



## IMPACT OF ORGANIZATIONAL FACTORS ON EMPLOYEE ENGAGEMENT IN IT INDUSTRY OF BENGALURU CITY

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### **Abstract**

**Purpose:** This paper aims to study the impact of organizational factors on the Employee Engagement in IT Industry of Bengaluru city. **Research Methodology:** The paper applies analyzing data using Reliability Test, Exploratory Factor Analysis (EFA) and Multiple Linear Regression on a sample of 432 respondents and reduces a set of 13 variables into a list of four organizational factors. **Implication:** The present study proposes a model of impact of organizational factors on the employee engagement. The study found that supervisor support, motivation, organizational culture and equal justice are impacting significantly the employee engagement. Therefore, IT companies should focus on the above factors to provide enrich the employee engagement. **Conclusion:** The study investigated the impact of organizational factors on the employee engagement of the IT employees concluded that supervisor support had the highest impact on the employee engagement of the IT employees followed by motivation, organizational culture and equal justice.

**Key Words:** *Employee Engagement, Supervisor Support, Motivation, Organizational Culture and Equal Justice.*

### **Introduction**

Most organizations today realize that a 'satisfied' employee is not necessarily the 'best' employee in terms of loyalty and productivity. It is only an 'Engaged employee' who is intellectually and emotionally bound with the organization, feels passionately about its goals and is committed towards its values who can be termed thus. He goes the extra mile beyond the basic job responsibility and is associated with the actions that drive the business. Moreover, in times of diminishing loyalty, Employee Engagement is a powerful retention strategy. The facts that it has a strong impact on the bottom-line add to its significance. Engagement is about motivating employees to do their best. The quality of output and competitive advantage of a company depend on the quality of its people.

### **Review of Literature**

**Demerouti, E., Bakker, A.B., Janssen, P.P.M. & Schaufeli, W.B. (2001)** in their article selected 381 employees from an insurance company to examine the relationship between job demands and job control on one part, and health impairment and motivation on the other part. Job demands were most clearly related to health impairment, whereas job control was most clearly related to motivation.

**Wilmar B. Schaufeli, Marisa Salanova, Vicente Gonzalez-Roma and Arnold. B. Bakker (2002)** in their paper "A Two Sample Confirmatory factor analytic Approach Published in Journal of Happiness Studies" has identified a new instrument to measure Engagement. An empirical study was conducted by taking sample of university students (N=314) and employees (N=619). Despite the fact that slightly different versions of the MBI-GS and the engagement questionnaire had to be used in both samples the results were remarkably similar across samples.

**Bakker, A.B., Demerouti, E. & Schaufeli, W.B. (2003)** in their study 477 employees working in the call centre of a Dutch Telecom Company and observed the predictive validity of the job demands –

Resources (JD-R) model for turnover intentions and absenteeism. Results emphasize that job demands were the most significant predictors of health problems, in turn, were related to sickness and absence. Job resources were the only predictors of involvement, which, in turn, was related to turnover intentions. In addition, job resources had a weak negative relationship with health problems, and health problems positively influenced turnover intentions.

**Bakker, A.B., Demerouti, E., & Verbeke, W. (2004)** in their study “Using the Job Demands-Resources model to predict burnout and performance” published in *Human Resource Management*, examined the relationship between job characteristics, burnout and performance (N=146). The findings support the JD-R model’s claim that job demands and job resources initiate two psychological processes, which ultimately affect organizational outcomes.

**Beckers, D.G.J., Van der Linden, D., Smulders, P.G.W., Kompier, M.A.J., Van Veldhoven, J.P.M. & Van Yperen, N.W. (2004)** published in *Journal of Occupational and Environmental Medicine*, conducted a survey among Dutch full-time work force over a sample of 1,807 and results confirm that 67% of the respondents worked overtime appeared to be non-fatigued, motivated workers with favorable work characteristics.

**Hakanen, J., Bakker, A.B. & Demerouti, E. (2005)** in their article “How dentists cope with their job demands and stay engaged: The moderating role of job resources” published in *European Journal of Oral Sciences*, undertook a study among 1919 Finnish dentists employed in public sector. It was proved that job resources are useful in coping with the high demands in dentistry and help dentists stay engaged.

**Alan M. Saks and Joseph L. (2006)** in their research paper “Antecedents and Consequences of Employee Engagement” published in *Journal of Managerial Psychology*, conducted a survey by 102 employees working in a variety of jobs and organizations concludes that there is a meaningful difference between job and organization engagement, job characteristics predicts job engagement; and procedural justice predicts organization engagement.

**Hallberg, U., & Schaufeli, W.B. (2006)** in their paper “Same” but different: Can work engagement be discriminated from job involvement and organizational commitment” published in *European Journal of Psychology*, identified whether work engagement is separated from job involvement and organizational commitment by taking a sample of 187 I.T consultants and the results proved that both work engagement, job involvement and organizational commitment are distinct constructs.

**Llorens, S., Bakker, A.B., Schaufeli, W.B. & Salanova, M. (2006)** in their study “Testing the robustness of the Job Demands-resources model” published in *International Journal of Stress Management*, undertook a sample of 654 Spanish and 477 Dutch employees working with ICT. The result highlights that job demands were important predictor of burnout whereas job resources were the important predictor of work engagement and it was negatively related to burnout.

**Langelaan, S., Bakker, A.B., Van Doornen, L.J.P. & Schaufeli, W.B. (2006)** in their paper “Burnout and work engagement: Do individual differences make a difference?” conducted a study among 572 Dutch employees and proved that high neuroticism is the core characteristic of burnout, whereas work engagement is characterized by low neuroticism.

**Wilmar B. Schaufeli and Arnold B. Bakker (2006)** in their article “The Measurement of Work Engagement with a Short Questionnaire: A Cross-National Study” published in *Educational and*

Psychological Measurement, developed a short questionnaire to measure work engagement which is characterized by vigor, dedication and absorption. Data were collected in 10 different countries ( $N = 14,521$ ), and results indicated that the original 17-item Utrecht Work Engagement Scale (UWES) can be shortened to 9 items (UWES-9). The results confirm that the work engagement may be conceived as the positive antipode of burnout. It also proved that UWES-9 scores have acceptable psychometric properties.

**Avery, D.R., McKay, P.F. & Wilson, D.C. (2007)** in their research paper “Engaging the aging workforce”: The relationship between perceived age similarity, satisfaction with co-workers, and employee engagement” published in *Journal of Applied Psychology*, conducted a survey of 901 individuals employed in the United Kingdom and examine the relationship between age, Perceived co-worker age composition, and satisfaction with older and younger co-workers. The results proved that perceived age was associated with higher levels of engagement among older workers when they were highly satisfied with their co-workers over 55 and lower levels of engagement when they were not.

**Bakker, A.B., Hakanen, J., Demerouti, E, & Xanthopoulou, D. (2007)** in their research “Job resources boost work engagement, particularly when job demands are high” published in *Journal of Educational Psychology*, undertook a study among 805 Finnish teachers who worked in elementary, secondary and vocational schools tested two interaction hypothesis. The results indicated that supervisor support, innovativeness, appreciation and organizational climate seem important job resources for teachers that help them cope with demanding interactions with students.

**Beckers, D.G.J., Van der Linden, D., Smulders, P.G.W., Kompier, M.A.J., Taris, T. & Van Yperen, N.W. (2007)** in their paper “Distinguishing between overtime work and long working hours among full-time and part-time employees” published in *Scandinavian Journal of Work Environment & Health*, conducted a survey among a representative sample of 2419 Dutch employees and distinguished between overtime work and long working hours among full-time and part-time employees. This finding suggests that part-time employees work overtime for reasons other than being engaged or that working overtime does not increase engagement for this group of employees.

**Brake, J.H.M. te, Bouwman, A-M., Gorter, R.C., Hoogstraten, J. & Eijkman, M.A.J., (2007)** in their study “Professional burnout and work engagement among Dutch dentists” published in *European Journal of Oral Science* took a sample of 497 Dutch general dental practitioners consists of 372 men and 125 women. The results proved that burnout level among dentists are low and the engagement level indicates that they have a positive working attitude.

**Christian, M. S., & Slaughter, J. E. (2007)** presented a paper at the sixty-seventh annual meeting of the Academy of Management, Philadelphia. This study reviews the engagement construct using a meta-analytic framework. The result highlights that the three factors of engagement like Vigor, dedication and absorption are strongly correlated; engagement is strongly related to job resources than job demands.

**Llorens, S., Schaufeli, W.B., Bakker, A. & Salanova, M., (2007)** in his article “Does a positive gain spiral of resources, efficacy beliefs and engagement exist”? identified causal relationship between two potentially important resources in the use of Information and Communication among 110 Spanish university students. The results show that efficacy beliefs play a mediating role between task resources and engagement. Engagement increases efficacy beliefs, which, in turn, increases task resources overtime.



## Research Problem

Engagement is the psychological or emotional dimension rather than physical which is complex and may be easily biased. In order to handle this situation, researchers must focus particularly on the Engagement levels of employees in human services field. Empirical information is required for professionals so they can better comprehend Employee Engagement and utilize to build up managerial interventions and various strategies to promote Engagement for Human resource management. Does Employee Engagement lead to superior performance? Do the employers know which specific factors lead to Employee Engagement? Do employees know their Engagement levels for the organization? Not everyone. The psychological dimension comprehended by the employees, expressed through questionnaires and answering them honestly require the maturity levels at a higher level. However, care is taken to simplify the questionnaire and administer the same by clarifying the questions and explaining the details.

## Research Objectives

1. To identify the organizational factors in I.T. Industry
2. To study the impact of organizational factors on the Employee Engagement.

## Research Hypothesis

**Ho1:** There is no significant relationship between employee opinion on organizational factors on employee engagement.

## Research Methodology

### Sampling Procedure for Research

The study is proposed to be conducted among software professionals in IT industry of Bengaluru city. The study adopts convenience sampling to collect the responses of the software professionals in Bengaluru City. The questionnaire is distributed personally to the software professionals and the soft copy also is floated to all the contacts of software professionals in turn. Software Professionals who have been full time employees with at least 8 months of work experience in the selected IT companies were taken as sample. 674 questionnaires were mailed to software professionals and received 526 filled questionnaires. Out of 526 questionnaires 432 were useful with full information in all aspects. Hence the sample size of this study is 432 employees.

## Research Tools

All the survey responses were coded into Microsoft Excel 2010 spreadsheet, verifying for missing data and inconsistently filled-in questionnaires. The data coded were transferred to SPSS and analyzed employing reliability analysis, defined variables and, all sorts of descriptive statistics of the responses were calculated. Testing the hypotheses was done, using SPSS 20.

The following statistical tools were used for data analysis:

- Reliability Test
- Exploratory Factor Analysis
- Multiple Linear Regression

**Data Analysis**  
**Reliability Test**

<b>Table: 1. Case Processing Summary</b>			
		N	%
Cases	Valid	432	100.0
	Excluded <sup>a</sup>	0	0
	Total	432	100.0
a. Listwise deletion based on all variables in the procedure.			

<b>Table: 2. Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.886	13

The internal consistency of the questionnaire of 13 questions with a value of the Cronbach's Alpha is 0.886, which shows that data is 88.6 per cent reliable.

**Exploratory Factor Analysis**

<b>Table: 3. KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.792
Bartlett's Test of Sphericity	Approx. Chi-Square	3287.132
	df	78
	Sig.	.000

Before proceeding for factor analysis the eligibility of the data has to be tested by conducting KMO-Bartlett's test. This test is a measure of sampling adequacy and multivariate normality among variables. The KMO value in this study is  $0.792 > 0.5$  which says that the sample taken is adequate. Bartlett's Test of Sphericity value is  $0.000 < 0.05$ , indicate multi normality among variables. Hence Factor Analysis is considered as an appropriate technique for further analysis of the data.

**Eigen Values**

The initial components are the numbers of the variables used in the Factor Analysis. However, not all the 13 variables will be retained. In the present research, only the 4 factors will be extracted by combining the relevant variables. The Eigenvalues are the variances of the factors. The total column contains the Eigenvalue. The first factor will always account for the most variance and hence have the highest Eigenvalues. The next factor will account for as much of the leftover variance as it can and the same will continue till the last factor. The percentage of variance represents the per cent of total variance accounted for by each factor and the cumulative percentage gives the cumulative percentage of variance account by the present and the preceding factors. In the present research, the first 4 factors explain 72.638 per cent of the variance. The rotation sums of the squared loading represent the distribution of the variance after the varimax rotation with Kaiser Normalization. The varimax rotation tries to maximize the variance of each of the factor.



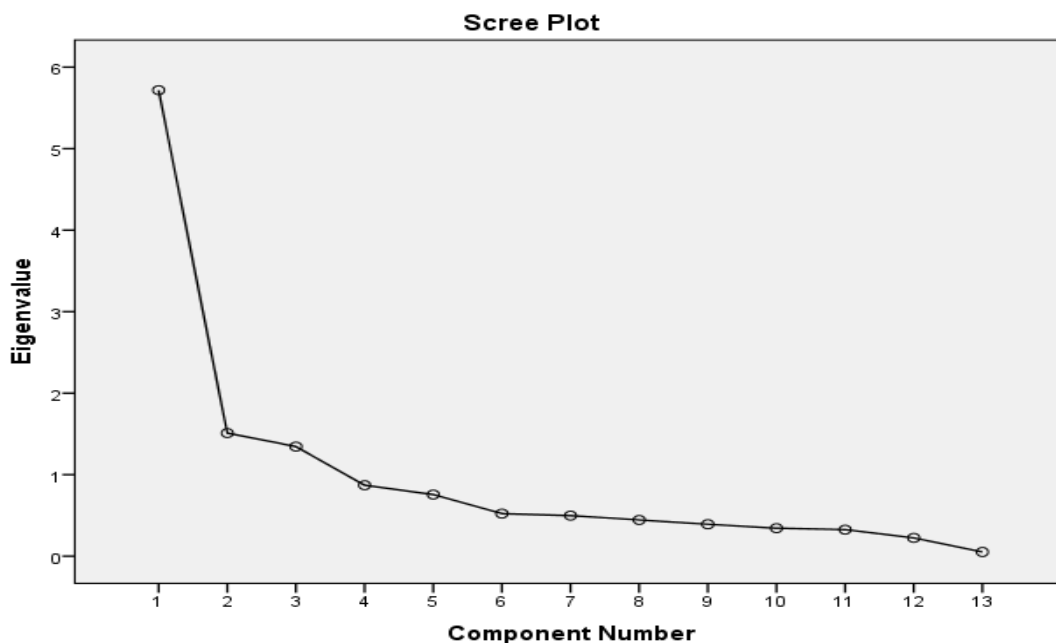
**Table: 4. Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.717	43.978	43.978	5.717	43.978	43.978	2.893	22.253	22.253
2	1.510	11.617	55.595	1.510	11.617	55.595	2.686	20.659	42.912
3	1.345	10.343	65.938	1.345	10.343	65.938	2.591	19.932	62.844
4	.871	6.700	72.638	.871	6.700	72.638	1.273	9.794	72.638
5	.756	5.816	78.454						
6	.522	4.017	82.471						
7	.498	3.831	86.301						
8	.445	3.421	89.722						
9	.392	3.015	92.737						
10	.343	2.642	95.379						
11	.326	2.505	97.884						
12	.224	1.722	99.606						
13	.051	.394	100.000						

Extraction Method: Principal Component Analysis.

On the basis of Varimax Rotation with Kaiser Normalization, 4 factors have been extracted. Each factor is constituted of all those variables that have factor loadings greater than 0.5. 13 variables were clubbed into 4 factors. 4 factors were extracted from the 13 variables used in the study. These 4 extracted factors explained 72.638 per cent of the variability in organizational factors.

### Scree Plot



**Table: 5. Rotated Component Matrix<sup>a</sup>**

	Component			
	Supervisor Support	Motivation	Organization Culture	Equal Justice
I am given enough freedom to decide on issues under my preview.	.804			
If given the opportunity, my organization would take advantage of me	.791			
I am satisfied with the promotional policies in the organization	.750			
My supervisor cares about my opinions.	.687			
Given my performance, my outcomes are justified		.816		
At work, I am always identified by the tasks I perform.		.800		
My organization would forgive a honest mistake on my part		.796		
My work supervisor really cares about my well-being.		.589		
My job itself provides me information about my work performance.			.854	
The organization I work for, elevates my respect in the public			.852	
Those procedures upheld ethical and moral standard			.743	
The outcomes I receive reflect the effort I have put into my work				.786
In the workplace my co-workers and subordinates give due respect to my thoughts and feelings.				.599

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

The above matrix gives the correlation of the variables with each of the extracted factors. Usually, each of the variables is highly loaded in one factor and less loaded towards the other factors. To identify the variables, included in each factor, the variable with the maximum value in each row is selected to be part of the respective factor. The values have been high lightened in each of the rows to group the 13 variables into 4 core factors excluding low loading variables.

### Multiple Linear Regression

In order to access the impact of independent variables on the dependent variable, enter a method of multiple regressions was applied.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.641 <sup>a</sup>	.594	.189	1.233	.1772
a. Predictors: (Constant), organizational culture, <b>Supervisor</b> Support, Motivation, equal justice					
b. Dependent Variable: Employee Engagement					

The regression table 6: summarizes the model performance through the following statistics. **R**: R represents the multiple correlations co-efficient with the range lies between -1 and +1. Since the R-value is 0.641 means that there is a high positive relationship between the organizational factors and employee engagement of IT employees. **R Square**: R<sup>2</sup> represents the coefficient of determination which lies between 0 and 1. Since the R square value is 0.594 i.e. 59.4 per cent of the explained variation is there in the employee engagement of the IT employees. **Durbin-Watson statistic**: From the above table 4.17 the Durbin-Watson statistic value is 1.772. It is closer to the standard value 2. So, that the assumption has almost certainly been met.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	156.777	3	52.259	34.395	.000 <sup>b</sup>
	Residual	650.297	428	1.519		
	Total	807.074	431			
a. Dependent Variable: Employee Engagement						
b. Predictors: (Constant), organizational culture, <b>Supervisor</b> Support, Motivation, equal justice						

The ANOVA (Table 7) reveals that the F statistics of the regression model is statically significant at 0.05 levels implying the goodness of fit of the regression equation. (Model is statistically significant).

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.307	.229		5.710	.000
	Supervisor Support	.141	.064	.121	2.204	.028
	Motivation	.249	.072	.198	3.463	.001
	Organizational Culture	.241	.070	.200	3.456	.000
	Equal Justice	.197	.063	.192	2.785	.032
a. Dependent Variable: Employee Engagement						



Table 8 denotes standardized regression coefficients which show the strength of impact and its positive/negative direction. It also comprises of t and significant values to validate the hypothesis framed to measure the significant impact of dimensions of organizational factors on the employee engagement.

### Supervisor Support

Table 8 shows Beta value as 0.121 which indicates positive impact of supervisor support on the employee engagement. Since the T value is 2.204 and significance value is 0.028 which is less than 0.05, so the supervisor support has a significant impact on employee engagement of IT employees.

### Motivation

Table 8 shows Beta value as 0.198 which indicates positive impact of motivation on the employee engagement. Since the T value is 3.463 and significance value is 0.001 which is less than 0.05 hence motivation has a significant impact on employee engagement of IT employees.

### Organizational Culture

Table 8 shows Beta value as 0.200 which indicates positive impact of Organizational Culture on the employee engagement. Since the T value is 3.456 and significance value is 0.000 which is less than 0.05 hence Organizational Culture has a significant impact on employee engagement of IT employees.

### Equal Justice

Table 8 shows Beta value as 0.192 which indicates positive impact of equal justice on the employee engagement. Since the T value is 2.785 and significance value is 0.032 which is less than 0.05 hence equal justice has a significant impact on employee engagement of IT employees.

### Multiple Regression Result Summary

The summary results impact: Multiple Regression is presented in below table 4.20.

**Table: 9. Results Summary of Organizational factors on Employee engagement**

S. No.	Variables	Sig. (P value)	Remark	R Square value
1	Supervisor Support	.028	Rejected	0.641
2	Motivation	.001	Rejected	
3	Organizational Culture	.000	Rejected	
4	Equal Justice	.032	Rejected	

### Implication

The present study proposes a model of impact of organizational factors on the employee engagement. The study found that supervisor support, motivation, organizational culture and equal justice are impacting significantly the employee engagement. Therefore, IT companies should focus on the above factors to provide enrich the employee engagement.

### Conclusion

The study investigated the impact of organizational factors on the employee engagement of the IT employees concluded that supervisor support had the highest impact on the employee engagement of the IT employees followed by motivation, organizational culture and equal justice.



## References

1. Demerouti, E., Bakker, A. B., De Jonge, J., & Janssen, P. P. (2001). Burnout and engagement at work as a function of demands and resources. *Scand J Work Environ Health*, 27(4).
2. ROMA, V. G., BAKKER, A. B., & FACTOR, A. (2002). WILMAR B SCHAUFELI, MARISA SALANOVA. *Journal of Happiness Studies*, 3, 71-92.
3. Bakker, A., Demerouti, E., & Schaufeli, W. (2003). Dual processes at work in a call centre: An application of the job demands-resources model. *European Journal of work and organizational psychology*, 12(4), 393-417.
4. Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 43(1), 83-104.
5. Beckers, D. G., van der Linden, D., Smulders, P. G., Kompier, M. A., van Veldhoven, M. J., & van Yperen, N. W. (2004). Working overtime hours: relations with fatigue, work motivation, and the quality of work. *Journal of Occupational and Environmental Medicine*, 1282-1289.
6. Hakanen, J. J., Bakker, A. B., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European journal of oral sciences*, 113(6), 479-487.
7. Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of managerial psychology*.
8. Hallberg, U. E., & Schaufeli, W. B. (2006). "Same same" but different? Can work engagement be discriminated from job involvement and organizational commitment?. *European psychologist*, 11(2), 119.
9. Llorens, S., Bakker, A. B., Schaufeli, W., & Salanova, M. (2006). Testing the robustness of the job demands-resources model. *International Journal of stress management*, 13(3), 378.
10. Langelaan, S., Schaufeli, W. B., van Doornen, L. J., Bakker, A. B., & van Rhenen, W. (2007). Is burnout related to allostatic load?. *International journal of behavioral medicine*, 14(4), 213-221.
11. Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and psychological measurement*, 66(4), 701-716.
12. Avery, D. R., McKay, P. F., & Wilson, D. C. (2007). Engaging the aging workforce: The relationship between perceived age similarity, satisfaction with coworkers, and employee engagement. *Journal of applied psychology*, 92(6), 1542.
13. Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of educational psychology*, 99(2), 274.
14. Beckers, D. G., van der Linden, D., Smulders, P. G., Kompier, M. A., Taris, T. W., & Van Yperen, N. W. (2007). Distinguishing between overtime work and long workhours among full-time and part-time workers. *Scandinavian journal of work, environment & health*, 37-44.
15. Brake, H. T., Bouman, A. M., Gorter, R., Hoogstraten, J., & Eijkman, M. (2007). Professional burnout and work engagement among dentists. *European journal of oral sciences*, 115(3), 180-185.
16. Wefald, A. J., & Downey, R. G. (2009). Job engagement in organizations: fad, fashion, or folderol?. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 30(1), 141-145.



17. Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist?. *Computers in human behavior*, 23(1), 825-841.
18. Reddy, T. N., & Mohana, S. (2021). Structural equation model (SEM) for predicting causing factors on job stress in information technology (IT) industry of chennai city. *Information technology in industry*, 9(2), 36-54.
19. Dr S. Mohana, Mr. Kathari Santosh, Dr. M. Rama Kumari<sup>3</sup> and Dr. Kasa Sudarsan<sup>4</sup>, Impact Of Talent Management On Employee Job Performance In Information Technology (It) Sector: An Empirical study of chennai city- *palarch's journal of archaeology of egypt/egyptology* 18(4), 1-14. ISSN 1567-214x, Key Words: Talent Management, Employee Job Performance, IT Sector and Chennai City.
20. Dr. D. Pradeep Kumar, Mr. B. Sreekanth & Dr. S. Mohana (2022), Impact of High Performance Work Practices (HPWP) on Employee Retention in IT Industry. *Journal of Contemporary Issues in Business and Government* Vol. 28, No. 03, 2022. DOI: 10.47750/cibg.2022.28.03.057.