Research Article

HRD Intervention And Organizational Effectiveness – An Impact Analysis

Phalguna Reddy.k1*, Prof. Dr. Ramakumar Ambatipudi 2

¹Research Scholar, KL University, Vijayawada. Email Id:phalgunareddy.1947@gmail.com ²Professor, Pro-Vice Chancellor, KL University, Vijayawada. Email Id: *ark6466@gmail.com*

Article History: Received: 11 January 2021; Accepted: 27 February 2021; Published online: 5 April 2021

ABSTRCT: The main aim of the study is to encourage professionals to strive towards specific goals and responsibilities on the basis of their abilities, skills and context. Efficiency in an organization needs an appreciation of the various professionals and their position within a company, as well as opportunities to develop their abilities or allow use of specific skills. The HRD interventions are playing key role for the organizational effectiveness. The paper has made an attempt to examine the HRD interventions impact on the organizational effectiveness in IT companies. The bivariate correlation has been applied for the measuring the relationship of HRD intervention parameters with the organizational effectiveness and result reveals that Performance management has the strong relationship with the organizational effectiveness. The statistical method of structural equation model has been applied to measure the impact of selected three HRD interventions and observed that Performance Management influence has been found higher followed by the training effect on the organizational effectiveness.

Keywords: Career Development, Effectiveness, HRD, Training, Performance Management, Organization.

INTRODUCTION

Human resource development (HRD) is increasingly one of the most comprehensive areas of research in the broader field of human resource management. HRD activities are initiatives intended to be strategically integrated with the corporate framework for handling human resource growth in order to lead to the overall performance of the enterprise. There is a growing appetite for the implementation of innovative and productive human resource development practices to enhance the capabilities of the workers and improve operational performance. **Roy and Dugal (2005)** concluded that operational productivity is the net happiness of all constituents in the course of collecting and converting inputs to outputs in a productive manner. HRD, as a term that originated about four decades ago, is therefore under-studied in the sense of information technology, considering the fact that it is commonly applied in these organizations. Digital Technology is proud of almost any nation or state because of its important position in the creation and growth of different economies. Dominant theorizing in HRD has grown and is directed towards the research of atypical businesses. As a result, HRD's mainstream conceptualizations are overly narrow in focus, and the resulting discourse is not easily linked to HRD models in small firms.

Organizational Effectiveness:

Given this importance, there has been no specific description of the construction. **Georgopoulus and Tannenbaum** (1957) described organizational effectiveness as the degree to which an institution as a social structure, provided its resources and means, achieves its goals without incapacitating its means and resources and without putting undue strain on its members. Organizational efficiency is the net happiness of all constituents in the course of collecting and converting inputs to outputs in an optimal manner. Theorists also postulated five methods to assessing operational effectiveness: a target success approach, a structure capital approach, an internal mechanism approach, a strategic electoral district approach, and a competitive benefit approach.

REVIEW OF LITERATURE

Ibrahim Mkheimer, Salameh A. Mjlae (2020): The aim of this paper is to investigate the links between employee engagement factors and organizational growth in Jordanian manufacturing firms. It also seeks to provide a response to the study's central question: Do employee motivation factors influence organizational development? The study suggested a model that shows a close relationship between employee engagement and organizational growth. The results indicated that organizational engagement variables had progressed to a certain degree. According to the results, there were also clear ties between employee engagement factors and organizational development. This study has important implications for management in terms of bettering its development, especially in terms of human resource development and employee motivation.

Blazej Motyka (2019): The article presents the findings of research on the linkage of employee involvement with various performance categories, and a systematic review of the literature body. The aim of the paper is to summarize previous studies on the basis of their arrangement and categorization and identify gaps in current knowledge. The paper presents the findings in a synthesis with practical and academic implications. Results of the review reveal that the statistically significant relationship between workforce participation and numerous categories and performance subcategories has been confirmed in most peer-reviewed publications.

Mohanad Ali Kareem (2019): With the rise of globalization and drastic shifts in the market world, employability has now become one of the top priorities for all companies. The aim of this research is to investigate how human resource planning practices influence employee productivity and organizational effectiveness in a sample of Iraqi public universities. The data was analyzed using a descriptive-analytical approach with a single regression model in mind. This article addresses human resource development, employee success, and the literature on organizational efficiency. This research often poses key theoretical and practical implications, which are then thoroughly examined.

Nuria Gisbert et al (2018): The goal of the present thesis is to establish a practical paradigm for alternative mentoring for managers. The framework developed by the analysis is a modern method to mentoring which, centered on a phenomenon in the enterprise, and clarifies the problems. In contrast to conventional mentoring, the report also addresses some of the benefits of employing alternate mentoring. Current study leads to exploring emerging ways of complementary mentoring by presenting professionals with a deeper understanding of core problems.

Jitendra. G (2018): The purpose of this study is to examine the opinions of managers working in the textile industry in Andhra Pradesh on HRD practices and to build a relationship with the output of employees. Descriptive analysis design is thus the safest way to science to meet the goals. Present analysis has not implemented a probabilistic-comfort sampling method. We have gathered information on HRD activities from 375 managers in the textile industry to achieve the goal, taking into account performance assessment, job planning, preparation and development, compensation and appreciation, wellbeing of workers, standard of work life and the HRD climate. This study will help to determine the influence of demographic factors on the perception of HRD operations and the productivity of workers.

Gitika Sablok et al (2017): The research gathered primary data from a representative group of 211 MNE working in Australia, explores the magnitude and determinants of recruitment and growth spending, resource acquisition, management development plans and succession planning decisions. The results of the study indicate that 20 percent of MNEs spend over 4 percent of their annual training and growth budget. The research illustrated management implications such as HR administrators and HR experts in extending their awareness to illustrate the relevance of an integrative approach to HRD. The analysis was fruitful in recognizing the need to review HRD activities on their human resources in MNE's functioning in Australia.

Tanuja Sharma (2016): The research offers opportunities for future empirical studies to examine the effect on employee results of PMS exactness and effectiveness (engagement, retention, etc.). In different socio-cultural contexts, researchers can also cross-validate PMSE measures. Practical Impacts – Powerful investigative instruments for measuring employee perception of PMS can serve the perceived accuracy and effectiveness of PMS measures. It can help organizations to identify and remedy their current PMS weaknesses. originality and value – originality This is the first paper to offer a compelling idea of the accuracy and efficiency of PMS perceptions of employees. It therefore has important consequences for academics and practitioners.

Rama Krishna Gupta Potnuru, Chandan Kumar Sahoo (2016): In their paper 'HRD Interventions, Employee Competencies and Organizational Effectiveness: Empirical Research,' it was stated that HRD interventions are essential for improving operational efficiency through employee skill building practices such as planning, enhancement of performance and career management. The thesis offers an applied research model for the study of HRD methods by taking core factors from existing literature. The study showed that HRD techniques have an effect on the skills growth of workers, which, in turn, is influential in optimizing organizational efficiency. The study relevant to the HRD literature concerned the integration of HRD strategies and labor expertise into a systemic analysis model that influences organizational effectiveness.

Asfaw, Argaw, and Bayissa (2015) explains how the primary purpose of HRD is to develop and expand employee competencies so that businesses can optimize the quality of their human resources. According to the argument that

organizations must use various human resource development strategies to increase employee competence, SHRD has a positive impact on organisational productivity. Employee performance has a positive and significant influence on organisational effectiveness, according to Hypothesis H4.

Weerarathna and Geeganage (2014): The aim of this research was to investigate the relationship between organizational culture and employee performance in the Sri Lankan apparel industry. Employee productivity is the dependent variable, and organizational culture is the independent variable. An observational survey was conducted using a self-administered questionnaire and a sample of employees from the apparel industry to complete this study. The three sections of the questionnaire were sent separately to the target group. This study was about hypothesis testing and co-relationships. Since this is a field study, the work was carried out in a natural setting with limited interference from other researchers.

Haslinda, Abdullah (2009): The aim of this study was to investigate the effects of HRD approaches using the idea of HRD as a starting point. A hybrid methodology was used in this study, which included questionnaire surveys and interviews with HR professionals. According to the results, HRD programmes and activities implemented and distributed to employees in Malaysian manufacturing companies result in individual and team development as well as job process improvement, but they do not aid HRD's strategic organizational change planning. HRD practices and events, according to the findings, were not strategically organized or aligned with organizational goals and objectives. The study's limitations and possible research directions have been addressed.

Jaya Bhasin, Aubid Hussain Parrey (2008): The key emphasis of this paper is on the initiatives and strategies of higher education institutions to turn them into higher-education educational institutions guided by student quality and excellence expectations and creative HR strategies. Analysis of the collected data was performed by using perceptive mapping to assess the attribute dependency and using Chi-square tests. This report discusses administrative solutions to the challenges and analyzes transition dynamics through a strategic HR intervention to achieve quality standards in higher schools.

Clardy, A. (2008): Companies have used human resource development as a key strategic goal to encourage positive behavior in individuals and to influence their knowledge, skills, and behaviors in order to enhance productivity and performance. HRD encourages organizational superior performance and improves organizational productivity in today's rapidly changing environment. Furthermore, successful HRD practices emphasize lean organization, workforce capability, and flexibility at the right time.

Razak. A (2003): The study aims to create a legacy in the field of training and growth is one of Malaysia's leading manufacturers of semiconductors. The company's goal is to become a learning institution. The success of a continuous learning organization is a key success. The evaluation approach has developed to determine the effectiveness of HRD programmes. The study found that there is an ongoing debate in the field of evaluation about which the processes involved can be made simpler. This paper discusses the latest methods of training evaluation in the theory and practice of Silterra.

Morley (2000): There is no clear model for investigating how HRD activities can boost organizational efficiency through enhanced employee performance. Few longitudinal studies have been conducted to investigate the relationship between HRD practices and company performance. In Iraq, no research or studies have specifically studied how HRD techniques develop employee productivity and its relationship with organizational effectiveness enhancement.

OBJECTIVES OF THE STUDY

- 1. To know the HRD interventions relationship with the Organizational effectiveness
- 2. To examine the Impact of HRD interventions on the Organizational Effectiveness.

HYPOTHESES OF THE STUDY

H01: The HRD interventions doesn't have relationship with the organizational effectiveness

 $H0_2$: The HRD interventions has no impact on the Organizational Effectiveness.

SCOPE OF THE STUDY

The study has focused on the role of Human Resource Development on the organizational effectiveness in IT sector. The study has considered the Information Technology companies with high workforce, where HRD interventions were used by the Managers. The study has considered the three HRD interventions parameters such as Training, Career Development and Performance Management.

RESEARCH METHODOLOGY

The study has adopted the qualitative research with the primary data. The primary data were collected directly from the employees through a well-devised interview schedule. Incomplete and inaccurate schedules were dropped and only fully completed schedules were taken up for analysis.

Sampling Design

The study is confined to IT companies located in Hyderabad region. Since, the size of universe is relatively large, the sample size was limited to 120 respondents – employees of Tech Mahindra, Infosys and Wipro. The study applied the convenient sampling method for the collection of primary data.

Questionnaire structure: The study framed the 5 point likert scale oriented questionnaire relating to the HRD Interventions parameters and Organizational Effectiveness.

Statistical tools

The SPSS package was used for data processing, classification, tabulation, analysis, and interpretation. Depending on the nature of the data collected from the respondents, the following statistical techniques were used. According to the importance of their application, the following statistical tools were used to analyze the data collected during the investigation: bivariate correlation and structural equation model.

Bi-Variate Correlation: The study applied the Bi-variate Correlation to know the significant relation of HRD interventions with the Organizational Effectiveness.

Structural Equation Model: The study has considered the SEM – Structural Equation Model to know the impact of HRD interventions on the Organizational Effectiveness.

TABULATION OF DATA ANALYSIS

This paper aimed to determine the relationship between HRD intervention and the organizational effectiveness and impact of HRD intervention on organizational effectiveness. This paper used Bi-variate correlation to examine the relationship between the Independent variable and the Dependent variable. Here, independent variables are the intervention of the HRD, i.e. the training programme implemented by the organization, the assistance provided by the organization to its employees for the development of their careers and the effectiveness of the performance management carried out within the organization. The Structural Equation Rule applied to the understanding of the impact of HRD intervention on organizational effectiveness.

Objective 1: To examine the relationship between the HRD intervention and Organizational Effectiveness.

To examine the relationship between the HRD intervention and Organizational Effectiveness, Bi-variate correlation is applied and following is the hypothesis framed to justify the objective

H0: There is no relationship between the HRD intervention and Organizational Effectiveness.

H1: There is a relationship between the HRD intervention and Organizational Effectiveness.

Table No-1: HRD Interventions Relation with the Organizational Effectiveness

14001(0 1	TIKD Interventions Ker	Organizational		Career	Performance
		Effectiveness	Training	Development	Management
	Pearson Correlation	1			
Organizational	Sig. (2-tailed)				
Effectiveness	N	120			
	Pearson Correlation	0.608	1		
	Sig. (2-tailed)	0.012			
Training	N	120	120		
	Pearson Correlation	0.562	0.39	1	
	Sig. (2-tailed)	0.032	0.03		
Career Development	N	120	120	120	
	Pearson Correlation	0.774	0.425	0.419	1
	Sig. (2-tailed)	0.027	0.029	0.033	
Performance Management	N	120	120	120	120

Source: Compiled on Primary data

Table represents correlations between the HRD intervention and Organizational Effectiveness. Performance Management is found to be strongly correlated with Organizational effectiveness (r=774), indicates there is a significant positive relationship between them which supports opinion of **Bayyurt and Rizvi** (2015). Similarly, Training and Career Development is found to be positively correlated with Organizational Effectiveness, implies that Training and Career development significantly affects organizational effectiveness. Which supports the opinion of **Alaldaeja** (2016). Since, the p-value is less than 0.05 which indicates that rejection of Null hypothesis and Acceptance of Alternative Hypothesis i.e., There is a significant relationship between the HRD intervention and Organizational Effectiveness.

Objective 2: To study impact of HRD interventions on Organizational Effectiveness.

This objective made an attempt to study the impact of HRD Intervention on Organizational Effectiveness'. Here, it considered three HRD intervention namely Training, Career Development and Performance Management. Each head consists of four sub attributes which are coded each are coded and combined and interlinked at the same time to create a hypothesized model. For this purpose, first, the model estimated find out the fitness index, followed by the model consistency, which indicates that the model is significant. Finally, the hypothesized model (SEM model) was framed to identify the estimated results of the model.

Table -2: Goodness of Fit Test Results

Tuble 2. Goddiess of the Test Results							
Fit statistic	Recommended Value	Obtained Value					
Chi square		124.14					
Df		29					
Chi square significance	p < = 0.05	0.015					
Goodness Fit Index	>0.90	0.933					
Adj. Goodness Fit Index	>0.90	0.939					
Normed Fit indexes	>0.90	0.911					
Relative Fit Index	>0.90	0.901					

Comparative Fit Index	>0.90	0.904
Tucker Lewis Index	>0.90	0.912
RMSEA	< 0.05	0.011

Source: Compiled on Primary data

Table represents Goodness of fit index indicates with respect to hypothesized model. The result indicates that GFI ("Goodness Fit Index") is 0.933 and "Adjusted Goodness of fit Index" is 0.939 which are observed to be above the recommended level. "Normed fit Index" seems to be greater than 0.90 and "Relative fit index" is 0.901. Goodness index like "Comparative Fit index" (0.904) and "Tucker Lewis Index" (0.912) are observed to be above the cutoff level. Root mean Square is 0.011 which implies that significant of the model. Hence goodness of fit index concluded that the model is satisfactory. The study has framed the following hypothesis to test with the statistical method of structural equation model.

The study has framed the broader hypothesis and followed by the sub hypothesis. The study has applied the structural equation model and with the three HRD interventions sub-hypothesis were also framed.

H₀: The HRD interventions has no impact on the Organizational Effectiveness

H₁: The HRD interventions will have an impact on the Organizational Effectiveness

Figure No-3: Impact of HRD Interventions on Organizational Effectiveness

Source: Compiled on Primary data

Figure shows the Structural Equation model with respect to HRD intervention impact on Organizational Effectiveness, implies the hypothesized model (SEM) is statistically significant at 5 per cent level, and implies there is a significant positive impact of HRD intervention on Organizational effectiveness.

Sub-Hypothesis

H0: The Training has no Impact on the Organizational Effectiveness

H0: The Career development has no Impact on the Organizational Effectiveness

H0: The Performance Management has no Impact on the Organizational Effectiveness

Table – 2: Impact of HRD Interventions on Organizational Effectiveness

			Estimates	S.E	C.R	Sig
Training						
Effective Implementation of Software application and Training tools		Training	0.518	0.213	2.431925	***
Organization gives time for training programmes.		Training	0.473	0.182	2.598901	0.021
The training employee receive on the job meets their needs	<	Training	0.406	0.164	2.47561	0.027
After training, the trainee provides feedback on the apprentice	<	Training	0.592	0.214	2.766355	***
Career Development						
Organization offers training to help employee career develop	<	Career Development	0.426	0.148	2.878378	0.023
Organization offers a personal development plan	<	Career Development	0.372	0.186	2	0.036
Management provides work that has developed my working skills.	<	Career Development	0.261	0.116	2.25	0.042
Employee supervisor's feedback helps their performance.	<	Career Development	0.342	0.159	2.150943	0.039
Performance Management						
The appraisal system offers an opportunity for self- examination and reflection.	<	Performance Management	0.641	0.315	2.034921	***
Organization has well-defined metrics to provide guidance for what we do	<	Performance Management	0.513	0.206	2.490291	***
Involvement of employee decisions in some cases by the top management.	<	Performance Management	0.333	0.165	2.018182	0.032
Having Aware of the mission, values, and Goals of the Organization	<	Performance Management	0.417	0.143	2.916084	0.022
Organizational Effectiveness'	<	Training	0.593	0.254	2.335	***
Organizational Effectiveness'	<	Career Development	0.462	0.214	2.159	0.004
Organizational Effectiveness'	<	Performance Management	0.681	0.265	2.570	***

Source: Compiled on Primary data

The lack of empiric studies or studies specifically looked at how HRD interventions have a practical effect on organizational effectiveness at the level of companies and institutions. The aim of this study is to investigate the impact of HRD intervention (i.e. training, career development and performance management) on the effectiveness of the organization. The result shows that training had a slight impact on organizational effectiveness, this finding is consistent with the outcome of **Dobrai and Farkas** (2015), which stated that training is a 'systematic process of increasing the ability of employees to perform through learning and changing the attitude and behaviour of employees and improving their skills and knowledge in order to enable the organization to do so. Career development is impacted by 0.462, implying that a unit increase in career development will increase organizational efficiency by 0.462, which supports the opinion of **Amah** (2006), stating that "career development is a process of promoting the knowledge, skills and skills of organizational staff to prepare them for new opportunities and

challenges." Whereas performance management has been found to have a high impact on organizational effectiveness as compared to other HRD interventions, a unit increase in performance management will increase organizational efficiency by 0.681 units, which supports the opinion of **Prince** (2005) that 'Human Resource Development focuses on developing and enhancing the workforce of the organization.

Therefore, null hypothesis has been rejected and alternative hypothesis will be accepted. Hence, it indicates that the HRD interventions will have a significant impact on the organizational effectiveness in IT companies of Hyderabad region.

FINDINGS OF THE STUDY

The study observed that HRD intervention parameter Training (0.608) has the strong positive relation with the organizational effectiveness and followed by the Career Development (0.562) also found to be having the positive relation. **Adewoye et al 2017**, stated that strategy of career advancement adopted by the organizational effectiveness on sustainable bases. The authors also observed that career advancement having positive and significant effectiveness of organization.

The Performance Management (0.774) had the higher significant relation with the organizational effectiveness compared with the training and career development factors of HRD interventions. The study observed that training feedback (0.692) has played the critical role in HRD intervention factor of Training, which again significantly influencing the organizational effectiveness. Organization offers training to help in employee's career develop (0.462) has the higher impact on the career development factor of HRD intervention followed by the Organization offers a personal development plan (0.372).

The appraisal system offers an opportunity for self-examination and reflection (0.641) influenced the Performance Management followed by the Organization has well-defined metrics to provide guidance for what employee do (0.513). **Qureshi, 2017** observed that performance management having significant impact on the organizational effectiveness. The study observed that HRD intervention parameter – Performance Management (0.681) influenced higher on the Organization Effectiveness followed by the Training (0.593). The study observed that Career Development (0.462) has lower influence on the Organizational effectiveness in IT organization compared with the other selected factors of HRD interventions.

CONCLUSION OF THE STUDY

The study examined the HRD interventions impact on the effectiveness of the Organization. The study has considered the Information Technology sector. The study has considered the higher workforce organizations located in Hyderabad division. The study has considered the convenient sampling methodology for the collection of responses i.e. employees working in the IT organization with minimum three organization. The study has considered the three HRD parameters such as Training, Career Development and Performance Management, which are playing the key role for the organization effectiveness. The bivariate correlation has been applied for the measuring the relationship of HRD intervention parameters with the organizational effectiveness and result reveals that Performance management has the strong relationship with the organizational effectiveness. The statistical method of structural equation model has been applied to measure the impact of selected three HRD interventions and observed that Performance Management influence has been found higher followed by the training effect on the organizational effectiveness.

Further Research Scope: There is a need to do research in this area by considering the HR practices impact on the organizational effectiveness in services organizations such as hospitality sector, financial sector. The present study has been confined to IT sector of Hyderabad region. Therefore, it is recommended to expand state level.

REFERENCES:

- 1. Jitendra. G, prof. B. Suresh Rao, dr. N. Visaalakshi (2018), "Impact of demographic variables on perceptions of HRD practices and employee performance in textile industry of Andhra Pradesh", Sri Venkateswara university vol. 5, issue 2,
- 2. Rama Krishna Gupta Potnuru, Chandan Kumar Sahoo (2016), "HRD interventions, employee competencies and organizational effectiveness: an empirical study", European Journal of Training and Development, Vol. 40 Issue: 5, pp.345-365

- 3. Gitika Sablok, Pauline Stanton, Timothy Bartram, John Burgess, Brendan Boyle, (2017) "Human resource development practices, managers and multinational enterprises in Australia: Thinking globally, acting locally", Education + Training, Vol. 59 Issue: 5, pp.483-501.
- **4.** Nuria Gisbert-Trejo, Jon Landeta, Eneka Albizu, Pilar Fernández-Ferrín, (2018) "Alternative mentoring: an HRD key for a rapid changing work environment", Human Resource Management International Digest, Vol. 26 Issue: 1, pp.4-6.
- 5. Mohanad Ali Kareem (2019), "The Impact of Human Resource Development on Employee Performance and Organizational Effectiveness", (2019), Vol.7, Issue no.3, pp.307-322, Kaposvár University, ISSN 2392-8042
- 6. Haslinda, Abdullah (2009), "Outcomes of Human Resource Development Interventions", Journal of Social Sciences 5(1): 25-32, 2009, ISSN 1549-3652, Faculty of Economics and Management, University Putra Malaysia.
- 7. Hole, Y., & Snehal, P. & Bhaskar, M. (2018). Service marketing and quality strategies. Periodicals of engineering and natural sciences, 6 (1), 182-196.
- **8.** Blazej Motyka (2019)," Employee engagement and performance: a systematic literature review", International Journal of Management and Economics, Vol-3, Series-09, ISSN: 1762-1962.
- 9. Weerarathna and Geeganage (2014), "The Relationship between Organizational Culture and Employee Performance: Case of Sri Lanka", International Journal of Scientific & Engineering Research, Volume 5, Issue 8.
- 10. Ibrahim Mkheimer, Salameh A. Mjlae (2020), "Factors of Employee Engagement and Organizational Development: Are they Linked?" International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-5, January 2020
- 11. Jaya Bhasin, Aubid Hussain Parrey (2008): efforts and strategies of Higher Educational Institutions for transforming them into progressive educational institutions of higher, The Business School, University of Jammu, vol 6, issue 3
- **12.** Clardy, A. (2008). The strategic role of human resource development in managing core competencies. Human Resource Development International, Volume -11, Issue 2, pp 183-197.
- **13.** Clardy, A. (2008). The strategic role of human resource development in managing core competencies. Human Resource Development International, Volume 11, Issue -2, pp 183-197.
- 14. Asfaw, A.M., Argaw, M.D., & Bayissa, L. (2015). The Impact of Training and Development on Employee Performance and Effectiveness: A Case Study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia. Journal of Human Resource and Sustainability Studies, Volume -3, Issue 4, pp 188-202.
- 15. Garavan, T.N., & Morley, M. (2000). Contemporary HRD research: a triarchy of theoretical perspectives and their prescriptions for HRD. Journal of European Industrial Training, Volume -24, Issue 3, 65-93.
- 16. Tanuja Sharma (2016), "Measuring employee perception of performance management system effectiveness" Employee Relations. Volume 38, Issue -2, pp 224-247
- 17. Razak A (2003), "The effectiveness and practical application of human resource development (HRD) programs in the semiconductor industry a case study of SilTerra Malaysia SdnBhd", *Advanced Semiconductor Manufacturing Conference and Workshop*, 2003 IEEEI/SEMI, Munich, Germany, 2003, pp. 175-187