# HUMAN RESOURCE MANAGEMENT APPLICATION IN IT INDUSTRY, THIRUVANANTHAPURAM

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### Abstract

Competitive advantage of a company can be generated from Human Resources (HR) and company performance is influenced by set of effective HR applications. Companies today need to be fast growing, efficient, profitable, flexible, adaptable, and future-ready and have a dominant market position. Without these qualities, firms believe that it is virtually impossible to be competitive in today's global economy. Under present market forces and strict competition, the software companies are forced to be competitive. Software companies must seek ways to become more efficient, productive, flexible and innovative under constant pressure to improve results. HR applications help increasing in productivity and quality and to gain the competitive advantage of a workforce strategically aligned with the organization goals and objective.

The proposed title of the article is "Human Resource Management Applications in IT Industry, Thiruvananthapuram". The main objective of this article is to analyze the HR activities such as job stress and green HR practices in IT industry. This study also aims to solve the issues of IT professionals during their work time.

Information Technology is one of the most important industries in Indian economy. The IT industry of India has recorded a huge growth in recent years. IT contributes 8% of country's economy. Even though the employment opportunities are increasing year by year, the workload and work pressure are also increasing rapidly. Employees are, simply put, not respected and cared for. The main objective of this article is to identify the factors causing stress to the IT professionals and giving suitable remedial suggestions to overcome this. The primary data is collected from the IT Professionals from different IT companies of Technopark Trivandrum. The secondary data's are from books, journals and websites. For this research, 382 samples of Convenient Sampling method. The researcher used chi-square test, ANOVA, and correlation for this research.

This article is concluded with some suggestions to the IT industry to increase productivity and performance among the IT professionals.

## **INTRODUCTION**

Information Technology (IT) is termed as the growth and implementation of computerbased information system, hardware and in particular software applications. Now, it has progressed in all the fields of computing and technology.

Today, everything and anything is being computerized across the world. Almost every country is linked by the World Wide Web. Almost all companies, business endeavors and government department both Central and State are linked through either intranet or internet. So the IT sector is very important to the growth of any nation. Human resource is the key factor in the progress of IT sector. So the dedication of IT professionals towards the job is vital for the healthy growth of this industry.

In the modern world where the competition is hard among different production units, human resource is believed as the most precious and challengeable asset of an organization. An organization, may be small or large, formal or informal, is composed of heterogeneous human resources who differ from each other in their skill, knowledge and psychology. Thus, human resource is the finest asset of any type of the organization.

### **IT INDUSTRY IN INDIA**

Indian Information Technology industry has a tremendous growth over the last decade. IT industry is composed of information technology enabled services, software industry and business process outsourcing industry. India is assessed as a forerunner in software development. Also India leads to a desired target for IT-enabled services.

India is home to a numeral of IT monsters. Indian labor market has changed by the large and medium players of IT industry such as Infosys, TCS, Wipro, etc. in various places. The software industry is constantly developing in India. It is a leading destination for the IT and ITES services worldwide. The top 20 IT companies have added over 64 percent to the combined revenue according to a study by Dataquest Research in 2011. The IT industry in India was kick-started by highly talented entrepreneurs from India. But the helpful policies of the government worked as a catalyst in shaping the future of IT industry in India as a growth driver. The special status allotted to the industry by the government through tax holidays and other incentives helped it in a great way to compete with vendors from developed countries and secure huge orders.

## HUMAN RESOURCE MANAGEMENT

Human Resource Management is the managing of people in organizations and their problems related to communication, training, performance, motivation, safety, etc. In brief, HRM is the skill of managing people at work for achieving organizations goal.

Human Resource Management today has to play a more strategic and business partnership role. Every organization controls a portfolio of powerful tools, through which it can influence or seek to influence employee attitude and behavior. The Human Resource Management applications constitute an important subset of the above portfolio.

Human Resource Applications can satisfy an employee's need to feel comfortable in the work-relationship with the organization and can make him/her feel comfortable in the work environment.

### HUMAN RESOURCE MANAGEMENT APPLICATIONS

Human resource management applications can be explained in different aspects. HRM applications as a plan to attract motivate and retain the employee for the endurance of business and organization (Schuler and Jackson, 1987). Moreover, HRM applications are described as a set of plans and policies which are described and implemented inside the organization to achieve its goals. Likewise, (Minbaeva, 2005) stated HRM applications as a set of applications to run the organizations human resources with certain competencies to produce organizations knowledge to continue competitive advantage. Similarly, HRM applications are certain specific practices and policies that are planned to attract, motivate and retain the employees of the organization for the befit of attaining its goals.

## STATEMENT OF THE PROBLEM

Information Technology is one of the dominant industries in India. This industry has witnessed a massive growth in recent decades. Even though the employment opportunities are increasing year by year, the workload and work pressure are also increasing rapidly. The Indian workforce in information technology industry has obtained the name of 'low cost' technical workers with 'high quality' of work. This makes the industry in a growing part with good growth rate.

The effectiveness of human resources employed depends to a larger extent how they are inducted, developed, evaluated and maintained. Moreover the organizations growth and success depends upon the success of its employees. Hence organization needs to formulate best strategies for its human resources and facilitate in achievement of organizational objectives. The present title focuses on various HRM applications in terms of job stress and green HR in IT industry.

### **SCOPE OF THE STUDY**

Information Technology is the most significant industry in India. The growth of IT industry is noted in the recent decades. The growth of IT industry can be revealed by its contribution to the country by means of GDP (Gross Domestic Product), employment opportunities, exports and revenues. Hence the study focused Thiruvananthapuram IT Industry in Kerala. Since Kerala is one of the positive locations for IT industries to flourish with all sort of resources.

An organization can reach its maximum potential, if each employee develops and achieve goals that support personal and organizational success. Even though the employment opportunities are increasing year by year, the workload and work pressure are also increasing rapidly. This leads to strain which is called as occupational stress. This article analyzed various factors of job stress in the workplace of IT professionals.

Human resource management not only helps the organization but also helps the progress of a nation. With the help of devoted and efficient manpower potential only a nations resources can managed and used. The growth of a country depends upon the skills and attitudes of its human resources. In order to analyze the healthy working environment in terms of environmental policies and practices, this article covered the various green HR practices available and followed in the industry.

## **OBJECTIVES OF THE STUDY**

The objectives of the present study are specified as follows.

To analyse socio economic profile of the IT Professionals selected from Thiruvananthapuram.

- > To analyze job stress in workplace of IT professionals in Thiruvananthapuram.
- > To analyze the green HR practices in IT industry Thiruvananthapuram.

### **HYPOTHESES**

Based on the above objectives the following hypotheses have been framed and tested.

 $H_10$ : There is no association between job stress and demographic factors of the IT Professionals.  $H_20$ : There is no association between green HR policies and level of employment of the IT Professionals.

## **RESERCH METHODOLOGY**

### **Research Design**

Both primary and secondary data were gathered from internal and external sources. The primary data were collected through structured questionnaire. The respondents for this study were selected through multistage sampling method. The researcher adapted descriptive study to solve the research problem.

# **Sampling Procedure**

This study is about the Human resource management applications prevailing in the Information Technology industry in Thiruvananthapuram. The respondents are the IT professionals working in Thiruvananthapuram IT industry. The researcher adapted descriptive study to solve the research problem. Both primary and secondary data were gathered from internal and external sources. The primary data were collected through structured questionnaire. Since the population size of IT Professionals in Thiruvananthapuram is quite big (46,000), the researcher used convenient sampling for the study. Sample size for the study is 382. The required samples are selected randomly from the IT firms.

### **Sources of Data Collection**

This study is based on both primary and secondary data. To get an authentic data the researcher collected the primary data by means of a questionnaire. To collect primary data a structured questionnaire has been used. Primary data is collected from top level, middle level and low level employees. For getting different views from other researchers and authors secondary data also gathered for the study.

## **Tools Used for Analysis**

The various data are analysed with the help of SPSS 20.0 Descriptive and inferential statistical tools were used to obtain different measures. The researcher used Statistical tests like

Chi-Square test, ANOVA, and Correlation for the analysis of collected data. These tools are identified by the researcher to get optimum results for the proposed hypothesis.

## LIMITATIONS OF THE STUDY

This study is limited to the IT companies in Technopark, Thiruvananthapuram .Each study has its own limitations which are beyond the control of the researcher. The researcher collected 382 samples for the study. Most of the employees are very reluctant to give information. Some of the employees are reluctant to cooperate, because of their busy schedule. The conclusion of the study is purely based on sample opinion of the IT Professional. Therefore the inference from the study may not be generalized.

## **REVIEW OF LITERATURE**

Oladinrinet al., (2014) analysed the sources of stress and the impact of stress on productivity among the construction professionals. Also this study examined the effective ways of managing stress among these professionals. Descriptive statistical analysis is used in this study. This study concluded that staff shortage and conflicting roles are the main reasons for job stress. Stress can be avoided by dividing work and correct planning in sharing the task. From the study, it is also concluded that stress has a greater impact on productivity of professionals.

Arulrajah *et.al.*, (2015) studied the different practices of green HR practices based on the existent literature. It reveals that much of the past research focused on a few functions of HRM such as recruitment, training and development, performance evaluation and reward management in integrating environmental management with HRM though HRM has more potential and scope in improving organisation's environmental performance. Hence, this review incorporates diverse functions of HRM to explore the respective green HRM practices under those functions. The findings of the review have identified and highlighted several green HRM practices under the human resource management functions. The HRM functions are classified into 12 functions. They are planning, job design, recruitments, selection, job design, training, performance evaluation, motivation, discipline, and health and safety management and employee relations. The contribution of this paper lies in extending the scope and depth of green HRM in materializing sustainable environmental performance of organisations.

Kennedy and Anne (2015) examined the role of employee outcome have any influence over the human resource management practices and performance of employees. This study carried out in a developing country context. Data were collected from the employees of government organizations with the help of structured questionnaire. To analyze the collected data, multiple regression analysis was used. The results shows that HRM practices have a significant influence on organizational performance. Regression analysis indicates that the employee outcome mediates the influence of HRM practices and performance of employees.

## ANALYSIS AND INTERPRETATION OF DATA

This is the most significant part of the study. It deals with the appropriate analysis and the interpretation of the data pertaining to the study with appropriate statistical tools and techniques. All the findings and conclusion of the study depend upon the analysis of data.

## SOCIO ECONOMIC PROFILE OF IT PROFESSIONALS

This section gives the socio economic profile of the IT Professionals selected from Thiruvananthapuram. This section comprises of the IT Professionals age, gender, marital status, designation, educational qualifications, experiences and annual income.

Table.1 showing the classification of Gender, Age and Marital Status of IT Professionals in

Description		No. of Respondents	Percentage
Gender	Male	205	53.7
Genuer	Female	177	46.3
	Below 25 years	157	41.1
	25-30 years	138	36.1
Age	30-35 years	68	17.8
	35-40 years	13	3.4
	Above 40 years	6	1.6
Marital Status	Married	174	45.5
Warnar Status	Unmarried	208	54.5

Kerala

Source: Primary Data

Table 1 exhibits that out of 382 respondents, 205 respondents are male which constitutes 53.7 per cent of the respondents, whereas, 177 respondents are female constituting 46.3 per cent of the respondents. It is observed that male employees are found to be flexible in working in the IT industry than the female, who need to address the night shifts and family care. Therefore, it is

found that male category is the bread winner of IT industry job than the female, who are highly motivated and suitable to working conditions in the IT industry.

Table 1 reveals that 54.5 per cent of the IT professionals were unmarried and 45.5 per cent of the IT professionals were married. It is inferred from the above table that most of the IT professionals (54.5 per cent) were unmarried. Therefore, it could be interpreted that IT industry nature of the job is very apt to the unmarried who are away from family.

The above Table 1 illustrates that 157 IT professionals are in the age group of below 25 years constituting 41.1 per cent of the respondents, 36.1 per cent of the respondents belong to the age group of 25 to 30 years, 17.8 per cent of the respondents belong to the age group of 30 to 35 years, 3.4 per cent of the respondents are in the age group of 35 to 40 years and only 1.6 per cent of the respondents are in the age group of above 40 years. It is clear that 41.1 per cent of the respondents lie in the age group of above 40 years which is the highest and 1.6 per cent of the respondents lie in the age group of above 40 years which is the lowest of all. Thus it is inferred that the IT industry catch the attention of IT professionals in the age group of below 25 years. There is the lowest percentage of the respondents who continue to be the employees of the IT industry who are in the age group of above 40 years. It is further inferred that, IT jobs are peculiarly suitable to youngsters who are below 25 years.

Description		No. of Respondents	Percentage
	BCA/Bsc/B.Tech/BE	243	63.6
	ME/M.Tech	21	5.5
Education	MBA	33	8.6
	МСА	79	20.7
	Ph.D	6	1.6
	One Year	87	22.8
	1 to 3 Years	132	34.6
Experience	3 to 5 Years	59	15.4
	5 to 10 Years	76	19.9
	Above 10 Years	28	7.3

**Table 2:** Table showing the Classification of Education, Designation, Experience and Annual

 Income of IT Professionals in Thiruvananthapuram

	1 Lakh	49	12.8
	1-3 Lakhs	131	34.3
Annual Income	3 – 5 Lakhs	70	18.3
	5 – 10 Lakh	105	27.5
	Above 10 Lakh	27	7.1
	8 Hours	293	76.7
Working hours	10 Hours	80	20.9
	Above 10 hours	9	2.4
	Top Level Employees	60	15.7
Designation	Middle Level Employees	86	22.5
	Low level Employees	236	61.8

Source: Primary data

Table 2 gives an account of the educational qualification groups, the number of respondents in each group and their percentage distribution. The above table indicates that 63.6 per cent of the respondents have completed BCA/Bsc/B.Tech/BE; 20.7 per cent of the respondents have MCA qualification; 8.6 per cent of the respondents have MBA qualification, 5.5 per cent of the respondents have ME/M.Tech qualification and only 1.6 per cent of the respondents have Ph.D .qualification. It is clear that 63.6 per cent of the respondents are possessing BCA/Bsc/B.Tech/BE which is the highest among various qualifications and 1.6 per cent of the respondents are Ph.D qualified which is the least of all.

The above table 2 shows that 34.6 per cent of the respondents have gained work experience between 1 to 3 years, followed by 22.8 per cent of the respondents who have work experience of less than one year, 19.9 per cent of the respondents have gained work experience between 5 to 10 years and 15.4 per cent of the respondents who have work experience of 3 to 5 years. There are only 7.3 per cent of the respondents, having above 10 years of work experience.

Thus, it is very much clear that the highest percentage (34.6%) of the respondents are with 1 to 3 years of experience, and the lowest percentage of respondents (7.3%) do have the maximum years of experience above 10 years.

The above Table 2 indicates that 34.3 per cent of the IT Professionals are earning annual income of Rs.1 to 3 lakhs and 27.5 per cent of the IT Professionals are earning annual income of Rs.5 to

10 lakhs. There is 18.3 per cent of the IT Professionals are earning annual income of Rs.3 to 5 lakhs, 12.8 per cent of the IT Professionals are earning annual income of Rs.1 lakh and only 7.1 per cent of the respondents are earning above Rs.10 lakhs. It is obvious that very lowest (7.1%) of the respondents are earning annual income above Rs.10 lakhs. The highest (34.3%) of the respondents are earning annual income of Rs.1 to 3 lakhs.

Table 2 clearly shows that majority of 76.7 per cent of the employees are working 8 hours, about 20.9 per cent of the employees are working 10 hours and only 2.4 per cent of the employees are working above 10 hours.

Table 2 shows that majority of 61.8 per cent of the employees are low level employees, 22.5 per cent of the employees are middle level employees and the remaining 15.7 per cent of the employees are top level employees in IT industry.

## INFERENTIAL ANALYSIS ON SAMPLE

Inferential statistics is applied to interpret the collected data by using probability theory and other mathematical tools.

### Factors of Job Stress among Different Gender Group of IT Professionals

In order to test whether there is any relationship between gender of the employees and factors of job stress; 'Chi-square' test is used. The hypothesis is,

 $H_0$ : There is no significant difference in factors of job stress among different gender group of IT professionals.

The results of the Chi-square test applied for the gender group of employees on the job stress is presented in Table.

**Table 3**: Table Showing the Chi-Square Test for Factors of Job Stress among Different Gender

 Group of IT Professionals

Factors	Chi-Square Value	p Value	Inference
Uneven Work Target	103.836	0.000	Significant
Lack of Stimulus and drive	19.972	0.173	Not significant
Weak Environment	52.088	0.000	Significant
Lack of Opportunity for Self	102.940	0.000	Significant
Development	102.910	0.000	Significant

Source: Calculated Primary Data

From the above table, in case of the gender of the employees and the factors of job stress "Uneven work target, Weak environment and Lack of opportunity for self development." the null hypothesis is rejected at 5 percentage level of significance since the 'p' value is less than 0.05. Hence it is concluded that there is a significant relationship between gender of the employees and factors of job stress that "Uneven work target, Weak environment and Lack of opportunity for self development".

## Factors of Job Stress among different Age Group of IT Professionals

In order to check whether there is any relationship between age group of the employees and factors of job stress; 'ANOVA' test is used with the following hypothesis as,

H<sub>o</sub>: There is no significant difference in factors of job stress among different age group of IT industry employees in.

The resulted mean score among different age group of IT professionals on the factors of job stress and the respective 'F' statistics are presented in Table.

**Table 4** showing the ANOVA for Significant Difference between age group of IT professionalsWith Respect to the Job stress factors

Factors	Age	Sum of Squares	df	Mean Square	F	p Value
Uneven Work	Between Groups	343.185	4	85.796	0.000	0.000
Target	Within Groups	10896.553	377	28.903	2.968	0.020*
	Total	11239.738	381	-		
Lack of	Between Groups	135.890	4	33.973		0.025
Stimulus and	Within Groups	4482.043	371	12.081	2.812	0.025*
Drive	Total	4617.934	381	-		
Weak	Between Groups	200.286	4	50.071		0.024
Environment	Within Groups	7178.461	377	19.041	2.630	0.034*
	Total	7378.746	381			
Lack of	Between Groups	370.523	4	92.631	1.594	0.175
Opportunity	Within Groups	21909.469	377	58.115		

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for Self					
Development.	Total	22279.992	381	-	

Note: \*Denotes Significance 5% Level

Source: Calculated Primary Data

Table shows that a significant difference among the different age group of employees were identified regarding the different factors of job stress are time pressure factor, lack of recognition factor and lack of infrastructural facility factor since the respective "F" statistics was significant at 5 per cent level with 'p' value is less than 0.05. It reveals that there is a significant relationship between age of the employees and factors of job stress that "uneven work target, Lack of stimulus and drive and Weak environment".

## Factors of Job Stress among Different Education of IT Professionals

In order to analysis whether there is any relationship between education of the employees and factors of job stress, 'ANOVA' test is used. The following hypothesis is,

 $H_0$ : There is no significant difference in factors of job stress among different education of IT industry employees in.

The resulted mean score among different education of employees on the factors of job stress and the respective 'F' statistics are presented in Table.

Table:	5	Table	Showing	the	ANOVA	for	Significant	Difference	between	Educational
qualific	atic	ons of I	Г Professio	nals	with Respe	ect to	the Job Stre	ss factors		

Factors	Educational Qualification	Sum of Squares	df	Mean Square	F	p Value
Uneven Work	Between Groups	235.064	4	58.766		
Target	Within Groups	11004.674	377	29.190	2.013	.092*
	Total	11239.738	381	-		
Lack of Stimulus	Between Groups	103.356	4	25.839		
and Drive	Within Groups	4514.578	377	12.169	2.123	.077*
	Total	4617.934	381	-		
Weak	Between Groups	206.963	4	51.741		
Environment	Within Groups	7171.784	377	19.023	2.720	0.029
	Total	7378.746	381	-		
Lack of	Between Groups	466.251	4	116.563	2.015	0.092*
Opportunity for	Within Groups	21813.741	377	57.861		0.072

Self Development	Total	22279.992	381	-	
Development					

\*Denotes 5% Level of Significance

Source: Calculated Primary Data

Table shows that a significant difference among the different education of employees were identified regarding the different factors of job stress on weak environment since the respective "F" statistics was significant at 5 per cent level. The 'p' value is less than 0.05. It shows that there is a significant relationship between education of the employees and factors of job stress that "weak environment".

## Factors of Job Stress among Different Experience of IT Professionals

In order to examine whether there is any relationship between experience of the employees and factors of job stress, 'ANOVA' test is used.

H<sub>o</sub>: There is no significant difference in factors of job stress among different experience of IT industry employees in.

The resulted mean score among different experience of employees on the factors of job stress and the respective 'F' statistics are presented in Table.

**Table 6:** Table Showing the ANOVA for Significant Difference between Experiences of IT

 Professionals with Respect to the Job Stress Factors

Factors	Experience	SumofSquares	df	Mean Square	F	p Value
Uneven Work	Between Groups	141.646	4	35.411		
Target	Within Groups	11098.093	377	29.438	1.203	0.309*
Turget	Total	11239.738	381	-		
Lack of Stimulus	Between Groups	84.479	4	21.120		
and Drive	Within Groups	4533.454	371	12.220	1.728	0.143*
	Total	4617.934	375	-		
Weak	Between Groups	77.657	4	19.414		
Environment	Within Groups	7301.089	377	19.366	1.002	0.406*
Linvironment	Total	7378.746	381	-	-	
Lack of	Between Groups	170.306	4	42.576		
Opportunity for	Within Groups	22109.687	377	58.646	0.726	0.575*
Self	Total	22279.992	381	-		

Development			

Table shows that no significant difference among the different experience of employees were identified regarding the different factors of job stress uneven work target, lack of stimulus and drive, weak environment and Lack of opportunity for self development since the respective "F" statistics were not significant at 5 per cent level. Since the 'p' value is higher than 0.05. It is finalized that there is no significant relationship between experience of the employees and factors of job stress that "uneven work target, lack of stimulus and drive, weak environment and Lack of opportunity for self development".

## Factors of Job Stress among Different Annual Income of IT Professionals

In order to investigate whether there is any relationship between annual income of the employees and factors of job stress; 'ANOVA' test with the following hypothesis is used.

H<sub>o</sub>: There is no significant difference in factors of job stress among different annual income of IT industry employees in.

The resulted mean score among different annual income of employees on the factors of job stress and the respective 'F' statistics are presented in Table 7

**Table 7**: Table Showing the ANOVA for Significant Difference between Annual Incomes of IT

 Professionals with Respect to the Job Stress Factors

Factors	Annual income	Sum of Squares	df	Mean Square	F	p Value
Uneven Work	Between Groups	833.256	4	208.314		
Target	Within Groups	10406.482	377	27.603	7.547	.000**
	Total	11239.738	381			
Lack of	Between Groups	340.544	4	85.136		
Stimulus and	Within Groups	4277.390	377	11.529	7.384	.000**
Drive	Total	4617.934	381			
Weak	Between Groups	701.131	4	175.283		
Environment	Within Groups	6677.615	377	17.713	9.896	.000**
Liiviioiment	Total	7378.746	381		-	
Lack of	Between Groups	1293.256	4	323.314		
Opportunity for	Within Groups	20986.736	377	55.668	5.808	.000**
Self	Total	22279.992	381			

Development			

Table shows that a significant difference among the different annual income of employees were identified regarding the different factors of job stress are uneven work target, lack of stimulus and drive, weak environment and lack of opportunity for self development since the 'p' value is less than 0.01 respective "F" statistics were significant at 1 per cent level. Hence the null hypothesis is rejected at 1% level of significance. It reveals that there is a significant relationship between annual income of the employees and factors of job stress that "uneven work target, lack of stimulus and drive, weak environment and lack of opportunity for self development".

## Factors of Job Stress among Different Designation of IT Professionals

In order to find out whether there is any relationship between designation of the employees and factors of job stress; 'ANOVA' test is used. The following hypothesis used is,

H<sub>o</sub>: There is no significant difference in factors of job stress among different designation of IT industry employees.

The resulted mean score among different designation of employees on the factors of job stress and the respective 'F' statistics are presented in Table.

**Table 8**: Table Showing the ANOVA for Significant Difference between Level of Employment

 of IT Professionals with Respect to the Job Stress factors

Factors	Designation	SumofSquares	df	Mean Square	F	p Value
Uneven Work	Between Groups	239.102	2	119.551		
Target	Within Groups	11000.636	379	29.025	4.119	.017
Target	Total	11239.738	381	-	-	
Lack of Stimulus	Between Groups	118.549	2	59.274		
and Drive	Within Groups	4499.385	373	12.063	4.914	.008
	Total	4617.934	375	-		
Weak	Between Groups	434.075	2	217.038		
Environment	Within Groups	6944.671	379	18.324	11.845	.000
Liiviioiment	Total	7378.746	381			
Lack of	Between Groups	656.003	2	328.001	5.749	.003

Opportunity for	Within Groups	21623.989	379	57.055	
Self	Total	22279.992	381	-	
Development	Totur		501		

Table shows that a significant difference among the different designation of employees were identified regarding the different factors of job stress are uneven work target, lack of stimulus and drive, weak environment and Lack of opportunity for self development since the respective "F" statistics were significant at 5 per cent level. Hence the 'p' value is less than 0.05. It shows a significant relationship between level of employment of the employees and factors of job stress that "uneven work target, lack of stimulus and drive, weak environment and Lack of opportunity for self development".

## **Green HR Practices**

There is a need for environmental management across the world. Adoption of environment friendly policies in organization has got its name as green HRM. This section deals with the factor analysis of various green HR practices prevailing in the IT industry. And these limited factors are then analyzed with the demographic factors of IT professionals. Also the awareness of green HR practices among different level of employment was examined with the help of Chi-square test.

## Awareness of Green HR Practices and Level of Employment of IT Professionals

In order to validate the relationship between designation of the employees and green hr campaign programmes for employees to provide awareness about green hr issues, the following hypothesis were formulated.

 $H_0$ : There is no significant relationship between green HR practices among different level of employment of IT professionals in.

The results of the Chi-Square test applied for the organization is conducting green hr campaign programmes for employees to provide awareness about green hr issues among different designation of the employees are presented in table.

 Table 9: Table Showing the Chi-Square Test for Association between Level of Employment and

 awareness about the Green HR Practices in IT Industry, Kerala

Level of	Awareness about the Green HR	Total	Chi Square	P Value
employment	Practices in IT Industry	100	Value	r value

	Yes	Somewhat	No			
	51	1	8	60		
Top Level	(85.0)	(1.7)	(13.3)	00		
	[16.5]	[2.8]	[22.2]			
	64	9	13	86		
Middle Level	(74.4)	(10.5)	(15.1)	80		
	[20.6]	[25.0]	[36.1]		11.506	0.021*
	195	26	15			
Low Level	(82.6)	(11.0)	(6.4)	236		
	[62.9]	[72.2]	[41.7]			
Total	310	36	36	382		

Note: 1. The Value within ( ) Refers to Row Percentage

2. The value within [ ] refers to Column Percentage

3. \* Denotes Significant at 5% Level

From the Table, it clearly reveals that at the 5 percent level of significance the null hypothesis is rejected since the P value is less than 0.05. Hence, it is concluded that there is an association between awareness about green hr issues among different designation of employees. Therefore it may be stated that there is significant difference in organization in conducting green hr campaign programmes for employees to provide awareness about green hr issues among different designation of employees. From the table it is evident that each level of employees have some awareness about the green HR practices. Only 6.4 percent of low level employees, 15.1 percent of middle level employees and 13.2 percent of top level employees are not aware about the green HR practices in IT industry.

# Factors of Green HR Practices among Different Gender group of IT Professionals

In order to check whether there is any relationship between gender of the employees and factors of green HR practices, 'Chi-square' test is used with the following hypothesis as,

H<sub>o</sub>: There is no significant difference in factors of green HR practices among different gender group of IT industry employees in.

The results of the Chi-square test applied for the gender group of employees on the green HR practices is presented in table.

 Table 10: Table Showing the Chi-Square Test for Association between Gender and Factors of

 Green HR Practices in IT Industry, Kerala

Factors	Chi-Square Value	p Value	Inference
Effective Recognition and Support	107.475	0.000	Significant
Environmental Responsibility	86.459	0.000	Significant
E-technology Efforts	38.925	0.001	Significant
Encouraging Energy Resources	83.241	0.000	Significant

Source: Calculated Primary Data

The above table gives the following results. Since the 'p' value is less than 0.05 in case of the gender of the employees and the factors of green HR practices "Effective Recognition and support factor, Environmental responsibility factor, e-technology factor and Encouraging energy resources factor", the null hypothesis is rejected and it is viewed that there is a significant relationship between gender of the employees and factors of green HR practices that "Effective Recognition and support factor, Environmental responsibility factor, e-technology factor and Encouraging energy relationship between gender of the employees and factors of green HR practices that "Effective Recognition and support factor, Environmental responsibility factor, E-technology factor and Encouraging energy resources factor".

# Factors of Green HR Practices among Different age Group of IT Industry Employees

In order to test whether there is any relationship between age group of the employees and factors of green HR practices, 'ANOVA' test is attempted with the following hypothesis as, H<sub>o</sub>: There is no significant difference in factors of green HR practices among different age group of IT industry employees in.

The resulted mean score among different age group of employees on the factors of green HR practices and the respective 'F' statistics are presented in Table.

**Table 11:** Table Showing the ANOVA for Significant Difference between Age Group of IT

 Professionals with Respect to the Green HR Practices

Factors	Age	SumofSquares	df	Mean Square	F	p Value
Effective	Between Groups	1107.358	4	276.840		
Recognition and	Within Groups	23610.600	377	62.628	4.420	0.002**
Support Factor	Total	24717.958	381	-		
Environmental	Between Groups	876.758	4	219.190	5.165	0.000**

Responsibility	Within Groups	16000.208	377	42.441		
Factor	Total	16876.966	381	-		
e-Technology	Between Groups	95.104	4	23.776		
Efforts Factor	Within Groups	5614.134	377	14.892	1.597	0.175*
	Total	5709.238	381	-		
Encouraging	Between Groups	738.594	4	184.649		
Energy	Within Groups	13771.639	377	36.530	5.055	0.001**
Resources Factor	Total	14510.233	381	-		

Table shows that a significant difference among the different age group of employees were identified regarding the different factors of green HR practices are effective recognition and support factor, environmental responsibility factor and encouraging energy resources factor since the respective "F" statistics was significant at 5 per cent level and the 'p' value is less than 0.05. It shows a significant relationship between age of the employees and factors of green HR practices that "effective recognition and support factor, environmental responsibility factor and encouraging energy resources factor of green HR practices that "effective recognition and support factor, environmental responsibility factor and encouraging energy resources factor".

# Factors of Green HR Practices among Different Education of IT Industry Employees

In order to examine whether there is any relationship between education of the employees and factors of green HR practices, 'ANOVA' test is attempted with the following hypothesis as, H<sub>o</sub>: There is no significant difference in factors of green HR practices among different education of IT industry employees.

The resulted mean score among different education of employees on the factors of green HR practices and the respective 'F' statistics are presented in Table.

**Table 12:** Table showing the ANOVA for Significant Difference between Education of IT

 professionals with Respect to the Green HR Practices

Factors	Education	Sum of Squares	df	Mean Square	F	p Value
Effective	Between Groups	1304.979	4	326.245		
Recognition and	Within Groups	23412.979	377	62.103	5.253	0.000
Support Factor	Total	24717.958	381	-		

Environmental	Between Groups	1109.050	4	277.262		
Responsibility	Within Groups	15767.916	377	41.825	6.629	0.000
Factor	Total	16876.966	381	-		
E-technology	Between Groups	291.550	4	72.887		
Efforts Factor	Within Groups	5417.689	377	14.371	5.072	0.001
	Total	5709.238	381	-		
Encouraging	Between Groups	555.951	4	138.988		
Energy	Within Groups	13954.282	377	37.014	3.755	0.005
Resources Factor	Total	14510.233	381	-		

Table shows that a significant difference among the different education of employees were identified regarding the different factors of green HR practices are effective recognition and support factor, environmental responsibility factor, E-technology efforts factor and encouraging energy resources factor since the respective "F" statistics was significant at 1 per cent level. The 'p' value is less than 0.01,shows that there is a significant relationship between education of the employees and factors of green HR practices that "effective recognition and support factor, environmental responsibility factor, E-technology efforts factor and encouraging energy resources factors of green HR practices that "effective recognition and support factor, environmental responsibility factor, E-technology efforts factor and encouraging energy resources factor".

# Factors of Green HR Practices among Different Experience of IT Industry Employees

In order to find out whether there is any relationship between experience of the employees and factors of green HR practices; 'ANOVA' test is attempted with the following hypothesis as,

H<sub>o</sub>: There is no significant difference in factors of green HR practices among different experience of IT industry employees.

The resulted mean score among different experience of employees on the factors of green HR practices and the respective 'F' statistics are presented in Table.

**Table 13:** Table Showing for ANOVA for Significant Difference between Experience of IT

 professionals with Respect to the Green HR Practices

Factors	Evnorionaa	Sum	of	df	Mean	Б	р
ractors	Experience	Squares		ai	Square	Г	Value

Effective	Between Groups	1374.197	4	343.549		
Recognition and	Within Groups	23343.761	377	61.920	5.548	0.000
support Factor	Total	24717.958	381	-	_	
Environmental	Between Groups	668.001	4	167.000		
Responsibility	Within Groups	16208.965	377	42.995	3.884	0.004
factor	Total	16876.966	381	-		
e-Technology	Between Groups	94.866	4	23.716		
Efforts Factor	Within Groups	5614.373	377	14.892	1.593	0.176
	Total	5709.238	381	-		
Encouraging	Between Groups	428.607	4	107.152		
Energy Resources	Within Groups	14081.626	377	37.352	2.869	0.023
Factor	Total	14510.233	381	-		

From the above Table, it is clear that the 'p' value is less than 0.05. This shows that a significant difference among the different experience of employees were identified regarding the different factors of green HR practices are effective recognition and support factor, environmental responsibility factor and encouraging energy resources factor since the respective "F" statistics was significant at 5 per cent level and It is finalized that there is a significant relationship between experience of the employees and factors of green HR practices that "are effective recognition and support factor, environmental responsibility factor and encouraging energy resources factor and encouraging energy resources factor."

## Factors of Green HR Practices among Different Annual Income of IT Industry Employees

In order to validate whether there is any relationship between annual income of the employees and factors of green HR practices, 'ANOVA' test is used with the following hypothesis as,

H<sub>o</sub>: There is no significant difference in factors of green HR practices among different annual income of IT industry employees in.

The resulted mean score among different annual income of employees on the factors of green HR practices and the respective 'F' statistics are presented in Table.

**Table 14:** Table showing for ANOVA for Significant Difference between Annual Income of IT

 professionals with Respect to the Green HR Practices

Factors	Annual income	Sum of Squares	df	Mean Square	F	p Value
Effective Recognition and	Between Groups	1604.304	4	401.076		
	Within Groups	23113.654	377	61.309	6.542	0.000
Support factor	Total	24717.958	381	-	_	
Environmental	Between Groups	1110.747	4	277.687	6.640	0.000
Responsibility Factor	Within Groups	15766.219	377	41.820		
	Total	16876.966	381	-		
e-Technology Efforts Factor	Between Groups	334.956	4	83.739		
	Within Groups	5374.283	377	14.255	5.874	0.000
	Total	5709.238	381		_	
Encouraging Energy Resources Factor	Between Groups	1040.641	4	260.160		
	Within Groups	13469.592	377	35.728	7.282	0.000
	Total	14510.233	381	-		

Table shows that a significant difference among the different annual income of employees were identified regarding the different factors of green HR practices are effective recognition and support factor, environmental responsibility factor, e-technology efforts factor and encouraging energy resources factor since the respective "F" statistics was significant at 5 per cent level and the 'p' value is less than 0.05. It is concluded that there is a significant relationship between annual income of the employees and factors of green HR practices that "effective recognition and support factor, environmental responsibility factor, e-technology efforts factor factor, environmental responsibility factor, e-technology efforts that "effective recognition and support factor, environmental responsibility factor, e-technology efforts factor factor and encouraging energy resources factor".

# Factors of Green HR Practices among Different Designation of IT Industry Employees

In order to assess whether there is any relationship between designation of the employees and factors of green HR practices, 'ANOVA' test is used with the following hypothesis as,

H<sub>o</sub>: There is no significant difference in factors of green HR practices among different designation of IT industry employees in.

The resulted mean score among different designation of employees on the factors of green HR practices and the respective 'F' statistics are presented in Table.

**Table 15**: Table Showing the Factors of Green HR Practices among Different Level of

 Employment of IT Professional

Factors	Annual income	SumofSquares	df	Mean Square	F	p Value
Effective	Bween Groups	942.032	2	471.016		
Recognition and	Within Groups	23775.926	379	62.733	7.508	0.001
Support Factor	Total	24717.958	381	-		
Environmental	Between Groups	331.441	2	165.721		
Responsibility	Within Groups	16545.525	379	43.656	3.796	0.023
Factor	Total	16876.966	381			
e-Technology Efforts Factor	Between Groups	20.142	2	10.071		
	Within Groups	5689.097	379	15.011	0.671	0.512
	Total	5709.238	381	-	_	
Encouraging	Between Groups	467.909	2	233.954		
Energy Resources Factor	Within Groups	14042.324	379	37.051	6.314	0.002
	Total	14510.233	381	-		

Table shows that a significant difference among the different designation of employees were identified regarding the different factors of green HR practices are effective recognition and support factor, environmental responsibility factor and e-technology efforts factor since the respective "F" statistics was significant at 5 per cent level of significance. The 'p' value is less than 0.05. It is concluded that there is a significant relationship between designation of the employees and factors of green HR practices that "effective recognition and support factor, environmental responsibility factor and e-technology efforts factor".

# SUMMARY OF FINDINGS

## **Findings on Personal Profile of IT Professionals**

From 382 respondents, 53.7 per cent of the respondents are male, whereas female constituting 46.3 per cent of the respondents. It is observed that male employees are found to be flexible in working in the IT industry than the female, who need to address the night shifts and family care. Therefore, it is found that male category is the bread winner of IT industry job than the female, who are highly motivated and suitable to working conditions in the IT industry.

It is identified that the majority of the respondents (54.5 per cent) were unmarried. It is observed that IT industry nature of the job is very apt to the unmarried who are away from family.

It is identified that the most of the respondents are in the age group of below 25 years constituting 41.1 per cent of the respondents and next majority 36.1 per cent of the respondents belong to the age group of 25 to 30 years. It is found that the IT industry catch the attention of employees in the age group of below 25 years. There is the lowest percentage of the respondents who continue to be the employees of the IT industry who are in the age group of above 40 years. It is further inferred that, IT jobs are peculiarly suitable to youngsters who are below 25 years.

Considering the education of professionals, 63.6 per cent of the respondents are possessing BCA/BSc/B.Tech/BE which is the highest among various qualifications and 1.6 per cent of the respondents are Ph.D. qualified which is the least of all.

Based on the experience of professionals, the highest percentage 34.6 of the respondents are with 1 to 3 years of experience, and the lowest percentage of respondents 7.3 do have the maximum years of experience above 10 years. Therefore, it is observed that IT job is not permanent to all. Since IT workers prefer to move from one company to another company due to more income, higher studies and repetitive work. It is understood from the table that IT jobs are not for long run survival and it is tolerable only for a few years. As a result, lower level of work experience bags high percentage among the IT workers.

It is found that majority of 34.3 per cent of the respondents are earning annual income of Rs.1 to 3 lakhs and next majority of 27.5 per cent of the respondents are earning annual income of Rs.5 to 10 lakhs. Therefore it is observed that at present IT industry are paying the compensation to their employees between Rs.20, 000/- and Rs. 25,000/-. Their income is found to be just sufficient for house rent and other luxurious living, which happens to be the minimum comfort today.

It is identified that majority of 76.7 per cent of the employees are working 8 hours, about 20.9 per cent of the employees are working 10 hours and only 2.4 per cent of the employees are working above 10 hours. It is observed that majority of 61.8 per cent of the employees are low level employees, 22.5 per cent of the employees are middle level employees and the remaining 15.7 per cent of the employees are top level employees in IT industry.

## **Findings on Job Stress of IT Professionals**

From the Chi-square test of Independence, the gender of IT professionals have a significant relationship between the uneven work target, weak environment and lack of

opportunity for self development. Lack of stimulus and drive has no influence over gender of IT professional.

From ANOVA, age group of IT professionals has a significant difference on uneven work target, lack of stimulus and drive and weak environment among the job stress factors. Age groups of IT professionals have no influence over lack of opportunity for self development. Education of IT professionals has a significant difference between the weak environment factor. But education of IT professionals has no impact on other job stress factors such as uneven work target, lack of stimulus and drive and lack of opportunity for self development.

It is clear from the ANOVA that the experience of IT professionals has no relationship between uneven work target, lack of stimulus and drive, weak environment and lack of opportunity for self development. When compared to the annual income of IT professionals, ANOVA concluded the significant relationship between uneven work target, lack of stimulus and drive, weak environment and lack of opportunity for self development. It is proved from ANOVA that the different levels of employment of IT professionals have a significant relationship between the job stress factors uneven work target, lack of stimulus and drive, weak environment and lack of opportunity for self development.

### **Findings on Green HR Practices in IT Industry**

It is concluded from the Chi-Square test that the different level of employment has an impact on the awareness of green HR issues. It is evident that each level of employees has some awareness about the green HR practices. Only 6.4 percent of low level employees, 15.1 percent of middle level employees and 13.2 percent of top level employees are not aware about the green HR practices in IT industry.

Based on the Chi-square test, the male and female IT professionals have a significant relationship between the green HR practices Effective recognition and support, Environmental responsibility, E-technology and Encouraging energy resources. From ANOVA, the different age group of IT professionals has a significant effect on the green HR practices Effective recognition and support, Environmental responsibility and Encouraging energy resources factors. It is also proved from ANOVA that the educational qualification of IT professionals has a significant relationship on Effective recognition and support, Environmental responsibility, E-technology and Encouraging energy resources has a significant relationship on Effective recognition and support, Environmental responsibility, E-technology and Encouraging energy resources.

From ANOVA, it is confirmed that there is a significant relationship between experience of the IT professionals and factors of green HR practices on Effective recognition and support, Environmental responsibility and Encouraging energy resources factors. It is evident from ANOVA that the annual income of IT professionals has a significant difference on Effective recognition and support, Environmental responsibility, E-technology and Encouraging energy resources. It is also found from ANOVA that the designation of the IT professionals has an significant effect on the factors of green HR practices that Effective recognition and support factor, environmental responsibility factor and encouraging energy resources factor".

## CONCLUSION

The present study concludes that there is job stress among the employees in IT field. It is increasing at a faster rate. The job stress among the IT industry employees is higher than that the other groups of employees. The important job stressors are unrealistic time pressures and they have to work very fast. Level of employment of employees are significantly influencing the stress among the employees are they not clear what they duties and responsibilities, working time is not flexible, promotional activities are not satisfied, not good working atmosphere, unrealistic time pressures, and job descriptions is not clear. Even though, the stress reducing techniques have been adopted by the IT companies, it is not sufficient to reduce or eliminate the stress among the employees, because of lesser involvement and implementation of stress reducing techniques. Even though, the rate of implementation of the stress reducing techniques is having positive impact on the job satisfaction and performance among the employees, it is not properly and consistently followed. If these techniques are properly implemented, the IT companies may save the life of the youngsters and also increase their productivity. Green HRM is the new and emergent topic in the field of IT industry. Most of the IT firms are focusing the environment responsibility and encouraging energy resources.

This study facilitates the Human resource managers to achieve the goals of the firm by improving the human resource practices availing in the industry. This article helps the HR managers to elevate job stress from IT professionals.

This study has practical implications to the society in spotting of eco-friendly practices followed by the IT industry. Since the economy is greening nowadays and the impact of daily activities are turned into environmental based. Also, environmental responsibility is now changed from individuals to organizations. Stress reduction techniques followed by the IT firms' helps the youngsters to have a positive impact on the IT industry.

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