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HUMAN RESOURCE DEVELOPMENT PRACTICES OF TEXTILE INDUSTRY IN TIRUNELVELI DISTRICT BY USING FACTOR ANALYSIS

D.Naveen Rajkumar[1], Dr.K.Arunkumar[2] and Dr.M.Gurusamy[3]

[1]Ph.D Research Scholar in Management, Bharathiar University, Coimbatore
[2]Assistant Professor, Department of Business Administration, Bharathidasan University Constituent College, Perambalur
[3]Associate Professor, Department of Management Studies, Paavai Engineering College (Autonomous), Namakkal

Email: [1]rajkumardnaveen@gmail.com, [2]kakarun_1@yahoo.com, and [3]gurusamymba@yahoo.com

Abstract—*Human Resource Development (HRD) is the structure for helping workers build up their own and authoritative aptitudes, learning, and capacities. The main objective of the article is to know the current human resource development practices in textile industry at Tirunelveli District. Research methodology is the orderly, hypothetical investigation of the strategies connected to a field of study. It involves the hypothetical investigation of the assortment of techniques and standards related with a branch of learning. The descriptive method is used to originate results based on the objectives of the study. Population of this study consists of employees of textile industry at Tirunelveli District in Tamil Nadu. Both executives and non-executives of textile industry at Tirunelveli District were the target population for survey. Total population of this study is 35033 employees. For this research, proportionate stratified random sampling is used for collecting the data. A stratified random sampling method was applied for this study. Randomly selected working employees of the following of nineteen textiles (19) companies at Tirunelveli District was the samples for this study. There were 32082 technical employees and 2951 non-technical employees are working in the nineteen textiles (19) companies at Tirunelveli District. The research has used online sample size calculator (Creative Research Systems, website: https://surveysystem.com/sscalc.htm) to determine the sample size. The sample size of this study is computed with the confidence interval of 4% and 95% confidence level. Here analysts utilize the 99% confidence level and the sample size is considered as 590. The primary data were collected through structured questionnaire on different parameters related to the research problems. A well-structured questionnaire was used to collect the data. It was partitioned based on the factors and variables. The location of the study is textile industry at Tirunelveli District in Tamil Nadu. The study was conducted during the year 2014 to 2017. Factor analysis is used to data analysis.*

Keywords—*Human Resource Development, Motivation, Performance Appraisal, Recruitment, Selection.*

INTRODUCTION

Human Resource Development (HRD) is the structure for helping workers build up their own and authoritative aptitudes, learning, and capacities. Human Resource Development incorporates such open doors as worker preparing, worker profession advancement, execution administration and improvement, instructing, tutoring, progression arranging, key worker recognizable proof, educational cost help, and organisation development.

REVIEW OF LITERATURE

Arif Hassan et al. (2006) examined the role of human resource development practices as determinant of HRD climate and quality orientation in the organization. He indicated large inter-organizational differences in HRD practices. In general, however, employees' ratings were moderate. ISO certified companies, compared to others, obtained higher means on some HRD variables. Organizations with better learning, training and development systems, reward and recognition, and information systems promoted human resource development climate. Quality orientation was predicted by career planning, performance guidance and development, role efficacy, and reward and recognition systems.

Dev Raj Adhikari, (2010) researched human resource development (HRD) for performance management in Nepalese organizations. A firm's competitiveness depends on its capacity to manage performance and improve the development of the skills and competencies of employees – creating a learning environment. Although the Nepalese economy has embraced an open market policy and is attempting to join the global market, competitive advantage is being hindered by a failure to address human resource development (HRD) and by poor performance management (PM) practices. In order to manage PM in Nepalese organizations a clear link between organizational objectives and outcomes should be established by developing a human capital base in organizations. HRD professionals help to integrate HRD functions and organizational objectives by creating a learning environment.

Ezgi Saribaloglu (2012) conducted a case study on Human Resource Development Approach to Innovation Capabilities in Turkish Textile Manufacturing Industry explored the ways through which SMEs in the Turkish textile manufacturing industry can enhance their innovation capabilities. Through such an analysis, she contributed to the literature on innovation studies concerning SMEs in the textile manufacturing industry in Turkey. The reason behind the choice of the abovementioned sector as a case study is that the sector has the potential for further development and advancement of Turkey's economy. On the other hand, the primary challenge in the Turkish textile sector is the pressure of low cost production by the Asian countries that have the advantage of low labour costs. Recognizing the significance of knowledge management within the firm, this study argues that the only way to survive in the face of challenges opposed by low-cost competitors is to enhance innovation capabilities of the firm and this is only possible through utilization of the existing human capital. Further investment in the development of knowledge-based resources will also significantly enhance innovation capabilities. In other words, it is proposed that the vocational education and training (VET) and education in general are prior areas to which policy makers should pay greater attention. Furthermore, she predicted that once these strategies are followed, innovation activities can be boosted in Turkey.

Subbiah et al (2012) analysed the human resource management in textile industry. The successful functioning of any industry is determined by the factors like men, material, money and market. Among all these factors, manpower assumes greater significance. Manpower is the life blood of any industry. Therefore, every effort should be taken on a priority basis to keep this factor for achieving the main objectives of the industry. The textile industry occupies a unique place in our country. It is the second largest employment generator after agriculture. The textile industry being labour-intensive, is a major contribution to the country's economy with its vast potential for creation of employment opportunities in the agricultural and industrial sectors. Business organizations are made up of people and function through people. Textile industries are no exception to this. Hence, it is essential for every organization to adopt the human resource management practices in the administration.

NEED FOR THE STUDY

HRD practices are basic for organizational development. Organizations have utilized human resource development practices to accomplish their development. The effect that human resource development practices have on organizational development are evident. Human resource development practices comprise of numerous strategies and practices that are utilized by managers to recruit, select, develop, utilize, reward, and maximize the potential of human resources in organizations. They have been examined broadly by analysts, however the ones that significantly affect organizational development are compensation & benefits management and reward system, and training & development. These are considered by organizations to be vital human resource development practices for the accompanying reasons. Compensation & benefits management and reward framework are required in organizations for budgetary salary and prosperity of their workers. Workers' living status in the public arena, fulfilment, steadfastness, and efficiency are affected by pay. Employees should be given training and development to build up their aptitudes and perform better at work. Training and development can prompt predominant learning, aptitudes, capacities, states of mind, and conduct of employees, consequently enhancing excellent financial and non-financial performance of the organizations. While there have been many reviews on the connection between human resource development practices and organizational development, there are additionally concentrates that have find out how to recognize different elements that could affect the relationship between HRD practices and organizational development. Therefore, by understanding the impact of between human resource development practices and organizational development in textile industry at Tirunelveli District, it would fill in as a stage for employees in an organization.

OBJECTIVES OF THE STUDY

To study the current human resource development practices in textile industry at Tirunelveli District.

SCOPE OF THE STUDY

The study is limited to textile industry at Tirunelveli District. The study has attempted to study the human resource development practices in textile industry at Tirunelveli District. The scope of study elicits the views of the employees on HRD practices and measures in the textile industry at Tirunelveli District.

LIMITATION OF THE STUDY

The study is attempted to deliberate the view point of employees working in textile industry at Tirunelveli District only. Human Resource Development Practices is subjected to change with respect to different industry, different company and different management specially located at various places.

RESEARCH METHODOLOGY

Research methodology is the orderly, hypothetical investigation of the strategies connected to a field of study. It involves the hypothetical investigation of the assortment of techniques and standards related with a branch of learning. The descriptive method is used to originate results based on the objectives of the study. Population of this study consists of employees of textile industry at Tirunelveli District in Tamil Nadu. Both executives and non-executives of textile industry at Tirunelveli District were the target population for survey. Total population of this study is 35033 employees. For this research, proportionate stratified random sampling is used for collecting the data. A stratified random sampling method was applied for this study. Randomly selected working employees of the following of nineteen textiles (19) companies at Tirunelveli District was the samples for this study. There were 32082 technical employees and 2951 non-technical employees are working in the nineteen textiles (19) companies at Tirunelveli District. The research has used online sample size calculator (Creative Research Systems, website: https://surveysystem.com/sscalc.htm) to determine the sample size. The sample size of this study is computed with the confidence interval of 4% and 95% confidence level. Here analysts utilize the 99% confidence level and the sample size is considered as 590. The primary data were collected through structured questionnaire on different parameters related to the research problems. A well-structured questionnaire was used to collect the data. It was partitioned based on the factors and variables. The location of the study is textile industry at Tirunelveli District in Tamil Nadu. The study was conducted during the year 2014 to 2017. Factor analysis is used to data analysis.

DATA ANALYLSIS AND INTERPRETATON

Hypothesis:

H_0: Human resource development practices variables chosen are not correlated with the sample population.

H_1: Human resource development practices variables chosen are correlated with the sample population.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.727
Bartlett's Test of Sphericity	Approx. Chi-Square	9821.138
	df	276
	Sig.	0.001

The above table explains that the value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy statistics is 0.727 which is greater than the significant value of 0.001. Therefore, it can be concluded that the factor analysis is considered an appropriate technique for analysing the correlation matrix.

Table 2: Variable with Extracted Communality Factor Value of Human Resource Development Practices

Variables	*Initial*	*Extraction*
Firm conjectures faculty prerequisites on an opportune premise	1.000	0.721
Firm has spent an extraordinary measure of cash on choosing staff.	1.000	0.680
An extensive number of individuals are involved in HR planning in firm.	1.000	0.564
Organized and Standardized interviews have been used in firm.	1.000	0.608
Firm receives selectivity in hiring.	1.000	0.793

The concentration of staffing in firm is for Manual and Physical abilities.	1.000	0.610
The concentration of staffing in firm is for Technical aptitudes.	1.000	0.732
The concentration of staffing in firm is for Problem understanding abilities	1.000	0.744
Firm has good motivator practices to urge workers to accomplish the company's goals.	1.000	0.750
Firm has reasonable incentive practices, aimed at compensating individuals who fulfill their objectives.	1.000	0.804
Firm has incentive practices which truly perceive individuals who contribute the most to firm.	1.000	0.817
Firm uses performance based evaluation.	1.000	0.816
Firm uses employee's self-evaluations on execution.	1.000	0.851
Superiors in firm frequently talk about performance with subordinates.	1.000	0.820
Extensive training programs are given to workers in firm.	1.000	0.707
Workers typically go through various training programs every year.	1.000	0.791
Firm provides formal training to elevate abilities to new hires as well as to promoted or existing employees.	1.000	0.819
Firm dependably gets group conclusion and thoughts before settling on any choice.	1.000	0.801
Firm structures focused groups to take care of issues.	1.000	0.802
Groups are given adequate power and resources to take care of the issues.	1.000	0.569
In firm, workers are permitted to decide.	1.000	0.778
Workers are frequently requested that by their managers take an interest in choices.	1.000	0.752
Workers are urged to recommend change in the way employments are finished.	1.000	0.879
Managers keep two-way correspondence with workers in the firm.	1.000	0.796

Extraction Method: Principal Component Analysis.

a. **Communalities** - This is the proportion of each variable's variance that can be explained by the principal components (e.g., the underlying latent continua). It is also noted as h^2 and can be defined as the sum of squared factor loadings.

b. **Initial** - By definition, the initial value of the communality in a principal components analysis is 1.

c. **Extraction** - The values in this column indicate the proportion of each variable's variance that can be explained by the principal components. Variables with high values are well represented in the common factor space, while variables with low values are not well represented. They are the reproduced variances from the number of components that you have saved. You can find these values on the diagonal of the reproduced correlation matrix.

Table 3: Total Variance of Human Resource Development Practices

Component	*Initial Eigen values*			*Extraction Sum of Squared Loadings*			*Rotation Sums of Squared Loadings*		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.875	28.646	28.646	6.875	28.646	28.646	3.187	13.278	13.278
2	2.878	11.992	40.638	2.878	11.992	40.638	3.115	12.977	26.255
3	2.535	10.561	51.199	2.535	10.561	51.199	3.019	12.580	38.836
4	1.671	6.964	58.163	1.671	6.964	58.163	2.785	11.606	50.442
5	1.536	6.400	64.563	1.536	6.400	64.563	2.500	10.415	60.857
6	1.455	6.063	70.626	1.455	6.063	70.626	1.760	7.335	68.192

7	1.051	4.380	75.006	1.051	4.380	75.006	1.635	6.815	75.006
8	0.973	4.054	79.061						
9	0.899	3.747	82.808						
10	0.618	2.573	85.381						
11	0.532	2.218	87.599						
12	0.448	1.866	89.465						
13	0.389	1.619	91.084						
14	0.336	1.399	92.483						
15	0.322	1.341	93.825						
16	0.281	1.172	94.997						
17	0.254	1.060	96.056						
18	0.198	0.825	96.881						
19	0.182	0.759	97.640						
20	0.153	0.636	98.276						
21	0.127	0.530	98.806						
22	0.111	0.463	99.269						
23	0.102	0.423	99.693						
24	0.074	0.307	100.000						

Extraction Method: Principal Component Analysis.

The extraction process has been carried out by using principal-component method, and it is found from the rotation sums of squared loadings and the total sum of twenty-four variables has been extracted and the same has been grouped into seven components which have Eigen value of more than one. It ranges from first component to seventh component with the cumulative percentage from 28.646% to 67.507%. The percentage of variance ranges from 28.646% to 4.380%.

For the first component of initial Eigen values, the total, percentage of variance and the cumulative percentage values are 6.875, 28.646% and 28.646% respectively. The extracted sum of squared loadings for the same is 6.875, 28.646% and 28.646% respectively. The rotation sum of squared loadings for the above is 3.187, 13.278% and 13.278% respectively.

For the second component of initial Eigen values, the total, percentage of variance and the cumulative percentage values are 2.878, 11.992% and 40.638% respectively. The extracted sum of squared loadings for the same is 2.878, 11.992% and 40.638% respectively. The rotation sum of squared loadings for the above is 3.115, 12.977% and 26.255% respectively.

For the third component of initial Eigen values, the total, percentage of variance and the cumulative percentage values are 2.535, 10.561% and 51.199% respectively. The extracted sum of squared loadings for the same is 2.535, 10.561% and 51.199% respectively. The rotation sum of squared loadings for the above is 3.019, 12.580% and 38.836% respectively.

For the fourth component of initial Eigen values, the total, percentage of variance and the cumulative percentage values are 1.671, 6.964% and 58.163% respectively. The extracted sum of squared loadings for the same is 1.671, 6.964% and 58.163% respectively. The rotation sum of squared loadings for the above is 2.785, 11.606% and 50.442% respectively.

For the fifth component of initial Eigen values, the total, percentage of variance and the cumulative percentage values are 1.536, 6.400% and 64.563% respectively. The extracted sum of squared loadings for the same is 1.536, 6.400% and 64.563% respectively. The rotation sum of squared loadings for the above is 2.500, 10.415% and 60.857% respectively.

For the sixth component of initial Eigen values, the total, percentage of variance and the cumulative percentage values are 1.455, 6.063% and 70.626% respectively. The extracted sum of squared loadings for the same is 1.455, 6.063% and 70.626% respectively. The rotation sum of squared loadings for the above is 1.760, 7.335% and 68.192% respectively.

For the seventh component of initial Eigen values, the total, percentage of variance and the cumulative percentage values are 1.051, 4.380% and 75.006% respectively. The extracted sum of squared loadings for the same is 1.051, 4.380% and 75.006% respectively. The rotation sum of squared loadings for the above is 1.635, 6.815% and 75.006% respectively.

From the analysis, it is inferred that the factor analysis has been supported up to 75.006% in this study. This is a good result and made the study reliable to the analysis.

Table 3: Rotated Component Matrix[a]

Variables	*Component*						
	1	*2*	*3*	*4*	*5*	*6*	*7*
Groups are given adequate power and resources to take care of the issues.	0.737						
Firm has reasonable incentive practices, aimed at compensating individuals who fulfill their objectives.	0.726						
Firm has incentive practices which truly perceive individuals who contribute the most to firm.	0.675						
An extensive number of individuals are involved in HR planning in firm.	0.575						
Superiors in firm frequently talk about performance with subordinates.	0.543						
The concentration of staffing in firm is for Technical aptitudes.		0.736					
Firm conjectures faculty prerequisites on an opportune premise		0.709					
Firm has spent an extraordinary measure of cash on choosing staff.		0.703					
The concentration of staffing in firm is for Manual and Physical abilities.		0.513					
Firm dependably gets group conclusion and thoughts before settling on any choice.			0.866				
Firm provides formal training to elevate abilities to new hires as well as to promoted or existing employees.			0.850				
Workers typically go through various training programs every year.			0.566				
Extensive training programs are given to workers in firm.			0.525				
Firm receives selectivity in hiring.				0.775			
Firm has good motivator practices to urge workers to accomplish the company's goals.				0.756			

The concentration of staffing in firm is for Problem understanding abilities				0.605			
Organized and Standardized interviews have been used in firm.				0.504			
Firm uses employee's self-evaluations on execution.				0.501			
Managers keep two-way correspondence with workers in the firm.					0.757		
Workers are frequently requested that by their managers take an interest in choices.					0.744		
In firm, workers are permitted to decide.					0.507		
Firm structures focused groups to take care of issues.					0.501		
Workers are urged to recommend change in the way employments are finished.						0.921	
Firm uses performance based evaluation.						0.573	
Superiors in firm frequently talk about performance with subordinates.							0.851

The above table 3 shows the rotated component matrix, in which the extracted factors are assigning a new naming related together. From the above table, it is noted that all the loading factors which are having the loading value less than 0.5 are rejected from the analysis.

a. Factor 1 is the most important factor which explained 13.278% of the variation. The factors as Groups are given adequate power and resources to take care of the issues (0.737), Firm has reasonable incentive practices, aimed at compensating individuals who fulfill their objectives (0.726), Firm has incentive practices which truly perceive individuals who contribute the most to firm (0.675), and an extensive number of individuals are involved in HR planning in firm (0.575) are highly correlated with each other. These variables reflect the human resource planning towards the human resource development practices. Therefore, the researcher names this segment respondent are **'Human Resource Planning'**.
b. Factor 2 is the most important factor which explained 12.977% of the variation. The factors as the concentration of staffing in firm is for Technical aptitudes (0.736), Firm conjectures faculty prerequisites on an opportune premise (0.709), Firm has spent an extraordinary measure of cash on choosing staff (0.703), and the concentration of staffing in firm is for Manual and Physical abilities (0.513) are highly correlated with each other. These variables reflect the choosing staff towards the human resource development practices. Thus, the researcher names this segment respondent are **'Recruitment and Selection'**.
c. Factor 3 is the most important factor which explained 12.580% of the variation. The factors as Firm dependably gets group conclusion and thoughts before settling on any choice (0.866), Firm provides formal training to elevate abilities to new hires as well as to promoted or existing employees (0.850), Workers typically go through various training programs every year (0.566), and Extensive training programs are given to workers in firm (0.525) are highly correlated with each other. These variables reflect the training and development programs towards the human resource development practices. Hence, the researcher names this segment respondent are **'Training and Development'**.
d. Factor 4 is the most important factor which explained 11.606% of the variation. The factors as Firm receives selectivity in hiring (0.775), Firm has good motivator practices to urge workers to accomplish the company's goals (0.756), The concentration of staffing in firm is for Problem understanding abilities (0.605), Organized and Standardized interviews have been used in firm (0.504), and Firm uses employee's self-evaluations on execution

(0.501) are highly correlated with each other. These variables reflect the motivational practices towards the human resource development practices. Therefore, the researcher names this segment respondent are **'Motivation'**.

e. Factor 5 is the most important factor which explained 10.415% of the variation. The factor as Managers keep two-way correspondence with workers in the firm (0.757), Workers are frequently requested that by their managers take an interest in choices (0.744), In firm, workers are permitted to decide (0.507), and Firm structures focused groups to take care of issues (0.501) highly correlated with each other. This variable reflects the correspondence with workers towards the human resource development practices. Thus, the researcher names this segment respondent are **'Communication'**.

f. Factor 6 is the most important factor which explained 7.335% of the variation. The factors as Workers are urged to recommend change in the way employments are finished (0.921), and Firm uses performance based evaluation (0.573) are highly correlated with each other. These variables reflect the performance appraisal of workers towards the human resource development practices. Hence, the researcher names this segment respondent are **'Performance Appraisal'**.

g. Factor 7 is the most important factor which explained 6.815% of the variation. The factors as Superiors in firm frequently talk about performance with subordinates. (0.851). This variable reflects the return on work commitment of the employees towards the human resource development practices. Therefore, the researcher names this segment respondent are **'Commitment'**.

CONCLUSION

From this study, the researcher has found seven factors of human resource development practices of textile industry at Tirunelveli District.

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