

Unravelling the HRM practices and performance link in Malaysian SMEs: The role of organizational innovation

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ABSTRACT

Many studies have focused on direct link between HRM practices and organizational performance. There is a strong relationship between these two variables that driven further research to identify the mechanism through which such relationship exists. Following resource-based view (RBV), the aim of this research was to investigate the indirect effect of organizational innovation on HRM practices-performance linkage. Data was collected from owners/managers of manufacturing SMEs in West Malaysia. 331 (60.5%) distributed questionnaires were received and analyzed through PLS-SEM. Out of six hypotheses on mediation, only one hypothesis was rejected. The findings strongly supported the RBV theory when organizational innovation significantly mediated the relationship. These results clearly indicate that organizational innovation plays an intermediate role between HRM practices (i.e. communication and information sharing, compensation, selection, performance appraisal, and training and development) and organizational performance of SMEs.

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1. Introduction

Malaysian SMEs are facing new challenges and opportunities in existing environment, resulting from economic and financial crises, rapid changes in global businesses, and continued pressure of liberalization. To effectively deal with them and to remain competitive, SMEs require a new approach by fundamentally shifting from being low cost providers to high value business enterprises. Therefore, in July 2012, a ‘game changer’ SME Masterplan 2012-2020 was introduced, which directed new gateways for development of SMEs in every sector until 2020. SMEs need to analyse various issues to transform themselves in implementing higher value-adding activities and adopting industry’s prime business operations. SMEs should enrich their organizational resources and capacities to enhance their innovativeness, competitiveness, and technological strength. Unfortunately, empirical studies on the SME’s resources and capacities-performance linkage are less than encouraging, particularly in Malaysia. Therefore, more empirical research is required to overcome this gap. Since organizational elements have almost double impact on OP as compared to economic elements (Hansen & Wernerfelt, 1989; Tvorik & McGivern, 1997; Wood, 2006), there is a need to further study the former. Hence, following the resource-based view (RBV) (Barney, 1991; Barney & Wright, 1998; Wernerfelt, 1984), this study focused on investigating the link between HRM practices, organizational innovation, and OP.

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2. Literature Review

2.1 Performance, Organizational Innovation and HRM Practices

Although SME Masterplan 2012-2020 labelled OI as the important factor in affecting the Malaysian SMEs' performance and productivity (NSDC, 2012a). Still, Malaysian firms' innovation level was far less than the economically advanced countries and was equivalent or better than the economically developing countries (NSDC, 2012b). Most of the SMEs are still not taking interest, irrespective of the fact that government was emphasizing on implementing the national innovation system. Probably because mostly SMEs lack able management, skilled employees, time, and investment to facilitate product innovation through a better research and development system. They also perceive new technology as a cost increment rather than future investment, resulting in SMEs' insufficient technological commitment (NSDC, 2012b). Hence, to resolve these issues, SMEs' owners or managers should opt for competitive edge of innovation to be successful and to compete with pre-established big companies (Rosenbusch et al., 2011; Zakaria et al., 2016).

Human capital development is also critical to the success of any business. Human resources such as employees' knowledge, proficiencies, capabilities, behaviours, and interactional skills are important for any organization. Because these resources serve as strategic resources of any organization, and can affect their performance (Osman et al., 2011a). Unfortunately, Malaysian SMEs' labour productivity is quite less in comparison of large companies. As per statistics of 2011, SMEs' estimated mean productivity was RM 50,498 per employee as compared to large firms' mean productivity of RM 140,691. It was majorly associated with considerable hiring of unskilled workforce by SMEs, specifically in labour-intensive firms in every economic sector (NSDC, 2012a). As reflected by World Bank surveys (NSDC, 2012b), the absence of sufficient skilled employees is the main problem for SMEs' operations and growth, especially in Malaysia. To ensure the SMEs' success, owners/managers must retrain and upgrade their employees' skills to enhance competitiveness and productivity. However, such employee development requires implementation of appropriate HRM practices.

Because of the value of HRM practices in corporate operations and success (Abdullah et al., 2009), it should be investigated that how HRM practices can facilitate companies to achieve success and higher performance. Previous literature explicitly indicates that HRM practices can affect OP, but not much is identified about what could go between these two variables (Becker et al., 1997; Wang, 2008). Because mere investigation of the direct relationship of HRM practices with OP, yielded only limited comprehension of their relationship (Theriou & Chatzoglou, 2008; Wiklund & Shepherd, 2005; Zakaria et al., 2017) particularly in the SMEs' context. Hence, the researcher wished to investigate the mechanism by which HRM practices (Becker et al., 1997; Zakaria et al., 2017) affect OP.

2.2 Literature Gaps

Western researchers have discovered that HRM practices increase OP (e.g. Collins & Clark, 2003; Lepak & Snell, 2002; Panayotopoulou et al., 2003; Stavrou-Costea, 2005; Uysal, 2008; Way, 2002; Youndt et al., 1996). However, many researcher works are still needed in the future so that previous findings can be further strengthened and validated (Arthur & Boyles, 2007; Cardon & Stevens, 2004; Fleetwood & Hesketh, 2006; Way, 2002), especially given that the majority of studies revealed different findings across countries, implying that different cultures (Bjorkman et al., 2007; Foley, Ngo, & Loi, 2012; Rowley et al., 2004) and size of the organization (Heneman et al., 2000; Hornsby & Kuratko, 2003) may be at play.

While HRM-performance links study was carried out in various eastern countries like China, Taiwan, Korea, Vietnam, Thailand, India, Russia and Israel, they tend to focus on large organizations, and only few studied the linkage in SMEs (Heneman et al., 2000; Hornsby & Kuratko, 2003). Because HRM researchers neglected SMEs for quite a long time in this perspective (Tansky & Heneman, 2003). In their in-depth qualitative study on the HRM practices issues that challenge the SMEs' creation and growth, Heneman et al. (2000) found that only 129 of 403 research papers clearly addressed the issues of HRM in SMEs. Out of 129 papers, only 17 tested specific hypotheses and signified future research opportunities on HRM practices in SMEs. Literature also indicated that relatively lesser HR practices are used in smaller firms as compared to larger firms. Moreover, SMEs also handle HRM practices in an informal manner (De Kok & Uhlaner, 2001), because of their restricted resources in HR experts, finance, and time, (Klaas et al., 2000). Likewise, research on HRM-performance links in Malaysia also appear to share the same pattern. As they mainly studied large organizations (e.g. Osman et al., 2011b; Othman, 2009; Zakaria et al., 2018). Due to limited studies on HRM-performance link in SMEs, it is necessary that more studies should be carried out to strengthen HRM theories that focus on organizational size and structure (Heneman et al., 2000). Because applicability of existing theories on SMEs is unclear, whether its agency theory, behavioural theory, institutional theory, or resource dependence theory (Subramaniam et al., 2011). As these theories were mostly developed in the context of larger organizations. This view was supported by Cardon and Stevens (2004) and Chandrakumara (2013), who concluded that there is limited comprehension of HRM significance in SMEs.

In Malaysia, recent studies have emerged on the importance of HRM in organizational success (Abdullah et al., 2009). To quote some, Ismail (2006) analyzed the relationship of human capital achievement with growth of SMEs' labour productivity. Hamid et al. (2006) identified that SMEs generally have lesser comprehension of various management practices. Jamaludin

and Hasun (2007) studied the importance of training staff to enhance SMEs’ performance. Osman et al. (2011a) examined the inclusion level of HRM practices in Malaysian service sector SMEs. The increased studies on HRM practices in context of Malaysian SMEs may reflect its recognition by government on the critical role of such practices in achieving Vision 2020 (Abdullah et al., 2009; Zakaria et al., 2018). However, according to Hassan (2010), SMEs still have limited use and adoption of HRM practices compared to multinational companies in Malaysia. Even though these practices are vital for SMEs long-term survival. Small organizations lack the motivation to compete. Thus, the SMEs need the HRM practices to motivate, attract, and train their employees for their business survival (Omar et al., 2009).

Despite the fact that HRM studies on Malaysian SMEs are increasing, the HRM field is still at the stage of infancy in this context (Subramaniam et al., 2011; Zakaria et al., 2017). Chandrakumara (2013) also stated that practices, behaviours, and outcomes related to HR are under comprehended in smaller firms. Heneman et al., (2000) suggested “SMEs may be an excellent place to study synergistic human resource management practices” (p. 22). Given these identified gaps, a study on HRM-performance linkage in Malaysian SMEs was justified.

Many scholars also engaged on the direct and strong association between HRM practices and OP. The strong relationship has driven further research to identify the mechanism through which such relationship exists. Organizational theory researchers tend to agree that OI increase OP. Nonetheless, what predicts OI and how these predictors can affect OP through OI, needs much clearer investigation, specifically in SMEs (Lin et al., 2008; Zakaria et al., 2017). More specifically, previous studies indicate the significance of HRM practices in achieving competitive advantage, but few studies focused on how HRM practices enhance OI and subsequently OP.

Based on the literature gap discussed above, the relationships were hypothesized based on resource-based view. This view offers that firms can enhance their performance as compared to their competitors, through successful utilization of their resources and capabilities. Figure 1 explains the study’s model and hypothesizes OI significantly mediates the relationship between owners/managers’ perceptions about HRM practices and performance of that particular SME.

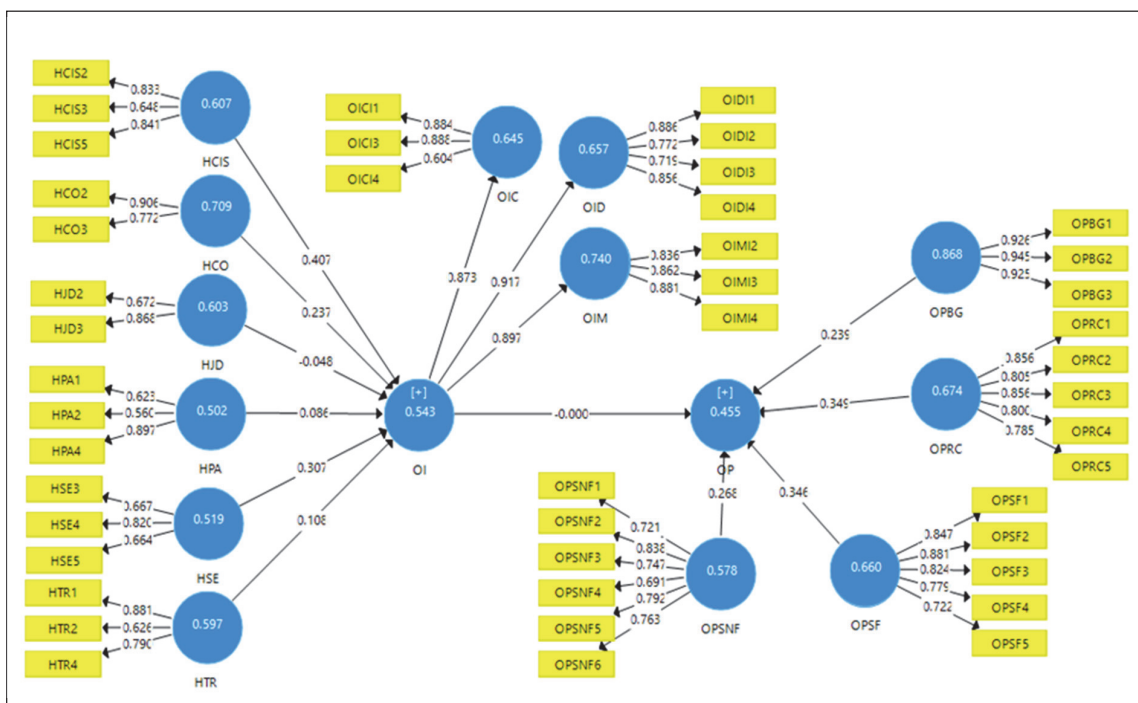


Fig. 1. Research Model of the study

2.3 Organizational Innovation as a mediator

Although the positive influence of HRM practices on OP has been proved, still, causality direction and the characteristics of prediction is a highlighted debate among strategic HRM experts. For instances, Wright et al., (2005) noted the inconsistent relationship between organization’s HRM practices and effectiveness. Actually, the relationship between these two is probably more complicated (Wall & Wood, 2005). Because the primary mechanism explaining how HRM practices influence OP is not yet theoretically or empirically established. Mayson and Barrett (2006), Messersmith et al. (2011), Takeuchi et al. (2007), Wall and Wood (2005), and Wright et al. (2005) observed the mediation between HRM practices and OP. So, OI was

identified as a potential intervening variable between HRM practices and OP, in this research (Farouk et al., 2016; Jiang et al., 2013; Zhou et al., 2013; Zakaria et al., 2017). Furthermore, HRM practices in SMEs tend to be informal and limited (De Kok & Uhlaner, 2001). So, in the context of SMEs, other variables need to be incorporated to explain OP.

Based on existing research, this study considered OI as an intervener between the relationship of HRM practices and OP. A mediator is introduced to stimulate better outcomes. Fundamentally, a mediator is used to extend the effect of the predictor-criterion relationship, and the mediator is best used whenever a strong predictor-criterion variable relationship exists (Baron & Kenny, 1986). Previous studies show that OI is a strong intermediate indicator of an organization's success (Al-Hakim & Hassan, 2013; Keizer et al., 2002; Mafabi et al., 2015).

In a study on retailers, market driving was identified as a powerful predictor of retailer's performance and OI, and an intervener between strategic inclination and retailer's performance (Medina & Rufin, 2009). Han et al. (1998) also studied the mediation of OI between the relationship of market inclination and bank's performance. They found that two components of OI (administrative and technical) can aid in identification of empirical conventions or reconciliation of differences between the relationship of market inclination and bank's performance. OI also plays a role to mediate the link between environmental and organizational variables towards financial performance (Vincent et al., 2004). They identified that it can significantly accelerate the relationship between selected variables. These results indicate that organizational resources are not enough to achieve superior performance. Moreover, OI is still evolving and can serve organizations in addressing the current dynamism in their environment (Vincent et al., 2004).

Several researchers have examined a number of predictors of OI and one of them is HRM practices, which were found to be crucial in accelerating OI activities and performance (Child, 1972; Diaz-Fernandez et al., 2015; Fu et al., 2015; Prieto & Pe'rez-Santana, 2014; Zakaria et al., 2017; Zhou et al., 2013). The competitive environment requires that a firm is proactive in its HRM practices to create new ideas and inventions (Jimenez-Jimenez & Sanz-Valle, 2008; Shipton et al., 2005). Effective management of human capital can aid in attracting, motivating, developing, and retaining the employees to attain better performance (Jackson & Schuler, 1995). Therefore, Kok and Hartog (2006) suggested OI as a mediator between HRM practices and OP. Provided these limitations in the previous literature, this research investigated that how HRM practices implementation can affect OP, in presence of OI as a mediator. To attain this goal, following research hypotheses were proposed:

- H1: Communication and information sharing practice has a positive link with SMEs performance through organizational innovation.
- H2: Compensation practice has a positive link with SMEs performance through organizational innovation.
- H3: Job design practice has a positive link with SMEs performance through organizational innovation.
- H4: Performance appraisal practice has a positive link with SMEs performance through organizational innovation.
- H5: Selection practice has a positive link with SMEs performance through organizational innovation.
- H6: Training and development practice has a positive link with SMEs performance through organizational innovation.

3. Research Method

3.1 Sampling Design

This was a correlational, cross-sectional, and non-contrived study. As the data on all variables were collected in a single time frame, with minimal intervention in respondents' work. Data was further collected through self-administered questionnaires.

3.2 Population and Sample Size

The study's population were all manufacturing-sector SMEs operating in Peninsular Malaysia's west coast registered with SME Corp. Malaysia between 2004/05 and 2012. Due to high SME concentration, the peninsular's west coast was chosen. Of the 4,591 total SMEs registered in Peninsular Malaysia, 4,303 (>90%) are in the west coast. The population size considered for this study was 4,303 firms. Data collection using a survey method. The data was collected from manufacturing SMEs in West Malaysia (Kedah, Selangor, Penang, Johor, and Wilayah Persekutuan). Manufacturing SMEs related to; manufacturing, manufacturing services, and agricultural enterprises, and having 5 to 150 full-time employees, constituted the sample. Companies were shortlisted from the SME Corp. Directory (SME Corp. Malaysia, 2012). The manufacturing sector was selected because their mean output was quite better than other sectors (NSDC, 2012b). Out of 531 distributed questionnaires, 321 (60.5%) usable questionnaires were returned. Firms were the unit of analysis in this research and were represented by the owners/managers of SMEs as the top management of those firms. They were selected as respondents because previous studies found that the owner or top management of SMEs have primary responsibility of taking firm's decisions and establishing strategic orientation of any organization (Abdullah, Mei, Shamsuddin & Wahab, 2014; Ahmad, Wilson, & Kummerow, 2011; Ahmad, Ramayah, Wilson & Kummerow, 2010).

3.3 Instrument Development

OP was a second-order formative construct (Ahmad et al., 2010; Ahmad et al., 2011; Gholami et al., 2013; Rai et al., 2006) which was adapted from Ahmad et al. (2011), comprising of (a) financial performance, (b) non-financial performance, (c) comparative performance, and (d) organizational growth. Satisfaction of respondents with financial and non-financial performance of their businesses was assessed on a five-point Likert scale. The scale ranged from “not at all satisfied” to “very satisfied”. Additionally, respondents must compare their business performance with their major competitors over the past 1 year, on a five-point Likert scale ranging from “significantly lower” to “significantly higher”. Respondents were also requested to employ a five-point Likert scale, ranging from “decreasing” to “increasing significantly” for their firm’s business growth over the last year. In line with the report of Ahmad et al. (2011), all dimensions of OP exhibited strong internal consistency >0.8 and composite reliability >0.7 in this research as well. These values verified the reliability of this construct’s dimensionality.

Meanwhile, only six HRM practices that were relevant to the Malaysian SMEs have been selected including selection, job design, communication and information sharing, performance appraisal, compensation, and training and development (Zakaria et al., 2018). The Cronbach’s alpha coefficient of these practices was 0.90 (Takeuchi et al., 2007). The six HRM practices were measured on a five-point Likert scale ranging from “strongly disagree” to “strongly agree”. OI was perceived as a unique construct in this research. A second-order factor analysis by Jimenez-Jimenez and Sanz-Valle (2008) indicated that OI could be modelled as a three dimensional higher-order construct. Hence, OI was measured through three kinds of innovation; product innovation, managerial innovation, and process innovation (Che-Ha and Mohd-Said, 2008; 2012). Respondents had to indicate their level of agreement or disagreement on a six-point forced choice scale, ranging from “strongly disagree” to “strongly agree”.

3.4 Data Analysis

Data was analyzed through Smart PLS 3.0 (Ringle et al., 2014), and measurement model and structural models were assessed. Measurement model was assessed to check the reliability and validity of constructs through composite reliability (CR), average variance extracted (AVE), and discriminant validity. All factor loadings were higher than the suggested cut off value of 0.5. It indicates the construct captured over half of the observed variable variance. The CR values were higher than the suggested cut off value of 0.7 (Hair et al., 2010). Hence, internal consistency reliability of all constructs was good. The AVE values were more than the recommended cut off value of 0.5 indicated the construct also captured over half of the variable variance. Table 1 provides summary of measurement model results of this study. parameter estimates and statistical significance of all constructs in results show that they were measured through valid instruments (Chow & Chan, 2008). Hence, convergent validity of all constructs in this model was established. Table 2 indicate that the measurement model displayed sufficient discriminant validity as well, as square root of AVE of each construct was larger than its correlation with any other variable.

OP was modelled as a second-order formative construct in this study. Hence it was assessed through weight significance, multi-collinearity, and correlation of indicators with the latent constructs. All stated paths coefficients between constructs were significant. The weight value indicates the relative importance of latent constructs formation. Therefore, to identify their relative contribution, correlation between indicators and their latent construct was tested. Findings indicate all items exhibited significant weights and were well associated with their latent constructs. Lastly, multi-collinearity was assessed through variance inflation factor (VIF). Experts suggest that VIF value must be less than 5 (Hair et al., 2014). Results demonstrate that VIF value of all item was less than 5, suggesting no issue of multi-collinearity among OP constructs (Luk et al., 2008; Moreno & Casillas, 2008). Hence, Table 1 shows all OP indicators were taken for analysis.

Table 1
Measurement Model

First Order Constructs	Second Order Constructs	Scale	Items	Loadings/ Weights	AVE	CR
Business Growth (OPBG)	Reflective	OPBG1	0.926	0.868	0.952	
		OPBG2	0.945			
		OPBG3	0.925			
Performance Relative to Competitor (OPRC)	Reflective	OPRC1	0.856	0.674	0.912	
		OPRC2	0.805			
		OPRC3	0.856			
		OPRC4	0.8			
		OPRC5	0.785			
Satisfaction Financial Performance (OPSF)	Reflective	OPSF1	0.847	0.66	0.906	
		OPSF2	0.881			
		OPSF3	0.824			
		OPSF4	0.779			
		OPSF5	0.722			

Table 1
Measurement Model (Continued)

First Order Constructs	Second Order Constructs	Scale	Items	Loadings/ Weights	AVE	CR
Satisfaction		Reflective	OPSNF1	0.721	0.578	0.891
Nonfinancial			OPSNF2	0.838		
Performance			OPSNF3	0.747		
(OPSNF)			OPSNF4	0.691		
			OPSNF5	0.792		
			OPSNF6	0.763		
	Organizational	Formative	OPBG	0.239	2.072	20.975
	Performance		OPRC	0.349	2.735	25.593
	(OP)		OPSF	0.346	2.842	30.799
			OPSNF	0.268	1.36	18.623
Communication		Reflective	HCIS2	0.841	0.607	0.821
& Information			HCIS3	0.674		
Sharing (HCIS)			HCIS5	0.819		
Compensation		Reflective	HCO2	0.57	0.709	0.829
(HCO)			HCO3	0.987		
Job Design		Reflective	HJD2	0.838	0.603	0.749
(HJD)			HJD3	0.714		
Performance		Reflective	HPA1	0.748	0.502	0.743
Appraisal			HPA2	0.747		
(HPA)			HPA4	0.743		
Selection (HSE)		Reflective	HSE3	0.69	0.519	0.762
			HSE4	0.84		
			HSE5	0.603		
Training (HTR)			HTR1	0.844	0.597	0.814
			HTR2	0.707		
			HTR4	0.792		
Process		Reflective	OIC1	0.884	0.645	0.841
Innovation			OIC3	0.888		
(OIC)			OIC4	0.604		
Product		Reflective	OID1	0.886	0.657	0.884
Innovation			OID2	0.772		
(OID)			OID3	0.719		
			OID4	0.856		
Managerial		Reflective	OIM2	0.836	0.74	0.895
Innovation			OIM3	0.862		
(OIM)			OIM4	0.881		
	Organizational	Reflective	OIC	0.873	0.803	0.924
	Innovation (OI)		OID	0.917		
			OIM	0.897		

Table 2
Fornell-Larcker Criterion for Discriminant Validity

	HCIS	HCO	HJD	HPA	HSE	HTR	OIC	OID	OIM	OPBG	OPRC	OPSF	OPSNF
HCIS	0.779												
HCO	-0.064	0.842											
HJD	0.32	-0.111	0.777										
HPA	0.292	-0.232	0.246	0.709									
HSE	0.541	-0.136	0.339	0.177	0.720								
HTR	0.545	0.004	0.182	0.26	0.515	0.773							
OIC	0.524	0.183	0.157	0.137	0.533	0.434	0.803						
OID	0.566	0.129	0.214	0.262	0.432	0.4	0.702	0.811					
OIM	0.588	0.111	0.16	0.177	0.53	0.524	0.695	0.718	0.860				
OPBG	0.466	0.19	0.093	0.091	0.429	0.389	0.602	0.602	0.644	0.932			
OPRC	0.341	-0.03	0.202	0.181	0.378	0.309	0.432	0.475	0.44	0.683	0.821		
OPSF	0.248	0.05	0.171	0.16	0.308	0.224	0.402	0.501	0.429	0.667	0.763	0.812	
OPSNF	0.207	0.004	0.141	0.252	0.066	0.156	0.187	0.412	0.291	0.326	0.46	0.509	0.760

Note: bold text in diagonals represent AVE square root

4. Findings

The bootstrapping revealed that all five indirect effects were significant. Further, to confirm the mediation in this study, 95% bootstrapped confidence interval (95% Boot CI) was determined as shown in Table 3. Mediation effect was supported, as five indirect effects did not straddle a zero in between confidence intervals. Consequently, the results demonstrated that, out of six proposed hypotheses, only one hypothesis was rejected. The findings of this study well supported the RBV theory when

mediation of OI significantly changed the relationship of five HRM practices with OP. Five HRM practices, namely communication and information sharing ($\beta=0.284$, $t=8.412$, $p<0.01$), compensation ($\beta=0.165$, $t=5.772$, $p<0.01$), performance appraisal ($\beta=0.060$, $t=2.050$, $p<0.05$), selection ($\beta=0.215$, $t=5.705$, $p<0.01$), and training and development ($\beta=0.076$, $t=2.332$, $p<0.05$) enhanced performance of SMEs through OI. Only one HRM practice which is job design was not related to OI ($\beta=0.034$, $t=1.021$, $p<0.05$). Table 3 provides detailed results of all paths.

Table 3
Hypotheses Testing

H	Relationship	β	SE	t	Bootstrapped Confidence Interval (Boot CI)		Decision
					5% LL	95% UL	
H1	HCIS \rightarrow OI \rightarrow OP	0.284	0.034	8.412**	0.211	0.343	Supported
H2	HCO \rightarrow OI \rightarrow OP	0.165	0.029	5.772**	0.108	0.213	Supported
H3	HJD \rightarrow OI \rightarrow OP	-0.034	0.033	1.021	-0.105	0.024	Not Supported
H4	HPA \rightarrow OI \rightarrow OP	0.060	0.029	2.050*	0.004	0.122	Supported
H5	HSE \rightarrow OI \rightarrow OP	0.215	0.038	5.705**	0.145	0.290	Supported
H6	HTR \rightarrow OI \rightarrow OP	0.076	0.032	2.332*	0.009	0.133	Supported

* $p < 0.05$; ** $p < 0.01$ - two tailed

β =Beta Coefficient; t =t Value; SE – Standard Error; LL – Lower Limit; UL – Upper Limit

5. Discussion and Implication

In conclusion, it is crucial to reveal that the present study provides empirical evidences on substantial contribution of HRM practices in enhancing SMEs OI. Provided that the majority of literature on the issue reflect the role of the broader HRM concept within the context of large firms, this is a useful development. Thus, likewise it is interesting to mention that industry experts believe that most of Malaysian SMEs do not emphasize on the development of HRM practices. In fact, they still practice traditional HRM practices in a very simple and ad hoc basis. However, this study provides empirical evidences that HRM practices, such as; selection, compensation, information sharing, performance appraisal, and training and development are important contributors to OI in Malaysian SMEs. In this respect, changes should be encouraged and performed widely in approaching HRM practices that have been dismissed thus far by SMEs. This would help SMEs to redefine themselves by implementing the new approach of HRM practices that cultivate more innovative activities within the organization.

This study also proved an indirect effect of HRM practices on OP of SMEs through OI. Hence, it can be concluded that in SMEs, the probability of HRM practices could not directly affect the performance of the organization. But indirectly affect performance by developing capabilities and behaviours that can increase the activity of OI and, ultimately lead to better OP. Therefore, results of this research also contribute towards closing the theoretical gap on the primary mechanism that explains how HRM practices relate to OP (Mayson & Barrett, 2006; Messersmith et al., 2011; Takeuchi et al., 2007; Wall & Wood, 2005; Wright et al., 2005). In sum, good HRM practices are required in SMEs to enhance OI for the better OP. These results clearly indicate that OI plays an intermediate role between relationship of HRM practices (i.e. selection, performance appraisal, communication, compensation, information sharing, and training and development) and SMEs performance.

This research proposes some suggestions for owners/managers of SMEs on dealing with their organizational capabilities and resources to enhance their OP. As OI is a pathway to gain competitive advantage and is important to improve OP of SMEs. Hence, special emphasis should be on developing an innovation mongering culture in organizations. For this purpose, the owners/managers of Malaysian SMEs are required to realize the value addition capacity of these HRM practices. It is expected that the management of SMEs will be stimulated by the empirical findings of this study and will consider focusing on their human resources through establishing an HRM system with these practices. Such a system can be established under the mentoring of any larger organization.

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References

Abdullah, Z., Ahsan, N., & Alam, S. S. (2009). The effect of human resource management practices on business performance among private companies in Malaysia. *International Journal of Business and Management*, 4(6), 65-72.

- Abdullah, N. H., Mei, Y. S., Shamsuddin, A., & Wahab, E. (2014). The relationship between entrepreneurial orientation (EO) and organizational innovativeness among small and medium enterprises (SMEs) in Malaysia. *Australian Journal of Basic and Applied Sciences*, 8(5), 199-206
- Ahmad, N. H., Ramayah, T., Wilson, C., & Kummerow, L. (2010). Is entrepreneurial competency and business success relationship contingent upon business environment? A study of Malaysian SMEs. *International Journal of Entrepreneurial Behaviour & Research*, 16(3), 182-203.
- Ahmad, N. H., Wilson, C., & Kummerow, L. (2011). Assessing the dimensionality of business success: The perspectives of Malaysian SME owner-managers. *Journal of Asia-Pacific Business*, 12(3), 207-224.
- Al-Hakim, L. A. Y., & Hassan, S. (2013). Knowledge management strategies, innovation, and organisational performance: An empirical study of the Iraqi MTS. *Journal of Advances in Management Research*, 10(1), 58 - 71.
- Arthur, J. B., & Boyles, T. (2007). Validating the human resource system structure: A levels-based strategic HRM approach. *Human Resource Management Review*, 17(1), 77-92.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Barney, J. B., & Wright, P. M. (1998). On becoming a strategic partner: The role of human resources in gaining competitive advantage. *Human Resource Management*, 37(1), 31-46.
- Becker, B. E., Huselid, M. A., Pickus, P. S., & Spratt, M. F. (1997). HR as a source of shareholders value: Research and recommendations. *Human Resource Management*, 36(1), 39-47.
- Bjorkman, I., Fey, C. F., & Park, H. J. (2007). Institutional theory and MNC subsidiary HRM Practices: Evidence from a three-country study. *Journal of International Business Studies*, 38(3), 430-446.
- Cardon, M. S., & Stevens, C. E. (2004). Managing human resources in small organizations: What do we know? *Human Resource Management Review*, 14, 295-323.
- Chandrakumara, A. (2013). *Human resource management practices in Small and Medium Enterprises in two emerging economies in Asia: Indonesia and South Korea*. Paper presented at the 26th Annual SEAANZ Conference Proceedings, Sydney.
- Che-Ha, N., & Mohd-Said, S. (2008). *Organizational innovation – practices and performance: An exploratory study among small & medium enterprises in Malaysia*. Retrieved February, 4, 2011, from http://eprints.um.edu.my/305/1/Organizational_Innovation.doc.
- Che-Ha, N., & Mohd-Said, S. (2012). Innovation practices by Malaysian SMEs. In N. Che-Ha & A. Mahmood (Eds.), *Malaysian SMEs in the new economy* (pp. 39 - 58). Petaling Jaya: Cengage Learning Asia Pte Ltd.
- Child, J. (1972). Organizational structure, environment and performance: The role of strategic choice. *Sociology*, 6(1), 1-21.
- Chow, W. S., & Chan, L. S. (2008). Social network, social trust and shared goals in organizational knowledge sharing. *Information & Management*, 45(7), 458-465.
- Collins, C. J., & Clark, K. D. (2003). Strategic human resource practices, top management team social networks, and firm performance: The role of human resource practices in creating organizational competitive advantage. *Academy of Management Journal*, 46(6), 740-751.
- De Kok, J., & Uhlaner, L. (2001). Organization context and human resource management in the small firm. *Small Business Economics*, 17(4), 273-291.
- Diaz-Fernandez, M., Bornay-Barrachina, M., & Lopez-Cabrales, A. (2015). Innovation and firm performance: the role of human resource management practices. *Evidence-based HRM: a Global Forum for Empirical Scholarship*, 3(1), 64-80.
- Farouk, S., Elanain, H. M. A., Obeidat, S. M., & Al-Nahyan, M. (2016). HRM practices and organizational performance in the UAE banking sector: The mediating role of organizational innovation. *International Journal of Productivity and Performance Management*, 65(6), 1-39.
- Fleetwood, S., & Hesketh, A. (2006). HRM-performance research: Under-theorized and lacking explanatory power. *International Journal of Human Resource Management*, 17(12), 1977-1993.
- Foley, S., Ngo, H.-y., & Loi, R. (2012). The adoption of high performance work systems in foreign subsidiaries. *Journal of World Business*, 47(1), 106-113.
- Fu, N., Flood, P. C., Bosak, J., Morris, T., & O'Regan, P. (2015). How do high performance work systems influence organizational innovation in professional service firms? *Employee Relations*, 37(2), 209-231.
- Gholami, R., Sulaiman, A. B., Ramayah, T., & Molla, A. (2013). Senior managers' perception on green information systems (IS) adoption and environmental performance: Results from a field survey. *Information & Management*, 50, 431-438.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). New Jersey: Pearson education Inc.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modelling (PLS-SEM)*: SAGE Publications, Inc.
- Hamid, A. B. A., Baharun, R., & Hashim, N. H. (2006). Comparative analysis of managerial practices in small medium enterprises in Malaysia. *Jurnal Kemanusiaan*, 8, 34-44.
- Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: Is innovation a missing link? *Journal of Marketing*, 62(4), 30-45.
- Hansen, G. S., & Wernerfelt, B. (1989). Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Management Journal*, 10(5), 399-411.
- Hassan, A. (2010). Linking quality assurance to human resource management: A study of SMEs in Malaysia. *International Journal of Quality & Reliability Management*, 27(6), 641-657.

- Heneman, R. L., Tansky, J. W., & Camp, S. M. (2000). Human resource management practices in small and medium-sized enterprises: Unanswered questions and future research perspectives. *Entrepreneurship Theory and Practice*, 25(1), 11-26.
- Hornsby, J. S., & Kuratko, D. F. (2003). Human resource management in U.S. small business: A replication and extension. *Journal of Developmental Entrepreneurship*, 8(1), 73-92.
- Ismail, R. (2006). Human capital attainment and performance of small and medium scale industries in Malaysia. *Jurnal Ekonomi Pembangunan*, 11(1), 79-90.
- Jackson, S. E., & Schuler, R. S. (1995). Understanding human resource management in the context of organizations and their environments. *Annual Review of Psychology*, 46(1), 237-264.
- Jamaludin, Z., & Hasun, F. M. (November, 2007). *The importance of staff training to the SMEs' performance*. Paper presented at the International Colloquium on Business and Management (ICBM), Bangkok Palace Hotel, Bangkok, Thailand.
- Jiang, K., Takeuchi, R., & Lepak, D. P. (2013). Where do we go from here? New perspectives on the black box in strategic human resource management research. *Journal of Management Studies*, 50(8), 1448-1480.
- Jimenez-Jimenez, D., & Sanz-Valle, R. (2008). Could HRM support organizational innovation? *International Journal of Human Resource Management*, 19(7), 1208-1221.
- Klaas, B. S., McClendon, J., & Gainey, T. W. (2000). Managing HR in the small and medium enterprise: The impact of professional employer organizations. *Entrepreneurship Theory & Practice*, 25(1), 107-123.
- Kok, J. d., & Hartog, D. d. (2006). *High performance work systems, performance and innovativeness in small firms*. Retrieved June, 5, 2011, from <http://www.entrepreneurship-sme.eu/pdf-ez/N200520.pdf>
- Keizer, J. A., Dijkstra, L., & Halman, J. I. M. (2002). Explaining innovative efforts of SMEs: An exploratory survey among SMEs in the mechanical and electrical engineering sector in The Netherlands. *Technovation*, 22(1), 1-13.
- Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of Management*, 28(4), 517-543.
- Lin, C.-H., Peng, C.-H., & Kao, D. T. (2008). The innovativeness effect of market orientation and learning orientation on business performance. *International Journal of Manpower*, 29(8), 752-772.
- Luk, C. L., Yau, O. H. M., Sin, L. Y. M., Tse, A. C. B., Chow, R. P. M., & Lee, J. S. Y. (2008). The effects of social capital and organizational innovativeness in different institutional contexts. *Journal of International Business Studies*, 39(4), 589-612.
- Mafabi, S., Munene, J. C., & Ahiauzu, A. (2015). Creative climate and organisational resilience: The mediating role of innovation. *International Journal of Organizational Analysis*, 23(4), 564 - 587.
- Mayson, S., & Barrett, R. (2006). The 'science' and 'practice' of HRM in small firms. *Human Resource Management Review*, 16(4), 447-455.
- Medina, C., & Rufin, R. (2009). The mediating effect of innovation in the relationship between retailers' strategic orientations and performance. *International Journal of Retail & Distribution Management*, 37(7), 629-655.
- Messersmith, J. G., Patel, P. C., Lepak, D. P., & Gould-Williams, J. S. (2011). Unlocking the black box: Exploring the link between high-performance work systems and performance. *Journal of Applied Psychology*, 96(6), 1105-1118.
- Moreno, A. M., & Casillas, J. C. (2008). Entrepreneurial orientation and growth of SMEs: A causal model. *Entrepreneurship Theory and Practice*, 507-528.
- NSDC. (2012a). *SME Annual Report 2011/12: Redefining the future*. Retrieved January, 30, 2013, from <http://www.smecorp.gov.my/v4/node/2946>
- NSDC. (2012b). *SME Masterplan 2012-2020: Catalysing growth and income*. Retrieved April, 27, 2015, from <http://www.smecorp.gov.my/vn2/node/190>
- Omar, S. S., Arokiasamy, L., & Ismail, M. (2009). The background and challenges faced by Small medium enterprises: A human resource development perspective. *International Journal of Business and Management*, 4(10), 95-102.
- Osman, I., Ho, T. C. F., & Galang, M. C. (2011a). Are human resource departments really important? An empirical study on Malaysian small and medium enterprises (SMEs) in the Service Sector. *International Journal of Business and Management*, 6(2), 147-153.
- Osman, I., Ho, T. C. F., & Galang, M. C. (2011b). The relationship between human resource practices and firm performance: An empirical assessment of firms in Malaysia. *Business Strategy Series*, 12(1), 41-48.
- Othman, A. E. A. (2009). Strategic integration of human resource management practices: Perspectives of two major Japanese electrical and electronics companies in Malaysia. *Cross Cultural Management: An International Journal*, 16(2), 197-214.
- Panayotopoulou, L., Bourantas, D., & Papalexandris, N. (2003). Strategic human resource management and its effects on firm performance: An implementation of the competing values framework. *International Journal of Human Resource Management*, 14(4), 680-699.
- Prieto, I. M., & Pe rez-Santana, M. P. (2014). Managing innovative work behavior: The role of human resource practices. *Personnel Review*, 43(2), 184-208.
- Rai, A., Patnayakuni, R., & Seth, N. D.-. (2006). Firm performance impacts of digitally enabled supply chain integration capabilities. *MIS Quarterly*, 30(2), 225-246.
- Ringle, C.M., Wende, S., Becker, J.M. (2014). SmartPLS 3.0: SmartPLS. Available from: <http://www.smartpls.com/>.
- Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, 26(4), 441-457.
- Rowley, C., Benson, J., & Warner, M. (2004). Towards an Asian model of human resource management? A comparative analysis of China, Japan and South Korea. *International Journal of Human Resource Management*, 15(4/5), 917-933.

- Shipton, H., Fay, D., West, M., Patterson, M., & Birdi, K. (2005). Managing people to promote innovation. *Creativity and Innovation Management*, 14(2), 118-128.
- SME Corp. Malaysia. (2012, May 22). *Permohonan untuk mendapatkan senarai syarikat dalam Industri Kecil dan Sederhana (IKS)*. Retrieved May 22, 2012, from message posted to nazlina@uum.edu.my
- Stavrou-Costea, E. (2005). The challenges of human resource management towards organizational effectiveness: A comparative study in Southern EU. *Journal of European Industrial Training*, 29(2), 112-134.
- Subramaniam, C., Shamsudin, F. M., & Ibrahim, H. (2011). Linking human resource practices and organizational performance: Evidence from small and medium organizations in Malaysia. *Jurnal Pengurusan*, 32, 27-37.
- Takeuchi, R., Lepak, D. P., Wang, H., & Takeuchi, K. (2007). An empirical examination of the mechanisms mediating between high-performance work systems and the performance of Japanese organizations. *Journal of Applied Psychology*, 92(4), 1069-1082.
- Tansky, J. W., & Heneman, R. (2003). Guest editor's note: Introduction to the special issue on human resource management in SMEs: A call for more research. *Human Resource Management*, 42(4), 299-302.
- Theriou, G. N., & Chatzoglou, P. D. (2008). Enhancing performance through best HRM practices, organizational learning and knowledge management: A conceptual framework. *European Business Review*, 20(3), 185-207.
- Tvorik, S. J., & McGivern, M. H. (1997). Determinants of organizational performance. *Management Decision*, 35(6), 417-435.
- Uysal, G. (2008). Relationship among HR and firm performance: A Turkey context. *Journal of American Academy of Business, Cambridge*, 13(2), 77-83.
- Vincent, L. H., Bharadwaj, S. G., & Challagalla, G. N. (2004). *Does innovation mediate firm performance? A meta-analysis of determinants and consequences of organizational innovation*. Retrieved November 12, 2011, from <http://smartech.gatech.edu/handle/1853/10731>
- Wall, T. D., & Wood, S. J. (2005). The romance of human resource management and business performance, and the case for big science. *Human Relations*, 58(4), 429-462.
- Wang, C. L. (2008). Entrepreneurial orientation, learning orientation, and firm performance. *Entrepreneurship Theory and Practice*, 32(4), 635-657.
- Way, S. A. (2002). High performance work systems and intermediate indicators of firm performance within the US small business sector. *Journal of Management*, 28(6), 765-785.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5, 171-180.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20(1), 71-91.
- Wood, E. H. (2006). The internal predictors of business performance in small firms: A logistic regression analysis. *Journal of Small Business and Enterprise Development*, 13(3), 441-453.
- Wright, P. M., Gardner, T. M., Moynihan, L. M., & Allen, M. R. (2005). The relationship between HR practices and firm performance: Examining causal order. *Personnel Psychology*, 58(2), 409-446.
- Youndt, M. A., Snell, S. A., Dean Jr, J. W., & Lepak, D. P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal*, 39(4), 836-866.
- Zakaria, N., Abdullah, N.A.C., & Yusoff, R.Z. (2017). Incorporating organizational innovation as a missing link in the examination of the EO-performance linkage. *International Journal of Economic Research*, 14 (15 (Part-II)), 49-60.
- Zakaria, N., Abdullah, N.A.C., & Yusoff, R.Z. (2016). Empirical review on innovation-performance linkage in Malaysian manufacturing small and medium enterprises. *International Review of Management and Marketing*, 6(S7), 101-106.
- Zakaria, N., Ishak, K.A., Arshad, D., Abdullah, N.C.A., & Ahmad, N. (2018). Measuring the dimensionality of human resource management: The perspective of Malaysian SME owner-managers. *Management Science Letters*, 8, 317-326.
- Zakaria, N., Fauzi, W.I.M., Abdullah, N.A.C., & Yusoff, R.Z. (2018). The Link between HRM Practices and Performance in Malaysian SMEs. *International Journal of Supply Chain Management*, 7(6), 118-126.
- Zhou, Y., Hong, Y., & Liu, J. (2013). Internal Commitment or External Collaboration? The Impact of Human Resource Management Systems on Firm Innovation and Performance. *Human Resources Management*, 52(2), 263-288.

