STRATEGIC HUMAN RESOURCE MANAGEMENT AND ORGANIZATIONAL PERFORMANCE: TESTING A TYPOLOGY OF FIT

A.S. ENGELBRECHT
R.G. ERASMUS
Department of Industrial Psychology
University of Stellenbosch

N. SIVASUBRAMANIAM
Center for Leadership Studies
Binghamton University, New York

ABSTRACT

To be utilized effectively and to have a positive effect on the multitude of complex challenges facing South African organizations, human resources (HR) have to be managed in a strategically correct manner. This study investigated the performance implications of two types of fit in strategic human resource management (SHRM). The results indicated that an organization's HR strategy had a moderating effect on the relationship between business strategy and performance. Furthermore, the survey indicated that organizations could be classified according to clusters of internally consistent HR practices, with some performance differences across the clusters. Finally, evidences for the validity of the proposed typology of fit were found, thus making a contribution to theory building in the field of SHRM.

OPSOMMING

Ten einde menslike hulpbronne (MH) effektief te benut, asook die vele komplekse uitdagings waarmee Suid-Afrikaanse organisasies worstel die hoof te kan bied, moet menslike hulpbronne op 'n strategies korrekte wyse bestuur word. In hierdie studie is die prestasie-implikasies van twee tipes passing in strategiese menslike hulp-bronbestuur (SMHB) ondersoek. Die resultate toon dat 'n organisasie se MH-strategie 'n modererende invloed op die verband tussen besigheidstrategie en prestasie uitoefen. Die ondersoek dui verder daarop dat organisasies in bondels van intern konsekwente MH aktiwiteite geklassifiseer kan word, met onderlinge verskille in organisatoriese prestasie tussen die bondels. Laastens is bewyse vir die geldigheid van die voorgestelde tipologie van passing gevind, waardeur 'n bydrae tot teoriebou in die veld van SMHB gemaak is.

As the ultimate effectiveness criterion for organizations is economic survival (Lundy & Cowling, 1996), effective processes implemented by strategic management are of critical importance. This entails that an organization must achieve a match with its external environment, while securing efficiency and effectiveness internally. In South Africa organizations are struggling with typical problems facing a developing economy, like a low productivity rate, a shortage of professional and highly skilled employees, and a declining work ethic that are posing a threat to business activity (Gerber, Nel & Van Dyk, 1998; Van Dyk, Nel, Loedolff & Haasbroek, 1997).

In order to make strategic changes effective and conducive to organizational performance, they have to be approached, developed and implemented in a strategically correct manner (Grobler, 1993). HR managers are increasingly being called upon to develop HR strategies and programmes targeted at improving the effectiveness of organizations. Top management is also increasingly turning to HR practitioners to act as agents of change in facilitating the complex transformation process in organizations (Swanepoel, Erasmus, Van Wyk & Schenk, 1998). South African organizations are in a transition phase characterized by instability and the human resource specialists hence are drawn right into the broader dynamics of a society in transformation.

Employers in South Africa seem to lack the necessary strategic orientation to ensure the integration of HR issues with the business aspects of organizations (Swanepoel et al., 1998). Research done by Grobler (1993) led him to conclude that the time has come for South African organizations to face the challenge of the future and adopt the recommended strategic approach of HRM.

The approach to enabling HR managers to contribute signifi-

cantly to the success of the organization is known as strategic human resource management (SHRM). SHRM, then, is a process which is used to anticipate future HR demands based on business strategy and to plan for the provision, motivation and development of human resources in such a way that the mission and the business strategy of the organization can best be realized (Smit, 1995). As such, SHRM represents a more holistic focus on organizational performance, as well as a major shift from the more traditional view of human resource management primarily as a staff function.

SHRM includes considering the degree of 'fit' between an organization's human resource and business strategies (Dyer & Holder, 1988). The notion of 'fit' is essential to explain the relationship between SHRM and organizational performance. This could be done by examining the match between HR strategies and business strategies in organizations, or by examining the internal coherence among a set of HR dimensions (i.e. selection, training and compensation). Several models have been developed to indicate how the company strategy and the HRM function can be linked (Arthur, 1992; Dyer & Holder, 1988; Miles & Snow, 1984; Sivasubramaniam & Kroeck, 1995).

Sivasubramaniam and Kroeck (1995) proposed a new typology of fit in SHRM and determined the effect it ultimately has on organizational performance. They tested the different forms of fit (see Figure 1) using data collected from a broad range of organizations in the USA. There exists a need to replicate this study in different industry contexts and country/cultural settings, like in South Africa, to examine the generalizability of the framework.

A potential limitation of the study of Sivasubramaniam and Kroeck (1995) arose from the fact that information on HR strategy and business strategy was sought from a single respondent, the HR executive, raising the possibility of common method bias. Sivasubramaniam and Kroeck (1995)

therefore assert that future research should be designed as multiple-informant studies so that responses from chief executive officers (CEOs) could be related to responses from HR executives.

Research in SHRM is at a crossroads today, and for the field to progress beyond descriptions of HR practices in different settings to theory testing, explicit consideration of fit among HR practices, organizational contingencies and organizational performance, is essential (Sivasubramaniam & Kroeck, 1995).

Purpose of study

This study is the first to explicate different types of fit in SHRM and their impacts on organizational performance in the South African context. The general research aim of this study was to enhance the limited body of knowledge on how strategic human resource management can have a positive influence on organizational performance. The specific purpose of this study was to test the validity of Sivasubramaniam and Kroeck's proposed typology of fit in SHRM in the South African context.

Description of fit typologies

The typology of fit proposed by Sivasubramaniam and Kroeck (1995) is adapted from the work of Drazin and Van de Ven (1985) and Venkatraman (1989) and is based on two dimensions, namely the context of fit (internal or external) and the criterion-specificity of fit (criterion-free or criterion-specific). Sivasubramaniam and Kroeck (1995) propose fit in strategic human resource management to be in five forms, namely: matching, interaction, gestalt, system, and covariation (see Figure 1). This study concentrated only on the fit as interaction and fit as gestalt perspectives.
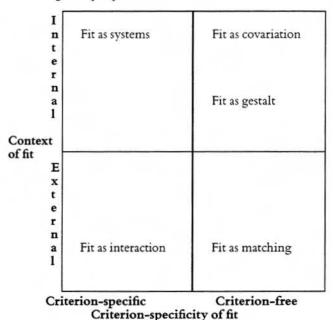
	Criterion-specific	Criterion-free
Internal	Fit as systems	Fit as covariation Fit as gestalt
External	Fit as interaction	Fit as matching

Context of fit

Criterion-specificity of fit

Figure 1: Typology of fit in SHRM
(Sivasubramaniam & Kroeck, 1995, p. 74)

Fit as interaction: The 'fit as interaction' perspective explores how the relationship between strategic human resource management practices and external context impact on specific performance criteria (Sivasubramaniam & Kroeck, 1995). Several studies have tested the contingency relationships between business strategy and specific human resource practices such as compensation and selection, but only Martell (1989) and Huselid (1995) have directly examined the interaction perspective. Martell (1989) found only some support for the moderating effect when whether a company's strategy has a significant moderating effect on the relationship between human resource management practices was tested. Huselid

(1995) found no support for the interaction between human resource practices and business strategy and only partial support for the interaction between human resource practices and the company's score on a strategic human resource index.

Likewise, Sivasubramaniam and Kroeck (1995) obtained no support for the performance impact of an interaction perspective of fit in SHRM. According to Sivasubramaniam and Kroeck, the lack of support for the interaction perspective may be due to performance criteria choice. They assert that interaction effects may be found when other criteria such as turnover rate, employee satisfaction and innovativeness are used.

Here it could be argued that the interaction between Dyer and Holder's (1988) human resource strategy and the company's business strategy, operationalized in terms of Miles and Snow's (1984) typology, could impact on the company's performance. Thus, it can be postulated that:

> **Hypothesis 1:** HR strategy will moderate the relationship between a company's business strategy and performance.

Fit as gestalt: Gestalts, or archetypes, represent clusters of attributes which exhibit a high degree of internal coherence. 'Fit as gestalt' in strategic human resource management can be defined as the reference to the interrelationships among different dimensions of human resource management such as staffing, training, appraisal, compensation, job design and corporate involvement. A gestalt perspective could be supported to the degree that companies could be clustered, based on the similarities of their human resource practices (Sivasubramaniam & Kroeck, 1995).

Fit as gestalt implies that the key to effective human resource management lies in finding an appropriate combination of practices, whether it be the synergistic combination of all the practices or the specific 'architecture' or culture which binds them together (Guest, 1997). This is often seen as the human resource-based source of competitive advantage within organizations.

Even though the fit perspective of gestalt is not explicitly identified, it is referred to as useful to identify types of HR systems (Arthur, 1992), "bundles" of HR practices (MacDuffie, 1995), or taxonomies of HR strategies (Ichniowski in Sivasubramaniam & Kroeck, 1995). Sivasubramaniam & Kroeck (1995) found support for the gestalt perspective by identifying three internally consistent HR strategic types. However, their hypothesis, that all three strategies are equally effective, was supported only when the criteria were objective measures of performance and not when perceptual measures were used.

If the Dyer and Holder (1988) typology is used to derive measures for assessing human resource practices, clusters of companies whose profiles of human resource practices are internally consistent could be identified. It could further be expected that these clusters resemble the three human resource strategies proposed by Dyer and Holder (1988). It can therefore be postulated that:

> **Hypothesis 2:** *a:* Companies can be classified according to clusters of internally consistent HR practices.
> *b:* There are no significant performance differences across the clusters, as all internally consistent forms are equally effective.

RESEARCH METHOD

Sample
CEO's and HR executives of 450 leading South African companies were approached to participate in the mail survey. A total number of 280 completed questionnaires were returned, with subtotals of 154 HR executives (34,2%) and 126 CEO's (28%) responding to the survey.

The sample is representative of a wide spectrum of sectors in the South African industry, with 72 organisations classified as manufacturing companies and 54 as services companies. Sales revenue (mean of R3 706 million per year) indicated that the responding companies have relatively large turnover, and was relatively large (mean of 3 659 employees per company), with 38 employees on average operative in the HR department.

Information relating to HR strategy and HR outcomes was gathered from the HR executives, while information relating to business strategy and strategic performance indicators was obtained from the CEO. Surveying the CEO and HR executives separately, and then matching their responses at the analysis stage only, reduced the concept of common-method bias.

Measuring instruments
This research utilized two instruments of measurement developed by Sivasubramaniam and Kroeck (1995) to assess human resource strategy, business strategy and perceived organizational performance. The data pertaining to the human resource strategy part of the research was collected by means of the Human Resource Practices in Corporations Questionnaire. Content validity was secured and by using LISREL, confirmatory factor analysis provided support for the convergent validity of the six factor, 31-item instrument (Sivasubramaniam and Kroeck, 1995). In order to ensure that the South African perspective in this field would emerge from the questionnaire, two items from the original questionnaire were dropped and five new items were added. The six strategic human resource management dimensions represented by these thirty-four items were staffing, training, compensation, appraisal, job design and corporate involvement. Data thus collected with this questionnaire provides information to classify an organization's HR strategy as being inducement, investment or involvement oriented (Dyer and Holder, 1988).

The data pertaining to business strategies was collected by means of the Strategic Questionnaire. The questionnaire consisted of an 11-item scale proposed by Conant, Mokwa and Varadarajan (1990) to operationalize Miles and Snow's (1984) strategic typology. For this study, the responding organizations were classified according to their business strategies as defenders, analyzers or prospectors. Conant et al. reported adequate internal consistency and inter-rater reliability of the items.

Conceptualizing and measuring organizational performance reveals this to be a rather complex matter. It is clear from the literature that there are a number of ways to measure company performance (Guest, 1997; Paauw & Richardson, 1997; Van der Post, 1997). In this study, company performance was measured along two distinct dimensions - *strategic outcomes* and *human resource outcomes*. Ten items, which included sales growth rate, market share, return on sales, return on investments, return on assets, new product development, product quality, brand image, customer services and the company's overall competitive position were used to measure *strategic outcomes*. Eight items, which included relative employee turnover, relative employee absenteeism, employee turnover, employee absenteeism, quality of work force, number of employee grievances, labour productivity and occupational safety, were used to measure *human resource outcomes*.

RESULTS

After operationalizing business strategy and HR strategy from the data, the formulated hypotheses have been tested in both the external and internal context of fit. The effects of HR strategy and business strategy on organizational performance were investigated from two different perspectives of fit.

Fit as interaction
In this study, it was proposed that the interaction effect between a company's HR strategy and business strategy would impact positively on organizational performance. To test this

hypothesis, hierarchical regression was employed, since this proved to be an appropriate statistical technique for determining whether significant moderating effects existed between variables (Tabachnick & Fidell, 1989). The aim was to determine if addition of information regarding HR strategy and business strategy improved prediction of organizational performance beyond that afforded by the interaction (moderating) effect between HR and business strategies. HR strategy, business strategy and the interaction effect between them were measured as independent variables and the performance measures as the dependent variables. In step one, the interaction effect was added to the equation. In step two, business strategy was added to the equation, and in step three, HR strategy was added.

After step 1, with the interaction between HR strategy and business strategy in the equation, for HR performance, $R^2 = .06$, $F (1, 116) = 8.20$, $p < .01$; for strategic performance $R^2 = .05$, $F (1, 116) = 5.78$, $p < .05$; for organizational performance $R^2 = .04$, $F (1,116) = 4.35$, $p < .05$; for employee productivity $R^2 = .04$, $F (1, 98) = 4.03$, $p < .05$; and for perceived financial performance $R^2 = .05$, $F (1, 116) = 5.84$, $p < .05$. If hierarchical regression analysis is used, Hypothesis 1, namely that the interaction between HR strategy and business strategy will affect a company's performance, can be accepted. To determine if there is a significant increase in R^2, business strategy and HR strategy was added to the equation.

After step 2, with business strategy added to the prediction of the influence of the interaction effect on performance, for HR performance, $R^2 = .15$, $F (1, 116) = 11.17$, $p < .01$; for strategic performance $R^2 = .05$, $F (1,116) = .04$, $p > .05$; for organizational performance $R^2 = .04$, $F (1,116) = .00$, $p > .05$; for employee productivity $R^2 = .04$, $F (1, 98) = .01$, $p > .05$; and for perceived financial performance $R^2 = .05$, $F (1, 116) = .08$, $p > .05$. Addition of business strategy to the equation results in a significant increment in R^2, only for HR performance.

After step 3, with HR strategy added to the prediction of organizational effectiveness by the interaction effect, and business strategy, for HR performance, $R^2 = .20$, $F (1, 116) = 6.95$, $p < .01$; for strategic performance $R^2 = .05$, $F (1, 116) = .79$, $p > .05$; for organizational performance $R^2 = .04$, $F (1, 116) = .05$, $p > .05$; for employee productivity $R^2 = .04$, $F (1, 98) = .002$, $p > .05$; and for perceived financial performance $R^2 = .05$, $F (1, 116) = .16$, $p > .05$. Apart from HR performance addition of human resource strategy to the equation, it did not reliably improve R^2 for the other aspects of organizational effectiveness.

Fit as gestalt
In terms of the gestalt hypothesis, it was proposed that organizations could be classified according to clusters of internally consistent HR practices. In order to test this hypothesis, non-hierarchical cluster analysis (k-means) was used, as it is much more robust than normal hierarchical procedures (Sivasubramaniam & Kroeck, 1995; Afifi & Clark, 1996). A three-cluster solution was used, based on the proposition that the cluster profiles corresponded to the three HR strategies identified by Dyer and Holder (1988).

The results of an ANOVA showed significant differences (F (2, 148) = 300,65, p < 0,001) between the three cluster means (centers), indicating cluster 1 to be on the opposite of a continuum to cluster 3, with cluster 2 in the middle.

To test hypothesis 2a, the clusters and the HR strategies were cross tabulated. It was found that of the 37 HR strategies identified as cluster 1 strategies ('Inducement' strategy), 34 (91.9% of cluster 1) indeed adopted an 'Inducement' HR strategy, while the other 3 (8.1% of cluster 1) adopted an 'Investment' HR strategy. Of the 71 HR strategies identified as cluster 2 strategies ('Investment' strategy), 48 (67.6% of cluster 2) adopted an 'Investment' HR strategy, while 11 (15.5% of cluster 2) adopted an 'Inducement' HR strategy and 12 (16. 9% of cluster 2) adopted an 'Involvement' HR strategy. Of the 43 HR

strategies identified as cluster 3 strategies ('Involvement' strategy), 37 (86.0% of cluster 3) adopted an 'Involvement' HR strategy, while the other 6 (14.0% of cluster 3) adopted an 'Investment' HR strategy. The Pearson chi-square test showed a significant association between the clusters and the HR strategies (Pearson's R = 0,82, p < 0,001), supporting Hypothesis 2a.

Dyer and Holder (1988) identify training as a very important area for companies following 'Investment' or 'Involvement' HR strategies, but not for companies following an 'Inducement' HR strategy. Differences between the three HR strategies were thus expected, regarding their allocation of HR budget to training of employees. 'Involvement' type companies were expected to allocate a larger budget to training than 'Investment' type companies, and 'Investment' type companies more than 'Inducement' type companies. Substantial differences between the three HR strategies' allocation of training budgets were observed. Organizations in cluster 3 ("Involvers") allocated to their total training budget (in thousands) an average of R32899.62; organizations in cluster 2 ("Investors"), an average of R 23063.40; and organizations in cluster 1 ("Inducers"), only R18538.75. This provides some face validity to the classification scheme, and further support for Hypothesis 2a.

In order to test for performance differences across the three HR strategies, an SPSS* ANOVA was used with five performance measures as dependent variables and the cluster distribution as the independent variable. The results in the ANOVA indicate that there could be a difference among the cluster means (p < 0.05) of HR performance and perceived financial performance. Hypothesis 2b, stating that all three HR strategies are equally effective, was thus only partially supported when the criteria were organizational performance, strategic performance and employee productivity.

In order to identify which pairs of means differ significantly, the LSD (least significant difference) test of the multiple range tests (Post Hoc) was conducted (SPSS Users Guide, 1998). The differences among the above-mentioned performance measures entails a substantial possibility that a company that follows the Inducement HR strategy, achieved lower (p< 0.05) HR performance than companies following Investment or Involvement HR strategies. Companies can also have higher (p < 0.05) perceived financial performance if they follow Involvement HR strategies, as opposed to following Inducement or Investment strategies.

DISCUSSION

The results indicate that the interaction between a company's HR strategy and business strategy does have a positive influence on company performance. In their study, Sivasubramaniam and Kroeck (1995) found no support for the performance impact of an interaction perspective of fit. Contrary to this study, they used an ANOVA to determine the interaction effect. Failure to support the hypothesis was ascribed to choice of criteria and operationalization of strategy variables.

The results of this study indicate that the internal consistent HR practices of the different companies do resemble the characteristics of the three HR strategies proposed by Dyer and Holder (1988). Differences in allocation of training budgets between the three clusters provided some face validity to the classification scheme that was used. The proposition that companies could be classified according to clusters of internally consistent HR practice was supported by the results of this study, which indicated a positive relationship between the identified clusters and the proposed HR strategies.

The results of this study indicate that companies in different clusters differ from one another on HR performance and perceived financial performance. Thus, companies following Involvement HR strategies may differ significantly from companies following Inducement HR strategies in terms of HR

performance and perceived financial performance. The three HR strategies were only equally effective in terms of the organizational, strategic and employee productivity measures of performance. Sivasubramaniam and Kroeck (1995) found that all three strategies were only equally effective when the criteria, in their case, were objective measures of performance.

Results of this study indicated that both the internal and external context of fit were either related, or partially related, to organizational performance. It could thus be argued that fit among the HR dimensions and fit with business strategy could be determinants of organizational performance.

CONCLUSION

This study addressed a relevant research field since SHRM is regarded as one of the current approaches to effectively transform and develop organizations. This study tested the proposed typology of fit in SHRM of Sivasubramaniam and Kroeck (1995), and also addressed the question of performance implications of fit for two of their five different perspectives of fit. To provide a more holistic view and understanding of this field, future research could also include the psychometric testing of the fit typologies of matching, systems (profile deviation) and covariation (Sivasubramaniam & Kroeck, 1995) in the South African context.

The validation of the proposed typology of fit in SHRM can be taken even further if more dimensions were added to the actual database. More detailed information on labour union orientation, affirmative action and management of diversity within the company especially could further the possible understanding regarding implementing specific HR activities that could prove to be successful in dealing with these typical strategic HR issues in South Africa (Gerber et al., 1998).

This study has provided some insights into the SHRM-Strategy-Performance relationships. Furthermore, the study made a contribution to theory building in the field of SHRM since it substantiates the first evidences, in a broad spectrum of companies, for the generalization of Sivasubramaniam's postulated new typology of fit to the South African corporate world. The study, therefore, further elevated SHRM to a theoretical level rather than merely a descriptive model.

REFERENCES

Afifi, A.A. & Clark, V. (1996). *Computer-Aided Multivariate Analysis.* (3rd ed.) London: Chapman & Hall.

Arthur, J.B. (1992). The link between business strategy and industrial relations systems in American steel minimills. *Industrial and Labour Relations Review, 45,* 488-506.

Conant, J.S., Mokwa, M.P. & Varadarajan, P.R. (1990). Strategic types, distinctive marketing competencies and organizational performance: A multiple measures-based study. *Strategic Management Journal, 11,* 365-383.

Drazin, R. & Van de Ven, A.H. (1985). Alternative forms of fit in contingency theory. *Administrative Science Quarterly, 30,* 514-539.

Dyer, L. & Holder, G.W. (1988). *Human Resource Management: Evolving roles* and Responsibilities. Washington: Bureau of National Affairs.

Gerber, P.D., Nel, P.S. & Van Dyk, P.S. (1998). *Human Resource Management* (4th ed.). Cape Town: Southern Book Publishers.

Grobler, P. (1993). Strategic HR planning: a neglected management activity? *Human Resource Management,* 9(7), 14-18.

Guest, D.E. (1997). Human resource management and performance: A review and research agenda. *The International Journal of Human Resource Management,* 8(3), 263-276.

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.

Lundy, O. & Cowling, A. (1996). *Strategic human resource management*. London: Routledge.

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

Martell, K.D. (1989). *Aligning executive human resource management with business unit strategy: An empirical study of the Fortune 500*. Unpublished doctoral dissertation, University of Maryland.

Miles, R. E. & Snow, C.C. (1984). Designing strategic human resources systems. *Organizational Dynamics*, Summer, 36-52.

Paauw, J. & Richardson, R. (1997). Introduction: Human resource management and performance. *The International Journal of Human Resource Management*, 8(3), 257-262.

Sivasubramaniam, N. & Kroeck, K.G. (1995). *The concept of "Fit" in strategic human resource management*. Paper presented to the Academy of Management Conference, Vancouver.

Smit, E. (1995). *Strategic human resource management*. Pretoria: Kagiso Publishers.

SPSS Users Guide (1998) *SPSS Base 8.0 for Windows Users Guide*. Chicago: SPSS Inc.

Swanepoel, B.J., Erasmus, B.J., Van Wyk, M.W. & Schenk, H.W. (1998). *South African Human Resource Management Theory and Practice*. Kenwyn: Juta & Co.

Tabachnick, B.G. & Fidell, L.S. (1989). *Using Multivariate Statistics*. New York: Harper & Row.

Van der Post, W.Z. (1997). *The relationship between organizational culture and financial performance*. Unpublished doctoral thesis, University of Stellenbosch, Stellenbosch.

Van Dyk, P.S., Nel, P.S., Loedolff, P. van Z., & Haasbroek, G.D. (1997). *Training Management: A Multidisiplinary Approach to Human Resource Development in South Africa*. (2nd ed). Halfway House: International Thompson Publishing Co.

Venkatraman, N. (1989). The concept of fit in strategy research: Toward verbal and statistical correspondence. *Academy of Management Review*, 14, 423-444.