REVISTA ESPACIOS

The Effect of HRD Practices for High-Performance Work Systems: An Empirical Study on IT Industries in India

El efecto del desarrollo de recursos humanos para áreas de trabajo de alto rendimiento: Un estudio empírico sobre las industrias TI en la India

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Content

ABSTRACT:

The growth-oriented high-performance IT Industries are being significantly influenced by the HR practices. In this sense, HRD is a continues process which helps in the sustainable development of in systems essential for the creation of a strong and committed work environment. Further, HRD practices have a positive impact on the performance level of the employees which operates through effective career planning, skill-enhancement training and welfare-oriented policies and programmes. In the present study, structured questionnaire followed by ANOVA, Correlation and Factor Analysis used to test the hypothesis to establish the relationship between HRD practices and high performance work systems of the three sampled IT Industries in India.
Keywords: HRD Practices, High-Performance Work

RESUMEN:

Las industrias TI de alto rendimiento orientadas al crecimiento están siendo influenciadas significativamente por las prácticas de recursos humanos. En este sentido, HRD es un proceso continuo que ayuda en el desarrollo sostenible de sistemas esenciales para la creación de un entorno laboral sólido y comprometido. Además, las prácticas de desarrollo de recursos humanos tienen un impacto positivo en el nivel de desempeño de los empleados, que opera a través de una planificación profesional efectiva, capacitación para mejorar las habilidades y políticas y programas orientados al bienestar. En el presente estudio, un cuestionario estructurado seguido de ANOVA, análisis de correlación y factor utilizado para probar la hipótesis para establecer la relación entre las prácticas de DRH y los sistemas de

trabajo de alto rendimiento de las tres industrias de TI de muestra en la India.

Palabras clave: prácticas de DRH, sistemas de trabajo de alto rendimiento, ANOVA y análisis factorial.

1. Introduction

Change is an unchanging thing of the changing world and it's a regular process which compels the human to change their competent and competency as per the demand of the society. The financial globalisation is one of the formidable reasons for modern management to think and give the right shape to their corporate strategies. So it is utmost importance to enrich human capital in the ever-evolving period as well as sharpen their skill-based knowledge for organization growth. In the fast-moving economy where uncertainty is the only certainty due to innovative HR practices required to ensure survival in an increasingly hyper-competitive environment. (Som, July 2008) (Muduli, June 2012). In the light of this event, it is said that it is the top key challenges before any HR department to engage their human capital, acquisition of fresh blood, retain their star employees, developing employees competency and introduce 720-degree performance management system for mentoring to them (Ramlall, 2009). Hence, there is a growing body of evidence which supports the positive correlation between Human Resource Development (HRD) practices and perceived benefits in organizations. (Aruna Gamage, 2007). In this juncture, Human Resource Development (HRD) is the frameworks for helping employees develop their personal and organizational skills, knowledge, and abilities. (Susan M. Heathfield, 2016) through employee training, employee career development programmes, performance management, coaching, mentoring and succession planning. In the light of these events, it is going to proved that HRD practice is a positive correlation between organisational benefits especially the financial performance of the company. In this context, it has been stated by the (Bartel, 1994; Koch and McGrath, 1996) that HRM practices directly link to the productivity (gross margin per employees) as the central measure for operational performance. Further, the researcher said that though the HRM practices do not lead directly financial performance, rather they influence firm's allocated resources, such as the human capital or employees' behaviour which create a skilled, motivated and empowered workforce for accelerating financial position of the company.

2. A Theoretical Analysis through the Review of Literature

2.1. HRD Practices for High-Performance Work Systems toward Financial Gain

There are many researchers who have attempted to measure the impact of HRM and HRD practices for the financial success of the industries especially in the MNCs and global industries. In this context, Agarwal N.P and Priti Gupta in their essay 'Human Capital Structure' Published in the Management Accountant (July 1997), did a study and found that human capital structure is as important as like as capital structure of the organisation. They also analysed the human capital structure consists of various types of employees in an organisation. The study outlines the various human capital valuation and accounting methodologies. They conclude that structural change improves the human effects of the organisation. But we will talk how human efficiency can help the financial performance of the company and its components. In this context, Luc SELS., et al. (2003) used structural equation modelling and found in their study that the effect of operational performance (productivity, employee turnover and absenteeism) on the relationship between HRM intensity and financial performance. The results showed a strong effect of intensive HRM on the profitability of small and medium-sized companies. In the same line, (Harel and Tzafrir, 1999; Holloway et al., 1995; Miller and Lee, 2001) stated that three regularly recurring themes of debate in SME performance research are: (1) the choice between either

operational (e.g. productivity, employee turnover) or financial performance (e.g. sales amount per employee, shareholder value) measures (2) the advantages and drawbacks of static versus dynamic measures and (3) the context-sensitivity of the most frequently used financial performance indicators. We elaborate on each of these themes.

In the same line, it has stated by the Delery, 1998; Guest, 1997; Huselid, 1995 that organisational performance is measure either operational or financial performance. After all, HRD Practices do not link directly to the firm performance; rather they influence firm resources such as the human capital of the firm, star employees and employee behaviour. After all, if we want to know how intensive HRD influences financial performance, it is important to pay attention not only to financial outcomes but also to intermediate operational criteria such that HRD practices for high-performance work systems which somehow financial results are achieved. For the best organisational performance the following practices are so essential and it should be abide by the top level management of the organisation such as Interaction and Communication, Sound HRM and HRD, Training for workers' for skill development, Congenial physical environment and Effective performance appraisal for interested stakeholders which rightly connected to the financial compensation of the employees (Huda, K. N., Anika, T. R., & Khaled, M. C., 2014).

3. An Extensive Review of High-performance work systems and present HRD practices in Indian IT industries

3.1. Infosys

Infosys Technologies, a leading software company based in India, was voted the best employer in the country in many HR surveys in the recent years. The company was well known for its employee-friendly HR practices. Infosys established in 1981 and gradually, it was listed global consulting and IT Services Company with more than 200,000 employees grew to become a US$ 2 billion company by the year 2006. Infosys attracted the best talent from across the world and recruited candidates by conducting one of the toughest selection processes. All the selected candidates were required to go through an intensive 14-week training program. All the employees were required to undergo training every year, and some of the chosen employees were trained at the Infosys Leadership Institute to take on higher responsibilities in the company. Infosys was one of the first companies to offer ESOPs to its employees. The company followed variable compensation structure where the employees' compensation depended on the performance of the individual, the team and the company. (Vivek, G, & Indu, P., 2006).

3.2. HRD Practices of Infosys

- To nurture of the future leader, the company was set up Infosys Leadership Institute (ILI) in 2001 for effectively manage the exceptional growth of the company.
- PA of Infosys is based on employees skills for assigned task especially timeliness, quantity of work, correlation among peer, customer satisfaction. The PA is also focused learning and analytical ability with communication skills, decision making, change management, and planning and organizing skills.
- The culture of the Infosys tried to preserve the attributes of a small company and worked in small groups, with decision-making Vivek, G, Indu, P.,(2006).

3.3. HRD Practices of WIPRO

Wipro is one of the most recognized companies in the IT space and its reputation is based in the future growth of the company. The company has received innumerable corporate awards that speak for the innovations introduced by them and the various milestones achieved.

Milestones on the Path to Glory

Wipro won the 'Best IT Solution Partner Award' by Cisco

- Wipro won the 'Association for Talent Development' BEST (Building talent Enterprise-wide Strategically) award for 2016
- Wipro won "Excellence in Diversity & Inclusion" award & "Employer with best Employee Health and Wellness Initiative" award at SHRM India HR Awards 2016
- Wipro was awarded a runner-up in "Excellence in Talent Sourcing & Staffing" at SHRM India HR Awards 2016
- Wipro was awarded runners Up in "Diversity & Inclusion" in the Corporate HR Best Practices category at NHRD HR showcase 2016 (WIPRO Awards and Recognitions 2017, https://www.wipro.com.)Wipro focuses on implementing recommendations of HR audits

HRD Practices

Wipro is an organization with an employee base of over 1, 70,000. And HR audit practices have helped to improve its employee services, efficiency and control mechanisms. HR audits aimed at process efficiency covers the entire employee lifecycle – from hire to retire including compensation and payroll, recruitment, learning, performance management systems and retirement, all are formally audited. While processes like succession planning and leadership development are not audited formally.

In this regard, there are three principal areas which are critical for audit purposes in HR: the first is payroll, given that the WIPRON has a large employee base; the second area is recruitment including background checks; and the third area is employee separation – with a gamut of employee exits, processes such as final settlements and closures. (*WIPRO Strategic HR, HR Audit Study, 2016*).

As per the HRD Audit process, here the WIPRO has been doing an audit once a year with having very strong dedicated HR resources for HRD Audit and it process do continue as per the process dependent. It has been proved that the WIPRO HRD practices have been confined is only for policies formulation but also the right time it implemented it for the long-term financial gain of the company through discipline and engaged employees.

3.4. HRD Practices of TCS

India's largest IT exporter with 2, 26,000 employees, has topped the BT-Indicus survey of 'India's Best Companies to Work for' for the first time ever. The company's Vice President and Head of Global HR, Ajoyendra Mukherjee, told about what helped TCS reach the top of the list.

4. Need for the study

As we know that any organisational performance is purely dependent on the real performance of their people if they are well committed to their job. In this context, high-performance work systems could have helped to achieve a lot to the financial performance of the company. Therefore, we will need to prove that how the effect of HRD has on positive impact on the operational performance of the firms which can help perceived high-performance work systems for firm financial growth.

5. Research Objectives

To extant review of the literature, as a researcher, we can come to the conclusion that to equal with the rest of the world in view of economic, technology, production, it is so essential for the IT industries that to access the future organizational financial performance through high-performance work systems. Hence, the following are the research objectives to be discussed and focused related to the effect of innovative HRD Practices on Perceived high-performance work systems;

- To access high-performance work systems and HRD practices of the IT industries in India.
- To measure the effects of HRD practices towards enriching high-performance work systems of the IT Industries.
- To establish a relationship between a dependent and Independent variable of the proposed study

through correlation Equation.

5.1. Research Hypothesis

Based on the research objectives, extant literature review, the present business and economic environment of the country, the following null hypothesis was formulated.

- **H0:** There is no significant difference exist among the IT Industries in variables wise.
- **H0:** Significant relationships do not exist in the perception of employees regarding HRD practices for high-performance work systems between Senior and Junior Employees
- **H0:** There is no correlation exist between the IT companies of their HRD practices.

6. Research methodology

6.1. Data

For the purpose study, we have selected three IT industries for the proposed study. In this study, we have collected samples for full-time employees belonging to this company and also those who were very recently left the company. The present study is a problem identification research, a sample size of 100 was targeted from different sections of employees in the different department and finally, we could achieve 60 samples from each company in the proposed study. During the sample design some of the control categories/characteristics (based on the nature of population) were developed/ identified like work groups, education and age and also the quotas were assigned so that the proportion of the sample elements possessing the control characteristics will be the same as the proportion of population elements with these characteristics.

6.2. Questionnaire on HRD Practices for perceived High-Performance Work Systems in Indian IT industries

For measuring effective HRD practices and high-performance work systems of different IT industries located in India, we have developed standard research questionnaire with a proper investigation of the HRD practices parameter. Also, in this context, we had taken aid and advice of experienced academicians, managers in different industries and research persons respective this fields with having five important parameters and each parameter having 5 statements (items) and scale ranging from 5 (Strongly Agree) to 1 (Strongly disagree) to measure the elements of effectiveness of HRD practices and high performance work systems as per the employee perceptions in present context.. The respondents were asked to rate each item on a five-point scale ranging from 5 (strongly agree) to 1 (strongly disagree).

6.3. Reliability Test- Reliability Test Statistics

For this study, first, we have used Cronbach alpha to test the reliability of the collected data for the proposed study. Table 6.1 shows the reliability of the data where the value of Cronbach's alpha was found to be 0.812, which shows that the data was 81.2 % reliable in the WIPRO. Whereas TCS and INFOSYS are concerned, we were found that 71% & 81% having reliable for the proposed study.

Table 6.1
Reliability Statistics

Companies	Cronbach's Alpha	N of Items	N of Cases
WIPRO	.812	60	60

TCS	.712	60	60			
INFOSYSIS	.814	60	60			

Source: Primary Data

6.4. Statistical Instruments Used for Measures

In this study, to analyse and interpret the collected data, various statistical measures have been used such as Mean, Standard Deviation, Variance, ANOVA, correlation and Z statistics were developed. It has been performed through SPSS 19 (trial version) MS Excel 2007.

6.5. Descriptive Analysis

Next, to reliability analysis, descriptive analysis is one of the most important diagnoses tools for study the character of data. As per stated by Malhotra (2005), the distribution is said to be normal, if it takes a bell-shaped curve and thereby the skewness and kurtosis computed out of the data becomes equal to zero. Any distribution is said to be normal when the values of skewness and kurtosis are equal to zero. Absolute values of univariate skewness indices greater than 3.0 seem to describe extremely skewed data sets and absolute values of the kurtosis index greater than 10.0 may suggest a problem. Out of the 25 variables taken in the questionnaire and implemented on 180 respondents for generation of primary data, none have reported skewness of more than 3.0 or kurtosis of more than 10.0. In the prescribed scale from '1' to '5' denoting 'Not Agree At All' to 'Strongly Agree', the means of perception varied in between a range of 2.93 to 4.09 which imply that perception of the respondents is near about their expectations on most of the attributes related to high performance is purely influenced by the HRD practices of the IT Industries in India. The scores were tightly packed around the mean (standard deviation ranging from 1.07. to 1.68), indicating that scores are very near to their mean values. The skewness is ranging between -0.09 to -0.89 while the kurtosis is ranging between -1.73 to 1.62. It means there are most of the items which are generating negatively skewed distributions and also there are another group of items that are generating slightly towards positively skewed distributions. In other words, the data so generated have unveiled mixed results.

Table 6.2
Descriptive Analysis (n = 180)

Parameters	Variables	Range	Mean	Std.Dev.	Variance	Skw.	Kurt.
HRD climate	1		3.33	1.21	1.46	-0.44	-0.72
	2		2.93	1.26	1.60	-0.60	-1.31
	3		3.59	1.35	1.82	-0.82	-0.79
	4		3.20	1.30	1.70	-0.93	-1.28
	5		3.74	1.07	1.14	-0.77	0.85
Company Training	6		4.09	1.12	1.26	-0.57	1.62
	7		3.77	1.27	1.62	-0.34	-0.70
	8		3.93	1.10	1.21	-0.30	1.27

Assessment	9		2.89	1.32	1.75	-0.15	-1.30
	10		3.08	1.41	1.99	-0.20	-1.43
Leave policy	11		3.34	1.35	1.83	-0.13	-1.21
	12		3.26	1.26	1.59	-0.18	-0.68
	13		3.07	1.46	2.15	-0.09	-1.43
	14		3.06	1.39	1.92	-0.06	-1.44
	15		2.93	1.28	1.64	-0.21	-1.29
Career Planning	16		3.17	1.34	1.80	-0.33	-1.01
	17		3.03	1.41	1.98	-0.28	-1.42
	18		3.24	1.32	1.75	-0.44	-1.35
	19		3.62	1.42	2.02	-0.49	-0.92
	20		3.41	1.31	1.73	-0.38	-1.30
Other Practices of the Company	21		3.33	1.40	1.95	-0.34	-1.51
	22		3.65	1.18	1.40	-0.37	-0.02
	23		3.31	1.67	2.80	-0.20	-1.58
	24		3.03	1.68	2.81	-0.11	-1.71
	25		3.11	1.71	2.93	-0.15	-1.73

Source: Primary Data

7. Testing of hypotheses

7.1. H0: There is no significant difference exist among the IT Industries in variables wise

In this section, we came to the conclusion that null hypothesises are rejected most of the variables among the IT Industries. It represents that there is significant difference exists among the IT Industries in India. Interestingly, we found the same characters in our brief review of HRD practices of the three IT Industries. Subsequently, a few variables do not have any significant difference (See table-7.1) because of common characteristics of the Industries and it is very good sign which represent that the HRD practices of the companies are as per market trends and advancement of the technologies. In this juncture, if we would like to discuss the HRD practices towards high - performance work systems, definitely there are lots of the scopes are remain exit for the further development of the systems, if we

assume the perception of the employees in these three Industries in the true sense. In this study, we have taken five parameters having five variables each to measure the real sense of the HRD practices for the high-performance work system of the IT Industries. It is very interesting that we have found there is negative correlation exists between the two importance parameter named career planning and others HR practices of the IT Industries.

Table-7.1.
One way ANOVA

		Sum of Squares	df	Mean Square	F	Sig.	
Identifying the potential of the employee	Between Groups	2.700	2	1.350	.922	.400	
	Within Groups	259.300	177	1.465			
	Total	262.000	179				
Inter-personal relation between supervisor and employee	Between Groups	9.211	2	4.606	2.944	.055	
	Within Groups	276.850	177	1.564			
	Total	286.061	179				
Enjoying work in the organization	Between Groups	26.978	2	13.489	7.996	.000	**HRD climate**
	Within Groups	298.600	177	1.687			
	Total	325.578	179				
People of the organization are helpful to each other	Between Groups	24.233	2	12.117	7.644	.001	
	Within Groups	280.567	177	1.585			
	Total	304.800	179				
Satisfaction with employee welfare facility	Between Groups	10.178	2	5.089	4.641	.011	
	Within Groups	194.067	177	1.096			
	Total	204.244	179				
	Between Groups	10.544	2	5.272	4.343	.014	

Training for Development and Growth	Within Groups	214.850	177	1.214			
	Total	225.394	179				
Increase your skills and knowledge	Between Groups	23.433	2	11.717	7.774	.001	
	Within Groups	266.767	177	1.507			
	Total	290.200	179				
Orientation Programme	Between Groups	1.078	2	.539	.444	.642	**Company Training Assessment**
	Within Groups	214.983	177	1.215			
	Total	216.061	179				
Job training programme	Between Groups	28963.600	2	14481.800	141.503	.000	
	Within Groups	18114.600	177	102.342			
	Total	47078.200	179				
Improve employee employer relationship	Between Groups	14.078	2	7.039	4.168	.017	
	Within Groups	298.917	177	1.689			
	Total	312.994	179				
Satisfied with your existing leave policy	Between Groups	5.078	2	2.539	1.277	.281	**Leave policy**
	Within Groups	351.833	177	1.988			
	Total	356.911	179				
Co-operative during the time of your emergency leave	Between Groups	44.411	2	22.206	13.105	.00	
	Within Groups	299.917	177	1.694			
	Total	344.328	179				

		Sum of Squares	df	Mean Square	F	Sig.	
Current company HR helpful for your career	Between Groups	2.178	2	1.089	.660	.518	
	Within Groups	291.883	177	1.649			
	Total	294.061	179				
Company offers you go for a foreign tour	Between Groups	11.211	2	5.606	3.196	.043	
	Within Groups	310.450	177	1.754			
	Total	321.661	179				
Training and development is really helpful for your career	Between Groups	3.633	2	1.817	.918	.401	Career Planning
	Within Groups	350.167	177	1.978			
	Total	353.800	179				
current project is helps to the developing your career	Between Groups	4.678	2	2.339	1.342	.264	
	Within Groups	308.567	177	1.743			
	Total	313.244	179				
Your manager is co-operative for your career growth	Between Groups	5.511	2	2.756	1.367	.258	
	Within Groups	356.800	177	2.016			
	Total	362.311	179				
Company offers Interesting and Challenging Work	Between Groups	54.078	2	27.039	18.745	.000	
	Within Groups	255.317	177	1.442			
	Total	309.394	179				
working hour of your company	Between Groups	30.178	2	15.089	8.360	.000	
	Within Groups	319.483	177	1.805			

	Total	349.661	179				
Rate the overtime allowances offered by the organization	Between Groups	10.833	2	5.417	3.993	.020	**Other Practices of the Company**
	Within Groups	240.117	177	1.357			
	Total	250.950	179				
The company offers Reasonable Work Places	Between Groups	79.344	2	39.672	16.670	.000	
	Within Groups	421.233	177	2.380			
	Total	500.578	179				
The company care for the night shift employee	Between Groups	133.233	2	66.617	31.819	.000	
	Within Groups	370.567	177	2.094			
	Total	503.800	179				

7.2. H0: Significant relationships do not exist in the perception of employees regarding HRD practices for high-performance work systems between Sr. Technician and Junior Technician

In this section, we have used z statistics for the testing hypothesis; it has been proved that there is no significant difference exists between the all level means vs. Sr. Technicians of the IT industries. Further, we found there are perception difference exist between the two workgroups of the company i.e, "Training Programs are conducted here for the Development and Growth", "The training programme   helps to increase your skills and knowledge", & "The orientation provided your company is really helpful to you" having mean 3.26, 3.22 & 3.03 which are significantly low as compare to Sr. Technicians and all level means.

Table: 7.2
Analysis among Work Groups

Work Groups --->	ALL Level (N=180)	Sr.Technicians (N=80)		Jr.Technicians (N=100)	
Description/Attributes	**Mean**	**Mean**	**SD**	**Mean**	**SD**
HRD Climate	3.36	3.39	1.23	3.35	1.28
Top management of the organization makes efforts of identifying the potential of the employee	3.33	3.36	1.20	3.35	1.24
Satisfied with your organization's inter-personal					

relation between supervisor and employee	2.93	2.99	1.19	2.97	1.28
Enjoying your work in the organization	3.59	3.70	1.27	3.52	1.34
The people of the organization are helpful to each other	3.20	3.19	1.28	3.16	1.32
Overall satisfaction with employee welfare facility.	3.74	3.68	1.06	3.73	1.09
Training & development	3.55	3.51	1.31	3.43	1.27
Training Programs are conducted here for the Development and Growth.	4.09	4.08	1.17	3.26*	1.34
The training programme helps to increase your skills and knowledge.	3.77	3.84	1.32	3.22*	1.28
The orientation provided your company is really helpful to you	3.93	4.01	0.99	3.03*	1.48
Satisfied with the on the job training programme provided by of your company.	2.89	3.06	1.32	3.11	1.40
The training programme is helping to improve employee-employer relationship.	3.08	3.13	1.39	2.97	1.30
Leave policy	3.13	2.99	1.33	3.12	1.36
Satisfied with your existing leave policy provided by your company.	3.34	3.10	1.35	3.26	1.34
Rate for maternity leave (women employee).	3.26	3.26	1.25	3.22	1.28
The leave policy of your company is better than other IT company.	3.07	2.90	1.41	3.03	1.48
Think there are some modifications needed for your leave policy.	3.06	3.18	1.39	3.11	1.40
Think your manager is co-operative at the time of your emergency leave.	2.93	2.63	1.21	2.97	1.30
career planning	3.30	3.38	1.37	3.32	1.38
Think the current company is helpful for your career.	3.17	3.31	1.32	3.18	1.37
The company offers you go for a foreign tour.	3.03	2.91	1.36	3.08	1.42
The training and development provided by your organization are really helpful for your career.	3.24	3.10	1.37	3.30	1.33
The current project in which you are working now is helping to the developing your career	3.62	3.78	1.35	3.56	1.42

Your manager is co-operative for your career growth.	3.41	3.74	1.27	3.47	1.31
Other HR Practices	3.29	3.20	1.56	3.36	1.53
The Environment in this Company offers Interesting and Challenging Work.	3.33	3.25	1.44	3.39	1.40
Rate the working hour of your company?	3.65	3.51	1.31	3.63	1.21
Rate the overtime allowances offered by the organization	3.31	3.16	1.66	3.42	1.63
This Company offers Reasonable Work Places.	3.03	2.85	1.62	3.13	1.66
The company cares for the night shift employee?	3.11	3.23	1.70	3.21	1.69

*Note: ' * ' --> Significantly Lower@95% Level Compared with the other Group mean & '_ '--> Significantly Higher/Lower@95% Level from the All Level Score*

It is proved that all the IT industries Jr. Level of Technician is expecting more from the company related to the training related activities which are directly linked to their career. As concerns of Sr. Technician are concerns, they have already well known the systems of HRD practice and also availed the practices to enrich their career. Hence, further, they are highly satisfied as compare to the Jr. Technicians.

In this context, it has been advised to the top level management of the IT Industries to implement 720 degrees performance appraisal process for continuous observation and mentoring of the newly joined employees who are having high expectation to improve their career otherwise it will affect the successor planning and high-performance work systems which ultimately affected the financial losses of the company.

7.3. HO: There is no correlation exist between the IT companies of their HRD practices

Through the correlation, we found from the table-5.3 that there are positive and negative correlations of coefficient exist having statistically different among the factors of HRD practices of IT Industries.

Table: 7.3
Correlation

	HRD Climate	Training Practices	Leave Policy	Career Planning	Other HR Practices
HRD Climate	1	.027	.180*	-.267**	-.206**
		.724	.016	.000	.006
	180	180	180	180	180
Training Practices	.027	1	.259**	.206**	-.157*
	.724		.000	.006	.035

Leave Policy	.180*	.259**	1	-.046	-.201**
	.016	.000		.543	.007
Career Planning	-.267**	.206**	-.046	1	.344**
	.000	.006	.543		.000
Other HR Practices	-.206**	-.157*	-.201**	.344**	1
	.006	.035	.007	.000	
Source: Primary Data					

Out of five parameter, we found three parameter of HRD practices for high performance work systems i.e. (HRD Climate, Strategic for training Practices and Leave practices of the companies) having positive correlation among each other's whereas another two parameter named "Career planning and Other practices of the companies" having negative correlation with rest of three factors of this organisation. Hence, it proved that the three variables are somewhat extant perfectly positively correlated and lie positively sloped straight line. Therefore, it supports the hypothesis and makes clear that an improvement is essential for improving the level of HRD practices for the effectiveness of high-performance work culture and systems of which in turn will bring positive changes in Organizational Performance of the company, basically it would help a lot for motivation of employee's attitudes and commitment. In the same time, it has been advised to the management of the organisations that training need identification and training design and its policy may not be rightly correlated each other due to having hidden problems within the organisations, hence management will do properly the brainstorming session with the presence of top-level managers for improvements their career-related problems

8. Factor analysis for HRD practices for high-performance work systems

Factor analysis was used to remove the redundant variables from the survey data and to reduce the number of variables into a definite number of dimensions. The application was done in SPSS19.0. Factor analysis was performed using principal components extraction methods with varimax rotation. Further, the variables were classified into five dimensions based on the factor loading scores. Before analysis all of the variables, we would explain briefly reliability of data related to factor analysis.

8.1. Kaiser Meyer Olkin (KMO) and Bartlett's Test

Table-8.1
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.706**
Bartlett's Test of Sphericity	Approx. Chi-Square	**1748.466**
	Df	**325**
	Sig.	.000

To determine the appropriateness of factor analysis for identified variables of HRD practices,

Kaiser Meyer Olkin (KMO) test and Bartlett's test were performed. KMO measure the magnitude of observed correlation coefficients to the magnitude of partial correlation coefficients whereas Bartlett's measures the correlation of variables. The KMO measure was observed to be 0.706 and Bartlet's test showed a value of 0.00. Hence, it can be interpreted that there was no error in 70.60% of the sample. The level of significance, which is less than 0.05 is desirable and acceptable as shown in table 8.1. Finally, it can conclude that data collected for this research was appropriate for factor analysis. According to the Kaiser Mayer-Olkin (KMO) test (1974) recommends accepting values greater than 0.5 as acceptable. A measures >0.9 is measure "marvelous", > 0.8 is "meritorious" > 0.7, is "middling" > 0.6, is "mediocre", > 0.5 is "measurable" and < 0.5 is unacceptable.

8.2. Results of rotated factors analysis for HRD practices for High - Performance Work Systems

From the below table-8.3, each factor loading values represent the partial correlation between the variables the rotated factor by inferring a common thread among the variables that have large loading above 0.5 values for a particular factor.

Table 8.2
Rotated Component Matrix

Factors	Variables	Factore				
		Factore-1	Factore-2	Factore-3	Factore-4	Factore-5
FACTOR-1	V12	-0.593				
	V21	0.767				
	V22	0.705				
	V25	0.676				
FACTOR-2	V1		0.841			
	V2		0.855			
	V4		0.59			
	V15		0.751			
	V16		0.714			
FACTOR-3	V3			0.746		
	V5			0.79		
	V6			0.401		
	V7			0.473		
	V8				.679	
	V10				.709	

FACTOR-4	V11				.631	
	V17				.440	
	V20				.852	
	V24				-.600	
FACTOR-5	V9					-.645
	V13					-.535
	V14					.700
	V18					.481
	V19					.484
	V23					.726
	Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.					

The above exploratory factor analysis revealed that the 25 items considered for testing were sufficiently loaded with value more than 0.4. The principal component analysis through varimax rotation revealed that there are five important factors categorized the25 items which were then renamed as Work Flexible Environment, Career planning, Training Enhancement Programmes, High-performance work systems and Employee well-being policies of the company.

9. Managerial implications

In the above discussion, we found that irrespective of the differences in view between different segments of people in the population (generalized from the sample results), it can be said that employees of the IT industries really value their HRD practices for high-performance work systems which directly link to the financial performance of the company. In the above study, we suggest to the top level management of the company that for further enriching of the work systems, the above factors (Getting from Factor Analysis) to be given first priority for improving the work systems. Dr Bruce Tuckman suggested that for group dynamics, developed a four-phase model such as; forming, storming, norming and performing which can help team building, system maturity and high-performance work systems

Especially, it should give importance for right career planning for newly joined employees who have tremendous energy for taking the new project as and when required. In this juncture, it is very closely observed to overcome the common barriers faced by High-Performance Work Teams like; Nonparticipation leadership, Poor decision-making, infrequent communication and diversity not valued. (SHRM,2015). Accordingly, the effectiveness of HRD practices not only helped to the employees for their personal growth but also attracting best talents from the industry and also to retain them.

10. Scope for further study

The result of this study is mainly focused an IT sector units in India, but in general, it can

also be applied to the other industries in India and abroad considering and depending on the organizational structure, cultures and size of the organisation and business functioning areas. However, this research study has substantial scope for extension – both in terms of breadth as well as depth.

The present study is an attempt to find out the problem areas about HRD Practices for high-performance work systems of IT Industries in India. From this study, we came to conclusion that there is lots of the scope for further development of the especially HRD practices to enriching the real work systems of the industries.

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