordinates to involve in making reward decisions. These factors may overrule the effectiveness of INV in MPRS of the organizations. Regarding the robustness of research methodology, the questionnaires used have satisfactorily met the standard of validity and reliability analysis. This situation could lead to accurate and reliable research findings.

Then, for the practical contribution, the findings can be used as guidelines by practitioners to improve the MPRS in the studied organizations. This purpose may be achieved if management focuses on the following aspects. First, the type, level, and amount of reward for high performers should be revisited according to the present standard of living and organizational changes to motivate them supporting their organizations' goals. Furthermore, negotiation and discussion should be encouraged between management and staff association to obtain new inputs for improving the reward allocation criteria as well as enhancing subordinates' understanding and trust of the purposes, policies, and procedures of MPRS. If these suggestions are given more attention, this may stimulate subordinates to accept and appreciate the MPRS goals.

CONCLUSIONS

This research tests the conceptual framework developed based on the organizational MPRS literature. The instrument used has met the requirements of validity and reliability analysis. The findings of SmartPLS path model analysis reveal two significant findings. First, IND and PA are important determinants of INJS. The ability of management to openly communicate the information about MPRS and appropriately use performance appraisal to determine rewards based on subordinate performance which leads to greater subordinates' intrinsic and EXJS in the organization. Second, IND, INV, and performance appraisal are important determinants of EXJS. This finding explains that the ability of management to openly communicate the information about MPRS, highly encourage INV style in making performance reward decisions, and appropriately use performance appraisal to determine rewards based on subordinate performance has led to greater subordinates' INJS and EXJS in the organization. This result also has supported and extended MPRS research literature mostly published in Western countries. Conversely, the finding displays that INV is not an important determinant of INJS. A thorough review of the interview outcomes shows that this result may be affected by external factors. The respondents have different values and judgments about the impact and advantages of implementing INV style in MPRS. Second, this organization has used a centralized decision-making power at higher positions, and this situation has decreased the ability of subordinates to involve in making reward decisions. These factors may overrule the effectiveness of INV in MPRS of the organizations.

Therefore, present research and practice within organizational compensation model need to incorporate IND, INV, and PA as core elements of the MPRS. The researchers also suggest that the ability of management to appropriately manage MPRS will strongly induce subsequent positive personal outcomes (justice, commitment, performance, and trust). Therefore, these positive behaviors may lead to maintained and enhanced organizational performance in the era of globalization and borderless world.

This research has several limitations. First, a cross-sectional research design is used to collect data, and it cannot capture the detail causal connections between the variables of interest. Second, it does not measure the relationship between specific indicators for the independent variable and the dependent variable. Third, the sample is conducted in a defense and security organization owned by Malaysian government. Four, it tests a direct effects model, so it does not examine the intervention of other factors such as respondent characteristics in this relationship. Finally, it uses a purposive sampling technique to collect questionnaires from respondents which can expose the biased response. These limitations may

reduce the ability to generalize the research findings to other organizational settings.

This research also provides several suggestions to improve the methodological and conceptual limitations to strengthen future research. First, several personal characteristics should be discovered, whereby this may show the perspectives in understanding how behavior similarities and differences influence the effectiveness of MPRS in organizations. Second, other research designs such as longitudinal studies are suitable to collect data more than one times. The outcomes of this method can be used to measure the effect of independent variable on dependent variable that occurs among different groups within organizations. Third, to understand the effectiveness of MPRS, more diverse organizations should be involved. Four, the larger sample size should be collected to represent the studied population and this may decrease response bias. Finally, other specific elements of subordinate outcomes such as justice perceptions, performance, and commitment need to be acknowledged because these are widely recognized in recent literature about MPRS. The significance of these issues can be advanced in future research.

REFERENCES

- Aaron, J., Harris, M. L., McDowell, W. C., & Cline, B. N. (2014). Incentive-based compensation for CEOs in small and medium sized enterprises: Does pay for performance matter? *Journal of Business & Entrepreneurship*, 25(1), 1-19.
- Ahmad, R., & Scott, N. (2015). Fringe benefits and organisational commitment: The case of Langkawi hotels. *Tourism Review*, 70(1), 13-23.
- Anuar, A., Ismail, A., & Abidin, F. (2014). Administrator's role in performance pay system as a determinant of job satisfaction. *Sains Humanika*, 2(2), 11-17.
- Artis, M.J., & Zhang, W. (1997). International business cycles and the ERM: Is there a European business cycle? *International Journal of Finance & Economics*, 2(1), 1-16. [http://doi.org/10.1002/\(SICI\)1099-1158\(199701\)2:1<1::AID-IJFE31>3.0.CO;2-7](http://doi.org/10.1002/(SICI)1099-1158(199701)2:1<1::AID-IJFE31>3.0.CO;2-7)
- Auh, S., & Menguc, B. (2013). Knowledge sharing behaviors of industrial sales people. *European Journal of Marketing*, 47(8), 1333-1355.
- Azman, I., Aimi, A., & Rashidi, A. (2014). Effect of manager's role in performance based pay on employee outcomes. *Global Journal Al-Thaqafah*, 4(2), 41-58.
- Barclay, D., Higgins, C., & Thompson, R. (1995). The Partial Least Squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Technology Studies*, 2(2), 285-309.
- Baule, R., & Soost, C. (2016). Pay for performance versus non-financial incentives in small and medium-sized enterprises. *International Journal of Entrepreneurial Venturing*, 8(1), 24-45.
- Bednarska, M. A., & Szczyt, M. (2015). Variations in job satisfaction in service industries: Comparative

- international analysis. *Foresight*, 17(6), 599-615.
- Chin, W. W. (2001). *PLS-Graph user's guide: Version 3.0*. Houston, Texas: Soft Modelling Inc.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). California: SAGE Publication.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Graen, G. (1976). Role making processes within complex organizations. In M.D. Dunnette (Ed.). *Handbook of industrial and organizational psychology*. Chicago: Rand McNally.
- Grille, A., Schulte, E. M., & Kauffeld, S. (2015). Promoting leadership: A multilevel analysis investigating the role of prototypical team leader behavior, psychological empowerment, and fair rewards. *Journal of Leadership & Organizational Studies*, 22(3), 1-16. <http://doi.org/10.1177/1548051815570039>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). United States of America: SAGE publications Inc.
- Henderson, R. I. (2006). *Compensation management in a knowledge-based world*. New Jersey: Prentice Hall.
- Henseler, J., & Chin, W. (2010). A comparison of approaches for the analysis of interaction effects between latent variables using partial least squares path modeling. *Structural Equation Modeling: A Multidisciplinary Journal*, 17(1), 82-109. <http://doi.org/10.1080/10705510903439003>
- House, R. J. (1971). A path goal theory of leader effectiveness. *Publications, Sage*, 16(3), 321-339.
- Ismail, A., Anuar, A., Haron, M. S., & Kawangit, R. M. (2015). Reward administration system enhancing organizational commitment: An islamic viewpoint. *International Letters of Social and Humanistic Sciences*, 49, 155-167.
- Ismail, A., Asilah, K. M. N., & Rahmad, R. M. (2016). Relationship between performance appraisal communication, procedural justice and job satisfaction. *Geografia OnlineTM Malaysian Journal of Society and Space*, 12(2), 15-26.
- Ismail, A., Mohamed, H. A. B., Sahol Hamid, N., Sulaiman, A. Z., Girardi, A., & Abdullah, M. M. (2011). Relationship between performance based pay, interactional justice and job satisfaction: A mediating model approach. *International Journal of Business and Management*, 6(11), 170-181. <http://doi.org/10.5539/ijbm.v6n11p170>
- Ismail, A., & Rivai, H. A. (2007). Relationship between participation in pay systems and job commitment: Does interactional justice act as a mediating variable. *Philippine Management Review*, 14, 38-58.
- Ismail, A., & Zakaria, N. (2009). Relationship between interactional justice and pay for performance as an antecedent of job satisfaction: An empirical study in Malaysia. *International Journal of Business and Management*, 4(3), 190-199.
- Jabatan Perdana Menteri (JPM). (2002). *Garis panduan pemberian anugerah perkhidmatan cemerlang anggota perkhidmatan awam*. Malaysia.
- Jabatan Perkhidmatan Awam (JPA). (2002). *Pelaksanaan sistem saraan malaysia bagi anggota perkhidmatan awam persekutuan*. Malaysia.
- Jabatan Perkhidmatan Awam (JPA). (2013). *Penambah baik Jadual gaji minimum - maksimum gred 1 hingga gred 54 di bawah sistem saraan Malaysia*. Malaysia.
- Jabatan Perkhidmatan Awam (JPA). (2016). *Rasionalisasi skim perkhidmatan bagi perkhidmatan awam persekutuan di bawah*. Malaysia.
- Khan, Z., Karim, N., & Jan, S. U. (2014). Role of performance based reward system in improving employee's productivity and job satisfaction: Analysis of government and private sector of Peshawar. *City University Research Journal*, 4(1), 80-87.
- Malik, T. (2013). Positive effects of opinion-count on job satisfaction of team members in business enterprises. *Journal of Communication Management*, 17(1), 56-74. <http://doi.org/10.1108/13632541311300151>
- Markova, G., & Ford, C. (2011). Is money the panacea? Rewards for knowledge workers. *International Journal of Productivity and Performance Management*, 60(8), 813-823.
- Newman, J. M., Gerhart, B., & Milkovich, G. T. (2016). *Compensation* (12th ed.). United States: McGraw Hill Education.
- Nunnally, J. C., & Bernstein, I. (1994). *Psychometric theory*. New York: McGraw Hill.
- Osterloh, M. (2014). Viewpoint: Why variable pay-for-performance in healthcare can backfire. *Evidence-Based HRM: A Global Forum for Empirical Research*, 2(1), 120-123.
- Pacheco, G., & Webber, D. (2016). Job satisfaction: How crucial is participative decision making? *Personnel Review*, 45(1), 183-200.
- Salim, S. S., Roszaide, S., Ismail, A., & Yussof, I. (2015). Peranan sistem ganjaran berdasarkan prestasi dalam meningkatkan komitmen organisasi: Kajian kes penjawat awam di Putrajaya dan Selangor, *Malaysia. Malaysian Journal of Society and Space*, 11(10), 51-62
- Sekaran, U., & Bougie, R. (2015). *Research methods for business: A skill-building approach* (6th ed.). New Delhi.
- Shaed, M. M., Ishak, S., & Ramli, Z. (2015). Employees' Participation in Decision Making (PDM): A literature survey. *Malaysian Journal of Society and Space*, 11(13), 142-155.
- Sharma, N. P., Sharma, T., & Agarwal, M. N. (2016). Measuring employee perception of performance management system effectiveness conceptualization and scale development. *Employee Relations*, 38(2), 224-247. <http://doi.org/10.1108/ER-01-2015-0006>
- Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological. *Journal of Occupational Psychology*, 52, 129-148.
- Yadav, M., & Rangnekar, S. (2015). Supervisory support

and organizational citizenship behavior: Mediating role of participation in decision making and job satisfaction. *Evidence-Based HRM: A Global Forum for Empirical Research*, 3(3), 258-278.

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