

### INTERVENTION OF HUMAN RESOURCE MANAGEMENT TO MANAGE THE EMPLOYEE ATTRITION RATE BY USING ANOVA TEST

Arun B Prasad<sup>1</sup>

<sup>1</sup>Associate Professor (Economics), Institute of Law Nirma University, Ahmedabad, India, Email: <u><sup>1</sup>arunprasad16@gmail.com</u>, Orcid ID: 0000-0002-6108-9219

#### Vishakha Chauhan<sup>2</sup>

<sup>2</sup>Assistant Professor, Institute of Management Studies, Roorkee, India, Email: <sup>2</sup>vishu.chauhan22@gmail.com

#### Manvi Chopra<sup>3</sup>

<sup>3</sup>Assistant Professor, Department of MBA, Dev Bhoomi Uttarakhand University, Dehradun, India, Email: <sup>3</sup>chopramanvi4@gmail.com

#### ABSTRACT

A series of activities, actions, and events called an organization development intervention are aimed at enhancing the performance and effectiveness of an organization. The organization's readiness for deliberate change is crucial to the success of the intervention. Knowing how to encourage change, lead change, gain political support, manage a transition, and maintain momentum are just a few of the knowledge and abilities needed to manage planned change effectively. Human resource management interventions increase an organization's effectiveness by modifying its human resource practices and policies, including managing workforce planning, diversity, compensation and reward systems, and training and development. Methodology: The study's foundations are secondary and primary data gathered from a few carefully chosen PSEs in Visakhapatnam. In order to better understand organizational development interventions for managing change, the research study analyzed the perspectives of 650 executives at a chosen public sector business (PSE) in Visakhapatnam. The data collected from the respondents is analyzed using percentages, Chi-square, and ANOVA tests. Findings: Based on the study, it can be inferred that the chosen PSE is implementing human resource management interventions to manage the changes. Over 90.22 percent of respondents from the entire sample responded positively to this question. According to the affirmative responses of 57.13 percent of respondents from the entire sample, there is an application of human resource management intervention in certain PSE and to the satisfaction of its personnel. Originality/value: In order to manage change within the firm, the paper looked at human resource management initiatives. Human resource management interventions focus on the people's readiness towards the change in the organization.

**Keywords:** Organizational Change, OD Interventions, Human Resource Management Interventions, Need, Objectives, Methodology, Findings, Suggestions, and Summary.

#### I. **INTRODUCTION**

The organization's employees are supported and assisted by human resources management. These interventions would concentrate on the methods of integrating new employees into organizations. These procedures include career planning, incentive programs, goal-setting, and performance review methods for change, all of which have historically been connected to the personnel function in organizations. Integration of organizational development and human resources management has gained popularity in recent years. Interventions in human resources management have their roots in the economics and labor relations fields, as well as in the practical personnel practices of salaries and benefits, hiring and placing employees, performance evaluation, and career advancement. Practitioners in this field frequently concentrate on the employees of organizations because they believe that better employee integration practices will lead to increased organizational effectiveness.

1. Establishing specific and demanding goals is a key component of this transition approach. It makes an effort to make personal and organizational goals more closely align, with the goal of increasing organizational effectiveness. In order to organize tasks, evaluate successes, and address obstacles to reaching objectives, managers and subordinates regularly meet.

2. Performance Appraisal: This intervention is a methodical procedure for determining the accomplishments, strengths, and weaknesses of an individual's performance at work. Giving individuals and workgroups performance feedback is the main human resources management action. Setting goals and implementing reward systems are connected in a significant way by performance evaluation.

3. Reward Systems: The goal of this intervention is to increase employee performance and happiness by designing organizational rewards. It offers cutting-edge methods for remuneration, promotions, and extras.

4. Career Planning and Development: In order to increase employee performance and satisfaction, this intervention entails designing organizational rewards. It offers cutting-edge methods for remuneration, promotions, and extras. Planning a career is advantageous for both individuals and organizations. Employees who need assistance identifying their strengths and weaknesses can benefit from counselling sessions. The organization can use this information to construct its training and development programs and help individuals develop the skills needed to take on more responsibility. An organization might find and develop talented individuals through such a procedure in order to promote them.

5. Handling Workforce Diversity: With the help of this change program, human resources processes are made to be more accommodating of a range of individual demands. Significant changes like the rise in the proportion of women, ethnic minorities, and individuals with physical and mental disabilities in the workforce necessitate a more adaptable set of laws and procedures.

6. Employee assistance programs (EAPs) and stress reduction are two of the therapies in the sixth category, employee wellness. Employee assistance programs, or EAPs, offer counseling to help workers deal with issues including financial hardship, marital conflict, and substance misuse that are frequently linked to subpar work performance. Programs for managing stress aid employees in coping with the harmful effects of stress at work. They offer

strategies for reducing stress symptoms like hypertension and assist managers in minimizing specific stressors like role conflict and ambiguity.

7. Skill Training: Increasing the knowledge, talents, and skills required to do a task successfully is referred to as skill training. The demand for imparting skill training is stimulated by the quick changes that organizations experience. Skill training can be given in a traditional classroom environment or on the job. So, to stay up with rapid change, the job knowledge needs to be regularly updated. The goal of training is to increase a worker's productivity at work.

8. Work Redesign: Job redesign is an OD intervention that modifies jobs to better match individual skills to job requirements. Job enlargement, job enrichment, job simplification, and job rotation are a few examples of interventions for job redesign. These strategies for redesigning work are used as OD techniques to better match task requirements with person capabilities or to redesign occupations to meet new methodologies or organizational structures.

9. Role negotiation: Group members occasionally have differing expectations of one another regarding their collaborative interactions. Role negotiation is a straightforward strategy that allows people to discuss and define their psychological contract. As a result, each party's expectations are made clear and subject to negotiation. Improved communication between the members is the result of role negotiation.

10. Management Development Training: Management development training includes a variety of methods intended to improve a manager's abilities in the workplace. Four different learning types—verbal knowledge, intellectual skills, attitudes, and development—are typically the emphasis of training for management development. Using action learning, which combines in-class instruction with real-world experience, is one technique to promote development. Through the struggles of their allies, managers can learn about themselves through action learning. The participants can also actively learn through case studies, simulation, business games, and roleplaying. 1

## II. NEED FOR THE STUDY

According to the assessment of the literature, various researchers have carried out studies on organisational change, change management, and organisational culture both domestically and overseas. There has not been much feedback on India's involvement in human resource management, according to the reviews that were found. The current study tries to comprehend the human resource management interventions to manage organisational change by looking at it at a micro level. Regarding human resource management interventions to manage organisational change, little study has been conducted in India, particularly in Andhra Pradesh. A significant public sector undertaking organization's human resource management interventions to manage change have not been the subject of any research. There was a clear need to close this gap, so it was decided to do study on the subject with a focus on public sector enterprise. Furthermore, policy decisions affecting India's whole industrial sector could be aided by the findings and recommendations derived from analysing such a huge organisation.

## **OBJECTIVES OF THE STUDY**

1. To examine respondents' opinions on human resource management strategies used in a few selected public sector companies in Visakhapatnam to manage transformation.

2. To offer appropriate recommendations for putting organisational development interventions into practise to manage organisational transformation.

#### III. RESEARCH METHODOLOGY

The study's unit of analysis was a select public sector firm in Visakhapatnam.

Technique of Data Collection: For this study, data from both primary and secondary sources were gathered.

Secondary Data: Secondary data was gathered from a variety of sources, including books, journals, magazines, periodicals, websites, administrative records, annual reports, management reports, organisation personnel manuals, and reports from special projects.

Primary Data: The study focuses on how employees perceive initiatives in human resource management. Data from the intended respondents was gathered using a well-structured questionnaire. Selected individuals from diverse organisational departments provided their views and opinions on wide topics. The top management, middle management, frontline management, and supervisory level executives working in the various departments of the PSE, Visakhapatnam, were the key data sources.

Sample and population

As the PSE Executives are the primary subject of the study, there are 6,505 overall employees. After executing the pilot study and using the results, the sample size is computed. Using the formula below, we have chosen a sample size of 650.

$$S = \frac{\frac{p(1-P)}{\frac{x^2}{c^2} + \frac{p(1-p)}{N}}{R}}{R}$$

The equation defines the several parameters which can be defined S denotes the sample size, p indicates the variance in population, x defines the precision, c indicates the confidence level, R defines the estimated response time.

If the population's estimated variance is P=50%=0.5, the desired level of precision is A=5%=0.05, and the assumed confidence level is 99%, the normal table value Z=2.58 is obtained. Based on the pilot study, it is determined that the response rate is R=0.93. Hence, the sample size is 649.3 when all the restrictions are substituted (Approximately 650). Thus, 10% of the entire population makes up the sample size.

Sampling Method

A multi-stage stratified random sample technique was employed to choose the sample respondents. First, a specific public sector company has been picked on purpose to examine organisational change and growth. At the second step, PSE's 6,505 permanent executives were classified into four strata based on the nature of their jobs: Top-level Management, Middle-level Management, Front-line Management, and Supervisory Level. At the third step, a sample of 10% of the entire population from each stratum was randomly selected because it was known the exact number of each stratum's population. This resulted in a total sample of 650 people. The table I in this article contains the sample design's specifics.

Table I: Sample Design

# INTERVENTION OF HUMAN RESOURCE MANAGEMENT TO MANAGE THE EMPLOYEE ATTRITION RATE BY USING ANOVA TEST

S.No.	Stratum	Cadre	Size of the population	Sample of 10% of the total population		
1.	Stratum – I	Top-level Management	469	46		
2.	Stratum – II	Middle-level Management	2157	216		
	Stratum – III	Frontline Management	3039	304		
3.	Stratum – IV	Supervisory level	840	84		
	Grand total	1	6505	650		

#### Hypothesis

The relationship between the variables is tested using the following hypothesis.

H0: Human resource management initiatives have no discernible effect on how the organisation handles change.

#### IV. ANALYSIS

With the use of some statistical methods, such as averages, standard deviations, significance tests, factor analysis, and so on, it has been attempted to examine the respondents' perspectives on human resource management interventions to manage change in a select PSE in Visakhapatnam in this section.

Target respondents provided qualitative information about the following twelve primary dimensions, which were examined using a well-structured questionnaire for data collection, processing, analysis, and conclusion-making. All the employees in the top, middle, frontline, and supervisory management levels in the select PSE are Executives. So, in the present study, the sample of respondents are only executives in the different cadre.

Table II: The opinion of the Respondents on 'Human Resource Management Interventions'

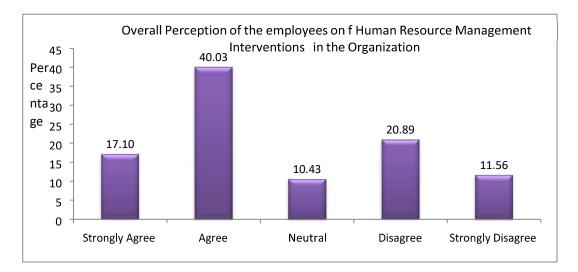
Statements related to Human Resource Management Interventions	SA	А	N	DA	SD
Sensitivity / Laboratory/ T. Group Training: During organizational change, sensitivity training in the organization helps the employees to understand their own behavior and developing the behavior flexibility		11.4	14.8	36.9	28.9
Goal setting: Change programs in the organization involves clear and challenging goals to improve organization and individual effectiveness	28.9	61.2	8.3	1.5	0.0

# INTERVENTION OF HUMAN RESOURCE MANAGEMENT TO MANAGE THE EMPLOYEE ATTRITION RATE BY USING ANOVA TEST

Skill Development Training: Skill development training in the organization helps in developing the job knowledge, skills and abilities to do job effectively during organizational change		54.5	3.7	1.2	2.5
Performance Appraisal: During organizational change, performance appraisal in the organization assesses individual's performance in a systematic way		16.0	13.5	38.5	25.5
Reward System: During organizational change, reward system intervention in the organization helps in improving employee satisfaction and performance		14.5	11.4	39.7	23.7
Career Planning and Development: Career planning and development for the employees in the organization improves the quality of work life which helps to manage the changes in the organization		21.8	17.2	39.4	12.3
Management Development Training: Management development training in the organization enhances manager's skills on the job to manage the changes in the organization more effectively.		73.2	4.0	0.6	0.3
Employee Wellness: Employee wellness through employee programs and stress management at work place helps to manage the change in the organization		37.2	14.5	27.1	10.5
Job Redesign: Job redesign intervention during organizational change alters the jobs, which helps to improve the fit between individual skills and the demands of the job. (Eg: Job enlargement, job enrichment and job simplification and job rotation.)		70.5	6.5	3.1	0.3
Overall Perception   SA= Strongly Agree A= Agree N=Neutral D	17.10 A= Disa	40.03	10.43	20.89 rongly I	11.56 Disagree

Source: Field Study

Analysis: According to Table II, the statements of the dimension "Human Resource Management Interventions" were accepted by an average of 40.03 percent of the sample's respondents, with 17.10 percent of those respondents strongly accepting the assertions. In contrast to the 10.43% of respondents who did not reply, 20.89% of respondents disagreed with the dimension, and the remaining 11.56% of respondents strongly disagreed with the comments made in relation to the human resource management initiatives. More evidence supporting this claim comes from the affirmative response of 57.13 percent of respondents from the entire sample, which indicates that human resource management intervention is being implemented in the chosen PSE and is to the employees' satisfaction.



# FIG. 1. THE OPINION OF THE RESPONDENTS ON 'HUMAN RESOURCE MANAGEMENT INTERVENTIONS'

The graph depicts the respondents' general view on the dimension 'Human Resource Management Interventions' in the selected PSE. More than half of the overall sample's respondents agreed with the deployment of human resource management interventions to manage planned changes in the organisation.

TABLE III:	ANOVA	TEST FOR	HR	MANAGEMENT	INTERVENTIONS	OF	ORGANIZATIONAL
DEVELOPME	NT BY CA	DRE					

Cadre	n	Mean	SD	F- Value	P- Value	Decision
Top Management	46	3.2899	.44781			
Middle Management	216	3.3560	.46484			Significant
Front Line Management	304	3.3056	.42404	4.122	0.007	
Supervisory level	84	3.1587	.40387			
	Top Management Middle Management Front Line Management	Top Management46Middle216Management216Front Line304Management40	Top Management463.2899Middle Management2163.3560Front Line Management3043.3056	Top Management463.2899.44781Middle Management2163.3560.46484Front Line Management3043.3056.42404	CadrenMeanSDValueTop Management463.2899.44781Middle Management2163.3560.46484Front Line Management3043.3056.42404	CadrenMeanSDValueValueTop Management463.2899.44781Middle Management2163.3560.46484Front Line Management3043.3056.424044.122

Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), Strongly Disagree (1)

Analysis: According to the significant p-values from the ANOVA test indicated above at a 5% level of significance, table III reveals a substantial impact of Human resource management interventions for managing change in the organisation by cadre. There is a significant variance of view among the cadre regarding the influence of human resource management interventions

# INTERVENTION OF HUMAN RESOURCE MANAGEMENT TO MANAGE THE EMPLOYEE ATTRITION RATE BY USING ANOVA TEST

on managing change in the organisation. Furthermore, the average opinion scores for all cadres are greater than "4", indicating that respondents' opinions are closer to the'strongly agree' level. It demonstrates that respondents highly agreed that human resource management interventions have an impact on managing change in the firm, which is a positive sign in the selected PSE for managing planned changes. According to Table 3, the respondents' average opinion scores across the cadres are significant at the 0.05 level for the dimension "Human Resource Management Interventions". At a 5% level, middle management's opinion score on the dimension "Human Resource Management Interventions in the organisation" (3.3560) is much higher than that of the other three cadres. For all cadres, the average opinion scores are higher than "3," indicating that the view is closer to the "agree" level. It demonstrates that respondents concur that organisational development interventions by human resource management have an impact on managing change inside the firm, which is encouraging to the organisation.

#### V. FINDINGS AND SUGGESTIONS

1. According to the study's substantial p-values from the ANOVA test, at a 5% level of significance, it can be concluded that interventions in human resource management have a significant impact on how change is managed in the organisation by cadre. The opinions of the cadre regarding the use of human resources in managing organisational change varied significantly. Also, the average opinion scores for all cadres are higher than "4", indicating that the opinion is closer to the strongly agree level, which is a good sign in the selected PSE for managing the organization's planned changes.

2. Under the dimension "Human Resource Management Interventions of Organizational Growth," the respondents' average opinion scores across cadres are found to be significant at a level of 5%. In comparison to the other three cadres, middle management has a much higher opinion score (3.3560) for the dimension "Human Resource Management Interventions" at the 5-percent level. For all cadres, the average opinion scores are higher than "3," indicating that the view is closer to the "agree" level. It demonstrates that the respondents were in agreement that organisational development and human resource management interventions have an impact on how well a company manages change, which is promising for the organisation.

#### SUGGESTIONS

According to the survey, a small portion of PSE is using HRM interventions to control organisational changes that are planned. The majority of respondents indicated unhappiness with the implementation of interventions for employee wellness, performance appraisal, reward systems, sensitivity/T-group training, and career planning and development during transition. In this aspect, management should take necessary steps to implement the above interventions properly in the organization, because the human resource of:

• Sensitivity / T- group training to the employees in the organization helps the employees to understand their behavior and develop behavior flexibility (behave suitably in light of understanding) during any change in the organization.

• Performance appraisal and Reward system interventions assess an individual's performance during organizational change in a systematic way, which helps the employees to

improve their performance and commitment in their work. It also helps the employees to reach higher levels through promotions.

• Career planning and development intervention to the employees in the organization to improve the quality of work-life which helps to manage the changes in the organization. It makes employees to develop their knowledge and competencies in the organization.

• Employee Wellness will protect their mental and physical health, which is most important to the organization because employee health is organizational wealth.

Employee wellness programs like stress management at the workplace, health screenings, health risk assessments, workshops on wellness issues, physical activity breaks, and so on.

Management should focus on the proper implementation of all the human resource management interventions in the organization to satisfy all the employees in the organization.

## CONCLUSION

It can be summarized that the respondent's opinion on Human Resource Management Interventions of Organizational Development is similar in nature with regard to their cadre in the select PSE, hence the null hypothesis is rejected. The respondents in the select PSE optimistically perceive that the Human Resource Management Interventions are managing changes in the organization.

# REFERENCE

1. Retrieved From: http://www.yourarticlelibrary.com/hrm/3-focused-areasoforganisation-development/35314/

2. Kangan, M. (1948). The cost of labour turnover: A review of the literature. Personnel Practice Blletin, 4, 12-27.

3. Kanwar, Y., Singh, A., & Kodawani, A. (2009). Work-Life balance and burnout as predictors of job satisfaction in the IT-ITES industry. Vision-The journal, 13 (2).

4. Sharma, R., & Jyoti, J. (2006). "Job satisfaction among school teachers". IIMB Management Review, 18 (4), 349-63.

5. Bawa, M. A., Jantan, M., and Ali, J. (2001). Human resource management practices in small, medium, and large firms. Malaysian Management Review, 36(1), (June), 40–52.

6. Huselid, M. A., Jackson, S. E., and Randall, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. Academy of Management Journal, 40(1), 171–188.

7. Gadi, P.D. and Kee, D.H.M. (2018) Human Resource Management Practices and Turnover Intention: The Mediating Role of Perceived Organizational Support in Tertiary Institutions in Nigeria. International Journal of Engineering and Technology, 7, 715-722.

8. Sun, L.Y., Aryee, S. and Law, K.S. (2007) High-Performance Human Resource Practices, Citizenship Behavior, and Organizational Performance: A Relational Perspective. Academy of Management Journal, 50, 558-577.