

THE EFFECTS OF HUMAN RESOURCE PRACTICES ON LABOR PRODUCTIVITY: A CASE OF SELECTED INDUSTRIAL ESTATES IN SRI LANKA

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ABSTRACT

Productivity is a widely considered concept in overall analysis of industrial success. In order to achieve organizational goals and enhance organizational productivity, flexible and capable employees play a crucial role. Further, it is extensively accepted that labor productivity is likely to be the outcomes of creative HRM strategies. In that background, the objective of this study is to examine the effects of HRM practices on Labor productivity. To achieve the objective, the study focused on HRM practices and its outcomes by measuring its contribution to overall organizational productivity. The study was conducted with randomly selected manufacturing firms which are located at eight (8) large industrial estates representing three (3) provinces in Sri Lanka. The data were gathered through a sample survey via a structured questionnaire. The correlation analysis of the data showed that out of nine (9) selected HRM practices, six (6) of them were significantly correlated with the labor productivity and three (3) of them were showing weaker correlation with the labor productivity.

Key Words: Human resources management practices, Labor productivity, Industrial estates, Correlation

1. INTRODUCTION

It is now commonly accepted that employees create an important source of competitive advantage for firms. As a result it is important for a firm to adopt Human Resources Management (HRM) practices that make best use of its employees. The practices of the HRM

are heavily affect productivity of the organization. Because to have an effective

impact or outcome through the other resources, human resource is must as it is the only resource that makes other resources providing a contribution towards the overall organizational productivity (Herath and Gajanayake, 2008). This trend has led to increased interest in

studying the impact of HRM on organizational productivity.

Sauian (2002) has emphasized that production processes in manufacturing should be the most productive as well as to get such kind of enormous productivity there should be an efficient HRM system. Most firms use productivity as a measure of organizational success. Sauian (2002) has mentioned number of measures of productivity including capital productivity, labor productivity, profitability indices as well as total output productivity. But along with the HR literature, this study has considered only labor productivity, which is an important element used to determine competition among manufacturing firms. Labor productivity can be written simply as: $\text{Labor Productivity} = \frac{\text{Total Output}}{\text{Total labor input}}$. Therefore, to carry out the study, researchers have selected a few measures with regard to labor productivity, such as productivity per hour, productivity per person, total production, labor turn over, absenteeism, number of industrial actions etc.

Especially in manufacturing estates, labor is the crucial input comparing to other variables (Datta, Guthrie and Wright, 2003). Many researchers (Data et al., 2003; Hayens and Fryer, 2000) have pointed out that HRM practices impact on the outcomes such as employee satisfaction, employee commitment, employee retention, employee presence, relationship between workers and management, employee involvement, employee trust and employee loyalty. They have also indicated that these outcomes and HRM practices can lead to a firm's performance such as profit, market share, increase in sales, productivity, product service quality and customer satisfaction. Further, a number of studies have found a positive relationship between "high performance HRM practices" (Huang, 1999) and different measures of firms' productivity.

This research paper has two aims. The first is to examine the key HRM practices in the Sri Lankan firms, as they undergo the productivity of the labor. The second is to examine correlation between the HRM practices and labor productivity and, if so, whether there are variations in how these practices are implemented. The paper begins with a brief discussion of the theoretical background of HRM.

2. THEORETICAL BACKGROUND

There is a growing research literature on the area of management and organizational science which has been dominated by the question of whether HRM practices make a difference to company performance (Patterson, West, Lawthom and Nickell, 2003). As such various authors put step forward to make a link between specific HRM practices and firm productivity. Heynes and Fryer (2000) found a positive relationship between the HRM policies, practices, service quality and firm's overall performance. Further, they explained that positive relationship between HRM and organizational performance on the manufacturing paradigm too. Goel (2008) has stated clearly with the justification of number of scholars that resources lead to sustain competitive advantage when they are valuable, rare, inimitable, and non-substitutable. While technology, natural resources, and other economic indicators such as economies of scale can create value, but these sources of value are increasingly available to almost anywhere and they are easy to copy, especially when compared to complex human resources system.

The firm's productivity varied in the extent to which they had well developed policies covering the human resource planning, job analysis, recruitment and selection, induction, training, compensation and welfare, performance appraisal, industrial relation, and discipline handling. The transparency and maintaining equity of these policies reduce feeling of alienation at work and such practices create trust in the minds of the employees which in turn may promote productivity of the employees. Therefore, these areas of HRM practices were explored in this research.

The effective implementation of the HRM policies can deal with those productivity issues in the firm. The firms in Sri Lanka are taking a proactive approach to formal HRM practices to deal with labor productivity after 1980s. A number of factors may help to explain the relatively more proactive HRM approach of the Sri Lankan firms after 1980s. To some extent it reflected global competitive pressures to establish well developed HRM practices in Sri Lankan firms. Second, the firms which entered international markets after the 1980s, with the liberalized economic policies in Sri Lanka moved into massive scale of production both with high-tech machinery and labor. Third, the firms which entered along with the liberalized

economic policies are multinational collaborations and international participants who have experienced with developed HRM practices as well as known the benefits from the value of human resource capital to the firm and HRM policies were a means of gaining competitive advantage to the organizations.

Huang (1999) has identified in his study that companies which closely coordinate with good HRM practices achieve better performance than companies do not. Schuler and Jackson (1997) note that businesses require employees to possess specific skills, knowledge, and abilities needed to implement their competitive strategies and the development of the desired behavior and abilities depends on the design and implementation of specific HRM methods. Firms adopting an innovation strategy must be prepared to adapt to rapid market change and technological progress. Their employees need to be creative; to be cooperative with each other; to be able to pursue long-term objectives; to devote proper consideration to the quality and the quantity of products and services provided; to be able to take risk; and to cope successfully with ambiguity and uncertainty.

To develop employees with those qualities, job descriptions should be broad, employee interaction should be strongly encouraged, career options should be extensive, training and career development should be emphasized and pay scales should be based on internal equity and also there should be excellent job security and performance evaluations should stress teamwork and long-term orientation. Schuler and Jackson (1997) defined this series or related HRM practices and methods as enhancing the overall performance of the firms in general, HRM involves the design and implementation of a set of internally consistent policies and practices that ensure a firm's human capital to contribute to the achievement of its business objectives (Datta et al., 2003). In the research by Schuler and Jackson (1997) statistically significant results were obtained between HRM practices and labor productivity. In that study they found that HRM practices such as training and development, compensation and performance management having a positive effect on the firm's profit and productivity.

3. RESEARCH ISSUE

Empirical studies carried out in the Sri Lankan context indicate that some of the most significant factors that have badly affected both private and public sector organizations are lack of cooperation and trust, conflict and poor relationship between management and employees, and low commitment and productivity (Mefford, 1986). One of the major reasons for these symptoms might be a lack of compatibility between management and employees with regard to the adoption of HRM policies and practices (Storey, 1989). For example, they have found that the work and value orientations of manufacturing sector employees significantly influence their preferences for HRM practices. In addition, some other researchers and national organizations in Sri Lanka have also stressed that the importance of identifying organizationally and industrially important cultural values and appropriate HRM practices and work ethics such as appropriate performance evaluation systems and incentives based on performance.

As discussed above, past literature shows that there is an identifiable relationship between firm's HRM practices and the level of labor productivity. In that background the present study focuses on examining the effect of HRM practices on labor productivity in the selected manufacturing firms in Sri Lankan industrial estates. The HRM practices comprise human resource planning, job design, recruitment and selection, orientation, training, compensation and welfare, performance appraisal, industrial relation, discipline handling and level of productivity was measured based on the employee turnover, employee loyalty, industrial actions, dispute and among employees, dispute among employees and management.

3.1. RESEARCH QUESTIONS

This study addresses the following two major research questions:

1. Do the selected HRM practices impact on labor productivity of firms in Sri Lankan industrial estates?
2. To what extent, does each of the selected HRM practices contribute to labor productivity?

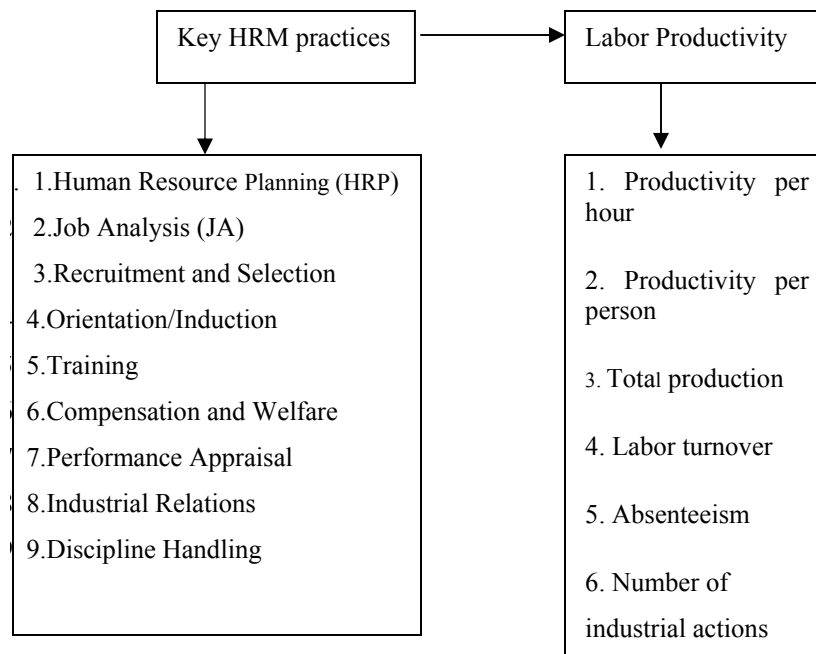


Figure 1: Effect of selected HRM practices on firm labor productivity

Table 1: Distribution of questionnaires

Location		Sample size			
Province	District	Industrial estates	No of firms	No of Ques	Total
Western	Gampaha	Ekala	3	12	36
		Meerigama	3	12	36
		Wathupitiwala	3	12	36
Wayamba	Kurunagala	Dambadeniya	3	12	36
		Kurunagala	3	12	36
		Pannala	3	12	36
		Dankotuwa	3	12	36
Central	Kandy	Pallekale	3	12	36
Total					288

Source: Authors' original construction

4. METHODOLOGY

By considering those pre-raised research questions authors have constructed a conceptual model as follows

4.1. RESEARCH CONTEXT

To gather data, help of questionnaire was taken and 12 copies were allocated to the each company by distributing 2 copies to the top management, 3 copies to the middle level management and 7 copies to shop floor level employees. Data were gathered from respondents without any explanation of the study and till collecting all the respondents feedback, continuous contact was made with them. The questionnaire was initially made in English language and a few copies were translated into Sinhala language at the request of respondents.

4.2. MEASURING HRM PRACTICES AND LABOR PRODUCTIVITY

The designed questionnaire had 10 major parts with several sub questions under each main heading. Question number 1 to 9 strongly aligned with the selected HRM cluster and asked to fill by all respondents including all three categories. Question number 10 focused on the measurement of organization's performance during last 5 years. Only top and middle level management were asked to fill them. The analysis was conducted in two phases; the primary analysis was carried out in order to find out the percentage contribution from different organizations within the sample on various factors that are under consideration. On the completion of the primary analysis, secondary analysis was carried out; focusing on searching the correlation among selected variables towards the organizational performance and finally, it has extended the analysis to obtain the overall impact of better HRM practices on result of the organization within the period under consideration. The stronger or weaker nature of the relationship is measured based on the correlation analysis. Further, the measures of correlation basically into three categories as follows:

Table 02: Key to correlation analysis

Stronger/weaker relationship category	Correlation value
Weaker correlation	Less than 0.55
Moderate correlation	Between 0.56 – 0.65
Strong correlation	Over 0.66

4.3. VARIABLES

Independent variables: The following nine (9) HRM practices were selected as independent variables:

1. Human Resource Planning (HRP)
2. Job Analysis (JA)
3. Recruitment and Selection
4. Orientation/Induction
5. Training
6. Compensation and Welfare
7. Performance Appraisal
8. Industrial Relations
9. Discipline Handling

Dependent Variable: Labor productivity of companies was set as dependent variable.

5. FINDINGS AND DISCUSSION

The study was carried out mainly to identify the correlation between the selected HRM practices and labor productivity. It was found that all the independent and dependent variables which were considered under this study had correlation among them. Therefore, as a whole, through the correlation values of labor productivity and HRM practices it can be seen that there is almost a positive relationship between these two variables.

Following correlations were calculated based on the selected HR practices and productivity. The calculation of productivity consists of production and the sales values during the period under consideration.

Further, it indicates that the correlation between orientation, industrial relations and discipline contribute towards the productivity in a weaker mode. All other selected HR practices have indicated that there is a strong correlation with productivity.

Table 3: Correlation among selected HRM cluster and labor productivity

Factors	Correlation	Nature of significance
1. Human Resources Planning and Productivity	0.68	Significant correlation
2. Job analysis and Productivity	0.69	Significant correlation
3. Recruitment, selection and productivity	0.69	Significant correlation
4. Orientation and productivity	0.52	Weaker correlation
5. Training and productivity	0.71	Significant correlation
6. Compensation and welfare	0.82	Significant correlation
7. Performance appraisal and productivity	0.67	Significant correlation
8. Industrial relations and Productivity	0.53	Weaker correlation
9. Discipline and productivity	0.51	Weaker correlation

Source: Authors' original construction

The result shows that HRM practices in terms of orientation, industrial relations and discipline have weaker correlation with productivity. Although all the other variables indicate positive correlation, human resource planning, recruitment and selection, training and performance appraisals have indicated higher level of correlation while compensation practices indicate far above the sound correlation with productivity.

5.1. HUMAN RESOURCE PLANNING

Considerable amount of organizations (86%) has indicated that they have developed organizational chart for their organization and practically they use it for managerial purposes. Apparently, some organizations have shown that developed organization chart is not communicated to employees. Nearly 98%

organizations have indicated that they have maintained proper employee records which are a prerequisite of the human resources planning. In accordance with the correlation analysis, it has indicated that there is high level of relationship existing between proper human resources planning practices and organizations profitability and employee satisfaction (0.68).

5.2. VALIDITY OF JOB ANALYSIS WITHIN THE ORGANIZATION

One may argue that there is no validity in Job Analysis to factories that are available in industrial states, thus there is a substantial number of organizations that have indicated they are not reluctant to implement job analysis practices in their establishments (76%). The frequency of job analysis practices in selected establishments shows a relatively non appreciable pattern. Nearly 40% of organizations have indicated that they give less attention to job analysis results in internal transfers.

5.3. APPLICATION OF RECRUITMENT AND SELECTION AND EMPLOYEE PERFORMANCE

Recruitment and selection was considered as one of the main activity in deciding the success of the organizational performance. Majority of organizations indicated that they are prepared to give priority to the existing employees and their recommendations in recruitment and selection while 44% of establishments depend on the external resources.

Further the review of literature indicates that the participation of different departments for the recruitment and selection process take incredible contribution towards the employee turnover. In data collection it is considered the contribution by HR department, relevant operational department and both parties together. 35% of the selected establishment makes their recruitment and selection based on the total contribution of HR department while 45% of the sample has indicated that they take resourcing decision based on the operations departments' consent. Further there is high correlation observed between participation of responsible department for the recruitment and selection and the employee turnover (0.69). Additionally, 56% of establishments strictly follow their HRP in day-

to day HR - related activities and it indicates significant correlation with employee retention (0.67).

5.4. APPLICATION OF ORIENTATION FOR THE ORGANIZATIONAL PERFORMANCE

The organization's orientation practices indicate high importance in case of employee familiarizing to the organizations environment. 57% of the selected sample indicates that they regularly provide an orientation to the newly recruited employees: Further out of those organizations 68% establishments has adequate training programs. It has also indicated that this

higher percentage of in-house training is purely because of several reasons, specially to reduce the cost of training while maintaining the better control over the trainer

5.5. COMPENSATION AND WELFARE

Based on the sample there are various factors that make an impact on deciding the compensation for their employees. Among selected organizations, majority have indicated that government regulations have a significant impact on designing compensation system (56%). Additionally, considerable number of organizations has indicated that they have taken steps to facilitate employee welfare. Financial facilities, meal facilities, social security payments and medical facilities are among the employee facilities.

5.6. APPLICATION OF INDUSTRIAL RELATIONS

The data indicates that there is a vital relationship observed among number of strikes other industrial actions, number of labor tribunals cases and employees terminated and resigned. The number of trade unions in operation has a high impact on the number of strikes and lost man hours and the correlation has indicated as 0.72.

5.7. APPLICATION OF PERFORMANCE APPRAISAL

34% of organizations has carried out performance appraisal on annual basis with the

fullest cooperation of management. Less number of organization has indicated that the appreciation of employee participation in performance appraisal (8%). In addition to employee participation in performance appraisal, 11% of organization has taken steps to communicate performance standards to respective employees while 96% of organizations communicate performance to management.

5.8. APPLICATION OF DISCIPLINE HANDLING

49% of organization has indicated that they have established well designed disciplinary procedure which is supported by strong recording system; out of which 37% has indicated that they have documented their disciplinary procedure.

5.9. PROVINCE-BASED CORRELATION ANALYSIS

Selected organizations in the sample spread over three districts and those three districts indicate different correlations in relation to productivity.

As it is indicated in Table 4, table there are certain factors that are indicating strong correlation between HR practices and productivity of selected organization. Additionally, employee productivity has measured in terms of average production generated by an employee, number of stoppages in production process, revenue generation within the period and employee's solution for advance solution in productivity improvement. Further development of earlier analysis based on province analysis indicates significant variance in correlation in HR practices and productivity.

6. CONCLUSION

In this connection the nine areas of in HRM practices have highlighted their role and their relationship with productivity. As a developing country, it has become difficult to adopt sophisticated HRM Practices due to cost factor, but still there are organizations which are able to break through this barrier in attaining hikes in productivity.

Table 4: Correlation analysis based on districts

Factors	Western	Central	Wayamba
1. Human Resources Planning and Productivity	0.66	0.59	0.61
2. Job analysis and Productivity	0.69	0.61	0.64
3. Recruitment, selection and productivity	0.68	0.52	0.71
4. Orientation and productivity	0.56	0.51	0.48
5. Training and productivity	0.70	0.69	0.70
6. Compensation and welfare	0.81	0.88	0.75
7. Performance appraisal and productivity	0.65	0.66	0.63
8. Industrial relations and Productivity	0.51	0.46	0.55
9. Discipline and productivity	0.59	0.51	0.54

Source: Authors' original construction

The result is insist that HR practices in terms of orientation, industrial relations and discipline have weaker correlation with level of productivity, which also accepted lower level in district and sector based analysis. The analysis has indicated that especially industrial relations and discipline have been perceived by an employees in a much neutral manner. Science those are common to all organization employee's productivity is not heavily affected by them. On the other hand orientation practices at industrial states were significantly weaker. Many firms were keen on employing trained and skilled employees and as a result orientation practices had been neglected. Additionally practices of human resources planning, recruitment and selection, training, performance appraisal have indicated high level of correlation while compensation practices indicated far above the ground correlation with productivity. The Province-based analysis facilitated to identify the differences between correlations among HRM practices and productivity regionally. There are

certain significant variations also conceded in Wayamba Province, compared to Western and Central provinces.

Finally, the district-based and province- based analysis indicated that the level of correlation between HRM Practices and the labor productivity is in the same trend. However, it is clearly observed that there are significant differences exist in relation to same HRM practices among different districts and provinces. The depth analysis insists that this is basically due to differences among employee expectations and the prevailing labor market conditions of such provinces.

7. LIMITATIONS OF THE STUDY AND DIRECTIONS FOR FUTURE RESEARCH

This study is subject to certain limitations encountered in the research process. The study was conducted only in three selected provinces and had considered few industrial estates. Generalisability would have increased if number of sufficient manufacturing firms representing all the provinces in Sri Lanka were used in the study. This study focused only on the issue of identifying the relationship between HRM practices and labor productivity but it did not attempt to measure the intermediary factors which affect employee behavior such as attitudes, personality, and perception etc. Further research can be conducted on addressing the reasons for the existence of this kind of relationship. It would be better to carry the same study in other industries and services as well. Researchers hope that this study spurs additional research that helps to improve the understanding of complex set of issues and relationship surrounding HRM and firm outcomes.

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