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Full Length Research Article

HRD CLIMATE FACTORS IN INDIAN INDUSTRIES - A CASE STUDY

*Dr. V. K. Jain

Department of Commerce, G M N College, Ambala Cantt, India

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ABSTRACT

HRD aims at assessing employee competency requirements to perform the jobs assigned to them effectively. Liberalization and globalization has brought in new challenges for the development of human resources. HRD has now been looked upon as need of the hour. The emphasis has now shifted towards developing employee competencies and helping them to develop their potentials so as to prepare for future roles for consistent growth and development of the organization. The organizations are also required to create developmental climate which enables them to grow. RXY Laboratories constantly monitors its employees' competencies and potentials, assesses their training needs and provides them opportunity to develop these skills. It provides them HRD Climate where they can grow and lead the organization to success. The present study was undertaken to study the nature of HRD climate of the company and the variables contributing to the HRD climate. Efforts were made to extract significant HRD Climate Factors based on the inter correlations of the HRD Climate Variables. The impact of HRD variables based on the opinions of the respondents was also studied.

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INTRODUCTION

HRD Climate Factors.

General Electric's former CEO, Jack Welch, mentioned in an interview in Fortune: 'Wespend all our time on people ... The day we screw up the people thing, this company is over' (Fortune, 21 June 1999). Human Resource Development (HRD) has been defined as essentially consisting three Cs i.e. Competencies, Commitment and Culture (Rao: 2012). They together make the organization to function smoothly. Without Competencies many tasks may not be completed in an efficient manner, without commitment, the tasks may not be completed within reasonable time and without culture, the organization may not survive for long. Human Resource Development (HRD) is a continuous process to ensure the development of employee competencies, dynamism, motivation and effectiveness in a systematic and planned way. In the organizational Context HRD refers to the improvement in capacities and capabilities of the personnel in relation to the needs of the organization. It involves the creation of climate where human knowledge, skill, capabilities and creativity can bloom. It involves the use of processes through which the employees of the organization are prepared to give their best for the achievement of corporate objectives and bring optimal effectiveness in their jobs as well.

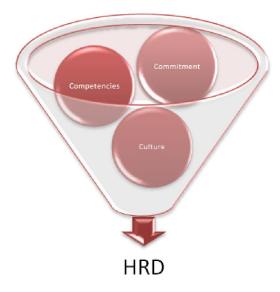
HRD CLIMATE – General View

According to Rao (1991), the major objective of HRD is to prepare employees to cope with functional complexities and facilitate integration of changes. The changes may be social, economic and technological. The people development process is, therefore, the synthesis of efforts on two fronts preparing individuals for technological competence and psychological acceptance for willing participation in change implementation. The focus of HRD has to be more on conditions of the organizational climate. In fact, HRD aims to achieve multiple goals as follows:

- a) Employee competency development.
- b) Organization climate development.

Employee Competency Development

Employees working in the organization require a variety of competencies, to perform different tasks or functions required by their job including knowledge, attitudes and skills in technical areas, managerial areas, behavioral and human relations areas and conceptual areas. But the nature of job is constantly changing due to changes in the environment, changes in organizational priorities, goals and strategies, changes in profiles of fellow employees (subordinates, bosses, colleagues etc.), changes in technology, new knowledge base, new challenges etc. Such changes in the nature of job require continuous development of employee competencies to perform the job well. Thus competency development is needed on a continuous basis for effective job performance. HRD aims at constantly assessing competency requirements of different individuals to perform the jobs assigned to them effectively and provide opportunities for developing these competencies. HRD also aims at preparing people for performing roles/ jobs/ tasks or functions which they may be required to perform in the future. HRD tries to develop potentials of employees for future likely jobs/roles in the organization



Human Resource Development Climate

A healthy HRD climate is required for utilizing and enchanting employee competencies and to develop employee motivation. Human Resource Development in an organization is facilitated by creating HRD climate. HRD climate means climate of a) Pro-activity i.e. employees are action oriented, willing to take initiative and show a high degree of proactivity; b) Openness and risk taking where Employees feel free to express their ideas and are willing to - take risks, experiment with new ideas and new ways of doing things; c) Collaboration i.e. employees collaborate with each other and have a feeling of belonging to the same family and working for common cause; d) Trust and authenticity i.e. employees, departments and groups trust each other and can be relied upon to do whatever they say they will do; e) Confrontation i.e. employees face problems and issues without hiding or avoiding them for the fear of hiring each other; f) Autonomy i.e. employees have some freedom to act independently within the boundaries of their role/ job (Rao, 1991). Thus, the competence and dynamism of employees require a development climate, internationalization of HRD mechanisms or sub-systems. The elements of HRD climate can be grouped into three broad categories - general climate, OCTAPAC culture and HRD mechanisms. The general climate items deal with the importance given to HRD in general by the top management and line managers. The OCTAPAC items deal with the extent to which openness, confrontation, trust, autonomy, pro-activity, authenticity and collaboration are valued and promoted in the organization. The items dealing with HRD mechanisms measure the extent to which these mechanisms are implemented seriously. HRD

climate can be developed if top management has a strong belief in the capabilities of its people; its policies show high concern for employees; HRD staff has a supportive role and line managers are committed. HRD sub-systems and increasing effectiveness also help in building HRD climate.

About the Company

RXY Laboratories is one of the major pharmaceutical companies. The Company has a global footprint in more than 40 countries, world-class manufacturing facilities in 7 countries and serves customers in over 100 countries. It has several plants in India. The Company offers a challenging assignment, a world class working environment and professional management system. It provides competitive salaries and stock options along with exceptional rewards to its employees. The Company believes in employee growth. Potentials and performance are the pillars of career progression at RXY. Considering the significance of Human Resources in this organization in mind the present study 'HRD Climate Factors in Indian Industries - A Case Study' was undertaken in RXY Laboratories. The study explores to determine how the variables concerned with competencies of the employees and other related variables help in developing HRD climate and affect the development of the employees of the organization. The researches undertaken in the past clearly indicate that there exists a relationship among the HRD mechanisms, HRD climate variables and HRD outcome variables. The efforts have been made to explore these relationships.

Objectives of the Study

The study has been undertaken with the following objectives in mind.

- To examine the interrelationships among the variables affecting HRD Climate.
- To extract the various Factors affecting HRD Climate in the organization
- To study the impact of HRD on competency development, productivity, efficiency, profitability etc.

MATERIALS AND METHODS

HR Climate development data has been collected on the basis of questionnaire and personal interaction with the employees. For the purpose of analyzing the HRD climate in the organization Standardized questionnaire '58-item HRD climate Scale (HRDCS)' developed by Dhar & Dhar has been used. For the purpose of data collection, 48 executives were selected on random basis. The analysis has been made by using various statistical tools. Inter-correlations among the 58 variables were studied and the significant relationships were ascertained. In order to reduce the variables Factor Analysis was used through SPSS software. Efforts were made to relate these factors with OCTAPAC culture. Efforts were made to study the impact of HRD on competency development, productivity, efficiency, profitability etc. to some extent on the basis of opinions of the respondents.

Significance of the Study

The study is of great significance to the employees and the organization as it provides an insight to find out the general

Table 1. Descriptive Analysis

S. No	Description of Variables	Abbreviation
1	Employees of this organization are very informal and do not hesitate in discussing their personal problems with their superiors.	IR
2	Employees of this organization cooperate with each other	COP
3	Performance appraisal is objective.	PA
4	Delegation of authority is used as a development mechanism.	DOA
5	Creative thinking is encouraged.	CT
6	Employees are sponsored for training on the basis of proper needs assessment.	SET
7	Employees are given feedback about their strengths and weaknesses.	FE
8	People are treated as human beings first and employees later	HT
9	Management ensures that the employees enjoy their work.	EW
10	Problems are solved through open forums.	PSOF
11	People are facilitated to acquire competency.	CD
12	Opportunity is given to the employees for utilizing their potential in the organization	UP
13	Employees are discouraged to accuse each other	ACC
14	Time and efforts are invested in developing the employees	IED
15	Superiors often facilitate their subordinates in identifying the career opportunities	CO
16	Management believes in the development of people.	DOM
17	People are considered as an asset to the organization.	PAA
18	Change is accepted as an inevitable phenomenon	IC
19	There is no favoritism in the case of promotions	FP
20	Good work is always appreciated	APP
21	Team work is encouraged	TW
22	Training is taken seriously.	SFT
23	Employees take feedback about their work seriously and use it for further development	SOF
24	Performing employees are recognized by the organization	RP
25	People generally prefer to work in teams.	PTW
26	Job rotation is used as a mechanism for employee development.	JR
27	Subordinate development is seen as an integral part of one's job	SD
28	Organizational climate is conducive for acquiring new knowledge and skills	COC
29	Favoritism in case of performance appraisal is unheard of in this organization	FPA
30	Employees are allowed to experiment within reasonable limits	EXP
31	Creative ideas are tried out for improving the performance	CIP
32	Efforts are always made to identify the potential of employees	IP
33	Organizational plans are discussed openly.	ODP
34	Superiors generally make efforts to prepare their subordinates for facing future challenges	PC
35	Problems are solved across the table	PSAT
36	Good work is rewarded	RGW
37	Contribution of employees is not undermined in this organization	RE
38	Employees are facilitated by the organization to use the skills they develop during training	UST
39	Employees of the organization are assessed on adequate information about their performance	EA
40 41	Human resource policies are employee centered.	EOHRP RS
	Superiors help their subordinates to overcome the states of distress and frustration Superiors prepare their subordinates for future responsibilities and roles they are likely to take up.	FRR
42 43	Employees are encouraged to learn from their mistakes	EE
43	Employees discuss their feelings freely with their superiors	CR
44	Superiors take interest in their subordinates and help them in learning their jobs.	SI
43	Performance is placed ahead of any other consideration	PO
40	Promotions are based on merit	MP
47	Efforts are always made to change the behavior of employees with the changing situations	BM
48	Organization does not hesitate in sponsoring the employees for requisite raining	TS
50	Delegation of authority is seen as an opportunity to develop subordinates	DD
51	Superiors discuss their feelings freely with their subordinates	SSI
52	Employees are not threatened while giving them feedback about their weaknesses	SEC
52 53	People trust each other	T
53 54	Solutions are sought through consensus	CON
54 55	Problems are discussed openly	O
56	Human resource policies are focused at development of the employees	DOP
50 57	Training is not perceived as a recreational activity away from workplace	TR
58	It is believed that people can be developed at any stage of life	ED

HRD climate prevailing in the organization and the variables affecting the HRD climate. The company can accordingly make its policies and develop plans for promotion, potential development, training etc. It will also help the company to improve its HRD climate and can further improve its overall efficiency and effectiveness.

Limitations of the Study

As the study is limited to only two plants of the company as stated above, its results cannot be generalized to other plants. Further, the results cannot be compared with other companies also because of different cultures, growth and HR policies.

HRD Climate – Survey of Literature

A study of 52 organizations made by Rao and Abraham [1986] shows HRD climate in these organizations was about 54% which is rather low. As such, an optimal level of development climate is essential for facilitating HRD activities. Jain, Singhal, and Singh [1997] conducted a study, HRD Climate in Indian Industry, in two public sector organizations i.e. BHEL and NFL and concluded that the HRD climate is mainly a function of the effectiveness variables including individual efficiency, organizational efficiency and productivity, and the HRD variables including management policy on HRD, organization development, role analysis and training.

Alphonsa [2000] surveyed HRD climate in private hospital of Hyderabad and highlighted that the supervisors perception about the HRD climate was satisfactory and there existed reasonably, good climate with respect to top management's belief in HRD climate. However, in his study on one of the major hospitals of the Jammu and Kashmir. Richa Chaudhary *et al.* [2012]on the basis of their study of private and public sector industries and services found that overall HRD climate in the organizations under study was good (Percentage score= 68%).

The employee's perception regarding the HRD Climate was found to be significantly better in the private sector organizations as compared to the public sector organizations. But position in the organizational hierarchy, age and gender were found to play little role in determining the HRD climate of the organizations covered under study. Venkateswaran, (1997) conducted a study on HRD climate in public sector undertakings and analyzed factors that are conducive for the development of HRD climate in these organizations. Similar study was made by Sharma and Purang (2000). Athreya, (1988) stated that the positive HRD climate renders the existing systems more effective and makes the organizations more receptive to the introduction of relevant additional system. Futher, an organization that has better HRD climate and processes is likely to be more effective than an organization that does not have them (Rao, 1992). All these studies have analysed the various variables which have an impact on HRD climate and also the nature of HRD climate existing in these organizations. The present study is an attempt to group the similar variables by using Factor Analysis and identify these groups as 'Factors' which not only limit the number of varibales but also are useful in analyzing and understanding the nature of HRD Climate.

Analysis and Interpretation

A healthy Organizational Climate is required to utilize Employee Competencies to an optimum extent. It is, therefore, necessary for the organization to analyze and develop its organization climate on a continuous basis. This study analyzed the organizational climate of RXY Laboratories to understand the nature and extent of HRD Climate in the Organization. For this purpose, 58-item standardized 'Human Recourse Development Climate Scale' developed by Dhar & Dhar has been used. A sample of 48 executives were selected on random basis. Descriptions of the variables used in the study are shown in Table 1.

Inter Correlation Pattern

Inter correlations among the variables were derived as per Karl Pearson's Product Moment Correlation Method. In all, there are 1653 inter correlations between the 58 variables under study are shown in Appendix-1. It may be noted that degree of freedom being 46 (N-2), the correlation coefficients of 0.13 and 0.17 are significant at 0.05 and 0.01 level, respectively. These relationships have been taken as basis for Factor Analysis.

Factor Analysis: Principal Component Analysis

Information yielded by the pattern of inter-correlations among different variables can at best be regarded as suggestive. Their true relationship is eclipsed because of many unknown variables that tend to influence the magnitude of correlations. Their influence needs, be partial out. Principle component method of factor analysis was used to partial out, at least to some extent, the effect of these variables. The inter-correlation matrix for 48 subjects was processed by principal component method with unities in the diagonal. Following the recommendation of Kaiser (1960) the extraction of factors was stopped when the value of latent roots came to be less than one. Thus 16 vectors corresponding to the latent roots were preserved for further analysis.

The normalized vectors were converted to factor pattern coefficients by multiplying each element of the latent vector by the square root of corresponding latent root. Thus, the roots enlisted in Table 2 are the standard deviations along the corresponding principal factors, rather than variables as is the case when normalized vectors are used as factor coefficients. To achieve an approximation to simple structures factors were rotated in accordance with the criterion of Kaiser (1958) varimax procedure. The factor loadings greater than .30 are significant at .05 levels. The communalities which give the proportion of variance for each of the original variables which were preserved in the factor solution are listed in the last column of the Appendix-2. The communalities are the sum of squared loadings across rows. If all the possible factors were used, these communalities would all be 1.00. The sixteen rotated varimax factors are reported in Table-2. The rotations were conducted in the hope that new factors would be less difficult to interpret. The varimax solution seems to be reasonable and criterion of simple structure seems to have also been satisfactorily attained.

Table 2. Latent Roots for the Principal Component Analysis

Root No.	Latent Root*	Percent Variance	Cumulative % of Variance
1.	15.472	26.677	26.677
2.	3.853	6.642	33.319
3.	3.470	5.984	39.303
4.	3.248	5.601	44.903
5.	2.860	4.931	49.834
6.	2.706	4.665	54.499
7.	2.455	4.233	58.732
8.	2.093	3.609	62.342
9.	1.987	3.425	65.767
10.	1.823	3.144	68.911
11.	1.703	2.937	71.848
12.	1.560	2.689	74.537
13.	1.463	2.523	77.060
14.	1.261	2.174	79.234
15.	1.210	2.087	81.320
16.	1.056	1.820	83.140

* These values are also the standard deviations for the corresponding Factors, using the principle factor pattern as the factor coefficients.

DESCRIPTION OF FACTORS

Highest loading of the variables on a particular factor were derived and all other loadings were eliminated. In this way, all fifty eight variables got segregated in one factor or the other. In this way, the distribution of the variables into factors is termed as "Factor Analysis" and is presented in the following table and explained thereafter:

This factor loads heavily on variables ACC (Accusation discouragement), UST (Utilization of Skills Developed by Training), PC (Preparing for Challenges), EW (Enjoyment in Work), RP (Recognition of Performance) and IED (Investment

in Employee Development). Besides, T (Trust), SI (Superior Initiation), EE (Employee Encouragement), SD (Subordinate Development), CO (Career Opportunities) and COC (Conducive Organizational Climate) of the HRDCS (HRD Climate Scale) also have moderately significant and positive loading on this factor. The nature of the contributing variables indicates this factor to be a factor of "Employee Development". This factor explains that Employee Development in the organization is mainly ensured by discouraging people to accuse each other with the help of various policies like 'Whistle Blowing'. Superiors and Management also contribute to employee development. They invest proper time and effort by organizing training session (LMS), providing guidance and assistance and various skill development programs.

Factor I

The significant loadings on this factor are for the following measures

ACC	(+)	Accusation discouragement	0.89
UST	(+)	Utilization of Skills Developed by Training	0.78
PC	(+)	Preparing for Challenges	0.71
EW	(+)	Enjoyment in Work	0.62
RP	(+)	Recognition of Performance	0.60
IED	(+)	Investment in Employee Development	0.59
Т	(+)	Trust	0.47
SI	(+)	Superior Initiation	0.43
EE	(+)	Employee Encouragement	0.42
SD	(+)	Subordinate Development	0.42
CO	(+)	Career Opportunities	0.41
COC	(+)	Conducive Organizational Climate	0.37

It is made sure that skills and competencies gained by employees during these trainings are properly utilized by giving them challenging tasks accordingly. By doing this they prepare employees to face future challenges and assure that they enjoy their work. On the basis of their performance employees are recognized by appreciations, global awards and bonus. This leads to development of skills, competence and morale of employees. It has also been observed that superiors take interest in their subordinates so that they can effectively achieve their targets by timely inspection to reduce errors, enhancing effective decision-making at various levels, providing guidance to improve their performance and assist them to learn step by step. Subordinates are also helped to identify career opportunities. This is apparent from above discussion that subordinate development is seen as integral part of one's job. It has resulted in moderately conducive organizational climate where people trust each other to reasonable extent. Here, opportunities are given to employees to learn from mistakes to some extent. Being Pharma Company, errors in various activities can lead to rejection of whole batch or various other serious consequences. Therefore Preventive Actions are emphasized over Corrective Actions.

Factor II

Here the significant loadings are on

SSI		Superiors Sharing Information	0.83
DD	(+)	Delegation for Development	0.76
RGW	(+)	Reward for Good Work	0.66
FRR	(+)	Future Responsibility & Roles	0.56
HT	(+)	Humane Treatment	0.51
DOM	(+)	Development Oriented Management	0.46
PO	(+)	Performance Orientation	0.40
DOA	(+)	Delegation of Authority	0.29

Highly significant loading has been observed on this factor on account of variables including SSI (Superiors Sharing Information), DD (Delegation for Development).RGW (Reward for Good Work), FRR (Future Responsibility & Roles) and HT (Humane Treatment) of HRDCS. Other variables such as DOM (Development Oriented Management), PO (Performance Orientation) and DOA (Delegation of Authority) have moderate loading on this factor. It has been observed that employees are assigned responsibilities in such a way that they do not feel overburdened and can enjoy while performing tasks. Superiors also discuss work plans, schedules, work related problems, risks, threats, opportunities and constraints that may occur freely with their employees so that they can also participate in developing RCA (Root Cause Analysis) and CAPA (Corrective And Preventive Actions).

It creates sense of belongingness and prepare them for future challenges. In order to enhance their efficiency further, superiors delegate their authority to some extent. This facilitates them to develop their skills including decision making, ability to plan and execute etc. But sometimes the delegation of authority is made to a limited extent due to higher accountability of superiors and nature of their work. Employees are encouraged to show their maximum contribution by rewarding and appreciating their good work and innovative plans for various activities such as cost saving, schedule compression without affecting quality. Management also believes in growth of employees to a moderate extent by using various methods such as VECTOR (employees can apply for various vacant positions in the organization). Performance is not regarded as sole criterion as performance in a particular quarter may be low due to health, stress etc. Therefore, his overall attributes, skills, potentials, knowledge and records of past performance are assessed. Due to the involvement of superiors and subordinates in these variables largely, this factor can be labeled as "Superior Subordinate Relationship".

Factor III

High Loadings are observed on

CD	(+)	Competency Development	0.76
FE	(+)	Feedback to Employees	0.68
SEC	(+)	Security	0.62
BM	(+)	Behavioral Modifications	0.50
UP	(+)	Utilization of Potentials	0.50
CIP	(+)	Creative Ideas for Performance	0.44
COP	(+)	Co-operation among Employees	0.42
СТ	(+)	Creative Thinking	0.35

This factor has been defined by eight variables. Variable CD (Competency Development), FE (Feedback to Employees), SEC (Security), BM (Behavioral Modifications) and UP (Utilization of Potentials) of HRDCS have significantly high loading on the factor, whereas variables CIP (Creative Ideas for Performance), COP (Co-operation among Employees) and CT (Creative Thinking) have significantly moderate loading on this factor. These variables collectively indicate that this factor can be termed as "Facilitation. In order to increase the performance of employees and to reduce errors, employees are given feedback on periodic basis on their strength and weakness so that they can further develop their competence and skills in areas they lack with the help of training programs organized for them. Further, facilitation in terms of

opportunity is given to employees to utilize potentials and efforts are also made to change the behavior of employees as per changing situations. For example, in case of overburden in situations of emergent batch release, they are prepared mentally to deal with the situation by providing guidance and leadership. Although employees are not threatened while giving feedback but they are given warnings in case of serious mistakes so that they can avoid such mistakes in future. They are also given training and guidance on other related issues so that they do not repeat the mistakes. Management tries creative ideas by recreational activities, trainings and discussions to facilitate employees in improving their performance but creative thinking is encouraged up to a moderate level. Every aspect in Pharma Company is dependent on SOPs procedures and guidelines. Besides, due to some conflicts between departments on quality related issues, waiting time for IPQA approval etc. moderate level of cooperation was observed.

Factor IV

The factor loads on the following measures

DOP	(+)	Development Oriented HR Policies	0.84
PSAT	(+)	Problem Solving Across the Table	0.82
SFT	(+)	Seriousness For Training	0.56
TS	(+)	Sponsorship for Training by Organization	0.46

In this factor, significantly high to moderate loading is apparent on account of DOP (Development Oriented HR Policies), PSAT (Problem Solving Across the Table) and SFT (Seriousness for Training) of HRDC. HR Policies of the organization are mainly focused in Employee Development from various aspects. These policies provide opportunity to develop skills and competence by training, monetary stabilization via loans, medical claims, pension schemes etc. Training on these policies are provided to employees so that employees can extract maximum benefits out of these policies. Management also emphasizes to solve the inter/ intra department issues across the tables in order to avoid biasness and confusion under the guidance of HOD/ subject matter expert. Employees also take training seriously. Their training records and qualification criteria are recorded and updated continuously using LMS. Any deviation from training schedule, which are in accordance to Training Matrix, may result in problem to employees. Apart from scheduled training, organization performs Training Need Assessment which is in accordance with Job Role of the employee. If the employee feels necessity for some other training which matches to his Job Role, organization does not hesitate in sponsoring for that training. Considering the contribution of all the variables on this factor, it appears that they are indicative of employees as useful resources in the organization and hence the factor can be named as "Training".

Factor V

The significant loadings are on

TR	(+)	Training not as Recreational Activity	0.83
EXP	(+)	Experimenting	0.69
IP	(+)	Identifying Potentials	0.56
CIP	(+)	Creative Ideas for Performance	0.48

This factor loads significantly high on variable TR (Training not as Recreational Activity), EXP (Experimenting) and IP

(Identifying Potentials) and loads significantly moderate on variables CIP (Creative Ideas for Performance) of HRDCS. It has been observed that when the employees are sent for training, they make full use of the given opportunity to enhance their skills and competencies and consider it as an essential part of their job rather than a recreational activity. Superiors encourage their employees to think out of the box and apply innovative ideas effectively in various cost saving measures, to balance schedule and resource constrains without affecting quality of the product. Organization also makes efforts to identify and develop potentials of the employee by involving them in challenging tasks, delegating authorities and responsibilities and providing training etc. On the basis of the discussion and factor loadings, the variables selected in this factor can be termed as "Experimentation"

Factor VI

The significant loadings of this factor are on the following measures

IC	(+)	Inevitable change	0.87
RE	(+)	Recognition	0.52
FPA	(+)	No Favoritism in Performance Appraisal	0.51
TW	(+)	Team Work	0.49

This factor loads highly on Inevitable Change (IC), Recognition (RE) and Favoritism in Performance Appraisal (FPA). Variable Team Work (TW) has also marked significantly positive loading on this factor. Change in the organization is accepted as inevitable as the organization constantly works to improve performance and ensure employee development. Recognition is a part of change as the organization looks for newer ways to recognize the good performers. Appreciation is supplemented with awards and bonus. Likewise promotions are given to contributing employees in accordance with annual guidelines set for evaluation of KRAs. Further, Team work has a significantly loading as organization ensures team work by introducing consistency in Job Roles and inter-departmental performance co-ordination. Considering all these variables, this factor can be best named as 'Organizational Change'.

Factor VII

Significant loadings are found on

0	(+)	Openness	0.90
CR	(+)	Cordial Relations	0.67
ODP	(+)	Open Discussion on Plans	0.61

This factor has high positive loading on Openness (O), Cordial Relations (CR) and open Discussion On Plans (ODP). It appears that transparency in the organization is maintained. The factor loading of 0.90 on account of openness clearly indicates that departmental issues are discussed openly in order to solve the problems as and when they arise. Employees also share their feelings with the superiors in the same spirit. Organizational plans are also made known to the employees so that they can implement them and are aware of the work practices. As the contribution of these factors indicates transparency at work, the factor is termed as 'Transparency'. Highly significant loadings are found on this factor on account of appreciation for good work (APP), team work (TW) and preference to work as team (PTW). Moderately significant but negative loadings were observed due to Superior's Initiation (SI) and Performance Orientation (PO). Due to inclusion of

Factor VIII

Significant loadings are found on

APP	(+)	Appreciation	0.89
TW	(+)	Team Work	0.51
PTW	(+)	Preference for Team Work	0.48
SI	(-)	Superior Initiation	0.45
PO	(-)	Performance Orientation	0.43

both encouragement and preference for team work in the organization and appreciation being an outcome of good performance on account of collective work, this factor clearly represents 'Team Work'. Further, efforts are made that subordinates learn in teams rather than superiors making them learn. Superiors play a supportive role only. Negative factor loading on account of Superior Initiation is mainly due to this reason. Similarly, negative loading for performance orientation is seen as performance is not the only consideration for the team. Co-opertation and trust also have significance role. No doubt performance is important but there are other conributors like skill, knowledge, attributesetc which are equally important.

Factor IX

The significant loadings of this factor are on the following variables

SET	(+)	Sponsoring Employees for Training	0.84
CON	(-)	Consensus	0.54
PAA	(-)	People as Assets	0.45

Positive and highly significant loadings are for sponsoring employees for training (SFT). At the same time negative but significant loading on this factor are found on solutions through consensus (CON) and people being treated as assets (PAA). It is true that the organization conducts proper training need assessment based on their Job Roles for its employees before sponsoring them for training. All issues are not solved through consensus. Only departmental matters and work related issues are solved through consensus. Disciplinary issues and other sensitive matters are taken up at the higher level. In the same way, the discussions in the preceding factors indicates that the organization considers its HR as assets but at the same time, the organization lays down strict rules for performance and expects proper discipline from the employees. The company takes into account the needs of the people but not at the cost of the organization. Needs of the employees being given priority, this factor is true indicative of 'Employee Needs'.

Factor X

Significant loadings were observed on

SOF	(+)	Seriousness of Feedback	0.80
FP	(-)	No Favoritism in Performance Appraisal	0.59

This factor loads highly on Seriousness Of Feedback (SOF) and loads negatively against Performance Appraisal (FP). It appears that employees in the organization have a high concern about their feedback and are involved in removing their weaknesses whenever reported to them. Further, they use their strengths for taking up higher responsibilities. It is strange to note that this factor loads negatively for no favoritism in performance appraisal. It was reported that the KRAs of some of the employees is not satisfactorily reported to the higher authorities causing a little dissatisfaction among the concerned employees. These variables indicate that this factor can be best named as 'Feedback'.

Factor XI

Here the loadings are found on

ED	(+)	Employee Development	0.69
MP	(+)	Promotion on the basis of Merit	0.54
EA	(+)	Employee Assessment	0.40

Employee Development (ED), Promotions on basis of merit (MP) and Employee Assessment (EA) are positively loaded on this factor. The high contribution of employee development confirms the belief of the management that people can be developed at any stage of life. The organization is oriented towards its employees and people are promoted on the basis of their KRAs. Further, employees are largely assessed on the basis of adequate information about their performance. This fact is perceived from the contribution of employee assessment on this factor. Due to emphasis on the betterment of the employees, this factor represents 'Employee Orientation'.

Factor XII

The significant loading of this factor is as under

EHRP (+) Employee Oriented HR Policies 0.78

Considerably, heavy loading of Employee Oriented HR Policies (EHRP) on this factor has been observed. HR Policies in the organization aim at developing and facilitating the employees, meeting their needs and creating conducive HR climate. At the same time, they also aim at rewarding the good performers and providing them opportunities for development. HR Policies also explain the standards to be met by the employees. Being the only variable in this factor, it has been designated as 'Human Resource Policies'.

Factor XIII

Here the factor loads on

-			
JR	(+)	Job rotation	0.85

Job rotation (JR) loads heavily on this factor. Job rotation in this organization is widely used. It provides opportunity to the employees to learn various aspects of job and increase their competence. It also helps them to reduce boredom and fatigue. Job rotation is also useful for making adjustment in demand and supply of different departments for the workforce. It being the sole variable, this factor has been termed as 'Job rotation'.

Factor XIV

DOOD			
PSOF	(+)	Problem Solving Through open Forums	0.85
RS	(+)	Reduce Stress	0.51

The contribution of Problem Solving Through open Forums (PSOF) and Reduction in Stress (RS) is positive and loads heavily on this factor. Considering the nature of the variables, this factor represents 'Employee Motivation'. Employees in the organization are motivated by the fact that their problems and allied issues are solved through open forums to their satisfaction. Further, the superiors also support them not only

in solving their issues but also overcoming stress and frustration. It motivates them to work freely in the organization.

Factor XV

Significant loading observed on this factor as

IR	(-)	Informal Relations	0.89

Employees in the organization do not appear to be informal as per the contribution indicated in the table on this factor. The employees do not generally discuss their personal problems with their superiors and try to maintain gap between the official and personal issues. Negatively high loading of informal relations (IR) on this factor is quite significant and explains this factor to be termed as 'Hierarchical Relations'.

Factor XVI

Here the significant loading is on

PA	(+)	Performance Appraisal	0.90
		11	

Performance Appraisal has contributed significantly high to this factor. The related variables in the preceding factors indicate that Performance Appraisal is the main HR Mechanism used for employee assessment, development, advancement and compensation. A little biasness has been reported in some cases but on the whole, Performance Appraisal System in the organization is objective. Undoubtedly, this factor is 'Performance Appraisal'. The Factor Analysis has reduced all the 58 variables into 16 factors. The factors have been named on the basis of the variables selected in each factor which represent that factor the most. It can be easily ascertained that the major factors which contribute to HR climate in the organization have been selected which include employee development, superior facilitation. training, subordinate relationship, experimentation, transparency, team work, employee needs, feedback, employee orientation, human resource policies, job rotation, employee motivation, hierarchical relations and performance appraisal. Efforts have been made to reduce these factors into the variables of HR climate to ascertain the nature of the climate in RXY Laboratories. The 16 factors identified under factor analysis can be grouped under OCTAPAC culture. Considering the similarity of relationships of these factors with OCTAPAC, the following broad distribution has been made:

- Openness is characterized by freedom to employees to discuss their ideas, activities and feelings with each other. Keeping this fact in mind, the variables included in Employee Development, Transparency and Informal Relations have been characterized as "Openness".
- Confrontation means bringing out problems and issues into open to solve them rather than hide them for fear of being heard. A close scrutiny of the factors indicates that Feedback and Employee Motivation have the variables which match to "Confrontation".
- Trust is to believe in people for what they say. On this parameter, variables included in factors- Superior-Subordinate Relationship and Employee Orientation have been included in "Trust".

- Autonomy means giving freedom to people to work independently with responsibility. Analysis of variables contained in Training and Organizational Change indicate that they can be broadly grouped into "Autonomy".
- Proactivity connotes encouraging employees to take initiatives and risks. Factors including Facilitation, Experimentation and Employee Needs contain such variables which correspond to the characteristics of "Proactivity".
- Authenticity is the tendency on the part of people to do what they say. On this parameter, Performance Appraisal and Job Rotation have been included.
- Collaboration is to accept interdependencies, to be helpful to each other and work as teams. The factors representing Teamwork and Human Resource Policies can be listed under this variable.

The distribution of the factors in OCTAPAC has been made on the personal observation only. All the 58 variables have some impact on the HRD Climate in the organization. Therefore, they must fall in one or the other factors of OCTAPAC. As the variables have been converted into 16 broad categories via factor analysis, they have been further converted into OCTAPAC on broad basis.

Impact of HRD Climate on the Organization

The variables of OCTAPAC culture help in creating better job roles, developing competent and committed people, better utilization of human resources, cohesiveness in team work which result in higher productivity, better growth, cost reduction and more profitability. The impact of HRD climate is based on the observations made during personal interaction with the respondents and has been explained as under:

More Competent People

Organization sponsors employees for training on the basis of Training Matrix via Training Need Assessment. Employees are bound to undergo training as per the matrix. At the end of each training session, they have to undergo qualification test in which they are required to score minimum eighty percent. Their attendance record and qualifications for training programs are tracked and updated via LMS. Thus the training becomes integral part of their job and they participate actively in the training programs meant for them. This enhances their overall competence of the employees and the organization is bale to have more competent people.

Better Developed Roles

It has been observed that the superiors help subordinates in their day to day activities and delegate authority to help them to learn decision making skills and prepare them to meet future challenges. They also counsel their employees to reduce stress and frustration. Weaknesses are conveyed to the employees in non-threatening manner so that they can overcome them. It helps the organization to develop better roles.

Better Utilization of HR

The HR policies are employees oriented. The organization believes in treating employees as assets and has the tendency

											Арр	pendix	к-1: С	orrela	ation 1	Matri	X										
	IR	COP	PA	DOA	СТ	SET	FE	HT	EW	PSOF	CD	UP	ACC	IED	CO	DOM	PAA	IC	FP	APP	TW	SFT	SOF	RP	PTW	JR	SD
IR	1																										
СОР	0.234	1																									
PA	0.153	0.221	1																								
DOA	192	0.004	0.169	1																							
СТ	0.196	.300*	.357**	.312*	1																						
SET	099	.275*	0.026	0.207	0.088	1																					
FE	0.136	.438**	.286*	0.229	.356**	0.214	1																				
HT	0.218	0.199	.302*	0.177	.267*	.258*	0.228	1																			
EW	0.148	0.091	0.144	.310*	.491**	.257*	0.132	.379**	1																		
PSOF	0.078	0.086	0.213	026	0.122	0.201	0.028	0.215	.324*	1																	
CD	071	.296*	0.116	.452**	.537**	.289*	.537**	.338**	.371**	0.206	1																
UP	139	0.119	0.045	.486**	.260*	0.186	.458**	.297*	.449**	0.119	.678**	1															
ACC	0.101	111	0.080	0.140	032	0.008	0.188	0.048	0.171	0.024	010	0.020	1														
IED	0.099	0.130	0.116	.338**	.285*	0.119	0.127	.278*	.402**	0.061	.262*	.333*	010	1													
СО	0.092	.357**	.315*	.405**	.367**	.434**	.448**	.342**	.300*	0.177	.512**	.360**	206	.538**	1												
DOM	0.093	0.157	0.202	.433**	0.101	0.017	.540**	.256*	0.226	080	.465**	.570**	002	.465**	.455**	1											
PAA	143	063	0.078	.307*	.308*	142	.243*	0.105	.350**	0.187	.457**	.320*	036	0.205	0.098	.371**	1										
IC	103	0.174	0.005	0.039	.258*	0.225	0.072	.371**	.250*	0.053	.246*	0.129	201	137	0.117	105	0.043	1									
FP	143	226	0.058	.296*	183	0.100	112	0.186	0.195	0.005	028	0.100	0.204	.250*	0.204	0.169	0.092	.255*	1								
APP	0.079	0.043	0.094	0.162	.330*	016	0.181	0.234	.292*	.303*	.299*	.392**	0.028	0.153	0.126	0.201	.328*	0.009	0.175	1							
TW	0.030	0.085	0.024	0.198	0.114	0.163	0.006	.260*	.464**	.438**	.276*	.281*	0.015	0.126	0.120	0.080	.326*	.415**	.393**	.481**	1						
SFT	087	.327*	136	0.147	0.215	.508**	0.125	0.172	.550**	.304*	0.205	0.154	044	0.058	0.226	0.066	0.239	.287*	0.127	.330*	.488**	1					
SOF	0.055	.242*	058	0.000	.295*	055	.375**	0.000	0.120	094	0.051	056	0.067	103	155	0.000	0.219	0.224	271*	0.071	0.073	0.172	1				
RP	200	0.132	.286*	.494**	.365**	0.030	.349**	.373**	.499**	0.103	.466**	.629**	012	.428**	.384**	.466**	.406**	0.027	0.107	.362**	0.145	0.177	0.218	1			
PTW	063	.377**	050	.315*	.322*	0.162	.308*	0.173	.262*	054	.440**	.309*	286*	0.088	.261*	0.193	.484**	.327*	0.039	.407**	.409**	.463**	.305*	.359**	1		
JR	100	0.102	0.002	.269*	098	.328*	0.047	0.023	001	025	0.155	019	0.061	0.111	.362**	0.182	0.032	0.009	0.196	003	0.041	0.185	129	008	0.110	1	
SD	0.013	0.227	108	.306*	.259*	0.038	.404**	0.153	.274*	056	.427**	.349**	129	0.231	.469**	.449**	0.236	.389**	0.141	0.210	0.230	.265*	.334*	.329*	.463**	.374**	1
·* G*	• ••	nt at 1 °)/ I																			* 6		ant at 5	0/ T		

051

												Corr	elatio	on Ma	trix												
	IR	СОР	PA	DOA	СТ	SET	FE	HT	EW	PSOF	CD	UP	ACC	IED	CO	DOM	PAA	IC	FP	APP	TW	SFT	SOF	RP	PTW	JR	SD
COC	250*	0.084	245*	0.198	.242*	.240*	0.194	0.210	.531**	.382**	.398**	.530**	038	0.195	0.214	0.082	.356**	.328*	0.089	.418**	.544**	.471**	0.237	.359**	.309*	149	.24
FPA	050	0.169	0.238	.258*	0.185	0.126	.273*	.436**	.319*	0.176	.386**	.407**	0.075	0.069	0.168	.326*	.515**	.437**	0.222	.358**	.513**	.260*	0.103	0.233	.377**	0.070	.2
EXP	048	0.089	0.166	.371**	0.054	0.036	0.051	0.142	.289*	0.083	.360**	.417**	044	0.045	0.170	.267*	.371**	.328*	0.208	031	.400**	0.063	044	.255*	0.200	0.178	0.
CIP	103	.255*	0.137	.615**	.292*	.244*	.467**	.290*	.405**	041	.577**	.540**	0.154	.474**	.462**	.548**	.544**	0.157	.342**	.253*	0.198	.250*	0.100	.553**	.424**	.263*	.435
Р	0.145	0.186	0.160	.357**	0.234	0.118	.483**	.274*	.533**	0.030	.395**	.633**	0.034	.369**	.454**	.511**	.398**	0.077	0.085	0.159	.264*	0.192	0.201	.520**	.445**	0.029	.45
ODP	089	0.189	0.090	0.228	049	.500**	.256*	0.154	0.016	0.076	0.086	003	106	0.219	.483**	0.091	054	.246*	0.203	100	0.136	0.140	0.065	0.117	0.111	.394**	.2
PC	011	050	098	.382**	0.173	0.070	0.166	.300*	.343**	0.208	.258*	.417**	0.046	.376**	.301*	.248*	.319*	.275*	.324*	0.105	.339**	0.122	0.230	.376**	0.168	0.139	.46
PSAT	023	0.094	118	0.158	.258*	0.200	.247*	035	.402**	0.220	0.178	0.115	068	040	0.184	0.091	.380**	0.100	011	.353**	.317*	.512**	0.170	0.154	.500**	0.162	.34
RGW	0.000	086	0.133	.459**	0.097	075	0.207	.313*	.310*	0.086	0.109	0.221	0.152	.359**	0.196	.432**	.374**	159	0.144	.304*	0.166	0.148	0.122	.265*	0.162	0.150	.2
RE	137	0.204	0.098	.446**	0.156	.453**	.346**	.360**	.342**	0.155	.435**	.547**	055	0.111	.300*	.350**	.317*	.505**	.268*	0.065	.342**	.317*	0.105	0.238	.405**	0.190	.37
UST	0.028	0.093	068	.299*	0.015	0.182	0.143	0.153	.415**	0.121	.312*	.398**	089	.453**	.440**	.468**	0.129	0.160	0.222	085	0.228	0.194	0.000	.385**	0.046	.354**	.52
EA	064	.273*	002	0.122	.349**	.298*	.427**	.435**	.441**	0.039	.341**	.478**	0.038	.341**	.332*	.302*	.315*	.334*	0.117	0.194	0.228	.324*	.267*	.496**	.336**	014	.2
EHRP	0.130	0.143	0.212	.288*	0.214	110	0.173	0.240	.381**	0.080	.263*	.299*	0.069	.263*	.260*	0.232	.349**	0.105	0.151	0.136	0.191	0.069	0.068	.319*	.270*	0.209	.29
RS	0.093	0.125	0.008	0.169	0.149	044	.485**	.250*	.331*	.450**	.351**	.498**	0.209	0.178	.273*	.386**	.351**	035	0.061	.267*	.256*	.260*	0.225	.367**	0.064	002	.3
FRR	0.096	.347**	0.200	.358**	0.220	0.040	.463**	.360**	.294*	0.191	.381**	.437**	0.035	.302*	.431**	.488**	.329*	0.022	033	0.096	0.067	0.146	0.154	.350**	0.213	0.089	.3
EE	0.016	.345**	013	.321*	.375**	.296*	.467**	.350**	.412**	0.095	.478**	.402**	239	0.210	.574**	.296*	.386**	.500**	0.123	0.199	.385**	.448**	.289*	.398**	.649**	.309*	.65
CR	0.090	.446**	0.146	0.070	0.208	0.118	.267*	.426**	0.104	026	0.098	036	0.033	0.136	.332*	031	047	.402**	0.068	0.039	0.169	0.138	.292*	0.119	.312*	0.146	.39
51	0.000	0.162	117	.441**	.344**	.275*	0.234	.294*	.359**	.283*	.462**	.448**	0.067	.308*	.362**	0.203	.328*	.299*	0.090	.428**	.437**	.401**	0.200	.363**	.381**	.257*	.42
PO	077	0.141	0.142	.418**	.336**	0.121	.288*	.293*	.444**	.328*	.298*	.299*	0.101	0.226	.353**	.251*	.526**	.277*	.246*	.463**	.431**	.445**	0.139	.353**	.424**	0.233	.37
мр	239	0.072	021	0.127	075	0.149	0.151	0.159	.298*	0.093	0.069	0.227	0.014	.258*	.330*	.242*	0.234	0.228	.473**	003	.291*	.340**	158	0.220	0.156	0.152	.37
зм	0.089	0.046	0.080	0.224	.287*	090	.335*	0.169	.332*	0.229	.479**	.293*	0.214	0.014	0.102	.302*	.638**	.286*	0.191	.284*	.359**	0.211	0.129	0.070	.283*	0.091	.36
гs	312*	029	0.206	0.028	0.049	.315*	0.096	066	0.143	.255*	0.094	0.156	084	0.202	.351**	0.043	0.083	149	0.146	0.116	0.094	0.203	316*	0.086	035	0.142	0.
DD	.255*	0.168	0.149	.471**	.299*	030	.416**	.295*	0.065	044	.325*	0.216	0.087	0.087	.410**	.490**	0.181	0.058	0.024	0.154	0.051	0.049	0.185	0.067	0.106	.281*	.47
SI	.288*	.270*	0.212	.303*	0.211	0.019	.420**	.566**	0.237	027	0.184	.255*	0.177	.303*	.432**	.516**	0.204	0.137	0.063	0.152	0.095	0.103	0.232	.295*	0.111	.247*	.42
SEC	0.123	.416**	.374**	0.060	0.182	0.135	.494**	.422**	0.090	0.056	.408**	0.224	0.190	0.111	.327*	.350**	0.231	0.230	0.079	047	0.112	0.017	0.052	0.048	0.045	0.167	.2
Г	062	.312*	0.010	.322*	0.208	0.100	.366**	.317*	.467**	0.053	.381**	.499**	0.046	.427**	.381**	.396**	.329*	0.170	.262*	0.186	0.224	.251*	0.134	.568**	.383**	0.100	.51
ON	0.041	021	0.049	.317*	.255*	294*	.243*	0.102	.260*	076	0.200	.268*	012	0.140	0.116	.413**	.477**	0.017	025	0.116	0.051	0.044	.295*	.353**	.297*	0.194	.48
D	088	0.097	0.037	0.094	0.145	024	0.138	0.028	0.011	075	0.037	207	044	0.131	0.152	090	0.061	.310*	0.061	168	0.029	0.021	.365**	0.017	0.148	0.102	.37
DOP	049	0.199	0.065	0.159	.311*	.252*	0.230	068	.513**	0.228	.259*	0.169	113	0.222	.476**	0.063	.308*	038	045	0.047	0.147	.411**	0.072	0.195	.293*	001	0.
ſR	0.150	.249*	0.119	.310*	0.065	0.166	.393**	0.139	.341**	0.008	.301*	.417**	024	.268*	.400**	.341**	.353**	0.138	.299*	0.171	.324*	0.204	0.128	.384**	.543**	0.039	.2
ED	0.089	0.176	0.061	.264*	057	0.010	0.097	0.087	.306*	076	0.069	.268*	.293*	0.235	0.141	.462**	0.113	117	.342**	0.131	0.100	0.094	065	.352**	0.086	.262*	.35
* Sia	nifican	t at 1 %	Lovel																			* 6	:: C :		% Leve	1	

													Cori	relation	on M	atrix													
OC	FPA	EXP	CIP	IP	ODP	PC	PSAT	RGW	RE	UST	EA	EHRP	RS	FRR	EE	CR	SI	MP	BM	TS	DD	SSI	SEC	Т	ON	0	DOP	TR	
PA	1																												
(P	.575**	1																											
Р	.542**	.428**	1																										
	.474**	.408**	.526**	1																									
Р	0.170	0.198	.365**	0.047	1																								┝
	0.215	.286*	.404**	.525**	0.085	1																							
AT	0.125	112	0.171	0.180	0.187	0.062	1																						┢
W	.289*	053	.373**	.345**	0.059	.269*	.335**	1																					
,	.582**	.403**	.572**	.556**	0.191	.511**	0.195	.295*	1																				۲
Г	0.033	.285*	.263*	.429**	0.149	.568**	0.094	0.156	.258*	1																			ł
	.405**	0.161	.458**	.492**	.250*	.449**	.257*	0.132	.475**	0.226	1																		۲
RP	.352**	0.237	.483**	.526**	004	.296*	0.081	.432**	.448**	0.110	0.216	1																	ł
	0.195	0.099	0.227	.436**	042	.514**	.278*	.342**	.258*	.356**	.340**	0.221	1																٢
R	.409**	.355**	.562**	.536**	0.156	.351**	0.057	.340**	.407**	0.129	.325*	.371**	.509**	1															t
	.323*	.304*	.435**	.530**	.389**	.531**	.535**	0.158	.466**	.460**	.561**	0.212	.417**	.440**	1														٢
L	.274*	080	0.203	0.177	.383**	0.108	0.178	.322*	.270*	028	.307*	.351**	0.072	0.102	.374**	1													t
_	.411**	.351**	.500**	.453**	0.194	.614**	0.085	0.183	.420**	.342**	.333*	.270*	.281*	.386**	.520**	0.146	1												Г
1	.590**	0.183	.562**	.414**	.255*	.365**	.511**	.635**	.529**	0.119	.425**	.548**	.326*	.349**	.469**	.482**	.556**												t
2	.378**	0.220	.291*	.321*	.331*	0.222	.311*	0.217	.282*	.372**	.431**	0.132	0.235	0.058	.364**	.324*	0.053	1											Γ
1	.644**	.397**	.524**	.327*	080	.287*	.251*	.334*	.471**	0.050	0.160	.397**	.369**	.318*	.284*	0.206	.323*	0.232	1										t
	0.083	0.012	0.105	0.156	0.146	0.021	.270*	0.168	0.105	0.133	0.131	025	0.091	0.064	0.123	094	0.000	.473**	027	1									Γ
)	.250*	0.162	.320*	.307*	0.010	.361**	0.092	.451**	.304*	0.174	0.057	0.198	.382**	.589**	.384**	0.219	.370**	045	.409**	102	1								T
I	.470**	0.229	.409**	.480**	.257*	.397**	0.090	.565**	.328*	.249*	.468**	.386**	.381**	.526**	.431**	.540**	.406**	.273*	.307*	089	.663**	1							Γ
С	.420**	.242*	.389**	0.239	0.191	0.189	028	0.232	.367**	0.151	.335*	0.199	.317*	.326*	.284*	.423**	0.052	.282*	.505**	0.050	.401**	.510**	1						t
	0.233	0.157	.678**	.528**	.287*	.505**	.319*	.395**	.437**	.410**	.591**	.481**	.373**	.384**	.502**	.363**	.313*	.465**	.263*	0.172	0.131	.385**	.390**	1					Γ
I	0.070	0.168	.252*	.469**	186	.495**	.343**	.511**	.280*	.381**	.248*	.363**	.389**	.264*	.439**	0.121	0.236	0.138	.281*	0.080	.450**	.436**	0.187	.452**	1				
	0.003	100	0.212	035	.470**	0.130	0.132	.348**	0.087	0.043	0.085	.244*	030	031	0.196	.570**	0.000	0.210	0.150	0.031	0.049	0.181	.279*	.407**	0.192	1			ſ
Р	0.062	0.047	0.207	.427**	0.056	0.095	.574**	0.207	0.148	0.224	0.192	0.155	.278*	.342**	.433**	0.062	0.072	.273*	0.153	.445**	0.138	0.038	0.035	0.231	0.177	0.007	1		
	.414**	.492**	.571**	.744**	.316*	.329*	0.129	0.127	.381**	.272*	.366**	.374**	0.207	.399**	.496**	0.096	.385**	.277*	.244*	0.095	0.074	.251*	0.179	.506**	0.191	0.106	.319*	1	ſ
	0.195	0.170	.357**	.300*	0.017	0.147	0.160	0.098	0.115	.382**	0.239	0.193	0.139	.243*	0.146	053	0.065	.374**	0.024	0.104	0.130	.257*	0.047	.388**	0.224	194	0.021	0.223	
Si	nificar	nt at 1	% Lev	el																			*	Signif	icant at	: 5 % L	evel		

III <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Appendix-2:</th><th>Unrotated Cor</th><th>nponent Matrix</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>								Appendix-2:	Unrotated Cor	nponent Matrix								
Dep:D		-						7										
Phy0.110.280.190.180.100.120.100.																		
box 0.97 0.96 0.97																		
ctr 0.65 0.05 0.43 0.43 0.20 0.43 0.43 0.43 0.43 0.44 0.44 0.45																		
nit 0.39 0.41 0.49 0.41 0.49 0.41																		
Phy9.099.0																		
HerHe																		
PN 040 417 400 418 010																		
Piercy9.399.4919.4909.4909.4949.039.039.0709.0109																		
Photobios																		
HIP 0.67 0.68 0.80 0.40 0.30 0.40 0.30 0.41 0.51 0.00 0.18 0.97 MCC 0.84 0.00 0.10 0.40 0.40 0.30 0.41																		
HACC 0.00 0.20 0.10 0.20 0.20 0.20 0.40 0.20 0.41 0.40 <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>																		
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IP 0.75 0.10 0.22 0.03 0.40 0.05 0.10 0.17 0.05 0.26 0.10 0.27 0.01 0.27 0.01 0.27 0.01 0.27 0.01 0.27 0.01 0.27 0.01 0.27 0.01 0.27 0.01 0.03 0.09 0.04 0.05 0.93 PK 0.42 0.11 0.12 0.13 0.01 0.23 0.00 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 <th0.04< th=""> 0.04 0.04 0.05 0.11 0.04 0.04 0.04 0.05 0.11 0.05 0.11 0.01 0.04 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03<th>EXP</th><th>0.44</th><th>-0.03</th><th>-0.17</th><th>0.03</th><th>0.43</th><th>0.28</th><th>-0.34</th><th>-0.15</th><th>0.19</th><th>-0.21</th><th>-0.08</th><th>0.24</th><th>0.00</th><th>0.04</th><th>0.02</th><th>0.27</th><th>0.918</th></th0.04<>	EXP	0.44	-0.03	-0.17	0.03	0.43	0.28	-0.34	-0.15	0.19	-0.21	-0.08	0.24	0.00	0.04	0.02	0.27	0.918
ODP 0.30 -0.14 0.03 0.09 0.04 0.01 0.02 0.07 0.08 -0.05 -0.04 -0.27 0.01 0.21 0.21 0.91 PC 0.61 -0.41 -0.42 0.11 -0.42 0.01 -0.24 0.01 -0.24 0.01 -0.24 0.01 -0.27 0.04 0.01 0.93 PSAT 0.41 -0.42 0.11 -0.16 0.01 -0.11 -0.03 -0.01 -0.03 -0.01 -0.03 -0.01 -0.03 -0.01 -0.03 -0.01 -0.03 -0.01 -0.01 -0.03 -0.01	CIP	0.78	0.13	-0.05	0.16	0.19	0.05	-0.07	-0.30	0.04	0.13	0.00	-0.19	-0.14	0.16	0.08	-0.10	0.922
PC 0.02 0.01 0.02 0.02 0.02 0.03 0.03 0.01 0.24 0.13 0.09 0.09 0.04 0.01 0.032 PSAT 0.41 -0.42 0.01 -0.13 0.03 0.11 0.03 -0.03 0.01 0.03 0.03 0.01 0.03 0.03	IP	0.75	0.10	-0.22	0.03	-0.10	0.05	-0.15	-0.12	-0.16	-0.17	0.05	0.26	-0.15	0.09	-0.20	-0.03	0.983
PSNT 0.41 -0.42 0.11 -0.19 -0.13 -0.13 0.11 0.11 0.04 -0.08 0.09 0.00 0.05 0.047 RGW 0.68 -0.08 0.09 0.01 0.02 0.01 0.01 0.03 0.01 0.03 0.04 0.05 0.01 RE 0.68 -0.08 -0.08 0.01 0.01 0.02 0.01 0.02 0.01 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.04 0.03 0.01 0.03 0.01 0.03 0.04 0.03 0.01 0.03 0.04 0.04 0.03 0.04 0.03 0.01 0.03 0.01 0.03 0.01 0.03 0.03 0.01 0.03 0.01 0.03 0.03 0.03 0.03 0.03 <th< th=""><th>ODP</th><th></th><th></th><th></th><th></th><th>0.09</th><th>0.04</th><th>0.01</th><th>-0.02</th><th>0.07</th><th>0.08</th><th></th><th></th><th></th><th></th><th></th><th></th><th>0.911</th></th<>	ODP					0.09	0.04	0.01	-0.02	0.07	0.08							0.911
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TR 0.60 -0.06 -0.04 0.12 0.07 0.13 -0.21 -0.33 -0.15 -0.10 0.18 0.33 -0.29 0.19 0.09 0.07 0.946 ED 0.33 0.14 -0.29 0.36 0.08 -0.13 -0.02 -0.12 -0.07 0.59 -0.09 0.17 0.06 0.00 0.12 0.957 Variance 15.472 3.853 3.47 3.248 2.86 2.706 2.455 2.093 1.987 1.823 1.703 1.56 1.463 1.21 1.056 1.056	0	0.20	0.11	0.62	0.05	0.02	-0.45	0.01	-0.13	-0.09	0.11	-0.35	0.00	-0.03	0.17	0.25	0.01	0.92
ED 0.33 0.14 -0.29 0.36 0.08 -0.13 -0.01 -0.02 -0.12 -0.07 0.59 -0.09 0.17 0.06 0.00 0.12 0.957 Variance 15.472 3.853 3.47 3.248 2.86 2.706 2.455 2.093 1.987 1.823 1.703 1.56 1.463 1.21 1.056	DOP	0.41	-0.36	-0.05	0.02	-0.46	-0.02	0.31	-0.19	0.09	-0.24	-0.10	0.20	-0.06	0.23	-0.21	0.00	0.971
Variance 15.472 3.853 3.47 3.248 2.86 2.706 2.455 2.093 1.987 1.823 1.703 1.56 1.463 1.261 1.21 1.056	TR					0.07												
	ED													0.17				0.957
Extraction Method: Principal Component Analysis. 16 components extracted	Variance	15.472	3.853	3.47	3.248	2.86	2.706	2.455	2.093	1.987	1.823	1.703	1.56	1.463	1.261	1.21	1.056	
					Extract	ion Method: P	rincipal Compo	onent Analysis.				16 components	extracted					

						Арре	endix-3: Rotated	Component Ma	trix								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	h ²
IR	03	0.17	0.01	03	0.04	05	05	0.01	03	0.05	01	0.04	05	0.04	89	0.10	0.966
СОР	12	0.04	0.42	0.07	0.12	0.00	0.16	0.04	0.40	0.31	0.28	0.18	0.09	0.10	31	0.12	0.875
PA	09	0.15	0.13	04	0.11	01	0.05	04	0.00	07	0.04	0.05	0.00	0.12	07	0.90	0.836
DOA	0.42	0.29	0.12	0.09	0.27	0.01	01	0.23	0.07	06	22	0.12	0.31	28	0.26	0.21	0.853
CT SET	0.29	0.03	0.35	0.26	12 0.03	0.15	0.08	0.27	0.02	0.25	28 03	0.12	12 0.17	07 0.04	17 0.12	0.47 0.02	0.864 0.980
FE	0.10	0.31	0.13	0.27	0.19	08	0.16	0.01	0.84	0.28	0.14	02	06	0.04	04	0.02	0.930
HT	0.26	0.51	0.08	17	07	0.33	0.04	0.18	0.25	02	0.21	0.16	22	0.08	09	0.32	0.836
EW	0.62	0.10	0.14	0.41	0.00	0.36	15	0.13	01	08	0.02	0.13	01	04	09	0.15	0.884
PSOF	0.09	04	0.02	0.16	02	0.07	05	0.22	0.09	07	10	0.05	0.02	0.85	03	0.16	0.911
CD	0.34	0.01	0.76	0.09	0.13	0.17	06	0.25	0.08	0.02	15	0.12	0.10	0.04	0.09	0.12	0.943
UP	0.49	0.16	0.50	0.00	0.25	0.09	28	0.23	0.07	06	0.14	0.16	13	0.03	0.23	03	0.949
ACC	0.89	0.10	0.08	08	03	09	02	01	0.04	0.05	0.11	0.05	0.01	0.08	06	0.01	0.977
IED	0.59	0.16	0.10	02	0.13	29	0.23	0.19	0.13	35	0.03	0.14	12	03	11	0.11	0.956
CO	0.41	0.28	0.33	0.24	0.19	08	0.24	0.03	0.35	28	03	03	0.19	0.05	14	0.24	0.943
DOM PAA	0.32 0.13	0.46	0.47	01	0.22 0.35	13 0.13	13	0.13 0.31	14 45	17 0.05	0.28	04 0.18	0.13	19 0.08	0.01 0.25	0.08	0.936
IC	0.13	05	0.27	01	0.35	0.13	0.26	0.31	45	0.05	03	01	01	02	0.25	0.10	0.883
FP	0.11	0.00	16	01	0.03	0.87	0.26	0.04	01	59	03	01	02	02	0.01	03	0.856
APP	0.05	0.12	0.12	0.12	02	01	09	0.89	07	02	0.06	0.01	06	0.14	03	0.04	0.909
TW	0.13	04	06	0.12	0.28	0.49	0.05	0.51	02	14	0.05	01	0.02	0.34	09	04	0.966
SFT	0.08	0.00	0.01	0.56	0.02	0.27	01	0.35	0.35	0.09	0.14	0.08	0.12	0.17	0.01	14	0.905
SOF	0.09	0.12	0.03	0.12	0.09	0.12	0.29	0.07	11	0.80	01	08	12	05	04	05	0.927
RP	0.60	0.08	0.16	0.02	0.20	09	0.01	0.33	01	0.19	0.27	0.13	11	05	0.27	0.37	0.922
PTW	0.06	03	0.19	0.37	0.33	0.23	0.12	0.48	0.02	0.26	0.09	0.22	0.07	27	0.00	05	0.826
JR	0.09	0.15	0.03	0.05	0.00	0.02	0.12	01	0.17	10	0.11	0.09	0.85	0.01	0.06	03	0.947
SD	0.42	0.22	0.33	0.19	0.06	0.23	0.31	0.15	17	0.12	0.19	0.00	0.36	12	11	19	0.874 0.960
COC FPA	0.37	0.13 0.35	0.11 0.24	0.36	0.21 0.46	0.25 0.51	07 0.00	0.31 0.32	0.13	0.09	07 0.13	05 0.16	30 06	0.35	0.24 0.16	27 0.11	0.985
EXP	0.13	0.04	0.24	13	0.48	0.31	17	04	01	10	0.13	0.10	0.20	0.12	0.10	0.11	0.983
CIP	0.30	0.20	0.12	0.06	0.48	0.05	0.20	0.25	0.11	07	0.05	0.29	0.12	18	0.12	0.05	0.922
IP	0.42	0.33	0.19	0.26	0.56	0.05	08	02	02	0.06	0.18	0.31	14	01	09	0.02	0.983
ODP	0.07	0.08	0.01	0.02	0.31	0.03	0.61	01	0.45	07	0.06	25	0.26	0.02	0.14	0.08	0.911
PC	0.71	0.29	01	04	0.21	0.26	0.10	0.00	10	0.07	04	0.12	0.03	0.24	0.03	20	0.952
PSAT	0.03	0.05	0.04	0.82	08	0.07	0.12	0.29	06	0.11	0.15	0.01	0.13	0.03	0.06	06	0.947
RGW	0.13	0.66	03	0.25	04	15	0.25	0.23	22	14	04	0.31	0.01	01	0.16	0.04	0.940
R	0.20	0.30	0.26	0.14	0.27	0.52	03	03	0.21	03	0.01	0.42	0.07	0.00	0.23	06	0.945
UST EA	0.78 0.36	0.01	0.07	0.19 0.14	0.09	0.04 0.26	02 0.15	15	0.02	07	0.18 0.40	08	0.28	0.16	0.03 0.15	10	0.930 0.919
EOHRP	0.36	0.18	0.22	0.14	0.13	0.26	0.13	0.11	15	0.16	0.40	0.11 0.78	34	0.02	10	0.00 0.12	0.919
RS	0.10	0.18	0.07	0.03	0.05	04	05	0.07	13	0.14	0.05	03	10	0.04	04	13	0.936
FRR	0.16	0.56	0.32	0.08	0.44	09	08	01	0.09	0.13	01	0.15	0.00	0.16	02	0.06	0.849
EE	0.42	0.24	0.22	0.41	0.26	0.35	0.21	0.12	0.10	0.21	0.13	06	0.16	0.03	05	04	0.874
CR	07	0.32	0.08	0.04	11	0.28	0.67	0.07	0.18	0.11	0.15	0.26	03	04	15	0.08	0.894
SI	0.43	0.24	0.09	05	0.30	0.20	0.01	0.45	0.21	0.18	21	0.14	0.22	0.23	0.03	17	0.962
РО	0.08	0.40	0.05	0.33	0.16	0.20	0.32	0.43	03	03	0.02	0.39	0.10	0.19	0.19	0.06	0.936
MP	0.15	0.09	0.06	0.33	0.15	0.24	0.31	05	02	42	0.54	04	02	0.10	0.21	06	0.953
BM	08	0.20	0.50	0.18	0.21	0.41	0.07	0.19	37	11	15	0.23	0.07	0.15	04	06	0.984
TS DD	0.04 0.13	01 0.76	0.05	0.46	0.03	20 0.08	0.05	07	0.12	41 0.08	0.14	02	0.02	0.30	0.37	0.17 0.01	0.914 0.920
SSI	0.13	0.76	0.30	06	0.03	0.08	04	0.02	12	0.08	22	07	0.30	08	21	0.01	0.920
SEC	08	0.34	0.62	07	0.04	0.12	0.22	22	01	10	0.21	0.10	0.00	0.02	08	0.10	0.894
Т	0.47	0.10	0.29	0.14	0.19	0.01	0.39	0.10	0.00	0.00	0.39	0.38	07	0.00	0.08	07	0.926
CON	0.40	0.38	0.05	0.25	0.00	0.03	0.03	04	54	0.25	0.14	0.25	0.19	06	0.07	0.05	0.949
0	0.05	0.00	0.05	0.05	04	0.07	0.90	09	12	0.10	11	0.12	0.06	06	0.08	0.01	0.920
DOP	0.18	0.04	0.11	0.84	0.21	12	0.00	10	0.10	04	11	0.06	12	0.12	03	0.07	0.971
TR	0.21	0.03	0.12	0.16	0.83	0.02	0.14	0.11	0.08	0.00	0.15	0.14	08	06	13	01	0.946
ED	0.24	0.07	0.04	0.05	0.16	08	18	0.11	03	10	0.69	0.06	0.29	16	10	0.07	0.957
Variance	15.472	3.853	3.470 Mothod: Bringi	3.248	2.860	2.706	2.455	2.093	1.987	1.823	1.703	1.560	1.463	1.261	1.210	1.056	
		Extraction Rotation conver		ipal Component	Analysis.					Rot	ation Method: V	arimax with Ka	user Normaliza	tion.			
	a	Rotation conver	igeu ili 40 itera	uons.													

to retain them. Opportunities are given for promotions to the employees performing well and have the competence to go up. The skills of the employees are developed on the basis of Job rotation and they are allowed to work on the position where they feel comfortable. The employees are allowed to experiment within certain limits and can try out the creative ideas. The employees' feedback is transparent and shared with the employees. Efforts are made to develop their potentials and remove their weaknesses through discussions and training. It helps in better utilization of HR.

Positive Work Environment

The organization has a system of solving problems across the table. Employees can express their feelings freely. It helps the superiors and subordinates to understand each other, remove misunderstanding in the initial stages and develop an atmosphere of trust. This creates positive work environment.

Higher Work Motivation

The performing employees are motivated by appreciation and awards. The innovative ideas related to cost saving, quality enhancement and other profit adding ideas are appreciated publicly and published in their quarterly magazine. It motivates the employees to think positive. It also helps in higher work commitment and job involvement. The above discussion, it can be concluded that HRD climate in the RXY Laboratories is quite conducive for employee development. As discussed earlier, a number of variables have a positive impact on developing HRD climate. For building good HRD climate, the organization uses many instruments such as training, performance appraisal, job rotation, potential development, career planning etc. These instruments/mechanisms help in developing HRD processes which create OCTPAC culture. The OCTAPAC culture brings in HRD climate which enables the organization to achieve its objectives of higher productivity, growth and profitability.

Suggestions

On the basis of the study, for improving the HRD Climate, it has been suggested that:

- Interaction with the respondents show that though the management takes interest in employee development, improvement in some of the variables is required.
- Promotions are generally based on merit but there is some element of biasness which must be reduced.
- The KRA reports should be objective and employees should be given hearing for their objections, if any, in case of dissatisfaction expressed by them.
- The organization should have definite plans to use the Potentials of the employees.
- High performers should be upgraded after requisite training.

It will help the company to develop better relationships, team work, trust and belongingness. It will improve the developmental climate in the organization and bring consistent and sustainable growth.

REFERENCES

- Athreya, M.B. 1988. Integrated HRD System-Intervention Strategies, in Rao, T.V., Verma, K.K., Khandelwal A.K., & Abraham, E. (Ed.), Alternative Approaches and Strategies of Human Resources Development, Rawat, Jaipur, pp. 378.
- Alphonsa, V.K, Sr., 2000. "HRD Climate in a Private Hospital in Hyderabad-An Empirical Study", *IJTD*, Vol. XXX (4) Oct –Dec.
- B. Parranayak, 1998. Corporate HRD, Excel Books, New Delhi, 26-40.
- Chaudhary Richa, Rangnekar, Santosh and Barua, Mukesh Kumar 2012. Human Resource Development Climate in India: An Empirical Analysis in *National Conference on Emerging Challenges for Sustainable Business 2012.*
- Jain, V. K., Singhal, K. C. and Singh, V. C. 1997. "HRD Climate in Indian Industry", *Productivity*, 37(4): 628-639.
- Maria Gonzalez, 1999. "Shifting the Performance Curve", *Ivey Business Journal*, July/August, 18-23.
- Mufeed S.A. 2006. The need for a focus on key elements of HRD climate in Hospitals- an Empirical study, *Management of Labour Studies* XLRI, Jamshedpur Vol. 31 PP 57-65.
- Purang, P. 2006. HRD Climate: A Comparative Analysis of Public, Private and Multinational Organisations, Indian Journal of Industrial Relations, 41(3), 407-419.
- Rao, T.V. and Abraham, E. 1986. "Human Resource Development Climate in Indian organization". In T.V. Rao and D.F. Pereira Ed. *Recent Experiences in Human Resources Development*, New Delhi: Oxford and IBH, 70 -98.
- Rao, T.V. Readings in Human Resource Development Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, 1991.
- Rao, T.V. 1992. HRD in Voltas, in Pareek, U. and Rao, T.V. (Ed.), Designing and managing human resource systems, Oxford & IBH publishing Co. Ltd., New Delhi, pp. 352-54.
- Sharma, A. and Purang, P., 2000. Value Institutionalization and HRD Climate: A Case Study of a Navratna Public Sector Organisation, *Vision. The Journal of Business Perspective*, Vol. 4 PP 11-17.
- Venkateswaran, K.P.S. 1997. A Note on HRD Climate, Vikalpa, 22(1), 51-53
- Venkataratnam, C.S. 1999. (ed.) 'HRD for Adjustment at the Enterprise Level', *Participants Manual, ILO*.

Questionnaire

 Dhar, S. & Dhar, U. Human Resource Development Climate Scale HRDCS), Rakhi Prakashan, Agra.
