The impact of management development on firm performance: A comparative study of Europe and Asia

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ABSTRACT

The present research explored the links between management development and organisational performance through data collected from 584 organisations from six European countries and 146 organisations from Asia including Singapore, Hong Kong, China, and Myanmar. The results showed that management development was significantly associated with positive human resource management outcomes (the firm’s ability to attract and retain essential employees, and better employee-employer relations), which in turn contributed to organisational level performance outcomes (product quality, product development and customer satisfaction). Location (i.e., Europe versus Asia) had a significant direct effect on the strategic fit, the organisation’s strategic view of MD, the MD system and HR outcome from both human resources managers’ and line managers’ perspectives.

Keywords

Management development, HR development, human resource management and organisational performance, strategic human resource management, comparative human resource management
Together with the rapid growth of globalisation and changing organisational structures there is an increasing demand for qualified managers along with a corresponding scarcity of a highly qualified managerial pool in labour markets, thus management development (MD) has emerged as one of the most important management tools from which to gain and maintain competent managers (Wissema, Brand and Van der Pol, 1981).

Management development is described as one of the key constituents of human resource policy, a source of competitive advantage, and an instrument of organisational change (Clarke, 1999). However despite its suggested crucial role, management development theory development is still at the embryonic stage and is often described as atheoretical (Mabey, 2002). The definition of management development differs widely among commentators (for example, Burgoyne, 1988; Mumford, 1997; Thomson, Mabey, Storey, Gray and Iles, 2001) and there is also a scarcity of empirical studies. Management development research has lagged behind advances in other areas of human resource management, such as high performance work systems, and more specific practices such as selection, training, and reward system so it is not surprising to find that most firms do not have an integrated view of management development (Margerison, 1991).

Added to the confusion are the mixed results reported from previous empirical studies. Some studies demonstrate the positive relationship between management development and firm performance (for example, Harold, 2000; Lee, Phan and Tan, 2003; Mabey and Gooderham, 2005). However some go to the other extreme and criticise management development for being a game of meaningless outcomes (Clarke, 1999). Furthermore, most of the recent research has taken place in Anglo-American and European contexts, and consequently there is little understanding as to how management development operates outside of these contexts.

The aim of the present study was to build on the research of Mabey and Gooderham (2005), and it proposes and tests a modified management development model, examining the effect of background variables (location, firm size and sector), management development process constructs (strategic fit, firm’s strategic view of management development, management development system, line managers’ perceived value towards management development), and their effects on reported firm performance. The consequences of management development include human resources outcome
(firm’s ability to attract and retain essential employees, and improved inter-firm relationships) and performance outcome (product quality, product development and customer satisfaction). In an effort to expand the research into management development across Asia, the member countries of the ASEAN plus Three trading bloc (Association of Southeast Asian Nations plus Three); Singapore, China and Myanmar were chosen as the focus countries for this study.

The present study explores management development in more depth and breadth than previous studies by firstly identifying the management development process constructs and then their relationships with various indicators of firm performance and through conducting an empirical study across a number of countries across the Asia region in addition to countries already covered in Europe (Mabey & Gooderham, 2005). It examines whether management development truly and significantly contributes to firm performance regardless of the context and location of the firm and if so which aspects of management development significantly contribute to performance outcomes.

**METHOD**

As this research built on the management development empirical study conducted recently in European countries, it used the same questionnaire that Mabey and Gooderham (2005) used for the Asian data collection. Data from the Asian countries was collected through face to face interviews with a semi-structured questionnaire. The data came from one human resources manager, and one line manager from participating firms in the Asian countries who had experience of the firm’s MD programme. The secondary data set from Mabey and Gooderham’s (2005) European study was used in the present study for the further development of the model of MD used in this research (see Figure 1).

**Sample**

The original data file consisted of 601 responses from six participating countries from Europe and 151 responses from four participating Asian countries; the total sample size was 752 responses from HR managers (or the persons responsible for management development) and 752 responses from line managers (a total of 1504 responses for the whole project). However after deletion of missing values, the final data set contained 730 responses from the HR managers and 730 responses from line managers across Europe and Asia, a total of 1460 responses. The distribution of participating line
managers was 15.1% junior managers, 55.9% middle grade managers and 29.0% senior managers across Europe and Asia. Among the participating line managers, 18.9% were from Marketing/Sales departments, 12.6% were from Finance/Accounts departments, 5.6% were from Information Technology, 14.7% were from Production, 17.8% were from General Management and 30.3% were from other departments.

At an early stage of the data collection, only host-country privately owned companies were targeted, omitting Multinational Corporations/Enterprises (MNCs, MNEs), 100% foreign direct investment companies and public sector. Due to the low response rate and access difficulties encountered, Joint Venture companies with 70% or more of the share owned by local counterpart (especially in Hong Kong and Shanghai) were included in this study at the later stage (less than 2%).

**Questionnaire**

The questionnaires (for human resources managers and line managers) covered the wide range of HRD and MD activities as highlighted in the literature. A detailed description of the human resources manager questionnaire items is given below:

Section I of the questionnaire consisted of basic background information of the participating firms including, their commercial activity; size (number of employees); annual sales turnover; current and expected future annual sales turnover change; current and expected future change in number of managers.

Section II was related to the firm’s HR strategy focusing on strategic fit and the role of HR in the firms. Respondents were asked to rate on a five-point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree) on business strategy; HR’s role in formulating business strategy; linkage between HR strategy and business strategy; strategy for developing managers; perceptions towards HR management; internal promotion; and long term plans and retention of managers.

Section III covered general training and development for managers and consisted of: recruitment; emphasis on training and development; manager’s career planning; and selection for intensive development.
Section IV covered management development: MD policy; budget for training; regular appraisal system for managers; evaluation system; prioritisation of MD; link between MD policy and business strategy; and responsibility for manager’s career progression.

Section V enquired about the MD methods practiced in the firms. The respondents were requested to fill in the number of days they spent on MD programmes on an annual basis on internal programmes; eternal public courses, seminars or conferences; in-company job rotation; external placements/secondments; mentoring/coaching; e-learning; formal qualification; and total number of days allotted to MD activities per annum.

Section VI asked for managers’ perception of firm performance over the past 3 years compared with their major competitors from same sector in a five point Likert-type scale, ranging from 1 (very much worse) to 5 (very much better) on firm performance widely covered the areas of: quality of products and services; product development cum innovation; customer satisfaction; firm’s ability to attract and retain essential employees; and in-company relationships.

The final section asked for HR manager’s perception on management development activities through open ended questions on the impact of MD and identification of stimulation factors for MD over the past 3 years.

As with the HR manager questionnaire, the majority of the line manager’s questions were constructed in a five point likert-type scale, ranging from 1 to 5 with one open ended question requesting line managers to identify three factors that stimulated MD in their firm over the past three years. Line manager questionnaires covered: background information of the manager: their level and department; discouraging factors for management development from their point of view; line managers’ perspective on HRM; their perceptive on MD policy and methods used in the company; and subjective measures of company performance (the same as HRD question).

**Procedure**

The face to face interview was the primary data collection method used for HR managers. HR managers were requested to give the names of line managers who had practical or in-depth experience of management development. There were originally 151 semi-structured questionnaire interviews
with HRD managers and 151 semi structured questionnaire interviews with line managers, in total of 302 face-to-face interviews were conducted in Asia. The Asian data set was then combined with the secondary data set of six European countries (601 firms, 1202 responses) (Mabey and Gooderham, 2005). However after deletion of missing values, the final data set contained 730 firms (1460 responses): a primary data set of 146 firms (292 responses) from Asia and a secondary data set of 584 firms (1168 responses).

This study firstly sought to identify the determinants as well as the nature of management development, specifically whether MD is a single factor or multi-faced process. This process was carried out by extracting the variables from the semi-structured interview questionnaires with special emphasis on the human resource management and management development literatures. The chosen variables were examined by exploratory and confirmatory factor analyses by using structural equation modelling and with the reliabilities verified with Cronbach’s Alpha scores using SPSS.

**Data analysis**

The analytical techniques used in this research included frequencies, descriptive statistics; exploratory factor analyses; reliability tests with Cronbach’s Alpha; Pearson Correlations; Hierarchical Multiple Regression; and SEM analyses. The Statistical Package for the Social Sciences (SPSS) version 15 was used for univariate statistics, and multivariate statistics. EQS software, version 6.1 was used for the structural equation modelling (SEM). The results here focus on the SEM analyses. The specific research questions and hypotheses tested were:

**Research questions and hypotheses**

*RQ1: Is management development a multi-dimensional or single factor?*

*RQ2: Does management development contribute to firm performance?*

*H1. There is a positive relationship between the management development process and performance outcome.*

*H1a. There is a positive relationship between the extent to which a firm seeks to achieve strategic fit and performance outcome.*

*H1b. There is a positive relationship between firm’s strategic view of MD and performance outcome.*

*H1c. There is a positive relationship between firm’s MD best practice system and performance outcome.*
H1d. There is a positive relationship between line managers’ perceived value towards MD and performance outcome.

H2a. There is a positive relationship between the extent to which a firm seeks to achieve strategic fit and human resources outcome.

H2b. There is a positive relationship between firm’s strategic view of MD and human resources outcome.

H2c. There is a positive relationship between firm’s MD best practice system and human resources outcome.

H2d. There is a positive relationship between line managers’ perceived value towards MD and human resources outcome.

RQ3: To what extent does location (i.e., Europe versus Asia) affect the extent of practice of management development?

H3. The relationship between management development process and firm performance (performance outcome and human resources outcome) varies depending on the location of the firm.

RQ4: To what extent does location (i.e., Europe versus Asia) moderate the relationships between management development process and firm performance (performance outcome and human resources outcome)?

H4. The difference in location is moderating the relationships between the management development process and firm performance (performance outcome and human resources outcome).

RESULTS

The results of the SEM analysis for determining whether management development was a single factor or a multi-dimensional process showed that the multi-dimensional model of management development represented a good fit. The determinants of the management development process were then identified as strategic fit, firm’s strategic view of MD, MD system and line managers’ perceived value towards MD and used in the ensuing analysis.

The first stage of the analysis considered the direct effects of location (i.e., Europe versus Asia) on management development strategy and practices and, in turn, the effects on firm performance, as reported by HR managers. The variables were coded in the analysis as, Europe 1, Asia 2. The model presented in Figure 2 summarises the SEM analysis.

The model proved a good fit to the sample data with $\chi^2 (15, N=730) = 10.080$, $p = 0.81$ (non-significant), CFI = 1.000, GFI = .997, AGFI = .991, and RMSEA = 0.00. According to EQS diagnostic analysis (the Wald test), the link between HR outcome and MD system, and performance outcome and strategic fit were non-significant. However as these are important links for the theoretical discussions, these links were kept in the model. Except for the non-significant relationship
between strategic fit and performance outcome, there is no relationship between the rest of the MD process constructs and performance outcome reported by the HR managers. The rest of the links were all statistically significant (p<.05).

To summarise the modified HR model, location (coded Europe 1, Asia 2) has a significant effect on strategic fit (standardised coefficient = 0.08), firm’s strategic view of MD (standardised coefficient = 0.10), MD system (standardised coefficient = 0.23), and a negative effect on HR outcome (standardized coefficient = -0.14). In other words, Asia was found to have higher ratings of strategic fit, strategic view of MD, MD systems, and lower HR outcome.

In terms of the relationships among the MD indicators, strategic fit has a significant effect on the firm’s strategic view of MD (standardised coefficient = 0.49); the firm’s strategic view of MD has a significant effect on MD system (standardised coefficient = 0.49) and on line managers’ perceived value towards MD (standardised coefficient = 0.25); and the MD system has a significant effect on line managers’ perceived value towards MD (standardised coefficient = 0.11).

In terms of testing the hypotheses between MD and performance outcome, strategic fit did not have a significant effect on the performance outcome (standardised coefficient = 0.06). None of the MD process constructs had statistically significant effects on performance outcome. With regard to the links between the MD constructs and HR outcome, strategic fit (standardised coefficient = 0.23), the firm’s strategic view of MD (standardised coefficient = 0.18), and line managers’ perceived value towards MD (standardised coefficient = 0.09) have significant effects on HR outcome variable but the MD system did not have a significant effect on HR outcome (standardised coefficient = 0.02). HR outcome has a strong and significant effect on performance outcome (standardised coefficient = 0.45).

Based on the analyses above, MD has a direct and positive relationship with HR outcome and an indirect relationship with performance outcome. The links between location and management development and HR and performance outcomes changes somewhat when outcomes are reported by line managers. The results of the SEM are summarised in Figure 3.

When outcomes are reported by line managers, Figure 3 shows that location has a negative effect on HR outcome. HR outcome is positively predicted by strategic fit, line managers perceived value of MD and, oddly, negatively predicted by MD system. In summary Asia was found to have
higher ratings of strategic fit, line managers’ perceived value towards MD, and lower ratings of MD system and HR outcome from the line managers’ perspective. Firm performance is positively predicted by HR outcome and also by line manager’s perceived value of MD.

The second stage of our analysis considered whether location moderated the strength of relationships between the background variables (firm size and sector), the management development process constructs (strategic fit, firm’s strategic view of management development, management development system, and line managers’ perceived value towards management development), and outcome variables (human resources outcome and performance outcome). Testing for moderation effect in EQS was achieved by conducting a multisample analysis, where the levels of moderator are treated as different groups (Bentler, 1995). In the present case, the model was estimated for both European firms and Asian firms as separate groups. Parameters were then constrained to be equal across groups, and the validity of these constraints was then statistically tested. If the constraints of equality of parameters across groups are statistically supported, then the samples can be considered to come from the same population. If the constraints of equality imposed upon certain parameters across models are not statistically supported, then there is evidence that the sub-samples are from different populations, and that there is an interaction between population membership (whether European or Asian firms).

The moderator analysis in SEM revealed that there were no significant differences between European firms and Asian firms in terms of the strength of relationships between variables presented in Figure 1. Therefore the MD model applies with near exactly equal relevance to both Europe and Asia contexts.

**DISCUSSION**

This empirical study supported management development being a multi-dimensional process and it supported previous definitions of management development as a pluralistic meeting point (Burgyone and Jackson, 1997), and a multi-faced process (Thomson, Mabey, Storey, Gray and Iles, 2001). The study identified the determinants of the management development process as strategic fit, firm’s strategic view of MD, MD system and line managers’ perceived value towards MD. The empirical
findings supported the use of multiple performance outcomes instead of relying on a single aggregate perceived measure of organisational performance.

The study found significant differences between human resource managers and line managers’ responses on the management development system and its contributions towards firm performance. Although the relationship between the management development system and the human resource outcome variable was insignificant in the human resource manager model, it was significant in the line manager model. As there was an insignificant relationship between the management development system and outcome variables, human resources managers appear not to be in favour of the system perspective. However, as the management development system was significantly related to the human resources outcome variable for line managers, line managers appeared to be more in-favour of the system perspective (i.e., linking management development with other human resource management practices).

In terms of examining the impact of management on firm performance, this study found clear support for management development directly contributing towards human resource outcome which in turn contribute towards firm performance (performance outcome). This significant finding suggests that human resource outcome is the mediator between management development process (strategic fit, firm’s strategic view of MD, MD system and line managers’ perceived value towards MD) and performance outcome.

Through the examination of the moderating effect of location on management development and firm performance, it was found that location had an impact on the firm-specific arrangements and planning for the management development process (for example, firm’s arrangement on aligning its business strategies with human resources strategies, the extent to which firms give strategic importance to management development and the extent to which firms practice best practices management development systems). However location did not have significant effect on the relationship between the management development process and outcome variables. It had a significant effect only to the extent to which line managers’ valued firm’s strategic management development activities. Therefore it is suggested that differences in location have only a minimal impact on management development and its contributions towards firm performance.
CONCLUSION

In conclusion the results suggest that if firms make concerted efforts in aligning human resources and management development strategies with business priorities, avoiding management development activities taking place independently without co-ordinating with other human resources practices, and strategically managing to develop managerial talent; management development contributes positively to firm performance. In other words, investing in properly configured management development is a worthwhile investment for firms regardless of their specific location.

Clearly the present study has limitations. Due to the multidimensional nature of management development carefully conducted longitudinal studies should be developed in further studies to make causal interpretations. This study was not able to examine the fit between the particular type of business strategies (for example cost leadership, differentiation) and the corresponding HRM strategies and further research could do this. The present study was also not able to examine the relationship between the type of management development methods the firms used and firm performance and therefore further research could focus more on this relationship. However while there are a range of limitations and indications for further study this research has comprehensively shown that management development positively contributes towards human resources outcome which in turn contribute to firm performance. Management Development should not be treated as a cost to be cut under economic downturn. Properly aligned management development brings about long term economic benefit.
References


Figure 1: Model of management development

- **Background variables**
  - Location
  - Firm size
  - Sector

- **The MD process constructs**
  - Strategic Fit
  - Strategic MD
  - MD system
  - *LMs perceived value towards MD*

- **The outcomes of MD**
  - Performance outcome
  - HR outcome
Figure 2: The effects of location on MD and firm performance (outcomes reported by HR managers)

Note: rectangles represent measured variables; unidirectional arrows denote direction of influence; bidirectional arrows denote correlations; hyphenated arrows denote statistically non-significant. ‘E’ denotes errors. Standardized parameter estimates are presented. Except for the paths denote in hyphenated arrows, the rest are all statistically significant (p < 0.05). *Italics* denote responses from line managers. All other responses are from HR managers.
Figure 3: The effects of location on MD and firm performance (outcomes reported by line managers)

Note: rectangles represent measured variables; unidirectional arrows denote direction of influence; bi-directional arrows denote correlations; hyphenated arrow denotes statistically non-significant. ‘E’ denotes errors. Standardized parameter estimates are presented in the diagram. Except for the path denotes in hyphenated arrows, the rest are all statistically significant. *Italics* denote responses from line managers.