Human Resource Orientation and Corporate Performance

Long W. Lam, Louis P. White

HRD has been seen as an issue that is critical for U.S. corporations so that they can remain competitive. Yet little has been known about the strategic role of HRD and how it may influence corporate performance. In this study, we have argued that HRD plays an immensely strategic role when combined with effective recruitment and compensation policies. These three activities together contribute to the company's human resource (HR) orientation and create sustainable competitive advantages for organizations. Data from fourteen manufacturing industries supported the proposition that companies with a strong HR orientation performed significantly better than firms with a weaker HR orientation. Suggestions were offered with respect to the strategic and developmental role of HR management.

The United States has led the world in the annual rate of productivity improvements since the beginning of the Industrial Revolution. From the start of the 1950s, however, that productivity improvement factor has decreased significantly. The reverse has been true in countries such as Japan and other Pacific Rim nations where the productivity growth rate has increased rapidly. In 1972, productivity for the average Japanese worker was 63 percent of that of an American worker. This changed quickly so that by 1988, the average productivity of a Japanese worker had increased to 80 percent of the average American worker's productivity (Cascio, 1995). From 1970 to 1990, the productivity growth rate for the American worker slowed to an average of 1.3 percent annually.

Since then, this alarming trend has begun to spawn a greater emphasis on HRD. If mishandled, employees can be a source of major corporate difficulties; if, on the other hand, they are dealt with competently, employees can be developed to an organization's competitive advantage (Becker and Gerhart, 1996). As a result, HRD is viewed as a significant issue for U.S. companies, so that they can remain strategically competitive in the global market (Sonnenfeld, 1985). Today, the challenge is to use HR in the planning and problem-solving process in such a way that companies can identify the critical employee skills in the corporate and business strategies (Hall, 1984; Butler, Ferris, and Napier, 1991; Becker and Gerhart, 1996). HR executives are also expected to act as change catalysts in making organizations more productive. This trend reflects a growing awareness of the contributions that HRD can make to the firm's success.

This growing awareness has spawned a number of empirical studies that investigate how HR practices could contribute to a firm's performance (for a review, see Butler, Ferris, and Napier, 1991, and Becker and Gerhart, 1996). Following this line of research, many studies have centered on a single HR practice, such as recruitment or compensation, and then evaluated the performance effect on companies (Schmidt, Hunter, McKenzie, and Muldrow, 1979; Balkin and Gomez-Mejia, 1990; Gerhart and Milkovich, 1990). The effectiveness of managerial training has also been researched extensively. Although it was concluded that managerial training was overall moderately effective in terms of improving participants' learning and job behavior (Burke and Day, 1986; Bartel, 1994), relatively few studies have addressed whether training programs can improve a company's profitability (Magnum, Magnum, and Hansen, 1990). As a result, trainers often have to justify the financial contribution of their programs and explain how they may add value to the company (Gordon, 1987).

Although training and development alone may have little effect on corporate performance, they can be seen to play a much more important role when coupled with effective recruitment and compensation practices (Wright and Snell, 1991).There has been speculation that researchers should distinguish between the complete systemic view of HR policies and the mere adoption of traditional HR practices, because the systemic view may provide more details about the interaction of different HR practices (Huselid, Jackson, and Schuler, 1997; MacDuffie, 1995). In this study, we viewed the complete implementation of HR systems as a company orientation and evaluated whether such an orientation can lead to superior corporate performance.

We explained from a strategic perspective the importance of effective recruitment and compensation in attracting and retaining competent employees, as well as the significance of training and development in terms of sustaining the human advantage. The creation of a strong HR orientation, we argued, should include equally important roles for recruitment, compensation, and training and development.

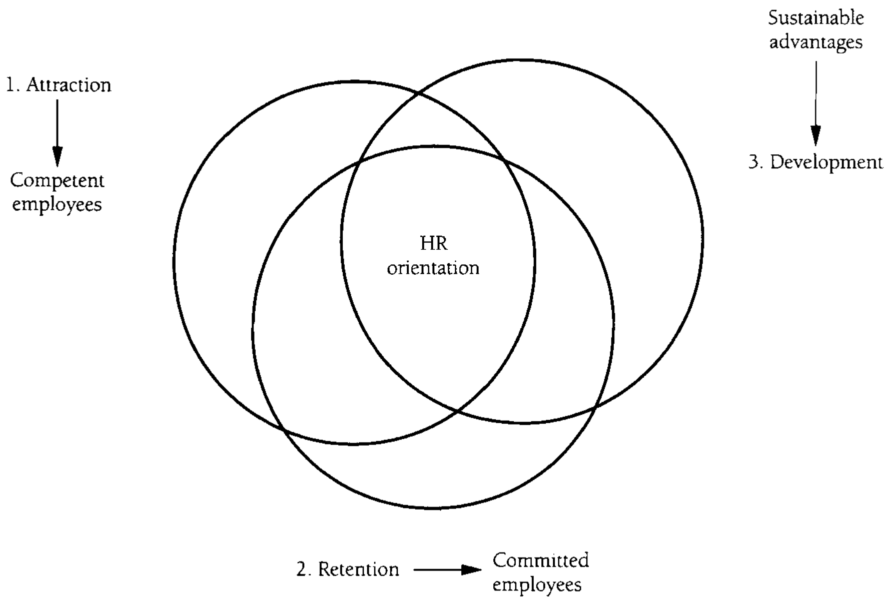
We measured these HR activities by surveying companies to determine their perceptions of whether or not their competitors have strong HR orientations. We found that companies that developed the reputation of being HR oriented also enjoyed significant financial payoffs in terms of profitability, sales growth, and appreciation of stock values. At the end of this chapter, we will discuss the implications of our findings for the research and practice of strategic HR development.

Theoretical Background

Concept of HR Orientation. In this study, we defined *HR orientation* as "a systematic organizational effort to attract, retain, and develop competent and committed human resources." Organizations that develop a strong HR orientation will not only adopt a single HR practice but also emphasize three behavioral components—attraction, retention, and development. In this way, they will be transforming employees as the basis of sustainable competitive advantages (see Figure 1). The process of creating sustainable competitive advantages has been cited recently by theorists of strategic management to describe how firms can trace their successes to their internal stock of resources (Barney, 1991; Prahalad and Hamel, 1990). From this perspective, human resources are viewed on a par with technological or physical resources in terms of having the same strategic potential. This strategic perspective has led Wright and his colleagues to urge organizations to focus on the serial steps of recruitment, compensation, and training in order to attract and develop competent employees (Wright and Snell, 1991; Wright and McMahan, 1992).

Following this approach, we identify recruitment as the first critical strategy that HR-oriented firms will employ, because effective recruitment efforts help the company "locate the relevant competencies and attract them to the organization" (Wright and Snell, 1991, p. 221). Competent employees are not necessarily loyal, however. To retain competent employees, it could be critical

Figure 1. Components of HR Orientation



to have a competitive level of compensation and fringe benefits (Balkin and Gomez-Mejia, 1990; Gerhart and Milkovich, 1990).Therefore, the second step involves implementing compensation strategies to improve employees' level of commitment. Finally, to sustain a competitive advantage, a company needs further developmental investments to maintain the level of superior HR competence (Magnum, Magnum, and Hansen, 1990). Rivals are constantly striving to improve their competitive positions. Thus, a competitive advantage is not sustainable unless a company makes continuous improvements to keep competitors from matching its competence level. The third step in this HR orientation also has to do with training a committed workforce. In interaction with recruitment and compensation, increasing the workforce's competence is postulated to increase workers' sense of efficacy, because workers feel that they can perform well enough to make significant contributions to the organization (Hackman and Oldham, 1980). Thus, the level of employee commitment may also be enhanced through training and development.

On the other hand, the pursuit of an HR orientation can also exceed conventional definitions of HR practices. There are cultural, strategic, structural, and cognitive ramifications for organizations if they decide to adopt HR as their corporate orientation. First, organizational culture represents a company's values and belief system (Schuler and Huber, 1993). The aspect of organizational culture that relates to employees is a company's HR beliefs and values about the role of HR in the success of corporations (Schuler, 1992). If companies believe strongly in the importance of HR, this conviction will be reflected in their HR activities. For example, "companies such as Levi Strauss that have a culture of caring for and respecting the individual are likely to offer employment security and provide benefits for a variety of employee needs. In this way, many employees learn the culture of the organization through the HR activities—how it selects, what criteria it evaluates, and what it compensates most highly" (Schuler and Huber, 1993, p. 70).

Second, the pursuit of an HR orientation represents a firm's strategic choice by recognizing that human resources, similar to other physical and technological resources, can become important ingredients of a firm's competitive strategy (Barney, 1991; Wright and Snell, 1991; Wright and McMahan, 1992). Companies adopting this approach should devote their attention to various strategic HR practices, such as staffing, creating reward systems, and implementing HRD, and should incorporate them into the company's strategic plan (Butler, Ferris, and Napier, 1991; Abelson, Ferris, and Urban, 1988).

Third, the extent of HR orientation can also affect the way in which organizations organize their HR functions. Companies with a minimal HR orientation often view the HR department as a staff function. The department may be embedded in a larger administrative division, and the head of the HR department will therefore not assume a key role in the organizational hierarchy. A contrasting approach would elevate the HR department to be on par with other functional units. Although such a structural change alone will not guarantee a greater emphasis on HR, it should be viewed as a positive step toward a more holistic approach—one that recognizes HR as central to organizational design and effectiveness.

Finally, a strong HR orientation can alter the way organizations perceive external events and the way they prioritize internal activities. Organizations are said to adopt one of the four mental "frames" or perspectives as their cognitive orientation. These are structural, human resource, political, and symbolic frames (Bolman and Deal, 1997). This study focused on the creation of an HR frame. Bolman and Deal argued that the adoption of an HR frame will enable organizations to have "a sensitive understanding of people and their symbolic relationship with organizations" (p. 102). We hold that a strong HR orientation will help organizations recognize the human needs of their employees.

Impact of HR Orientation on Corporate Performance. Does HR orientation have any impact on corporate performance besides its cultural, strategic, structural, and cognitive manifestations? Yes, we believe there are two reasons behind a positive impact of HR orientation on corporate performance. First, HR-oriented firms are likely to enjoy substantial cost savings by reducing employee absenteeism and turnover rates. From a cost perspective, an absent employee often means a loss in wages and benefits. The annual cost of unscheduled absence has been estimated to range from about $250 to $500 per employee (Cascio, 1995). It is beneficial, therefore, for firms to reduce the rate of absenteeism. For each case of employee turnover, the company incurs additional expenses to terminate and replace that person. The termination costs may include the expenses of an exit interview and the increase of unemployment tax. After termination, new employees are needed to fill the vacant position. Thus, there will be an increase in replacement costs in terms of additional recruiting and training (Cascio, 1995). These replacement costs can be minimized if companies incorporate HRD activities into their strategic business plans so that they can rely more on existing employees to fill vacant positions (Friedman and LeVino, 1984).

Second, HR-oriented firms are also likely to develop their employees into a more competent workforce, because they place stronger emphasis on recruiting, compensating, and training and development. The development of employees into a highly competent workforce has been argued to produce competitive advantages that are more valuable and also more difficult to imitate (Pfeffer, 1994). For these reasons, a strong HR orientation may bring significant economic benefits to companies (Gatewood and Field, 1994; Cascio, 1995). The advantages of increasing employee commitment and creating a more competent workforce led us to propose the following research question: Does a strong HR orientation have a positive impact on corporate performance?

Research Methodology

Industry Setting and Sample. The sample consisted of firms from fourteen manufacturing industries in the United States.[1] These fourteen industries were purposely selected to create a diverse contextual background. They include a variety of products and manufacturing technologies, ranging from heavy equipment, such as farm machines and aircraft engines, to light equipment, such as electrical houseware and electronic components. They also include various industry structures, ranging from growing to declining industries, from oligopolistic to fragmented industries, and from high-technology to low-technology industries.

The firms were selected from the COMPUSTAT database, which contains financial and stock market information for major U.S. corporations. To be included in the sample, a firm had to meet several criteria. First, because smaller firms are more prone to fold and are therefore less likely to be traced in follow-up studies, we included only larger firms (those whose annual sales were $2.5 million or more). Second, to avoid confounding corporate and diversification effects on firm performance, we included only firms classified as having a dominant business in a sampled industry (specifically, firms with 70 percent of more of their total sales in one of the fourteen industries; see Rumelt, 1974). Using these criteria, we selected 235 firms from the COMPUSTAT database.

Measurement and Sources of Data. Multiple sources were used to collect data on HR orientation and corporate performance.

HR Orientation. We used survey techniques to collect data about each firm's HR orientation. Using the corporate and personnel data provided by the COMPUSTAT database, Dun and Bradstreet's *Million Dollar Directory* (1993), and Standard and Poor's *Register of Corporations, Directors, and Executives* (1993), we contacted four senior executives at each company in the fall of 1993. The survey was administered using the total design method (Dillman, 1978), which consisted of pretests, pilot tests, prenotification postcards, first-round mail, follow-up postcards, second-round mail, and second follow-up postcards. This procedure yielded 246 usable questionnaires, which is equivalent to a response rate of 26.3 percent [246 responses/(235 firms x 4 executives)]. No statistical differences were found between the responding and the nonresponding sample.[2]

Competitive assessment was used to determine the level of HR orientation. If a study's purpose is to document how certain HR practices are developed, the firm itself is probably an ideal informant. Because we were more interested in how corporate performance was affected, however, we believed that outside constituents would be in a better, and perhaps more objective, position to assess the external reputation of a firm's HR orientation. As a result, we chose competitors as the key informants in this study. A similar approach of competitive assessment was used by Cappelli and Crocker-Hefter (1996) when they measured distinctive HR competencies.

In a cover letter accompanying the questionnaire, we asked each executive to respond to a series of HR questions about two competing firms. We determined competitors by locating firms in the sampling frame that sold products that were the most similar (the product information was provided by COMPUSTAT). The survey was also initially designed so that executives of each company would evaluate HR orientation for two competitors and so that the company's own HR orientation would also be evaluated by other executives from two different competing firms.[3] In the final sample, 120 firms received competitor responses.

As defined previously, an *HR orientation* is conceptualized as a systematic organizational effort to attract, retain, and develop competent and committed employees. Accordingly, we wanted respondents to evaluate a firm's HR orientation on these items (on a seven-point scale). We asked:

> To what extent is the company characterized by
> (a) effective recruitment of valued employees?
> (b) above-average compensation and fringe benefits?
> (c) extensive training and development programs?

The results of Cronbach's alpha and intraclass correlation indicated that the scale had achieved acceptable levels of interitem and interrater reliability (Judd, Smith, and Kidder, 1991; James, 1982; Glick, 1985).[4] Because of the high level of convergence, we first averaged these items to generate individual executive ratings. We then used the mean rating among executives to measure HR orientation for each company.

Corporate Performance. In conducting studies of corporate performance, researchers of strategic management have recommended using multiple measures of corporate performance (Venkatraman and Ramanujam, 1986). As a result, three different measures of corporate performance were used in this study. The first measure was *return on assets.* A firm's return on assets is an indicator of accounting profitability. It was computed by dividing the operating income by total assets in 1993. The second measure was *growth in sales.* Sales growth can capture how well customers accept a company's products or services. We calculated the average annual growth of sales between 1990 and 1993. The third measure was *growth in stock values.* To capture how well firms maximize the shareholder's value, we also measured the annual growth rate of a firm's stock market value. We did this by (1) computing market value (the share price multiplied by the number of outstanding common shares) and (2) calculating the average annual growth of market values between 1990 and 1993. Because the data were skewed, a natural logarithm of growth in market values was used as a dependent variable. Data for operating income, total assets, sales, and stock market values were extracted from the COMPUSTAT database.

Exogenous Factors. Because the level of corporate performance tends to vary across industries, we included three types of industry characteristics in this study (see Dess, Ireland, and Hitt, 1990): research intensity, industry concentration, and industry growth. The level of corporate performance may be affected by the intensity of research efforts that characterizes each industry. We measured this industry characteristic by averaging the ratio of R&D expenses and sales of the sampled firms in each of the fourteen industries. These industry-level data were obtained from COMPUSTAT. Industry concentration describes the structure of the industry in terms of the level of control exercised by large organizations. It was measured by the total market shares captured by the largest four firms in an industry. The data were provided by the U.S. Bureau of the Census.[5] The rate at which an industry is growing shows the level of customer demand for the products and services. This variable was measured using the compound annual growth rate of industry sales over a seven-year period (1987 to 1994). The data were provided by *The U.S. Industrial Outlook* (1994).

In addition to accounting for industry effects, this study also controlled for a number of firm effects before examining how HR orientation relates to corporate performance (see Capon, Farley, and Hoenig, 1990, for a review of firm effects). Those firm effects included age, debt position, and market share. A firm's age may affect how the company performs. To control for this effect, we used the number of years since a firm first issued stock as a proxy for a company's age. These data were provided by COMPUSTAT. The amount of debt a firm has may also affect its performance. The ratios of debt to total assets in 1993 were extracted from COMPUSTAT. Like age, firm size may affect a company's financial performance. We measured size in terms of a firm's market share relative to its largest three competitors. Measuring market share in relative terms allows the variable to reflect the firm's size advantage and market position within its industry. Firm sales in 1993 were extracted from the COMPUSTAT database.

Empirical Findings

Table 1 lists univariate statistics and correlations for all the variables used in the data analyses. Our research question predicted that an HR orientation would relate to firm performance. Because the effect of HR orientation was expected to be positive, a one-tailed test of significance was used. As Table 2 indicates, the beta coefficients of several exogenous factors are statistically significant when return on assets is analyzed. This includes research intensity ($p < .01$), industry growth rate ($p < .05$), and debt divided by total assets ($p < .001$). The findings also suggest that after we account for these industry and firm effects, HR orientation is still strongly related to return on assets ($p < .05$). Similar results were also obtained when the other two measures of firm performance were analyzed. In both cases, HR-oriented firms were able to outperform their competitors in terms of growth in sales ($p < .01$) and growth in stock values ($p < .05$).

Therefore, the overall results strongly support our research question; significant financial payoffs were found among companies that strongly emphasized recruitment, compensation, and training and development. Through a strong HR orientation, companies enjoy a more competent and committed workforce, thus creating a sustainable competitive advantage that rivals will find difficult to surpass. The result also illustrates the strategic importance of

Table 1. Descriptive Statistics and Correlations

Variable	*Mean*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Dependent variables												
1. Return on assets	4.67	22.12	—									
2. Growth in sales	30.52	53.22	.29***	—								
3. Growth in stock values	-116.29	136.15	.17	.54***	—							
Independent variables												
4. Research intensity	0.07	0.04	-.22**	.01	-.14	—						
5. Concentration	40.89	14.77	.14	-.12	.11	-.48***	—					
6. Growth rate	3.69	4.84	.00	.13	-.13	.47	-.40***	—				
7. Age	19.81	11.41	.05	-.32***	-.19*	-.08	.29***	-.15	—			
8. Debt divided by total assets	24.37	26.76	-.36***	-.22**	-.13	-.06	.05	.02	.01	—		
9. Market share	0.37	2.00	.03	-.07	.02	-.09	.19*	-.17*	.31***	.01	—	
10. HR orientation	3.53	1.25	.25*	.09	.18	-.02	.21	-.15	.38***	-.14	.28***	1.00

Note: Pearson product-moment correlations. For two-tailed test: *<0.05; **p<0.01; ***p<0.001.

Table 2. Multiple Regression Analysis of the Relationship Between HR Orientation and Corporate Performance

Independent Variable	*Dependent Variable*		
	Return on Assets	*Growth in Sales*	*Growth in Stock Values*
Industry characteristics			
1. Research intensity	-149.04	-152.42	-344.53
	(-2.54**)	(-1.10)	(-0.74)
2. Concentration	0.13	-0.0003	1.11
	(0.78)	(-0.001)	(0.80)
3. Growth rate	1.17	1.49	-2.48
	(2.37*)	(1.28)	(-0.61)
Firm characteristics			
4. Age	-0.07	-2.09	-2.98
	(-0.38)	(-4.58***)	(-1.90*)
5. Debt divided by total assets	-0.31	-0.47	-0.63
	(-4.51***)	(-2.90*)	(-0.87)
6. Market share	-0.11	0.20	-0.39
	(-0.13)	(0.10)	(-0.06)
7. HR orientation	4.11	11.24	28.50
	(2.11*)	(2.46**)	(1.89*)
Intercept	-0.03	53.43	-152.67
	(-0.003)	(2.14*)	(-1.84*)
Adjusted R^2	0.26	0.25	0.05
F-ratio	5.21***	4.86***	1.49
N	84	84	65

Note: T-values in parentheses; for one-tailed tests: *p<0.05; **p<0.001.

HRD—it helps to sustain the level of employee competence that is created by the company's recruitment and compensation policies.

Discussion and Conclusion

The purpose of this chapter was to investigate the effects of an HR orientation on corporate performance. *HR orientation* was defined as a systematic organizational effort to attract, retain, and develop competent and committed employees. We proposed that HR-oriented organizations would perform better because they place stronger emphasis on attraction, retention, and development in order to create a low-cost sustainable competitive advantage. Data on HR orientation were obtained from U.S. companies in fourteen manufacturing industries. Results supported the hypothesis that companies with a strong HR orientation performed significantly better than firms with a weaker HR orientation. Such findings suggest that corporations have strong financial incentives in promoting HR cultures and should invest heavily in their HR practices.

The findings should be interpreted carefully, however, with respect to the limitations of this study. First, as indicated earlier, the sample for this study came from the 1993 COMPUSTAT database. This approach made the study static; that is, we took a snapshot, or one-time view, of certain aspects of a firm. Future research could try to avoid this static approach. That is, a future investigation of the hypothesis tested herein would attempt to find a causal relationship between HR orientation and firm performance over time. Data on firm performance could be analyzed from the initiation of the corporate activity on recruitment, compensation, and training and development. In this way, the degree of an HR orientation's impact could be determined more precisely. This method might then provide future studies with a more direct measurement of the relationship between HR orientation and firm performance.

Second, there are also certain limitations regarding the use of survey methodology. For instance, various respondents may have different perceptions of an HR orientation. Future research should therefore consider alternative methods (for example, focus groups and case studies), so that results can be compared with the measurement of HR orientation.

Third, our findings may lack generalizability. To minimize potential noise about corporate performance, we limited our sample to domestic, manufacturing companies. One should therefore exercise caution when generalizing the results beyond the population from which the sample was drawn. To alleviate this issue, future studies might adopt a different sample, such as a more international group of organizations. Researchers would then be able to assess the impact of cultural differences and of differing nations on the HR orientation and corporate performance. If incorporated, these suggestions might shed light on the consistently increasing importance of HR orientation and its role in successful corporate performance in the global arena.

Despite the need for further research, our findings may have strong implications regarding the demand for strategic HR development and the expanded strategic role of HR executives. First, the conventional view regarding HRD is that it is needed when companies experience (1) a lack of qualified employees, (2) changes of job performance standards, or (3) a high variance of employee outputs for the same job (Hall and Goodale, 1986). Our findings imply an additional strategic need for HRD; besides ensuring effective recruitment and compensation systems, HRD helps to sustain the human advantage vis-à-vis competitors.

Second, our results imply that the workforce can add a valuable competitive advantage for organizations. Consequently, we believe that HRD should be one of the building blocks in corporate strategic plans. HR directors should be included at the strategic level of decision making similar to directors of other functional areas. This strategic restructuring would then allow the HR director to help select strategic alternatives so that HR strategies could be formulated to support organizational strategic choices (Hall, 1984). The employees needed to support the organizational strategy could then be recruited. Available staffing requirements would be known and fulfilled, wage and salary policies could be worked through, and necessary training requirements would be developed so that critical HRD activities could be initiated. Firms adopting such an HR orientation would then be positioned to capitalize on the advantages of a well-trained and committed workforce.

Notes

1. COMPUSTAT contained more than fourteen manufacturing industries. These are the fourteen industries selected for the study: farm machines, office machines, refrigerator and heating equipment, electrical houseware, audio and video equipment, personal wireless communication equipment, electronic components, auto parts, aircraft, aircraft engines, aircraft parts, electrical testing and measuring instruments, analytical instruments, and measuring and control devices. We chose only manufacturing industries in order to minimize the influences of macroeconomic factors (for example, capital investment and economic cycles) on corporate performance.
2. No significant differences ($p < .05$) were noticed between the responding and the nonresponding samples in terms of firm size (log of annual sales [$t = 0.88$], log of total assets [$t = 0.69$]) or in terms of firm performance (return on assets [$t = 0.16$], stock market values [$t = 1.91$]).
3. In the final sample, some firms received one response from one of their competitors whereas others received multiple responses. When analyzing the data, we recognized that the number of respondents was not equal among the companies and that this discrepancy could introduce potential biases to the findings. The results of intraclass correlations (ICC(1) and ICC(2)), however, suggested that both single-rater and mean-rater responses were reliable. In terms of single-rater response, the ICC(1) was 0.36, surpassing the acceptable level of single-rater reliability proposed by James (1982). In other words, the information on HR orientation was reliable, even though one response was used per firm. Based on this information, firms having one response were included in the data analysis. In terms of multiple responses per firm, the level of ICC(2) was 0.65, which also reached the acceptable standard of mean-rater reliability proposed by Glick (1985). As a result, when a firm received multiple responses, we used the average to measure HR orientation.
4. Cronbach's alpha was .82 for the interitem reliability. Also see note 3.
5. Andy Hait, Special Report Branch of the Bureau of Census, kindly provided the data.

References

Abelson, M. A., Ferris, G. R., & Urban, T. F. (1988). Human resource development and employee mobility. In R. S. Schuler, S. A. Youngblood, & V. L. Huber (Eds.), *Readings in personnel and human resource management* (pp. 320–329). St. Paul, MN: West.

Balkin, D., & Gomez-Mejia, L. R. (1990). Matching compensation and organizational strategies. *Strategic Management Journal, 11*, 153–169.

Barney, J. (1991). Firm resources and sustainable competitive advantage. *Journal of Management, 17* (1), 99–120.

Bartel, A. P. (1994). Productivity gains from implementation of employee training programs. *Industrial Relations, 33*, 411–425.

Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal, 39*, 779–801.

Bolman, L. G., & Deal, T. E. (1997). *Reframing organizations: Artistry, choice, and leadership.* San Francisco: Jossey-Bass.

Burke, M. J., & Day, R. R. (1986). A cumulative study of the effectiveness of managerial training. *Journal of Applied Psychology, 71* (2), 232–245.

Butler, J., Ferris, G., & Napier, N. (1991). *Strategy and human resources management.* Cincinnati: South-Western.

Capon, N., Farley, J., & Hoenig, S. (1990). Determinants of financial performance: A meta-analysis. *Management Science, 36* (10), 1143–1159.

Cappelli, P., & Crocker-Hefter, A. (1996). Distinctive human resources are firms' core competencies. *Organizational Dynamics, 24* (3), 7–22.

Cascio, W. F. (1995). *Managing human resources* (4th ed.). New York: McGraw-Hill.

Dess, G. G., Ireland, R. D., & Hitt, M. A. (1990). Industry effects and strategic management research. *Journal of Management,* 16, 7–28.

Dillman, D. A. (1978). *Mail and telephone surveys: The total design method.* New York: Wiley.

Friedman, S. D., & LeVino, T. P. (1984). In C. J. Fombrun, N. M. Tichy, & M. A. Devanna (Eds.), *Strategic human resource management* (pp. 183–201). New York: Wiley.

Gatewood, R. D., & Field, H. S. (1994). *Human resource selection.* Fort Worth, TX: Dryden.

Gerhart, B., & Milkovich, G. T. (1990). Organizational differences in managerial compensation and financial performance. *Academy of Management Journal, 33* (4), 663–691.

Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: Pitfalls in multilevel research. *Academy of Management Review, 10* (3), 601–616.

Gordon, J. (1987, June). Romancing the bottom line. *Training,* pp. 31–42.

Hackman, R. J., & Oldham, G. R. (1980). *Work redesign.* Reading, MA: Addison-Wesley.

Hall, D. T. (1984). Human resource development and organizational effectiveness. In C. J. Fombrun, N. M. Tichy, & M. A. Devanna (Eds.), *Strategic human resource management* (pp. 159–181). New York: Wiley.

Hall, D. T., & Goodale, J. G. (1986). *Human resource management.* Glenview, IL: Scott, Foresman.

Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *Academy of Management Journal, 40* (1), 171–188.

James, L. R. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology, 67* (2), 219–229.

Judd, C. M., Smith, E. R., & Kidder, L. H. (1991). *Research methods in social relations.* Austin, TX: Holt, Rinehart and Winston.

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* (2), 192–221.

Magnum, S., Magnum, G., & Hansen, G. (1990). Assessing the returns to training. In L. Freeman, M. Hoyman, J. Cutcher-Gershenfeld, & E. Savois (Eds.), *New development in worker training: A legacy for the 1990s* (pp. 54–89). Madison, WI: Industrial Relations Research Association.

Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the work force.* Boston: Harvard University Press.

Prahalad, C. K., & Hamel, G. (1990, May–June). The core competence of the corporation. *Harvard Business Review,* pp. 79–91.

Rumelt, R. (1974). *Strategy, structure, and economic performance.* Boston: Harvard University Press.

Schmidt, F. L., Hunter, J. E., McKenzie, R. C., & Muldrow, T. W. (1979). Impact of valid selection procedures on work-force productivity. *Journal of Applied Psychology, 64* (6), 609–626.

Schuler, R. (1992, summer). Strategic human resources management: Linking people with the strategic needs of the business. *Organizational Dynamics,* pp. 18–32.

Schuler, R., & Huber, V. (1993). *Personnel and human resources management.* St. Paul, MN: West.

Sonnenfeld, J. A. (1985). Education at work: Demystifying the magic of training. In R. E. Walton & P. R. Lawrence (Eds.), *HRM trends and challenges* (pp. 285–317). Boston: Harvard Business School Press.

Standard and Poor. (1993). *Registry of corporations, directors, and executives.* New York: Standard and Poor.

Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review, 11* (4), 801–814.

Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management, 18* (2), 295–320.

Wright, P. M., & Snell, S. A. (1991).Toward an integrative view of strategic human resources management. *Human Resources Management Review, 1,* 203–225.363

Long W. Lam is assistant professor of management at the University of Houston–Clear Lake, Houston, Texas

Louis P. White is professor of management at the University of Houston–Clear Lake, Houston, Texas.