A STUDY OF FACTORS RELATING TO HR PRACTICES THAT AFFECT THE OVERALL PERFORMANCE OF ORGANIZATIONS

L.J. Kanore

ASM's Institute of Professional Studies, Pune, MS, India

ABSTRACT

Human resource management is relatively new term used for management of employee and other human resources of firm. It has been evolved through various phases, each phase added new practices and has contributed to the development of HRM. Central theme of development of each era in the evolution phase was to improve overall performance of the firm. Many researchers' have studied the impact of HR practices on firm's overall performance. By reviewing literatures of various scholars, researcher identified 27 most commonly HR practices that have positive impact of the overall performance of the firm. Researcher further identified five underlying factors that can be termed as, 'Training and Development', 'Recruitment and Selection', 'Performance Appraisal', 'Compensation and Rewards', and 'Carrer Progression & Personal Development'.

Keywords: Factor Analysis, Training & Development, Performance Appraisal, Compensation, Rewards, Career Progression, Personal Development.

Introduction

Human Resource Management (HRM) is relatively a new term considered for managing human resources of an organization. HRM is still evolving and is becoming a blend of organizational behavior. personnel management, industrial relations, and labor legislation. During pre-industrialized era, production of goods was primarily done by skilled artisans and craftsmen. Tools, skills etc. required for production of goods are owned by them. These craftsmen managed all affairs of low volume business on their own or with the help of the family members.

As business grows, these craftsmen felt need to hire personals to carry out production process required to cater the need of increased demand. During this phase, the increased demand of human resources is mainly satisfied by the slaves, serfs and indentured (contract) labor.

The industrial revolution resulted in large-scale production, rapid growth of factories, advancement in technologies and reduction in production time.During this period, many merchants and businessmen became owners of factories and other establishments.

These developments in the field of manufacturing processes resulted in an exponential growth in the demand for labors with specialized skills. Majority of this demand is fulfilled by migration of people from rural areas in the large-scale to the industrial centers and town. During this era, the employers were mostly interested in maximizing their profits and they usually overlook the welfare of their employees.

Later industrial workers realized that though individually they are dispensable to the employer, collectively they are indispensable and running an enterprise is in the interest of not only employer but in the interest of employee as well. This thought triggered the evolution and development of human resource management practices in manufacturing firms.

The different stages of evolution of HRM practices can be seen through different eras as follows:

- a) **Industrial** revolution Industrial era: revolution resulted in centralized work location with large number of workers working together and having indirect with factory owners. contact The management people in this era includes recruitment of workers, training of workers ans control of workers. However, the basic philosophy revolved around master-servant relationship.
- b) **Trade union movement era:** During this era, works started to organize themselves to protect their common interests and formed workers association to safeguard interest of the members of association. As a result of the trade union activities, owners and managers adopted grievance handling systems. This era contributed a lot in the evolution of HRM practices such as

employee benefit programmes, clear definition of jobs and responsibilities, holidays, introduction of proper wage mechanism etc.

- c) **Social responsibility era:** In early 20th century some factory owners started adopting more humanistic approach towards workers by treating them as family members and considering themselves as head of the family. Such factory owners offered number of concessions to workers such as reduced number of work hours, improved facilities in factories, safety measures etc.
- d) Scientific management era: In 20th century, Taylor based on his experiments, wrote many papers stating that the productivity of workers can be increased considerably replacing rule of thumb with science, harmony among workers and cooperation owners. rather than individualism and development of each and stakeholder. The scientific every management techniques include functional foremanship, simplification of work. standardization of work process and differential wage system.
- e) **Human relations era:** This era highlights the importance of social factors at workplace, group formation, nature of leadership and communication. The research conducted by professors at Harvard business School concluded that for better productivity, management must focus on human relations rather than the physical conditions at the workplace.
- f) Behavioral science era: The development of two-way communication, joint goal setting, involvement of employees in decision making, group dynamics etc. are the outcomes of behavioral science era.
- g) **Human Resource management era:** This is the era in which organizations started considering their employees and human resources and considers them and price source of organizational effectiveness. The changed the nomenclature of personnel department to human resource department that takes care of not only recruitment, training and development but also look after welfare of all its employees.

Through the evolution of HRM, firms have realized the importance of Human resource of the organization. Human resource enables firms to convert the other resources like money, machine, material etc. into output. Human resource is the most important factor that provide flexibility and adaptability to organization. It allows firms to achieve competitive advantage, as other resources such as technology, capital, raw material can be easily copied, but it is almost impossible to copy the human resources. Many scholars have noted that managing people is more difficult than managing other resources. However, the firms that manages their human resources well have an edge over their competitors.

Human resource management practices and its impact on firm's overall performance has been a widely researched area over the last decade. Many researchers from USA and UK through their scientific research study have highlighted the relationship between HRM practices and its impact on firm's performance.

Through this study, researcher aims to identify the most prominent human resource management practices that have positive impact on the overall performance of the manufacturing firms.

Objectives of Study

- 1. To identify prominent human resource management practices.
- 2. To determine HR managers perspective about the impact of prominent human resource management practices on overall performance of the firm.
- 3. To identify fewer underlying factors that affect overall performance of the firm.

Literature Review

Cristina Simón (2007) in her study entitled, 'A Case Study Approach To Exploring The Relationship Between Human Resources Management Firm Performance' And presented a quantitative case study of a large financial services organization and has explored the possible links among HR and individual and business unit levels of performance. Despite being highly exploratory, the study had successfully identified a set of issues that might challenge some of the wellestablished HRM practices that include the assumption of a direct &linear relationship between HR practices and business outputs. It also challenged usage of financial ratios as indicators of the efficiency of people management practices.

Conceptual literature by authors, Begin, 1991; Butler, Ferris, & Napier, 1991; Cappelli & Singh, 1992; Jackson& Schuler, 1995; Porter, 1985; Schuler, 1992; Wright & McMahan, 1992 concludes that human resource management practices when they are aligned with a firm's competitive strategy can help to create a source of sustained competitive advantage.

Bailey (1993) in his study asserted that human resources are mostly "underutilized" because employees perform below than their potential. Bailey also argued that HRM practices affect employee skills through the acquisition and development of Human Resource of a firm. According to Bailey Recruiting procedures plays an important role in the performance of a firm. Bailey also highlighted the importance of selection process, formal and informal training, mentoring, performance appraisals, incentives and compensation policies etc.

Cutcher-Gershenfeld (1991) revealed that firms that adopt "transformational labour relations", such as emphasizing cooperation and dispute resolution are able to lower costs, generate less scrap, have higher

productivity, and a greater return to direct labour hours than those using "traditional" adversarial labour relations practices. Katz, Kochan, and Weber (1985) showed that highly effective industrial relations systems have fewer grievances and disciplinary actions and, increased product quality, increased efficiency of direct labour and lower absenteeism. Katz, Kochan, and Gobeille (1983)and Schuster (1983) found that productivity of firm can be improved by HRM practices like, better quality of work life (QWL), quality circles, and labour-management teams. Bartel (1994)identified the relationship between the adoption of training programs and productivity growth, and Holzer (1987) in his study elucidate that extensive recruiting efforts increases productivity of firm. Guzzo, Jette, and Katzell's (1985) found the impact of training, goal setting, and sociotechnical systems design on productivity. He proved that the impact is significant and positive. Brown & Medoff, (1978), demonstrated importance of employee retention policy by proving that employee turnover has negative influence on organizational productivity.

Research Methodology

То identify prominent human resource management practices, the researcher has used secondary data the research work of eminent researchers and current trends in HRM are reviewed and prominent human resource management practices are identified by the researcher. To determine HR managers perspective about the impact of prominent human resource management practices on overall performance of the firm researcher used primary data. A well-structured questionnaire comprising questions to record the degree of agreement of HR managers about the positive impact of various human resource management practices on overall performance of the firm is prepared. Initial draft of questionnaire is then administered on 15 HR managers bv conducting pilot survey. Based on the responses given by HR managers, difficulties observe while recording the responses and feedback of HR managers, an initial draft is modified, and final draft is prepared. This final draft is then administered on 100 HR managers of medium and large-scale companies and primary data for the study purpose is collected. Researcher has used convenience sampling method to collect responses from HR managers. 100 HR managers of medium scale large-scale companies and from Pune Metropolitan region are selected and One-toone interview method and mailed questionnaire methods are used to record responses of HR managers.

Frequency distribution, factor analysis principal component analysis has been applied for the data analysis and to draw conclusions.

Limitations of the Study

The study has been carried out for medium scale and large-scale industries in PCMC area. In this study researcher had considered 27 variables that may affect the performance of the organization as a whole. The impact of these variables on the overall performance of the organization is studied through the opinion of HR managers recorded using well-structured questionnaire. A separate study may be conducted by identifying key performance indicators and impact of different HR practices on overall performance based on these key performance indicators.

This is a cross sectional study; primary data is collected in a specific period and the results, conclusions are based on this primary data. Results and outcomes of study may vary if data is collected afresh.

Data Analysis and Results

To study the factors relating to HR practices that affect the overall performance of organization the researcher identified 27 that variables may affect the overall performance of the organization. A wellstructured questionnaire is prepared after implementation suggestions and resolving difficulties observed during pilot survey. A final questionnaire is then administered on 100 HR managers. The respondents were asked to record their agreement or disagreement on 5point Likert scale about the parameters that have positive impact on the performance of the organization as a whole.

To check the reliability of data researcher has used Cronbach's alpha reliability coefficient. It measures the reliability of responses. It determines whether the responses are homogenous or not by using various correlation coefficient.

Table1: Reliability Statistics

Cronbach's Alpha	N of Items
0.885	27

The Cronbach's alpha value (0.885) is greater that 0.8 hence the reliability of the questionnaire is considered as very good.

The frequency of responses towards 27 parameters identified by the researcher are recorded and presented in the following table. Scores 1,2,3,4 and 5 are assigned respectively to the responses Strongly disagree, disagree, indifferent, agree and strongly agree. Relative average score of agreement is then calculated for all 27 parameters and the same is presented in table 2 given below:

Variable	Strongly Disagree (1)	Disagree (2)	Indifferent (3)	Agree (4)	Strongly Agree (5)	Overall Score
Advertisements are given in reputed newspaper by the organization. (V1)	9	0	0	40	51	4.24
Applicants are fully informed about the required qualifications and skillset to perform the job before being hired. (V2)	0	9	0	47	44	4.26
An appointment in this organization is strictly based on the merit. (V3)	0	0	9	75	16	4.07
There is a formal induction, orientation and familiarization process designed to help new recruits to understand the organization. (V4)	0	9	0	44	47	4.29
Participation of higher authorities in the selection process. (V5)	0	9	0	46	45	4.27
Selection system selects those having the desired knowledge, skills and attitude. (V6)	0	9	0	40	51	4.33
Vacancies are filled from qualified and experienced employees. (V7)	0	9	0	65	26	4.08
Training modules are designed after conducting need analysis with employees. (V8)	0	6	32	62	0	3.56
Implementation of training strategy and coherent training program. (V9)	0	0	36	64	0	3.64
Training that incorporates the interests of the organization as well as the individuals. (V10)	0	36	62	2	0	2.66
Identification of training needs considering organizational strategic goals, realistic goals, and usefulness to the organization. (V11)	0	0	32	68	0	3.68
Compulsory training/ orientation program for every	0	0	36	62	2	3.66

 Table 2: Frequency distribution of degree of agreement

employee in a year. (V12)						
Allocation of budget dedicated to training & skill development programs. (V13)	0	0	34	64	2	3.68
Proper utilization of budget allocated for training and development. (V14)	0	0	34	64	2	3.68
Implementation of Compensation & rewards programs. (V15)	0	0	0	78	22	4.22
Skill based reward system. (V16)	0	0	2	80	18	4.16
Implementation of unbiased reward system. (V17)	0	0	0	80	20	4.2
Incentives /bonus offered against higher performance. (V18)	0	0	0	81	19	4.19
Regular and predefined performance appraisal system. (V19)	0	0	0	35	65	4.65
Clear communication of management goals and objectives with every employee. (V20)	0	0	0	57	43	4.43
Setting of individual goals and targets in consultation with every employee. (V21)	0	0	49	49	2	3.53
Transparency in communication and collaboration. (V22)	0	0	52	48	0	3.48
Implementation of Effective Performance Management System. (V23)	0	0	68	32	0	3.32
Retention and promotion policies. (V24)	0	0	56	44	0	3.44
Existence of suitable promotional opportunities for deserving employees. (V25)	0	0	10	88	2	3.92
Existence of policy to attract competent, capable, candidate into the organization. (V26)	0	0	5	90	5	4
Implementation of policy to encourage employees for their personal development and keep them ready to meet the various future challenges. (V27)	0	0	3	92	5	4.02

From the above table it can be inferred that 91% of the respondent agree or strongly agree that the advertisements for recruitment given in the reputed newspaper have positive impact on the overall performance of the organization. The overall score (4.24) also confirms the same. Table 2 also confirms that if applicants are fully informed about the required qualification and skill set before hiring them, the impact on overall performance is positive.

The overall average score for V4 is 4.29 this highlights the importance of induction and orientation programmes. Overall score for variable V5 (4.27) confirms that participation of higher authorities in selection process have positive performance impact on of organization. Similarly table 2 confirms that the parameters, 'Selection system selects those having the desired knowledge, skills and attitude', 'Vacancies are filled from qualified and experienced employees', 'Implementation of Compensation & rewards programs', 'Skill based reward system', 'Implementation of unbiased reward system', 'Incentives /bonus offered against higher performance', 'Regular and predefined performance appraisal system', 'Clear communication of management goals

and objectives with every employee', 'Existence of policy to attract competent, capable, candidate into the organization', 'Implementation of policy to encourage employees for their personal development and keep them ready to meet the various future challenges', has positive impact on overall performance of the organization. The overall score of these parameters is 4 or more.

The overall score for the parameters, 'Training modules are designed after conducting need analysis with employees', 'Implementation of and coherent training strategy training program', ' Identification of training needs considering organizational strategic goals. usefulness realistic goals and to the organization', 'Compulsory training/ orientation program for every employee in a year', 'Allocation of budget dedicated to training & skill development programs', 'Proper utilization of budget allocated for training and development', 'Setting of individual goals and targets in consultation with every employee', 'Transparency in communication collaboration', and 'Implementation of Effective Performance Management System', 'Retention and

promotion policies' are more than 3 but less than 4, this confirms that these parameters have negligible to moderate positive impact on overall performance of the organization.

From the above table it can also be inferred that the training that incorporates the interests of the organization as well as the individuals has negative impact, however the overall score for this parameter (2.66) is close to 3. Hence, we can say that the training that incorporates the interests of the organization as well as the individuals does not have any impact on the overall performance. To identify fewer underlying factors that affect overall performance of the firm, the researcher applied factor analysis to the primary data collected by administering well-structured questionnaire on 100 HR managers. The result of factor analysis is presented in the tables given below. Initially factor analysis has considered 27 component factors. Initial eigenvalues, extraction sums of squared loadings and rotation sums of squared loadings are presented in Table 3.

Component	In	itial Eigenvalues Extrac			Extraction Sums of Squared Loadings			tion Sums of Loading	
<u>F</u>	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulative %
1	8.686	32.170	32.170	8.686	32.170	32.170	6.940	25.703	25.703
2	5.297	19.618	51.787	5.297	19.618	51.787	5.039	18.664	44.367
3	3.740	13.850	65.637	3.740	13.850	65.637	4.636	17.170	61.538
4	2.813	10.418	76.055	2.813	10.418	76.055	3.528	13.067	74.605
5	2.162	8.007	84.062	2.162	8.007	84.062	2.553	9.457	84.062
6	.796	2.950	87.012						
7	.554	2.052	89.063						
8	.476	1.765	90.828						
9	.417	1.544	92.372						
10	.385	1.426	93.798						
11	.328	1.216	95.014						
12	.268	.991	96.005						
13	.231	.856	96.861						
14	.185	.684	97.545						
15	.171	.634	98.179						
16	.106	.394	98.573						
17	.091	.336	98.910						
18	.083	.309	99.219						
19	.069	.256	99.474						
20	.060	.223	99.697						
21	.040	.149	99.846						
22	.025	.092	99.938						
23	.014	.052	99.990						
24	.003	.010	100.000						
25	1.359E-16	5.034E-16	100.000						
26	1.215E-16	4.500E-16	100.000						
27	-7.811E-16	-2.893E-15	100.000						

 Table 3: Total Variance Explained

Extraction Method: Principal Component Analysis.

Source: Primary data

Table 3 depicts that factor analysis has extracted five factors, theses five factors together account for 84.062 per cent of the total variance. Thus initial 27 factors are reduced to 5 underlying factors. The factors extracted can be interpreted by looking at 'Rotated Component Matrix' table presented in table 4.

	Component								
	1	2	3	4	5				
V1	.229	.945	114	015	.006				
V2	.195	.757	.576	021	077				
V3	.328	.702	325	048	.031				
V4	.608	.610	.239	.088	150				
V5	.167	.873	.170	005	.067				
V6	.256	.791	.224	071	053				
V7	.006	.922	.189	.065	074				
V8	.824	.116	.016	115	.012				
V9	.962	.172	026	012	023				
V10	.963	.160	026	014	.099				
V11	.935	.116	093	065	.043				
V12	.963	.160	026	014	.099				
V13	.963	.160	026	014	.099				
V14	.953	.164	071	039	.105				
V15	050	014	116	.955	061				
V16	068	.082	074	.891	056				
V17	017	059	085	.909	.094				
V18	049	033	056	.919	038				
V19	.060	.045	.721	245	.217				
V20	068	100	.853	015	.129				
V21	.108	.032	676	.153	.443				
V22	002	.068	.916	058	.198				
V23	110	.270	.737	.052	022				
V24	002	.251	.924	089	068				
V25	.260	.306	.139	016	.747				
V26	.045	096	.075	107	.936				
V27	.009	204	.038	.034	.843				
			cipal Component with Kaiser Nor	-					
	а	. Rotation conve	rged in 6 iteratior	18.					

Table 4: Rotated Component Matrix^a

Source: Primary data

By looking at 'Rotated Component Matrix' table, researcher noticed that variables V8, V9,V10,V11,V12,V13and V14 have loadings of 0.824, 0.962, 0.963, 0.935, 0.963, 0.963 and 0.953 respectively on factor 1. This suggests that factor 1 is a combination of these seven original variables (components). The components that have high factor loadings on factor 1 are all related to the training /induction / orientation program for employees to improve their skills. Therefore, this factor can be termed as 'Training and Development'.

Initial components V1, V2, V3, V4, V5, V6 and V7 have loadings of 0.945, 0.757, 0.702, 0.610, 0.873, 0.791 and 0.922 respectively on factor 2. These seven initial components are the HR practices related to publication of advertisement, declaration of required qualification and skillsets, selection process and recruitment of employees. Hence, this factor can be termed as 'Recruitment and Selection'.

Similarly, the variables V19, V20, V22, V23 and V24 have high loadings on factor 3. This factor can be termed as 'Performance Appraisal'. The variables V15, V16, V17 and V18 have high factor loadings on factor 4 which can be termed as 'Compensation and Rewards'. The fifth factor on which the variables V25, V26 and V27 have high factor loadings can be termed as 'Carrer Progression & Personal Development'.

The factor analysis has extracted five factors namely, 'Training and Development', 'Recruitment and Selection', 'Performance Appraisal', Compensation and Rewards' and 'Carrer Progression & Personal Development'

Discussion and Conclusions

Human resource management is relatively newer term and is still in evolving phase. The evolution of HRM practices has gone through different eras such as Industrial revolution era. Trade union movement era. social responsibility era, Scientific management era, Human relation era. Behavioral science era. and Human resource management era. Throughout this evolution the impact of different HR practices on firm's overall performance was widely researched by many scholars. Present study is an attempt to identify key factors from HR managers' perspective that affect overall performance of the firm.

Through the literature review, the researcher identified 27 most commonly used HR practices and then researcher prepared a wellstructured questionnaire to record the agreement/ disagreement of HR managers about positive impact of those 27 HR practices on overall performance of an organization.

The analysis of primary data collected showed that HR managers of the firms agree or strongly agree that 15 out of 27 HR practices identified by researcher have positive impact on overall performance, while they moderately agree that 11 out of 27 HR practices have positive impact on overall performance. HR managers disagree on positive impact of one HR practice on overall performance of an organization.

While going through the responses for 27 HR practices researcher observed correlation among the variables many variables are closely related with each other and subset of these variables representing a common underlying factor. To identify fewer underlying factors that affects the overall performance of firm a factor analysis is applied to the primary data. Principle component analysis is applied to extract underlying common factors. Factor analysis has extracted five factors that accounts for 84.062% of the total variance.

Seven out of 27 initial components namely, 'Training modules are designed after conducting need analysis with employees', ' Implementation of training strategy and coherent training program', 'Training that incorporates the interests of the organization as well as the individuals', 'Identification of training needs considering organizational strategic goals, realistic goals and usefulness to organization', 'Compulsory training/ the orientation program for every employee in a year', 'Allocation of budget dedicated to training & skill development programs', and 'Proper utilization of budget allocated for training and development' have high loadings on factor 1. All of these 7 components are related with the training and development of skill of employees therefore this factor is termed as 'Training and Development'.

Initial components, 'Advertisements are given in reputed newspaper by the organization', 'Applicants are fully informed about the required qualifications and skillset to perform the job before being hired', 'An appointment in this organization is strictly based on the merit'. 'There is a formal induction, orientation and familiarization process designed to help new recruits to understand the organization', 'Participation of higher authorities in the selection process', 'Selection system selects those having the desired knowledge, skills and attitude', and 'Vacancies are filled from qualified and experienced employees' have high loadings of 0.945, 0.757, 0.702, 0.610, 0.873, 0.791 and 0.922 respectively on factor 2. These seven initial components are the HR related to publication of practices advertisement, declaration of required qualification and skillsets, selection process and recruitment of employees. Hence, this factor can be termed as 'Recruitment and Selection'.

Similarly other three factors are termed as 'Performance Appraisal', Compensation and

Rewards' and 'Carrer progression & Personal Development'.

Scope for Future Research

The present study is based on the opinion of HR managers of manufacturing firm, this study can be extended to other sectors such as education, organized retail outlets, marketing etc.

This study is based on the opinion of HR managers, a similar study may be done by comparing HR practices implemented and its impact on key performance indicators.

Implications of the study

This study discusses the factors having positive impact on overall performance of the firm. Hence this study would be helpful to the manufacturing companies to improve and modify their HR policies so that new policies will have positive impact on overall performance of the firm.

References

- 1. Cristina Simón, 2007, "A Case Study Approach To Exploring The Relationship Between Human Resources Management And Firm Performance,
- Begin, J. P. 1991. Strategic employment policy: An organizational systems perspective, Prentice-Hall, Englewood Cliffs, New Jersy.
- Butler, J. E., Ferris, G. R., & Napier, N. K. 1991. Strategy and human resources management,South-Western, Cincinnati.
- 4. Cappelli, P., & Singh, H. 1992, 'Integrating strategic human resources and strategic management', Research frontiers in industrial relations and human resources, Vol. 1, pp.165–192.
- 5. Jackson, S. E., & Schuler, R. S. 1995. Understanding human resource management in the context of organizations and their environments, Annual review of psychology, vol. 46, pp. 237–264.
- 6. Porter M. E., 1985. Competitive advantage: Creating and sustaining superior performance, Free Press, New York.
- 7. Schuler, R. S. 1992. Strategic human resource management: Linking people with

the needs of the business. Organizational Dynamics, Vol. 20, pp 19–32.

- Wright, P. M., & McMahan, G. C. 1992. Theoretical perspectives for strategic human resource management. Journal of Management, Vol. 18 No. 2, pp. 295–320.
- 9. Bailey, T. 1993. Discretionary effort and the organization of work: Employee participation and work reform since Hawthorne. Working paper, Columbia University, New York.
- 10. Cutcher-Gershenfeld, J. 1991. 'The impact on economic performance of a transformation in industrial relations', Industrial and Labor Relations Review, Vol. 44, pp. 241–260.
- Katz, H. C., Kochan, T. A., & Weber, M. R. 1985. 'Assessing the effects of industrial relations systems and efforts to improve the quality of working life on organizational effectiveness', Academy of Management Journal, Vol. 28, pp 509–526.
- Katz, H. C., Kochan, T. A., & Gobeille, K. R. 1983. 'Industrial relations performance, economic performance, and QWL programs: An interplant analysis',

Industrial and Labor Relations Review, Vol. 37, pp. 3–17.

- Schuster, M. 1983. 'The impact of unionmanagement cooperation on productivity and employment', Industrial and Labour Relations Review, Vol.36, pp. 415–430.
- Bartel, A. P. 1994. 'Productivity gains from the implementation of employee training programs', Industrial Relations, Vol. 33. Pp. 411–425.
- 15. Holzer, H. J. 1987. Hiring procedures in the firm: Their economic determinants and

outcomes. In M. M. Kleiner, R. N. Block, M. Roomkin, & S. W. Salsburg (Eds.), Human resources and the performance of the firm: Washington, DC: BNA Press.

- 16. Guzzo, R. A., Jette, R. D., & Katzell, R. A. 1985. 'The effect of psychologically based intervention programs in worker productivity: A meta-analysis',Personnel Psychology, Vol. 38, pp. 275–291.
- 17. Brown, C., Medoff, J. 1978. 'Trade unions in the production process', Journal of Political Economy, Vol. 86, pp. 355–378.