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# STRATEGIC HUMAN RESOURCES AS A STRATEGIC WEAPON FOR ENHANCING LABOR PRODUCTIVITY: EMPIRICAL EVIDENCE

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## ABSTRACT

*This pioneer study investigates strategic human resource management practices (employment security, selective hiring, self-managed teams and decentralization, comparatively high compensation contingent on organizational performance, extensive training and development programs, reduction of status differences, and sharing information) that treat a firm's human resources as valuable assets. Subsequently, this study investigates the relationship between these human resources management practices and a firm's labor productivity. The results of this study revealed a positive and significant relationship between five strategic human resources management practices (job security, selective hiring, self-managed teams and decentralization, extensive training and development programs, and comparatively high compensation contingent on organizational performance) and the company's labor productivity. While reduction of status differences has positive and insignificant relationship with the company's labor productivity, sharing information has a positive and marginal relationship with the company's labor productivity.*

## INTRODUCTION

Over the past decade, several studies (e.g., Cascio, 1991; Arthur, 1994; Huselid, 1995; Delery & Doty, 1996; Pfeffer, 1998; Hagen, Udeh, & Hassan, 2001; Bahattacharya & Doty, 2005) conducted within and across many industries demonstrate that enormous economic returns were obtained through the implementation of high commitment management practices. Furthermore, much of this research serves to validate earlier writing on participative management and employee involvement. Despite these research results, trends in actual management practice are, in many instances, moving in a direction opposite to what this growing body of evidence prescribes. Moreover, this disjuncture between knowledge and management practice is occurring at the same time that organizations, confronted with a very competitive environment, are looking for some

magic solutions that will provide sustained success, at least over some reasonable period of time (Pfeffer, 1998; Lepak & Snell, 2000; Koyes, 2001; Zollo & Winter, 2002).

Rather than putting their human resources first (Miller & Lee, 2001), many organizations have sought means to competitive challenges in places that have not been very productive. Such organizations treat their businesses as portfolios of assets to be bought and sold in an effort to find the right competitive niche, downsizing and outsourcing in a risky attempt to shrink or transact their way to profit, and doing other things that weaken or destroy their organizational culture in order to minimize labor costs (Pfeffer & Veiga, 1999). This pioneer study claims that the way an organization manages its human resources is a real and enduring source of competitive advantage. To support this claim, this study examines the relationship between the suggested strategic human resource management practices and labor productivity.

### **CORROBORATIVE EVIDENCE**

CEOs frequently say, "Don't just give me anecdotes specifically selected to make some point; show me the evidence!" Fortunately, there is a substantial and rapidly expanding body of evidence that speaks to the strong connection between how firms manage their human resources and the economic results achieved. This evidence is drawn from studies of 5-year survival rates of initial public offerings; studies of profitability and stock price in large samples of companies from multiple industries; and detailed research on the automobile, apparel, semiconductor, steel manufacturing, oil refining, and service industries. It shows that substantial gains can be obtained by implementing high performance management practices (Pfeffer, 1998; Ellinger et al., 2002).

According to an award-winning study of high performance work practices of 968 firms representing all major industries, a one standard deviation increase in the use of such practices is associated with a 7.05 percent decrease in turnover and, on a per employee basis, \$27,044 more in sales and \$18,641 and \$3,814 more in market value and profits, respectively (Huselid, 1995). That is an \$18,000 increase in stock market value per employee. A subsequent study conducted on 702 firms in 1996 found even larger economic benefits: A one standard deviation improvement in the human resources system was associated with an increase in shareholder wealth of \$41,000 per employee, about a 14 percent market value premium (Huselid & Becker, 1997). These results are not unique to firms operating in the United States. Similar results were obtained in a study of more than one hundred German companies operating in ten industrial sectors. The study found a strong link between investing in employees and stock market performance. Companies place workers at the core of their strategies produce higher long-term returns to shareholders than their peers (Bilmes, Wetzker, & Xhonneux, 1997).

One of the clearest demonstrations of the causal effect of management practices on performance comes from a study of five-year survival rate of 136 non-financial companies that initiated their public offering in the U.S. stock market in 1988. By 1993, only 60 percent of these

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companies were still in existence. The empirical analysis demonstrated that with other factors such as the company's size, industry, and even profits statistically controlled, both the value that a company placed on human resources (such as whether the company cited employees as a source of competitive advantage) and how the company rewarded people (such as stock options for all employees and profit sharing) were significantly related to the probability of survival. Moreover, the results were substantively important. The difference in survival probability for firms is one standard deviation above and one standard deviation below the mean (in the upper 16 percent and the lower 16 percent of all firms in the sample) on valuing human resource was almost 20 percent. The difference in survival, depending on where the firm scored on rewards, was even more dramatic, with a difference in five-year survival probability of 42 percent between firms in the upper and lower tails of the distribution (Welbourne & Andrews, 1996).

Scholars from different disciplines have suggested various conceptual frameworks as explanations for the links between human resources practices and organizational outcomes. For example, Pfeffer (1998) claimed that employee participation and empowerment job design (team-based production system, extensive employee training, performance-contingent incentive compensation, and others) are widely believed to improve the performances of organizations. Similarly, Huselid (1995) concluded that certain human resources management practices affect turnover, productivity, and financial performance of organizations. According to Delery and Doty (1996), strategic human resources practices have the most significant effects on organizational outcomes such as productivity, turnover, and firm's financial performance.

How can such substantial benefits in profit, quality, and productivity occur? Essentially, these tremendous gains come about because high performance management practices provide a number of important sources that enhance organizational performance. In fact, people work harder because of their increased involvement and commitment that comes from having more control on their work; people work smarter because they are encouraged to build skills and competence; and people work more responsibly because more responsibility is placed in the hands of employees farther down the organizational hierarchy (Pfeffer & Veiga, 1999; Gibson & Birkinshaw, 2004).

### **SUGGESTED HUMAN RESOURCES MANAGEMENT PRACTICES**

Some researchers (Hagen, Hassan, and Maghrabi, 2002; Neal, West, & Patterson, 2005) concluded that not all human resources practices have the same effect on organizational outcomes. The authors attested that while some practices have a significant effect, others have a marginal effect. Based on related literature, personal observation, and experience, Pfeffer and Veiga (1999) developed a set of seven dimensions that seem to characterize most, if not all, of the systems producing profits through human resources. We call these dimensions "strategic human resources management (SHRM) practices. Each one of these practices is briefly summarized below.

### **First: Employment Security**

Most researchers have emphasized employment security as an important dimension among human resources management practices (Dessler, 1999). In his cross-national review, Locke (1995) proposes that innovations in work practices or productivity improvement are not likely to be sustained over time when employees fear that by increasing productivity they will work themselves out of their jobs. On the other hand, Pfeffer and Veiga (1999) suggest that the idea of providing employment security in today's competitive world seems impossible task

However, assurance of job security has various benefits. One advantage to firms is the workers' free contribution of knowledge and efforts to enhance productivity. A second advantage is the decreased possibility of laying off employees during downturns. The benefit from the second advantage to firms is that in the absence of a commitment to retain the work force (either through pledges about employment security or through employment obligations contractually negotiated with a union), firms may lay off employees too quickly and too readily at the first sign of financial difficulty. But such action constitutes a cost for firms that have done a good job of selecting, training, and developing their workforce because layoffs put important strategic assets on the street for competitors to employ (Pfeffer & Veiga, 1999).

However, employment security is a fundamental issue to the implementation of most other high performance management practices. For example, when General Motors wanted to implement new work arrangements in its innovative Saturn plant in the 1990s, it guaranteed its people job security, except in the most extreme circumstances. When New United Motor Company was formed to operate the Fremont automobile assembly plant, it also offered its employees job security (Kelleher, 1997). One of Southwest Airlines' most important tools for building employee partnership is job security which kept its labor force smaller and more productive than those of its competitors (Southwest Airlines, 1999).

### **Second: Selective Hiring**

Companies that are serious about obtaining profits through employees will expend the effort required to ensure that they recruit the right employees in the first place. Selective hiring requires several things (Pfeffer & Veiga, 1999). First, the organization needs to have a large applicant pool from which to select. A good example is Southwest Airlines. In 1993, the company received about 98,000 job applications, interviewed 16,000 people, and hired 2,700. In 1994, applications increased to more than 125,000 for 4,000 hires. While some organizations see processing this many job inquiries as an unnecessary expense, Southwest sees it as a necessary first step (Southwest Airlines, 1999). Second, the organization needs to be clear about what are the most critical skills and attributes needed in its applicant pool. At Southwest, applicants for flight attendant positions



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are evaluated on the basis of initiative, judgment, adaptability, and ability to learn fast (O'Reilly, 1996).

Third, the skills and abilities sought need to be carefully considered and consistent with the particular job requirements and the organization's approach to its market. For example, Enterprise Rent-A-Car is today's largest car rental company in the United States, and has expanded at a rate between 25 and 30 percent a year for the past 11 years. It has grown by pursuing a high customer service strategy and emphasizing sales of rental car services to repair garage customers (O'Reilly, 1996). Fourth, organizations should screen primarily on important attributes that are difficult to change through training and should emphasize qualities that actually differentiate among those in the applicant pool. For example, interviewers at PeopleSoft (a producer of human resource management software) ask very little about personal or academic background, except about learning experiences from school and work. Rather, the interviews focused mostly on whether the applicant sees himself or herself as team-oriented or as an individual achiever (O'Reilly, Chatman, & Caldwell, 1991; Chatman, 1991).

### **Third: Self-Managed Teams and Decentralization**

Systematic studies (Hagen, Udeh, & Hassan, 2001; Farren, 1999; Gregory, 1999) attest to the effectiveness of teams as a principle of organizational design. Team-based organizations also are largely successful in having all employees in the firm feel accountable and responsible for the operation and success of the enterprise, not just a few people in senior management positions. This increased sense of responsibility stimulates more initiative and effort of everyone involved. In addition, teams permit removal of layers of hierarchy and absorption of administrative tasks previously performed by specialists, avoiding the enormous costs of having people whose sole job is to watch people who watch other people do the work.

For example, the implementation of teams in Honeywell's defense avionics plant led to improve delivery time, from 59 percent in the late 1980s to 99 percent in the first quarter of 1996 (The Wall Street Journal, 1996). Whole Foods Market (a natural foods grocery store chain) also attributes much of its success to its team-based organization. Between 1991 and 1996, the company achieved sales growth of 864 percent and net income growth of 438 percent. The stores are organized into self-managing work teams that are responsible and accountable for their own performance (Whole Foods Market Inc., 1995 Annual Report). Teams at Saturn and at Chrysler Corporation provide a framework in which workers help one another and share their production knowledge (Shaiken, Lopez, & Mankita, 1997).

Fourth: Comparatively High Compensation Contingent on Organizational Performance  
It is often argued that high compensation is a consequence of organizational success, and that high compensation (compared with the average) is possible only in certain industries that either face less competition or have particularly highly educated employees. In fact, neither of these statements is

correct. Frequently, successful firms can afford to pay more, but high pay can also produce economic success (Lewis, Goodman, & Fandt, 2001).

Pathmark, a large grocery store chain in the eastern United States, is a good example. In 1972, the company had about 90 days to live, and was in desperate financial situation. The new manager, who assumed leadership in 1972, discovered that 120 store managers in the chain were paid less than the butchers, who were unionized. He decided that the store managers were vital to the chain's success and its ability to accomplish a turnaround. Consequently, he gave the store managers a substantial raise, about 40 to 50 percent. Subsequent success of the chain was attributed to improving performance instead of complaining about their pay (Pfeffer & Veiga, 1999).

Contingent compensation also dominates in most high performance work systems. Such compensation can take a number of different forms, including gain sharing, profit sharing, stock ownership, pay for skill, or various forms of individual or team incentives (Lewis, Goodman, & Fandt, 2001). Wal-Mart, AES Corporation, Southwest Airlines, Whole Foods Markets, Microsoft, and many other successful organizations encourage share ownership. When employees are owners, they act and think like owners. However, merely putting in ownership schemes without providing training, information sharing, and delegation of responsibility will have little effect on performance (Pfeffer & Veiga, 1999).

### **Fifth: Extensive Training and Development Programs**

Studies (e.g., Grossman & Mangus, 1989; Lawler, Mohrman, & Ledford, 1992; Wright & Boswell, 2002; Yeo & Neal, 2004; Rogg et al., 2004) on training in the United States consistently provide evidence of inadequate levels. In many American companies, training is something to be reduced to make profit aims in times of economic hardship. Even when there is training, it focuses on special skills rather than generalist competence and organizational culture. Although knowledge and skill are critical for organizational success, few organizations act on this insight. Training is an essential component of high performance work systems because these systems rely on frontline employee skill and initiative to identify and resolve problems, to initiate changes in work methods, and to take responsibility for quality. All of this requires a skilled and motivated work force that has the capability to perform the required tasks.

Men's Wearhouse (an off-price specialty retailer of men's tailored business attire and accessories) discovered that training can be a source of competitive advantage if it is wisely used. Its 1995 annual report revealed that Men's Warehouse had achieved growth rates in revenues of 32 percent, and net earnings of 41 percent, and the value of its stock had increased by approximately 400 percent. The company attributes its success to how it treats its employees and particularly to the emphasis it has placed on training. The company built a 35,000 square foot training center in Fremont, California, its headquarters. During the winter, experienced store personnel come back

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to headquarters in groups of about 30 for a three or four-day retraining program (Men's Wearhouse Annual report, 2001).

### **Sixth: Reduction of Status Differences**

The fundamental premise of high performance management systems is that organizations perform at a higher level when they are able to tap the ideas, skills, and efforts of all of their people. In order to help make all organization members feel important and committed, most high commitment management systems attempt to reduce the status differences that separate individuals and groups and cause some to feel less valued. This notion can be accomplished through the use of language and labels, physical space, dress, and substantively, in the reduction of the organization's degree of wage inequality, particularly across levels (Dessler, 1999).

At the New United Motor Manufacturing firm, everyone wears the same colored smock; executive dining rooms and reserved parking don't exist. At Kingston Technology, a private firm manufacturing add-on memory modules for personal computers, the two cofounders sit in open cubicles and do not have private secretaries. Status differences are also reduced, and a sense of common fate developed, by limiting the difference in compensation between senior management and other employees (Pfeffer & Veiga, 1999). When Southwest Airlines negotiated a five-year wage freeze with its pilots in exchange for stock options and occasional profitability bonuses, the CEO of Southwest, Herb Kelleher, agreed to freeze his annual base salary at \$395,000 for four years from \$500,000 per year, including base and bonus. Sam Walton, the founder and chairman of Wal-Mart, was one of the most underpaid CEOs in the United States (The Economist, 1995).

### **Seventh: Sharing Information**

Information sharing is a basic and essential component of high performance work systems. The sharing of information on such things as financial performance, strategy, and operational measures conveys to the organization's people that they are trusted Shen & Cannella, 2002. The CEO of Whole Foods Markets demonstrated that the firm is trying to create a high-trust organization in which employees are all-for-one and one-for-all, such a firm can't have secrets. For example. The firm shares detailed financial and performance information with every employee, including individual salary information. Every Whole Foods store has a book that lists the previous year's salary and bonus of all 6,500 employees (Fisherman, 1996).

Dessler (1999) claimed that motivated and trained people couldn't contribute to enhancing organizational performance if they don't have information on important dimensions of performance and training on how to use and interpret that information. The famous case of Springfield Re-Manufacturing Corporation (SRC) is a good example that illustrates this assertion. On February 1, 1983, SRC was created when plant's management and employees purchased an old International

Harvester plant in a financial transaction that consisted of about \$100,000 in equity and \$8.9 million in debt, which makes it one of the most leveraged of all buyouts. The plant manager at that time knew that if the plant was to succeed, all employees had to do their best, and had to share all their wisdom and ideas for enhancing the plant's performance. That manager came up with a system called "open-book management," that has become so popular that SRC now makes money by running seminars on this system (Pfeffer & Veiga, 1999).

## LABOR PRODUCTIVITY

At a general level, labor productivity is defined as total output divided by labor inputs (Samuelson & Nordhouse, 1989). The focus on labor productivity in this study is considered for a number of reasons. First, labor productivity is a crucial organizational outcome; it indicates the extent to which a firm's labor force is efficiently creating output. Second, labor productivity is relatively directly related to the firm's labor force. The face validity of this measure of a firm's success is also relatively high (Dyer & Reeves, 1995). Third, theorists of strategic human resource management have identified labor productivity as the crucial indicator of workforce performance (Delery & Shaw, 2001; Hit, Bierman, Shimizu, & Kochhar, 2001). Fourth, productivity has been the most frequently used outcome variable in a large body of work in the strategic human resource management literature (Boselie & Dietz, 2003).

However, this measure has two limitations. First, it does not control for potential increases in costs (e.g., labor costs) that may accompany increased revenue generation. Second, not all elements of this outcome measure are directly controllable by employees (e.g., market, demand, and product price). Datta, Guthrie, and Wright (2005) attested that these limitations are not serious issues. Therefore, this measure of productivity is a key indicator of the efficiency with which firms produce revenue, and it allows comparability across industries and previous studies.

## PURPOSE AND RESEARCH HYPOTHESES

The purpose of this study is to explore and examine the relationship between the seven strategic management practices and the firm's labor productivity. Based on this objective, the following hypotheses have been formulated:

- H1: There is a significant and positive relationship between "employment security" and the firm's labor productivity.*
- H2: There is a significant and positive relationship between "selective hiring" and the firm's labor productivity.*
- H3: There is a significant and positive relationship between "self-managed teams and decentralization" and the firm's labor productivity.*

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- H4: There is a significant and positive relationship between "comparatively high compensation contingent on organizational performance" and the firm's labor productivity.*
- H5: There is a significant and positive relationship between "extensive training programs and development" and the firm's labor productivity.*
- H6: There is a significant and positive relationship between "reduction of status differences" and the firm's labor productivity.*
- H7: There is a significant and positive relationship between "sharing information" and the firm's labor productivity.*

## RESEARCH METHODS

Research methods used in this study included survey questionnaire, sample and data collection, measurement of variables, and statistical analysis. In addition, inter-rater reliability and biased responses were tested. Finally, the responding sample was investigated to determine whether it represented its target population.

### Survey Questionnaire

To test the formulated hypotheses, a combination of primary and secondary data was utilized. Primary data concerning the seven SHRM practices were obtained through a mail survey questionnaire. The survey questionnaire was developed by the researchers of this study and included seven management practices. The items and statements utilized in this survey were adapted from Pfeffer and Veiga's (1999) study. Statements were categorized under seven management practices as follows: employee security (4 items), selective hiring (5 items), self management teams and decentralization (5 items), comparatively high compensation contingent on organizational performance (4 items), extensive training programs and development (6 items), reduction of status differences (2 items), and sharing information (3 items). Each statement had a five-point Likert response format ranging from strongly disagree (1) to strongly agree (5). This survey questionnaire elicited opinions from the participating HRMs. The surveyed HRMs were requested to assign the degree of their agreement or disagreement with each of the twenty-nine statements categorized under the seven SHRM practices.

The validity and reliability of the questionnaire was tested. Confirmatory factor analysis (CFA) was conducted in order to test the construct validity of the survey questionnaire items. To evaluate the fit of CFA, several goodness-of-fit indicators were used including  $\chi^2$ , goodness-of-fit index, and the root mean square residual (Merrilees & Miller, 2001). These constructs were analyzed individually to determine their unidimensionality. A common approach to measuring reliability is Cronbach coefficient alpha. Cronbach alpha obtained for the overall scale scores

measuring the seven human resources management practices ranged between 72 and 86 percent. According to Kassim (2001), a reliability coefficient of around 90 percent can be considered excellent, values around 80 percent are very good, and values of around 70 percent are adequate depending on the questionnaire items. Data analysis suggests that the survey questionnaire is valid and reliable. Due to the limited space, the CFAs are not reported in this study. However, the CFA is available upon request from authors.

### **Sample and Data Collection**

The research sample consisted of 500 HRMs randomly selected from American medium-size public companies throughout the United States from the COMPUSTAT. HRMs of the participating companies were mailed a cover letter requesting their participation, the survey questionnaire, a stamped return envelope, and a brief summary for the five strategies suggested in this study. Of the 500 mailed questionnaires, 131 (26.3%) were completed and returned. Secondary data concerning labor productivity, firm's age, firm's size, sales growth, technological opportunities, and capital intensity were obtained from COMPUSTAT.

### **Measurements of Variables**

Measurements included the seven SHRM practices (independent variables), the firm's labor productivity (the dependent variable), and three control variables (firm's size, sales growth, and capital intensity). a. SHRM practices. As mentioned, the seven SHRM practices were measured by the survey questionnaire developed by the researchers of this study based on the work of Pfeffer and Veiga (1999). b. Labor Productivity. Drawing on prior research (e.g., Guthrie, 2001; Huselid, 1995; Koch & McGrath, 1996), labor productivity was measured by the logarithm of the ratio of a firm's sales to its number of employees. c. Control Variables. Control variables that have potential impact on a firm's labor productivity are the firm's size, sales growth, and firm's capital intensity (Datta, Guthrie & Wright, 2005). The company's size is controlled because it may be associated with the use of more sophisticated human resource practices as well as with higher productivity (Guthrie, 2001). Firm's size is measured by the natural logarithm of a company's number of employees (e.g., Huselid, 1995; Koch & McGrath, 1996). Company's sales growth is controlled because of its potential implications for a company's productivity (Huselid, 1995). Company's sales growth is measured by the average of growth in a company's sales over a three-year period (1999-2001). Finally, the company's capital intensity is controlled because of its potential relationship with the use of high performance work systems and company's productivity (Huselid, 1995; Koch & McGrath, 1996). Company's relative capital intensity is computed as the mean of company's capital intensity (fixed assets/sales) divided by the capital intensity for the particular company's industry (Datta, Guthrie & Wright, 2005).

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## Statistical Analysis

Statistical analysis in this study utilized the Statistical Package for Social Science (SPSS-X) to compute frequencies and percentages. The AMOS package was utilized to conduct confirmatory factor analysis (CFA) to test the construct validity of the survey questionnaire. That is, to determine whether the scales of the twenty items measured distinct constructs.

## DATA ANALYSIS

To determine the reliability of the survey-based measures, the procedure of Kumar, Stern, and Anderson (1993) was applied. Fifty assistant HRMs were randomly selected from the responding companies and were also surveyed. A similar number was randomly selected from the responding HRMs. Responses for the two groups of HRMs and assistant HRMs were then correlated to establish the inter-rater reliability. Inter-rater agreement ( $\kappa = 0.86$ ,  $P < .001$ ) on the survey measures concerning the seven SHRM practices was significant and consistent with the literature (e.g., Zahra, Neubaum, & Huse, 2000; Hagen, Hassan & Wilkie, 2003; Hagen & Lodha, 2004).

Following the work of Osterman (1994), the logistic regression was utilized to detect potential biased responses. The dependent variable is defined as a dummy variable coded 1 if the HRM of the company responded and 0 if he or she did not. The independent variables included the company's size, and the relative capital intensity of both responding and non-responding companies were correlated. The outcome of the logistic regression indicated that response bias was not a significant problem for CEOs' responses.

Utilizing the work of Zahra, Neubaum, and Huse (2000), both samples of this study were investigated to determine whether the sample represented their target populations. The company's number of full-time employees, sales growth, and the relative capital of the responding and non-responding firms were compared. The t-tests and the X<sup>2</sup> tests did not reveal significant differences between the two groups. Thus, each sample represented its target population. Subsequently, the factor structure of the scales was investigated by incorporating all scales of the seven human resources management practices into a separate confirmatory factor analysis (CFA). The CFA conducted on the data collected from the responding human resources managers revealed that the measures were distinguishable from one another.

To ensure that the regression model has not been undermined by any potential problem, certain statistical tests have been used to check the existence of any problem. Multicollinearity is not a problem because all variance inflation factors (VIFs) are low. Autocorrelation does not exist because the Durbin-Watson statistic is significant ( $D.W. = 2.4$ ). The plot of the residuals shows that there is no evidence of heteroskedasticity. Neither the Studentized Deleted Residuals test identified influential outliers for the dependent variable, nor Diffits and the Cook's Test detected influential



outliers for the independent variables. The plotted histogram of data depicted normal distribution of the data. The plot of the dependent variable against each of the independent variables showed a linear relationship between these perspective variables.

### FINDINGS OF THIS STUDY

The matrix correlation presented in Table 1 shows moderate correlations among SHRM practices. Self-managed teams and decentralization is marginally correlated with selective hiring ( $R = .18$ ;  $P < .10$ ). Comparatively high compensation contingent on the company's performance is marginally correlated with employment security ( $R = .15$ ;  $P < .10$ ) and moderately correlated with self-managed teams and decentralization ( $R = .22$ ;  $P < .05$ ). Extensive training and development programs are significantly correlated with selective hiring ( $R = .28$ ;  $P < .01$ ) and moderately correlated with comparatively high compensation contingent on the company's performance ( $R = .21$ ;  $P < .05$ ), but marginally with Self-managed teams and decentralization ( $R = .14$ ;  $P < .10$ ). Reduction of status differences is marginally correlated with selective hiring ( $R = .18$ ;  $P < .10$ ). While sharing information is marginally correlated with self-managed teams and decentralization ( $R = .14$ ;  $P < .10$ ), it is moderately correlated with extensive training and development programs ( $R = .19$ ;  $P < .05$ ). However, these correlations indicate that the seven SHRM practices that treat human resources as the most valuable asset in the company are not completely independent. These correlations are expected because the items measuring and the firm's SHRM practices are interrelated. However, such moderate correlations should not be considered a serious problem in previous research (Delery & Doty, 1996; Hagen, Hagen, Hassan & Maghrabi, 2002).

Labor productivity is correlated with five SHRM practices. It is correlated with employment security ( $R = .19$ ,  $P < .05$ ), selective hiring ( $R = .22$ ;  $P < .05$ ), self-managed teams and decentralization ( $R = .20$ ;  $P < .05$ ), comparatively high compensation contingent on the company's performance ( $R = .24$ ;  $P < .05$ ), and extensive training and development programs ( $R = .27$ ;  $P < .01$ ). On the other hand, labor productivity has not a significant correlation with reduction of status differences ( $R = .09$ ;  $P > .10$ ), but it has a marginal correlation with sharing information ( $R = .15$ ;  $P < .10$ ). This notion refers to a potential relationship between the suggested SHRM practices the company's labor productivity.

With respect to control variables, the company's size has marginal correlation with extensive training and development programs ( $R = .14$ ;  $P < .10$ ) and slightly less than a moderate correlation with labor productivity ( $R = .17$ ;  $P < .10$ ). Sales growth has marginal correlations with employment security ( $R = .16$ ;  $P < .10$ ), selective hiring ( $R = .18$ ;  $P < .10$ ), self-managed teams and decentralization ( $R = .14$ ;  $P < .10$ ), but it has a moderate correlation with extensive training and development programs ( $R = .19$ ;  $P < .05$ ). This SHRM practice has slightly high correlations with comparatively high compensation contingent on the company's performance ( $R = .25$ ;  $P < .01$ ) and

labor productivity  $\beta = .34$ ;  $P < .01$ ). The relative capital intensity is not correlated with any of the seven SHRM practices or any of the control variables.

SHRM Practices and Control Variables	1	2	3	4	5	6	7	8	9	10	11
1. Employment security	1.0										
2. Selective hiring	.12	1.0									
3. Self-management teams & decentralization	.04	.18	1.0								
4. Comparatively high compensation contingent on company's performance	.15	.12	.22	1.0							
5. Extensive training programs and development	.11	.28	.14	.21	1.0						
6. Reduction of status differences	.08	.18	.11	.06	.09	1.0					
7. Sharing information	.08	.09	.14	.08	.19	.12	1.0				
8. Labor productivity	.19	.22	.20	.24	.27	.09	.12	1.0			
9. Size	.09	.07	.10	.12	.14	.06	.07	.17	1.0		
10. Sales growth	.16	.18	.14	.25	.19	.10	.10	.34	.09	1.0	
11. Relative capital intensity	.10	.09	.07	.05	.11	.07	.03	-.06	.15	.14	1.0

Correlations greater than .14 and less than .18 are significant at  $P < .10$ ; correlations greater than .18 and less than .24 are significant at  $P < .05$ ; correlations greater than .24 are significant at .01; all two-tailed tests.

Data analysis in Table 2 reveals five positive and significant relationships between the first five SHRM practices and labor productivity. It also shows a positive and marginal relationship between the seventh SHRM practice and labor productivity. Finally, data analysis shows a positive and insignificant relationship between the sixth SHRM practice and labor productivity. There is a positive and significant relationship between "employment security" and the firm's labor productivity ( $P < .05$ ). This finding supports the *first hypothesis*, which proposed a significant and positive relationship between employment security and the company's labor productivity. Although the idea of providing employment security in the 21st century seems impossible, this finding reveals that HRMs still believe that employment security is a fundamental element for employees who expect to stay in their organizations as long as they wish. It is also possible that the responding HRMs have reaped the benefits of this SHRM practice. However, job security in most organizations is normally not guaranteed, particularly when organizations face economic problems.

A second positive and significant relationship exists between "selective hiring" and labor productivity. This finding supports the *second hypothesis*, which proposed a significant and positive relationship between selective and the company's labor productivity ( $P .01$ ). In order to enhance labor productivity, the company is required to focus on hiring the right person for the right job. T

achieve selective hiring, the company must have a large applicant pool from which to select, to be clear about the most critical skills, to match these skills with the required job and market, and to emphasize qualities that really differentiate among those in the applicant pool.

Independent Variables	Dependent Variable: Firm's Labor Productivity		
	Beta	T-value	P
SHRM Practices			
Employment security	.1783	3.23	.05
Selective hiring	.2824	8.15	.01
Self-managed teams and decentralization	.1869	2.87	.05
Comparatively high compensation contingent on organizational performance	.1547	2.74	.05
Extensive training and development programs	.2763	6.64	.01
Reduction of status differences	.0148	0.86	.56
Sharing information	.1139	1.68	.10
Firm's size	.2243	2.72	.05
Sales growth	.2513	5.31	.01
Relative capital intensity	.0168	.72	.52
R <sup>2</sup> = .48; Adjusted R <sup>2</sup> = .38; F-value 14.79, P < .001			

A third positive and significant relationship can be seen between "self-management teams and decentralization" and labor productivity ( $P < .05$ ). This finding supports *third hypothesis*, which proposed a significant and positive relationship between employment self-managed teams and decentralization and the company's labor productivity. This SHRM practice enhances labor productivity because work teams permit removal of layers of hierarchy, absorbs a portion of administrative tasks previously performed by specialists, and save costs of having people whose sole job is to watch other people do the work. Work teams also permit employees to pool their ideas to come up with better and more creative solutions to problems, allow them help each other, and more freely share their production knowledge.

A fourth positive and significant relationship appears between "comparatively high compensation contingent on the company's performance and labor productivity. This finding supports the supports the *fourth hypothesis*, which proposed a significant and positive relationship between comparatively high compensation contingent on the company's performance and labor productivity. If a company has high labor productivity, it can afford to pay more because high pay reflects the company's financial success. Compensation has a number of different forms such as

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profit sharing, stock ownership, pay for skill, or various forms of individual or team incentives. When employees are owners, they act and think like owners. However, just utilizing ownership approaches without providing training, information sharing, and delegation of responsibility will have a marginal influence on performance. Even if employees are more motivated by their shared ownership, they do not necessarily have the skills, information, or power to do anything with that motivation.

"Extensive training and development programs" also have a positive and significant relationship Extensive training and development programs and its labor productivity ( $P < .05$ ). This finding supports the supports the *fifth hypothesis*, which proposed a significant and positive relationship between comparatively high compensation contingent on the company's performance and labor productivity. If a company wants to increase its labor productivity, such company has to focus on extensive training and development programs because they are a source of competitive advantage and an essential component of high performance work systems in their organization. Such training should be provided for employees in the job every few years or as needed. Thus, organizations should provide funded education, workshops, and conventions to develop required employees' skills.

In contrast, "reduction of status differences among employees" has not a significant relationship with the company's labor productivity. This finding does not support the *sixth hypothesis*, which proposed a significant and positive relationship between "reduction of status differences" and labor productivity. Although this SHRM practice make all employees feel important, but it doesn't have impact on productivity.

Finally, "sharing information" has a positive and marginal relationship with labor productivity. This finding provides a partial support the *seventh hypothesis*, which proposed a significant and positive relationship between "sharing information" and labor productivity. Although sharing of information about financial performance, strategy, and operational measures conveys to the company's employees that they are trusted, yet this SHRM practice has a marginal effect on labor productivity.

## IMPLICATIONS

Observing results from implementing the aforementioned SHRM practices takes time. For example, it takes time to train and upgrade workers' skills and even more time to see the economic benefits of this training in reduced turnover and enhanced performance. It takes time to share operating and financial information with people, and to be sure that they understand and know how to use it. Even more time is needed before suggestions and insights can improve business results.

However, the key to managing people in ways that lead to profits, productivity, innovation, and real organizational learning ultimately lies in the manager's perspective. With the right perspective, anything is possible. With the wrong one, change efforts and new programs become gimmicks, and no number of consultants, seminars, and slogans will help.

## CONCLUSIONS

The economy will continue to be complex, challenging and filled with competitive opportunities and threats. Effective management practices can help firms compete successfully in this globalization era. Suggested management practices are the ways of how organizations should treat employees as their most valuable asset. There should be barriers and potential challenges encounter CEOs of organizations during the implementation of these management practices. To achieve global competitiveness, firms have to adopt the suggested competitive strategies. They must also be prepared to overcome any obstacles that arise during the implementation of these strategies.

## RECOMMENDATIONS FOR FUTURE RESEARCH

Future research should expand this study to include potential barriers to these management practices. Future research should also include employees' perceptions to these SHRM practices. Are there similarities and/or differences in the perceptions of the three groups to these management practices and their impact on labor productivity?

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<b>Appendix A-Confirmatory Factor Analysis (CFA)</b>			
<b>Properties of the Strategic Human Resource Management Practices</b>			
<b>Construct and its Indicator Variables</b>	<b>Factor Loadings</b>	<b>Cronbach alpha</b>	<b>Composite reliability</b>
<b>1. Employee Security</b>		0.7331	0.7463
* Employees in their jobs can expect to stay in our organization as long as they wish.	.7258		
* It is very difficult to dismiss an employee from his or her job from our organization.	.8251		
* Job security in our organization is almost guaranteed to our employees in their jobs.	.6725		
* If our organization faces economic problems, employees would be the last to get cut.	.6625		
<b>2. Selective Hiring</b>		0.8634	0.8835
* Recruitment processes in our firm ensures that we recruit the right people in the first place.			
* Our organization selects its employees from a large applicant pool.	.8473		
* Our organization realizes what are the most critical skills and attributes needed in its applicant pool.	.7942		
* Our organization seeks the skills and abilities, which are consistent with the particular job requirements and our approach to our market.	.8164		
* Our organization emphasizes qualities that are actually differentiated among those in the applicant pool.	.7829		
<b>3. Self-Managed Teams and Decentralization</b>		.7248	.7411
* Our organization attests to the effectiveness of self-management teams as a principle of our organization design.	.7263		
* One of the significant payoffs of teams in our organization is that our teams substitute peer-based control for hierarchical control of work.	.7164		
* Self-management teams in our organization allow our employees to pool their ideas to come up with better and more creative solutions to problems.	.7282		
* Self-management teams in our organization allow the removal of layers of hierarchy and absorption of administrative tasks.	.7425		

<b>Appendix A-Confirmatory Factor Analysis (CFA)</b>			
<b>Properties of the Strategic Human Resource Management Practices</b>			
<b>Construct and its Indicator Variables</b>	<b>Factor Loadings</b>	<b>Cronbach alpha</b>	<b>Composite reliability</b>
* Self-management teams help our organization avoid enormous costs of having an individual whose sole job is to watch other people do the work.	.7581		
<b>4. Comparatively High Compensation Contingent on Organizational Performance</b>		.7126	.7154
* Contingent compensation in our organization takes a form of gain sharing.	.6685		
* Contingent compensation in our organization takes a form of profit sharing.	.6685		
* Contingent compensation in our organization takes a form of stock ownership.	.6685		
* Contingent compensation in our organization takes a form of pay for skill.	.6685		
<b>5. Extensive Training and Development Programs</b>		.8126	.8727
* Extensive training programs are a source of competitive advantage for our organization.			
* Extensive training programs are an essential component of high performance worksystems in our organization.	.8022		
* Extensive training programs are provided for employees in the job in our organization.	.7858		
* Our employees normally go through training programs every few years, or as needed.			
* Our formal training programs to teach new hires the skills they need to perform their jobs.	.7534		
* Our organization provides funded education, workshops, and conventions to develop required employees' skills.	.7281		
<b>6. Reduction of Status Differences</b>		.6833	.7218
* Management systems of our organization attempt to reduce the status distinctions that separate individuals.	.6538		
* Management systems of our organization attempt to reduce the status distinctions that cause some individuals to feel less valued.	.6647		

<b>Appendix A-Confirmatory Factor Analysis (CFA)</b> <b>Properties of the Strategic Human Resource Management Practices</b>			
<b>Construct and its Indicator Variables</b>	<b>Factor Loadings</b>	<b>Cronbach alpha</b>	<b>Composite reliability</b>
<b>7. Sharing Information</b>		.7648	.7743
* Sharing information is a basic and an essential component of high performance work systems in our organization.	.7412		
* Sharing information on financial performance, strategy, and operational measures is practiced in our organization to convey to employees that they are trusted.	.7321		
* Motivated and trained employees cannot contribute to enhancing our organizational performance unless they have information and how and interpret that information on important dimensions of performance.	.6742		

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