**THE MEDIATING EFFECT OF HRM PRACTICES ON THE RELATIONSHIP BETWEEN BUSINESS STRATEGY AND EMPLOYEE OUTCOMES**

**Koon Vui Yee, Juhary Ali**

**ABSTRACT**

This study examines the effects of human resource management (HRM) practices on strategic approach on employee attitudes and behaviors in Public and Private limited companies in Malaysia. Specifically, the study examines the combination effect of HRM practices variable of the relationship between business strategy of the company and employee outcomes such as organizational commitment, job satisfaction, employee involvement and employee turnover. The framework is tested using structural equation modeling and the data are from 571 non-human resource department employees from two different types of business ownership in Malaysia. The hypothesized relationship is tested using AMOS 16.0 through path analysis. The results of the confirmatory factor analysis demonstrated relatively a reasonable fit of the model to the data on the basis of a number of fit statistics (χ2= 1184.856; GFI (goodness-of-fit index) = 0.903; CFI (comparative fit index) = 0.927; TLI (Tucker-Lewis index) = 0.918 and RMSEA (root mean square error of approximation) = 0.037). This study found the mediation effect of HRM practices between business strategy and employee outcomes showed mixed results.

**INTRODUCTION**

Rapid changes in technology, product development, production process, manufacturing and the relative size of manufacturing and services pose a different set of problems that could not be solved with traditional HRM methods alone (Day, 1994; Drucker, 1986). Through these changes and renewed, it emphasis on the importance of training and development, selective staffing, compensation, and information sharing as management has begun to recognize that workers could stimulate achieving organizational goals (Levine, 1995).

An effective HRM practices and procedures could improve profitability and bring benefit to the firm (Dobni & Luffman, 2000; Mavondo, Chimhanzi & Stewart, 2004). This owing to the idea that human resource should be considered as a strategic factor, not only for the role it plays putting managerial strategy into effect, but also for its potential to become the source of sustainable competitive advantage, especially when they aligned with organization’s competitive or business strategy (Begin, 1991; Cappelli & Singh, 1992; Jackson & Schuler, 1995).

Various studies have proven the role of human resources as one of the important capitals to organizations and discussed on how this capital could be the core competence of an organization. Despite this evidence, many organizations still adopted a passive approach of HRM practices although research found these practices could bring effect to organizational success. Now, most of the studies about HRM practices, employee attitudes and performance have conducted in the West, on the domestic operations of United States (U.S) firms. Smaller number of studies conducted in the United Kingdom (U.K), Europe (for example Hoque, 1999; Guest & Hoque, 1994) and in Asia (for example Huang, 2000; Huang & Cullen, 2001; Khatri, 2000; Mak & Akhtar, 2003).

The research reported here explores the prevalence of HRM practices in different types of business level strategy and explore to the extent of these interrelationship toward better working attitudes of human resources or workers. This working attitude includes organizational commitment, job satisfaction, employee involvement and turnover intention.

**THE RESEARCH PROBLEM**

The main challenge addressed in this study is to link three main variables: Business strategy, HRM practices and employee outcomes. Prior literatures on these three variables linkages have neglected the following aspects that form research gaps.

The field of SHRM research has increasingly recognized the role of employees in the HRM practices-organization fit performance. SHRM research has developed into two pathway that is micro (with its focus on enhancing individual-level productivity, attitudes, well-being and retention) and macro (with its focus on firm-level HR strategies, functions and practices) as noted by several researchers (Ostroff & Bowen, 2000; Ployhart, 2004; Wright & Boswell, 2002). However, integration between macro and micro HRM has been lacking, leading to inadequate understanding of whether and how ‘strategic’ HRM might impacts individual-level outcomes. Supporting this notion, reviews by Lepak, Liao, Chung and Harden (2006); and Wright and Boswell (2002) have noted the lack of multilevel research that integrates between macro such as high performance work system (HPWS) and more micro HRM-related processes and outcomes.

Past studies conducted have proven a significant positive relationship between HRM practices and firm performance (for example, Ahmad & Schroeder, 2003; Bae & Lawler, 2000; Batt, 2002; Guthrie, 2001; Hoque, 1999; Jayaram, Droge & Vickery, 1999; Wright, Gardner & Moynihan, 2003). HRM practices have designed to strengthen employee ability, motivation, and opportunities to contribute (Batt, 2002; Boxall & Purcell, 2002). However, researchers generally agree that HRM practices do not lead directly to organizational performance and have started examining the intermediate effect to understand how HRM practices affect organizational performance (for example, Wright, Dunford & Snell, 2001; Takeuchi, Lepak, Wang & Takeuchi, 2007). Godard (2001) found that moderate HRM practices had positive outcomes for employees, but intensive adoption heightened stress levels. Further, Boselie, Dietz and Boon (2005) found from their analysis of the 104 articles, it confirms the impression of the ‘linking mechanisms’ between HRM and performance (Wood, 1999), and the mediating effects of key variables (Batt, 2002) are largely disregarded.

Boselie, Dietz & Boon (2005) found majority of the 104 articles that they surveyed, financial measures such as profits being the most common followed by various measures for sales. Although HRM’s impact on performance is typically depicted as being refracted through changes in employee attitudes and behaviors, these measurement in research are rare. Guest (1997) has raised persuasive doubts about the problem of ‘causal distance’ between an HRM input and such outputs based on financial performance. Put simply, so many other variables and ‘event’, both internal and external, affect organizations that these direct linkages rather strain credibility. He claimed that using more ‘proximal’ outcome indicators such as the influence of workforce to increase employees’ direct contribution to performance is both theoretically more reasonable and methodologically easier to link.

This study attempts to address the gap discussed in problem statement. Assumption of this conceptual framework is using confirmatory factor analysis. Overall, this study embarks on examined the validity of the position taken by configuration theory; specific business strategy would coordinate with the bundle of HRM practices. Besides, it attempted to determine whether the interactive effect of HRM practices with distinctive business strategies bring significant effect on employee outcomes by attitudes. Figure 1 shows the conceptual framework of this study.

*Figure 1* Conceptual Framework

Independent Variable Mediating Variable Dependent Variable

HRM Practices

* Recruitment & Selection
* Training & Development
* Compensation
* Performance

Management

* Employment Security
* Work-life balance

Employee Outcomes

* Organizational Commitment
* Employee turnover
* Employee Involvement
* Job Satisfaction

Business Strategy

* Differentiation
* Low-cost

**METHODOLOGY**

In conducting this study, 200 companies consist of profit making Public Limited and Private Limited from manufacturing and service sectors selected randomly as population set. The sample includes 100 Public Limited and 100 Private Limited companies. Equal number of firms selected to ensure a representative sample. There were two respondents to the questionnaire. The first respondents, was the employees from non-human resource (HR) departments. They were required to providing information on business strategy, HRM practices in their company and employee outcomes. The second respondent was the person identified as the HR manager. The respondent expected to have knowledge and able to answer questions pertaining business strategy as well as HRM practices within the organization.

Items from past studies of Dess & Davis (1984) and Guest, Conway & Dewe (2004) used to measures of business strategy (10 items) and HRM practices (46 items). Organisational commitment were measured using Allen and Meyer (1990)’s three components which are affective, continuance and normative. Employee outcomes had of 23 items and divided into four attitudinal outcomes. Variables of job satisfaction in this study were measured using job descriptive index (JDI) (Smith, Kendall & Hulin, 1969). Employees’ job involvement was measured using a four-item scale based on Kanungo’s (1982) study. Evaluating worker turnover intentions was composed of three sub-scales using Mayfield and Mayfield’s (2007) study.

The 642 dataset collected were coded and saved into SPSS Version 14 and analysed using AMOS Version 16.0. During the process of data cleaning and screening for accuracy for data input, outliers, normality and multicollinearity, 22 dataset were deleted due to incomplete cases while another 49 data set were deleted due to Mahalanobis distance values more than χ2 value (χ2 = 137.208; n=90, p<0.001) leaving a final 571 dataset to be analysed. Several statistical tests and analysis such as reliability test, validity tests using confirmatory factor analysis (CFA) for construct validity, discriminant validity for multicollinearity treatment, descriptive analysis, correlation and structural equation modeling (SEM) analysis using AMOS 16.0. Mediation analysis was to examine the direct and indirect effects of the study variables and test whether HRM practices mediated the associations between business strategy and employee outcomes. Holmbeck (1997) suggested that SEM is particularly useful when multiple latent variables are under investigation. In this study, the results of SEM model were reported and then follow-up by mediation test using Baron and Kenny’s (1986).

**RESULTS**

*Confirmatory Factor Analysis (CFA)*

Hypothesized model referred to Figure 1 was designed to test the effect of business strategy and HRM practices on employee outcome’s sub-variables. The model that proposed no relation between error terms did not fit well. Therefore, modifications indices were used to identify paths to improve model fit. After the modification indices (MI) showed eleven misspecified error variance indicated a high degree of overlap in content and six correction lines were made to eliminate the incorrect effect in initial model, the modified model had a good fit with the data based on assessment criteria such as GFI, CFI, TLI and RMSEA (Bryne, 2001; Anderson & Gerbing, 1998). Table 1 shows that the goodness of fit of generated or modified model is better compared to the hypothesized model.

Table 1 *Goodness of Fit Results of Hypothesized and Modified Model (N=571)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Goodness-of-fit statistics |  |  | Hypothesized  Model | Modified  Model |
|  |  |
| Chi-square test | χ2 | p<0.05 | 2479.138 (p<0.001) | 1184.856 (p<0.001) |
| Degree of freedom | df | ≥0 | 1139 | 664 |
| Goodness-of-fit index | GFI | >0.90 | 0.848 | 0.903 |
| Comparative fit index | CFI | >0.90 | 0.859 | 0.927 |
| Tucker-Lewis index | TLI | >0.90 | 0.848 | 0.918 |
| Root mean square error of approximation | RMSEA | <0.08 | 0.045 | 0.037 |

*Mediation Analysis*

Table 2 presented and discussed in detail on the analyses of direct, indirect, and total effects. Maximum likelihood with bootstrapping was implemented in SEM to test the model. Thus, Table 2 summarizes bootstrapped estimates of paths and standard errors. A resampling methods (bootstrapping) also used to determine the significant of the indirect effect in the current study. Table 3 shows the indirect effect or mediation effect of HRM practices on business strategy and employee outcomes. Table 4 shows the types of mediation effects. The mediation effects were determine using the methodology of various researchers (James et al., 2006, Kenny et al, 1998; Baron & Kenny, 1986).

For human resource management practices 1 (HRMP1), a significant relationship (p<0.01) was found between business strategy (i.e. differentiation strategy) and employee outcomes (path a). When the business strategy and HRM practices variables entered into model, the relationship between HRMP1 and employee outcomes (path b); organizational commitment (p<0.01), employee involvement (p<0.01), and job satisfaction (p<0.01) were significant except turnover intention. Further, the relationship between differentiation strategy and employee outcomes (path c’) showed organization commitment, turnover intention and job satisfaction become non-significant. Interestingly, the relationship between differentiation strategy and employee involvement was significant (p<0.05) but with sign change to negative. Therefore, the study found that the relationship of differentiation strategy and employee outcomes (organizational commitment and job satisfaction) having full mediation with HRM practices. The relationship between differentiation strategy and employee involvement as an indirect of inconsistent mediation through HRM practices. However, HRM practices have no mediation between differentiation strategy and turnover intention.

For the human resource management practices 2 (HRMP2), a significant relationship (p<0.001) was found between business strategy (i.e. low-cost strategy) and HRMP2 (path a). When the low-cost strategy and employee outcomes variables were included into the model, the relationship between HRMP2 and employee outcomes (path b); organizational commitment (p<0.01), employee involvement (p<0.01), turnover intention (p<0.001) and job satisfaction (p<0.001) were significant. Further, the relationship between low-cost strategy and employee outcomes (path c’); organizational commitment (p<0.01), employee involvement (p<0.01), turnover intention (p<0.01) and job satisfaction (p<0.01) were significant. This finding supports a partial mediation effect of HRMP2 on the relationship between low-cost strategy and employee outcomes.

Table 2 *Steps of Determining Mediation or Indirect Effect*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Path  (X🡪Y) | **Step One: Path c**  **(Total Effect)** | | | | |
|  | Estimate | 95% CI | Beta | | p |
| D🡪OC | 0.334 | .211 to .479 | 0.300 | | .001 |
| D🡪EI | 0.109 | -.014 to .237 | 0.104 | | .094 |
| D🡪ET | -0.129 | -.286 to .023 | -0.108 | | .099 |
| D🡪JS | .0.304 | .212 to .434 | 0.416 | | .001 |
| LC🡪OC | -0.072 | -.078 to .243 | -0.053 | | .385 |
| LC🡪EI | 0.053 | -.090 to .202 | 0.042 | | .494 |
| LC🡪ET | -0.249 | -.465 to -.028 | -0.171 | | .017 |
| LC🡪JS | 0.228 | .121 to .352 | 0.257 | | .002 |
| Path  (X🡪M) | **Step Two: Path a**  **(Direct Effect)** | | | | |
| D🡪HRMP1 | 0.427 | 0.339 to 0.543 | 0.710 | | .001 |
| LC🡪HRMP2 | -0.121 | -0.249 to -0.054 | -0.938 | | .001 |
|  | **Step Three: Path b**  **(Direct Effect)** | | | | |
| Path  (M🡪Y) | Estimate | 95% CI | | Beta | p |
| HRMP1🡪OC | 0.929 | .544 to 1.365 | | 0.502 | .003 |
| HRMP1🡪EI | 0.795 | .511 to 1.168 | | 0.455 | .002 |
| HRMP1🡪ET | -0.232 | -.566 to .151 | | -0.117 | .252 |
| HRMP1🡪JS | 0.691 | .441 to .956 | | 0.568 | .003 |
| HRMP2🡪OC | 17.586 | 13.630 to 22.121 | | 1.684 | .000 |
| HRMP2🡪EI | 17.388 | 12.828 to 21.881 | | 1.763 | .002 |
| HRMP2🡪ET | -15.531 | -20.856 to -10.260 | | -1.385 | .002 |
| HRMP2🡪JS | 10.575 | 7.684 to 13.871 | | 1.540 | .001 |
|  | **Step Four: Path c’**  **(Direct effect)** | | | | |
| D🡪OC | -0.063 | -0.280 to 0.145 | -0.057 | | .533 |
| D🡪EI | -0.230 | -0.437 to –0.045 | -0.219 | | .016 |
| D🡪ET | -0.029 | -0.272 to 0.197 | -0.025 | | .724 |
| D🡪JS | 0.009 | -0.123 to 0.144 | 0.013 | | .877 |
| LC🡪OC | 2.206 | .849 to 4.786 | 1.633 | | .001 |
| LC🡪EI | 2.163 | .985 to 4.436 | 1.695 | | .001 |
| LC🡪ET | -2.134 | -4.435 to -1.084 | -1.471 | | .001 |
| LC🡪JS | 1.512 | .683 to 3.263 | 1.701 | | .001 |

Table 3 *Mediation Effect of Human Resource Management Practices on Business*

*Strategy and Employee Outcomes.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Indirect Effect or Mediation or (c – c’)** | | | |
|  | Estimate | 95% CI | Beta | p |
| D🡪OC | 0.397 | 0.245 to 0.572 | 0.357 | .002 |
| D🡪EI | 0.340 | 0.216 to 0.497 | 0.323 | .002 |
| D🡪ET | -0.099 | -0.254 to -0.070 | -0.083 | .236 |
| D🡪JS | 0.295 | 0.195 to 0.423 | 0.403 | .002 |
| LC🡪OC | -2.134 | -4.719 to -.804 | -1.580 | .001 |
| LC🡪EI | -2.110 | -4.384 to -.949 | -1.653 | .001 |
| LC🡪ET | 1.885 | .867 to 4.215 | 1.299 | .001 |
| LC🡪JS | -1.284 | -3.011 to -.484 | -1.444 | .001 |

Table 4 *Types of Mediation*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Path c  (Step 1) | Path a  (Step 2) | Path b  (Step 3) | Path c’  (Step 4) | Path c-c’ | Type |
| D🡪HRMP1🡪OC | (+)\*\* | (+)\*\* | (+)\*\* | (-) ns | (+)\*\* | Full mediation |
| D🡪HRMP1🡪EI | (+) ns | (+)\*\* | (+)\*\* | (-)\* | (+)\*\* | Inconsistent mediation |
| D🡪HRMP1🡪ET | (-) ns | (+)\*\* | (-) ns | (-) ns | (-) ns | No mediation |
| D🡪HRMP1🡪JS | (+)\*\* | (+)\*\* | (+)\*\* | (+) ns | (+)\*\* | Full mediation |
| LC🡪HRMP2🡪OC | (-).ns | (-)\*\* | (+)\*\*\* | (+)\*\* | (-)\*\* | Partial mediation |
| LC🡪HRMP2🡪EI | (+) ns | (-)\*\* | (+)\*\* | (+)\*\* | (-)\*\* | Partial mediation |
| LC🡪HRMP2🡪ET | (-)\* | (-)\*\* | (-)\*\* | (-)\*\* | (+)\*\* | Partial mediation |
| LC🡪HRMP2🡪JS | (+)\* | (-)\*\* | (+)\*\* | (+)\*\* | (-)\*\* | Partial mediation |

*Note.* \*Correlation significant@p≤0.05, \*\*Correlation significant @ p≤0.01 and \*\*\*Correlation significant @ p≤0.001

**DISCUSSION**

In this study, HRM practices were combined to see the effect of the integration effect towards business strategy and employee outcomes. The benefit of examining the effect of the mutiple pattern of HRM practices, rather than focus on individual practices because HRM practices in organizations are related, and communicate as part of coordinated systems (see Huselid, 1995). Hence, the relations between particular HRM practices and organization commitment are difficult to interpret whenever individual HRM practices were measured (Meyer & Allen, 1997). These relations could indicate a causal connection between some particular practices with employee outcomes. In order word, these relations could be false because reflected mutual relations with other HRM practices or business strategies only.

As a result, it was hypothesized that the combination of HRM practices would mediate the relationship between business strategy and employee outcomes. After HRMP1 (the combination of HRM practices) was added to the model, the relationships between differentiation strategy and employee outcomes (organizational commitment, employee involvement and job satisfaction) were shown significant relationship. From the results in Table 3 it was found that HRMP1 had indirect effect on the relationship of differentiation strategy with job satisfaction (*β*=0.295), organization commitment (*β*=0.397), and employee involvement (*β*=0.340). The results showed that interaction of HRM practices among business strategy and job satisfaction; business strategy and organization commitment; and business strategy and employee involvement, could increase their positive attitude by 0.295, 0.397 and 0.340 respectively for every increase of business strategy and HRM practices in an organization.

However, results did not showed significant mediation effect of HRM practices between differentiation strategy and turnover intention. This is consistent with Altarawmneh and al-Kilani (2010) where their results found no statistical evidence on the effects of HRM practices on employees’ turnover intentions except job analysis. Furthermore, although in this study showed no significant mediation effect but standardized estimates showed negative effect. This result also showed consistency with Mudor and Tooksoon (2011) that studied the impact of three variables of HRM practices (supervision, job training, and pay practices) on employee turnover and their results highlighted negative effect on turnover.

On the other hand, HRMP2 (the combination of HRM practices) was added to the model to determine whether any effect of mediation between low-cost strategy and employee outcomes. From the results, it was found that HRMP2 had indirect effect on employee involvement (*β*=-2.110), turnover intention (*β*=1.885) and organization commitment (β=-2.134) and job satisfaction (*β*=-1.284). All the mediation effect was negative except turnover intention. The indirect (mediated) effect of low-cost on employee turnover intention is 1.885. This effect means that due to the indirect (mediated) effect of low cost on turnover intention of employee, when low-cost goes up by 1, employee turnover goes up by 1.885. This is in addition to any direct (unmediated) effect that low-cost may have on turnover intention.

Overall, studies in SHRM consistently find that HRM practices are positively related to organizational performance, either directly or through mediating variables such as turnover, productivity, or quality (Arthur, 1994; Delery & Doty, 1996, Huselid, 1995; MacDuffie, 1995; Youndt et al., 1996). The findings of this study are consistent with Berg (1999) where at employee level, strong HRM system has found to be associated with increased job satisfaction. Employee found to have high intention to stay with the organization providing company emphasizes on training and development opportunities (Robinson, Kraatz & Rousseau*,* 1994; Lester & Kickul, 2001). Rousseau and Ho (2000) in their research also claimed that compensations and benefits practices used by employers provide for employees bring major influence on their perception of employment relationships. All the characteristics of HRM practices discussed above by several authors are similar with the characteristics of HRMP1 (HRM practices implemented by organization that using differentiation strategy).

**CONCLUSION**

In today’s dynamic global business environment, human resource plays a critical role in building a competitive advantage in the organization. The available literature on importance of human resource has generally accorded more attention to exploring performance and work attitudes. However, little empirical research has been found to establish a relationship between HRM practices with business strategy and the four variables of employee outcomes namely, job satisfaction, organization commitment, employee involvement and employee turnover intention.

The results had partially supported the hypothesis, which is “There is positive relationship between HRM practices and employee outcomes, thus playing mediation role between business strategy and employee outcomes”. HRM practices had indirect effect on the relationship between business strategy and employee outcomes. In this study, the interaction of HRM practices surveyed with differentiation strategy found to have significant positive effect on organization commitment, employee involvement and job satisfaction except turnover intention. On the other hand, the interaction of HRM practices surveyed with low-cost strategy found to have significant negative effect on organization commitment, employee involvement and job satisfaction except turnover intention.

Small sample size was one of the limitations of this study. Although the sample size of this study has met the minimum requirement sample size for SEM, the sample size of 571 is not sufficient to generalize the findings in this study to the population. Besides, respondents in this study could have self-report bias where the respondents tend to report positively on their own belief and knowledge. Reverse causality is also another threat to the internal validity of the findings from this study. Nature of survey could be some probability that the respondents may have given inaccurate ratings in this study, as English was the only language used as the medium of instruction. Some respondent could have difficulty in understanding and answering some questions.

Nonetheless, this present study brings benefit in gaining a better sense of the relationships between the variables. However, further research in the areas of business strategy, HRM practices and employee outcomes are recommended to discover the effects of this relationship with financial measurement. Differences of industry sector, level of management, region or countries should be examined to reveal the level of the model’s stability across population. Further studies should include the development of a more comprehensive set of measurement items for the latent variables of HRM practices. Doing so would provide greater insight into which consistency of HRM practices best explain on employee outcomes.

**REFERENCES**

Ahmad, S. & Schroeder, R.G. (2002).The importance of recruitment and selection process for sustainability of total quality management. *International Journal of* *Quality & Reliability Management,* 19 (5), 540-50.

Allen, N.J., & Meyer, J.P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of* *Occupational Psychology, 63*, 1-18.

Altarawmneh, I. & Al-Kilani, M. H. (2010). Human Resource Management and Turnover Intentions in the Jordanian Hotel Sector. *Research and Practice in* *Human Resource Management*, 18(1), 46-59.

Anderson, J.C., & Gerbing, D.W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411- 423.

Arthur, J.B. (1994). Effects of human resource systems on manufacturing performance and turnover. *The Academy of Management Journal.* 37(3), 670-687.

Bae, J. & Lawler, J. (2000). Organizational and HRM strategies in Korea: impact on firm performance in an emerging economy. *Academy of Management Journal*, 43(3), 502-517.

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,* 51(6), 1173– 1182.

Batt R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal, 45*, 587-597.

Begin, J.P. (1991). *Strategic employment policy: An organizational systems perspective*. Englewood Cliffs, NJ: Prentice-Hall.

Berg, P. (1999). The effects of high performance work practices on job satisfaction in the United States steel industry. *Industrial Relations, 54*, 111–134.

Boselie, P., Dietz, G. & Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal.* 15 (3), 67-94.

Boxall P,& Purcell J. *(*2002*). Strategy and human resource management*. New York: Palgrave Macmillan.

Byrne, B.M. (2001). *Structural equation modelling with AMOS: Basic concepts, applications, and programming*. London: Lawrence Erlbaum Associates.

Cappelli, P., & Singh, H. (1992). Integrating strategic human resources and strategic management. In D. Lewin, O. S, Mitchell, & P. Sherer (Eds), *Research frontiers* *in industrial relations and human resources*. 165-192, Madison, WI: Industrial Relations Research Association.

Day, G. (1994). The capabilities of market-driven organizations. *Journal of Marketing,* 58(4), 37–52.

Delery, J.E. & Doty, D.H. (1996). Modes of theorizing in strategic HRM: Test of universalistic, contingency and configurational performance predictions. *Academy of Management Journal*, *39*, 802-835.

Dess, G.G. & Davis, P.S. (1984). Porter’s generic strategies as determinants of strategic group membership and performance. *Academy of Management Journal,* 26(3), 467-88.

Dobni, C.B. & Luffman, G. (2000). Implementing marketing strategy through marketing orientation. *Journal of Marketing Management.16*, 895-916.

Drucker, P.F. (1986). *The Practice of Management*. HarperBusiness, New York, NY.

Godard, J. (2001). High performance and the transformation of work? The implications of alternative work practices for the experience and outcome of work. *Industrial* *and Labor Relations Review*, 54 (4), 776-805.

Guest, D. (1997). Human Resource Management and Performance: A Review and Research Agency. *International Journal of Human Resource Management,* 8(3), 263-276.

Guest, D. E. & Hoque, K. (1994). The good, the bad, and the ugly: Human resource management in new non-union establishments. *Human Resource Management* *Journal*, 5(1), 1-14.

Guest, D. E., Conway, N. & Dewe, P. (2004). Using sequential tree analysis to search for “bundles” of HR practices. *Human Resource Management Journal*, *14,* 79– 96.

Guthrie, J. (2001). High Involvement work practices, turnovers and productivity: Evidence from New Zealand. *Academy of Management Journal*, *44,* 180-192.

Holmbeck, G.N. (1997). Toward Terminological, Conceptual, and Statistical Clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology*, 65(4), 599-610.

Hoque, K. (1999). Human Resource Management and Performance in the UK Hotel Industry. *British Journal of Industrial Relations*, 37(3), 419-443.

Hoque, K. (1999). Human Resource Management and Performance in the UK Hotel Industry. *British Journal of Industrial Relations*, 37(3), 419-443.

Huang T.C (2000). Are the Human Resource Practices of Effective Firms Distinctly Different from Those of Poorly Performing Ones? *International Journal of* *Human Resource Management*, 11(2), 436-451.

Huang, H. J., & John B. Cullen, (2001). Labour Flexibility and Related HRM Practices: A Study of Large Taiwanese Manufacturers. *Canadian Journal of Administrative* *Sciences,* 18 (1), 33–39.

Huselid, M.A. (1995). The impact of human resource management practices on turnover, productivity and corporate financial performance. *Academy of Management* *Journal*. 38, 635-672.

Jackson, S.E. & Schuler, R.S. (1995). Understanding human resource management in the context of organizational and their environment. In M.R. Rosenzweig & L.W. Porter (Eds), *Annual Review of Psychology*, *46,* 237-264, Palo Alto, CA: Annual Reviews.

James, L. R., Mulaik, S. A., & Brett, J. M. (2006). A tale of two methods. *Organizational Research Methods, 9,* 233–244.

Jayaram J, Droge C & Vickery SK. (1999). The impact of human resource management practices on manufacturing performance. *Journal of Operations Management*, *18,* 1-20.

Kanungo, R.N. (1982). Measurement of job and work involvement. *Journal of Applied Psychology,* 67 (3), 341-349.

Kenny D.A., Kashy D.A. & Bolger N. (1998). Data analysis in social psychology. In Gilbert DT, Fiske ST, Lindzey G (Eds.), The handbook of social psychology (4th ed.) (pp. 233-265). New York: Oxford University Press.

Khatri, N. (2000). Managing human resource for competitive advantage: a study of companies in Singapore. *International Journal of Human Resource Management* *11*, 336-365.

Lepak D.P., Liao H., Chung Y., Harden E.E. (2006). A conceptual review of human resource management systems in strategic human resource management research. In Martocchio J (Ed.). *Research in personnel and human resources* *management, 25*, 217-271. Greenwich, CT: JAI Press*.*

Lester, S.W. & Kickul, J. (2001). Psychological contracts in the 21st century: what employees value most and how well organizations are responding to these expectations. *Human Resource Planning. 24*, 10-21.

Levine, D. S. (1995). *Thinking small leads to big gains for money managers*. San Francisco Business Times 10(13), 6.

MacDuffie, J. P (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production system in the world auto industry. *Industrial and Labour Relations Review, 48*, 197-221.

Mak*,* S.K.M. & Akhtar, S. *(*2003*).* Human resource management practices, strategic orientations, and company performance: a correlation study of publicly listed companies. *Journal of American Academy of Business*, 2 (2), 510-515.

Mavondo, F.T., Chimhanzi, J. & Stewart, J. (2004). Learning orientation and market orientation: relationship with innovation, human resource practice and performance. European Journal of Marketing, 39(11/12), 1235-63.

Mayfield, J. & Mayfield, M. (2007). The effects of leader communication on worker's intent to stay: an investigation using structural equation modeling. *Human* *Performance. 20*, 85-102.

Meyer, J.P., & Allen, N.J. (1997). Commitment in the workplace: Theory, research, and application. Thousand Oaks, CA: Sage Publications.

Mudor, H & Tooksoon, P (2011). Conceptual framework on the relationship between human resource management practices, job satisfaction, and turnover. *Journal of* *Economics and Behavioural Studies*, 2 (2), 41-49.

Ostroff C,& Bowen DE. (2000). Moving HR to a higher level: HR practices and organizational effectiveness. Klein KJ, Kozlowski SW (Eds.). Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions, (pp. 211-266). San Francisco: Jossey-Bass.

Ployhart RE. (2004). Organizational staffing: A multilevel review, synthesis, and model. In Martocchio JJ (Ed.), Research in personnel and human resources management, Vol. 23 (pp. 123-179). Greenwich, CT: JAI Press.

Robinson, S., Kraatz, M. & Rousseau, D. (1994). Changing obligations and the psychological contract: a longitudinal study. *Academy of Management Journal*, *37*, 137-52.

Rousseau, D. & Ho, V (2000). Psychological contract issues in compensation in S. Rynes and B. Gerhart (Eds) Compensation in Organizations: Current Research and Practice (pp. 273-310), Jossey Bass, San Francisco.

Smith, P.C., Kendall, L., & Hulin, C.L. (1969). *The measurement of satisfaction in work and retirement*. Chicago: Rand McNally.

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, 1069-1083.

Wood, S. (1999). Human resource management and performance. *International Journal of Management Review, 1,* 367-413.

Wright P.M, & Boswell WR. (2002). Desegregating HRM: A review and synthesis of micro and macro human resource management research. *Journal of Management,* *28*, 247-276.

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,* 409-446.

Wright, P.M., Dunford, B. & Snell, S.A. (2001). Human Resources and the Resource- Based View of the Firm. *Journal of Management*, *27,* 701-721.

Youndt, M., Snell, S., Dean, J., & Lepak, D. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of Management Journal,* 39(4), 836-867.