

TRAINING NEED ANALYSIS OF EMPLOYEE AT PETROLEUM DEVELOPMENT OF OMAN (PDO)

Dr. Mohamed Riyazh Khan

*Assistant Professor, Department of Business Studies
Higher College of Technology, Muscat, Sultanate of OMAN*

Mr. N. Arunkumar

*Assistant professor, Department of MBA, Panimalar Engineering College
Chennai – 600 123*

ABSTRACT

In modern organization training programme is one of the vital roles to solve the any organization problems. In this research work, researcher have been discussed the effectiveness of training programme in PDO (Petroleum Development of OMAN) in Sultanate of Oman. An analysis of training requires is an essential requirement to the design of effective training. The purpose of training need analysis is to determine whether there is a gap between what is required for effective performance and present level of performance. This research was conducted by the top level executives in PDO. The study population was around 120 and the sample size was 50. The researcher adopted simple random sampling technique. Percentage analysis method was used to find out the frequency and percentage of the respondents and Statistical Package for Social Sciences (SPSS) tools like Chi-square, Factor Analysis, Multi Dimensional Scaling, Correlations and Correspondence Analysis were used to test the hypothesis. Finally, it is concluded that training at PDO is effective and if the organization focused on the new innovative training methods, communication and skills improvement the effectiveness can be enhanced.

Key Words: PDO (Petroleum Development of OMAN) Training effectiveness, performance analysis, chi-square test and multi dimensional scaling.

INTRODUCTION

In this competitive world, training plays an important role in the competent and challenging format of business. Training is the very important component for the Human resource department. To develop the manpower or human capital is only through training department. Each every organisation spent too much of money for their training needs. Training and work efficiency are interrelated; if the training programme is good the employees are getting good skills due to those skills the productivity was good or more effectiveness. Training can be described as “the acquisition of skills, concepts or attitudes that result in improved performance within the job environment”. Training analysis looks at each aspect of an operational domain so that the initial skills, concepts and attitudes of the human elements of a system can be effectively identified and appropriate training can be specified.

NEED ANALYSIS

Training is a responsibility of the management to create necessary changes at the place of work as per the requirement of the occupation. To survive in the competition and to meet the requirements, the management wants to change their policies, rules and regulations. The organizations face a lot of force in the competence for a talented work force, for constantly improving the making methods, entrants of advanced technology and for the employees who are inclined to achieve work life balance. The success of any organization depends upon the quality of the work force, but in order to keep the quality of the work force, many organizations come across a number of obstacles.

Training needs analysis process is a series of activities conducted to identify problems or other issues in the workplace, and to determine whether training is an appropriate response. The needs analysis is usually the first step taken to cause a

change. This is mainly because a needs analysis specifically defines the gap between the current and the desired individual and organizational performances.

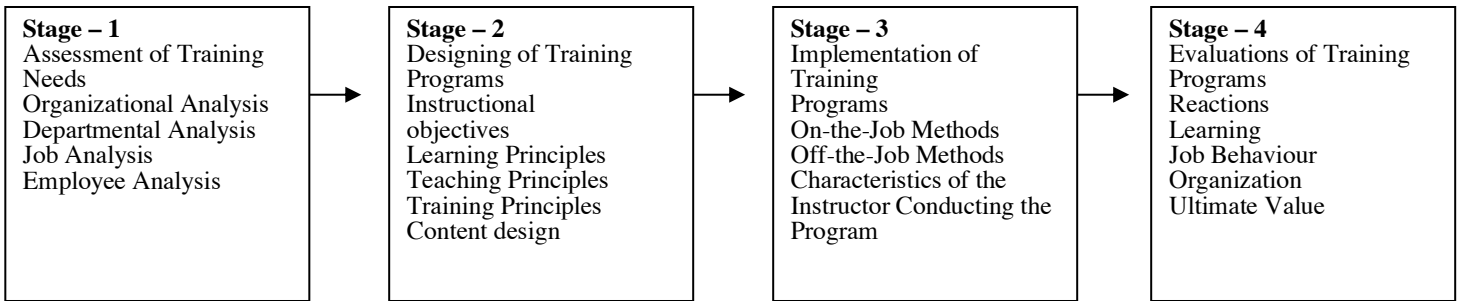
REVIEW OF LITERATURE

Human resource is the very vital and the backbone of every organization and it is also the main Resource of the organization. So organizations spend huge amount on the human resource capital because the performance of human resource will ultimately boost the performance of the organization. According to the Michel Armstrong, “Training is systematic development of the knowledge, skills and attitudes required by an individual to perform adequately a given task or job” Michel Armstrong (2001).

Training plays an extremely essential role in the employee as well as organizational performance. A terrible training plan is nothing but the loss of time and money (Tsauro and Lin, 2004). According to the Edwin B Flippo, “Training is the act of increasing knowledge and skills of an employee for doing a particular job.” The term ‘training’ indicates the process involved in improving the aptitudes, skills and abilities of the employees to perform specific jobs. Training aids in updating old talents and developing new ones. ‘Successful candidates placed on the jobs need training to perform their duties effectively’ (Aswathappa 2000). Chih , Li and Lee (2008) have been discussed, Training programme is dependent on the following parameters for its success (i) perceived value of leaning programme (ii) attitude to teacher (iii) response to learning conditions (iv) desire to learn: the degree to which trainees really want to learn and do well. Usefulness of training programme is possible only when the trainee is able to practice the theoretical aspects learned in training programme in actual work environment. They highlighted the use of role playing, cases, simulation, mediated exercises, and computer based learning to provide exposure to a current and relevant body of knowledge and real world situations (Bates and Davis 2010). Training programme is very necessary for any organization to give its employees training to get overall goals of the organization in a better way (Flynn et al., 1995). According to Karthik R (2012) discussed, Training objectives tell the trainee that what is expected out of him at the end of the training program. Training objectives are of great significance from a number of stakeholder perspectives; Trainer, trainee, designer, evaluator.

Delivery style is a very important part of Training and Development (Carlos A. Primo Braga, 1995). Employees are very conscious about the delivery style Michael Armstrong, 2000). If someone is not delivering the training in an impressive style and he is not capturing the attention of the audience it is means he is wasting the time (Mark A. Griffin et al., 2000). It is very necessary for a trainer to engage its audience during the training session (Phillip seamen et al., 2005). Delivery style means so much in the Training and Development.

PROCESS OF TRAINING NEEDS ANALYSIS:



(Source: P. Subba Rao, “Essentials of Human Resource management and Industrial Relations” Himalaya Publication House, 3rd Revised & Enlarged Edition 2009, Pg-199-203)

RESEARCH METHODOLOGY

A research design is the arrangement of conditions for collections and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. However the research design is the conceptual structure within with the research is conditional. It constitutes the blueprint for the collection measurement and analysis of data. Therefore research design is needed because it facilitate smooth sailing of various research operations, thereby making research as efficient as possible yielding maximal. Since the primary is the data used here, Descriptive Research is used. The population of the study is 194 employees which includes Team leaders, Executives and Workmen. The total

numbers of respondents are termed as sample size. The sample size for this analysis is 50 respondents. Sampling procedure is about “how respondents should be chosen” Simple random sampling was chosen. These are the statistical tools are used for the research work. These tools are Percentage analysis, Chi-Square, Median and Multi Dimensional Scaling (MDS)

Objectives of the Study

- To study the existing practices of training need analysis of employees in PDO organization.
- To find out the effective methods of training to achieve the goal of the organization.
- To identify the operating problems in the organization which determine training need analysis?
- To consolidate findings and suggestions regarding the training programme in PDO

Hypothesis

- There is association between personal profile and training need analysis.
- Training need analysis is done appropriately in the organization.
- Operating problems were reduced after the training programme..

RESULT AND DISCUSSIONS:

Research methodology is a way to systematically solve the research problem is to how research is done scientifically. It consists of the different steps that are generally adopted by the researcher to the study his research problem along with logic behind them. Base on questionnaire method researcher collect some data for analysis and give the interpretation for the current research.

Table: 1 Based on this research work these are the some of the important findings from percentage analysis.

Sl.No	Particulars	Frequency	Percentage
1.	Age wise (above 36)	26	52%
2.	Designation wise (work men)	39	78%
3.	Experience Wise (Above 9 years)	42	84%
4.	Training is benefit for skill development	36	72%
5.	Improve their attitude	30	60%
6.	Method of Training- Classroom	37	74%
7.	Method of Training – Video (not effective)	47	94%
8.	Method of Training – Workshop (effective)	50	100%
9.	Place Preferred for Training (Other Company)	40	80%
10.	Trainer Preferences (Industry Supervisors)	44	88%
11.	Training need analysis lead to effective training programme (Strongly Agree)	22	44%
12.	Training Need Analysis Leads to Improved Employee Orientation	21	42%

From the above table, some of the important findings derived from the table, 52% of the respondents belonged to the age group of above 36 years, where 78% of the respondents were workmen, 84% of the respondents had above 9 years of experience, it is inferred that 72% of the respondents have strongly agreed that training helps to improve their skills, From the table, it is inferred that 60% of the respondents have agreed that training helps to improve their attitude, 74% of the respondents said that classroom training was somewhat effective, The above table shows the method of training wise classification of the respondents, where 94% of the respondents said that video method was not very effective, 100% of the respondents have said that workshop method of training were very effective. Where 44% of respondents strongly agreed that training need analysis leads to effective training programme, The table shows training need analysis leads to improved employee productivity orientation, where 42% of the respondents agreed that training need analysis leads to improved employee productivity orientation.

Table 2: Modes of Training Need Analysis

Sl.No	Particulars	Ranks									Frequency
		1	2	3	4	5	6	7	8	9	
1.	Self requisition	7	22	5	12	2	1	0	0	1	50
2.	Observation	43	7	0	0	0	0	0	0	0	50
3.	Questionnaire	0	1	2	8	14	10	5	2	8	50
4.	Interview	0	4	5	6	7	8	10	8	2	50
5.	Assessment centre's	0	0	4	7	5	5	11	10	8	50
6.	Peer evaluation	0	3	8	7	6	2	8	8	8	50
7.	Performance management	0	1	9	1	4	6	8	12	9	50
8.	Job analysis	0	9	5	3	2	8	9	8	6	50
9.	Annual survey	0	3	12	4	10	10	0	3	8	50

From the above table, it is inferred that (mode of training need analysis), 44% (22) of the respondents have mentioned ranked 2nd for self requisition. 86% (43) of the respondents have ranked 1st for observation, 28% (14) of the respondents have ranked 5th for questionnaire, 20% (10) of the respondents have ranked 7th for interview, 22% (11) of the respondents have ranked 7th for assessment centre's, 16% (8) of respondents have 3rd, 7th, 8th and 9th for peer evaluation, 24% (12) of the respondents have ranked 8th for performance management, 18% (9) of the respondents have ranked 2nd for job analysis, 24% (12) of the respondents have ranked 3rd for annual survey.

Table 3: Operational Data used for Training Need Analysis

Sl.No	Particulars	Rank		Frequency	Percentage
		1	2		
1	Job description	49	1	50	100
2	Job specification	50	0	50	100
3	Performance standard	49	1	50	100
4	Performance on the job	49	1	50	100
5	Perception of the job by the job holder	0	50	50	100
6	Perception of the job by the supervisor	0	50	50	100
7	Perception of the job by management	1	49	50	100

8	Input from training committees	49	1	50	100
---	--------------------------------	----	---	----	-----

From the above table it is inferred that, 98% of the respondents have ranked first for job description, 100% of the respondents have ranked first for job specification, 98% of the respondents have ranked 1st for performance standard, 98% of the respondents have ranked 1st for performance on the job. 100% of the respondents have ranked 1st for the perception of the job by the job holder, 100% of the respondents have ranked 1st for the perception of the job by the supervisor, 98% of the respondents have ranked 1st for perception of the job by management, 98% of the respondents have ranked 1st for input from training committees in PDO organisation.

Table 4: Discuss the Operating Problems with Ranking method

Sl.No	Particulars	Rank					Frequency
		1	2	3	4	5	
1	Downtime reports	10	2	2	0	36	50
2	Waste	1	35	10	2	2	50
3	Repairs	38	2	0	8	2	50
4	Late deliveries	1	10	2	36	1	50
5	Quality control	1	1	35	3	10	50

From the above table it is inferred,72% (36) of the respondents have ranked 5th for downtime reports, 70% (35) of the respondents have ranked 2nd for waste,76% (38) of the respondents have ranked 1st for repairs,72% (36) of the respondents have ranked 4th for late deliveries,70% (35) of the respondents have ranked 3rd for quality control.

Table 5: Determination of Training Need Analysis

Sl.No	Particulars	Rank		Frequency
		1	0	
1	Performance Appraisal Data	42	8	50
2	Supervisor Observation	50	0	50
3	Peer feedback	1	49	50
4	Work sampling	1	49	50
5	Interview	2	48	50
6	Questionnaire	6	44	50
7	Tests of Job Knowledge/Skills/	6	44	50
8	Training Progress charts	2	48	50
9	Critical Incidents	10	40	50
10	Assessment center feedback	30	20	50
11	Coaching Feedback	1	49	50
12	MBO	0	50	50

From the above ranking method table, it is inferred that 100% of the respondents have said that supervisor observation has been mostly used to determine training need analysis, 84% of the respondents have said that performance appraisal data has been used to determine training need analysis, 60% of the respondents have said that assessment center feedback has been used to determine training need analysis, 98% of the respondents have said that peer feedback, work sampling and coaching feedback were not used to determine training need analysis.

Discussion with Hypothesis:

Hypothesis: There is no association between Age and Training Need Analysis leads to effective Training.

Table-6: Association between Age and Training needs analysis

		Training need analysis leads to effective training programme					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Age	Below 25	0	5	1	0	0	6
	26-30	0	2	1	1	0	4
	31-35	7	4	2	0	1	14
	Above 36	15	5	2	3	1	26
Total		22	16	6	4	2	50

Chi-Square Tests

	Value	D f	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.679	12	.129
Likelihood Ratio	21.876	12	.039
Linear-by-Linear Association	1.126	1	.289
N of Valid Cases	50		

17 cells (85.0%) have expected count less than 5. The minimum expected count is .16.

Degrees of Freedom = 12

Chi Square Value = 17.679

Table Value = 28.3

The Distribution is not significant.

Result:

Hence the χ^2 value is less than the table value we accept the hypotheses. There is no association between Age and Training Need Analysis leads to effective Training.

Hypothesis: There is no association between Designation and Training Need Analysis leads to effective Training.

Table 7: Association Between Designation and Training Need Analysis

Cross Tabulation

		Training need analysis leads to effective training programme					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Designation	Team leaders	2	1	0	0	2	5
	Executives	3	0	1	2	0	6
	Workmen	17	15	5	2	0	39
Total		22	16	6	4	2	50

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	27.069	8	.001
Likelihood Ratio	19.103	8	.014
Linear-by-Linear Association	4.291	1	.038
N of Valid Cases	50		

13 cells (86.7%) have expected count is less than 5. The minimum expected count is 20.
 Degrees of Freedom = 8

Chi Square Value = 27.069
 Table Value = 21.96
 The Distribution is not significant.

Result: Hence the χ^2 value is greater than the table value we reject the hypotheses.
 There is association between Designation and Training Need Analysis leads to effective Training.

Hypothesis: There is no association between Total experience and Training Need Analysis leads to effective Training.

Table 8: Association between Experience and Training Need Analysis Cross Tabulation

		Training need analysis leads to effective training programme					Total
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
Total Experience	4-6 years	2	0	0	1	0	3
	7-9 years	3	1	0	0	1	5
	Above 9 years	17	15	6	3	1	42
Total		22	16	6	4	2	50

Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.709	8	.286
Likelihood Ratio	9.487	8	.303
Linear-by-Linear Association	.011	1	.918
N of Valid Cases	50		

12 cells (80.0%) have expected count less than 5. The minimum expected count is .12.

Degrees of Freedom = 8
 Chi Square Value = 9.709
 Table Value = 21.96
 The Distribution is not significant.

Result:

Hence the χ^2 value is less than the table value we accept the hypotheses. There is no association between Total experience and Training Need Analysis leads to effective Training.

Table 9: Median Ranking for various factors

		Self Requisition	Observation	Questionnaire	Interview	Assessment	Peer evaluation	PM Data	Job Analysis	Annual Survey
N	Valid	50	50	50	50	50	50	50	50	50
	Missing	0	0	0	0	0	0	0	0	0
Median		2.00	1.00	5.00	6.00	7.00	6.00	7.00	6.00	5.00
Rank		II	I	III	IV	V	IV	V	IV	III

The variables used for ranking are self requisition, observation, questionnaire, interview, assessment centre's, peer evaluation, performance management data, job analysis and annual survey. From the median value it is inferred that observation has been ranked first, self requisition has been ranked second, questionnaire and annual survey has been ranked third, interview, peer evaluation, job analysis has been ranked fourth and assessment center and performance management (PM) data has been ranked fifth.

Table 10: Median ranking for various Operational factors

		Job Description	Job Specification	Performance standard	Performance on the job	Perception of the job by the job holder	Perception of the job by the supervisor	Perception of the job by management	Input from training committees
N	Valid	50	50	50	50	50	50	50	50
	Missing	0	0	0	0	0	0	0	0
Median		1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00
Rank		I	I	I	I	II	II	II	I

The various operational data's used for training need analysis are job description, job specification, performance standard, performance on the job, perception of the job by the job holder, perception of the job by the supervisor, perception of the job by management and input from training committees. From the median value it is inferred that job description, job specification, performance standard, performance on the job and input from training committees has been ranked first and perception of the job by the job holder, perception of the job by the supervisor and perception of the job by management has been ranked second.

Table 11: Median ranking for various Operating Problems

		Downtime reports	Waste	Repairs	Late Deliveries	Quality Control
N	Valid	50	50	50	50	50
	Missing	0	0	0	0	0
Median		5.00	2.00	1.00	4.00	3.00
Rank		V	II	I	IV	III

The operating problems used for determining training need analysis are downtime reports, waste, repairs, late deliveries and quality control. From the median value it is inferred that among the operating problems repairs has been ranked first, waste has been ranked second, quality control has been ranked third, late deliveries has been ranked fourth and downtime reports has been ranked fifth.

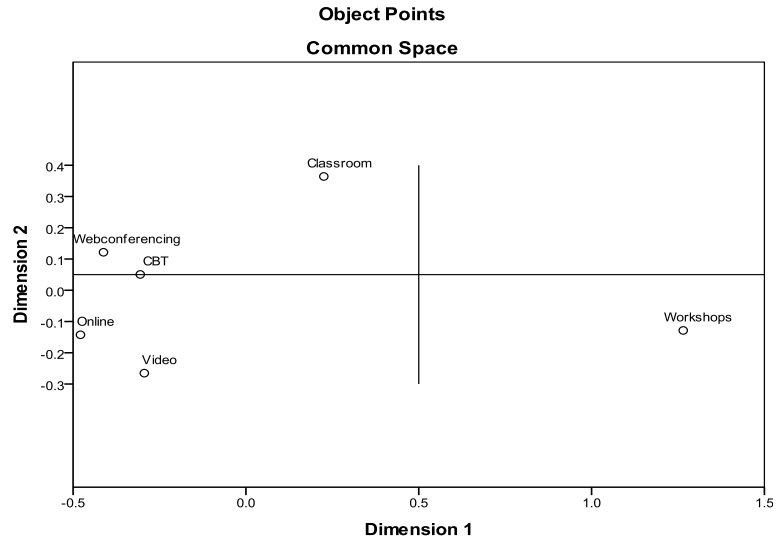
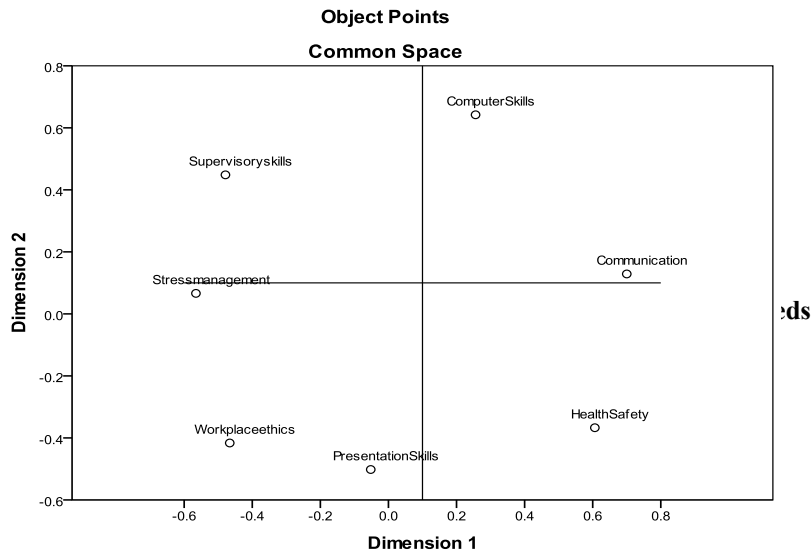


Chart 1: Multidimensional Scaling for Training Methods
Multidimensional Scaling

The dimensions used to identify which training method would be most effective in achieving learning goals are classroom, video, online, workshops, computer base training and web conferencing. It is the perception of the employees that only through workshops and classroom method training they can achieve their learning goals. They don't prefer to get trained through online, video, web conferencing and computer base training. With the advancement in technology when the organization adopts all these latest methods of training it would be beneficial for the employees in achieving their learning.



Distances

	Supervisory skills	Health & Safety	Stress management	Presentation Skills	Computer Skills	Work place ethics	Communication
Supervisory skills	.000						
Health & Safety	1.357	.000					
Stress management	.392	1.249	.000				
Presentation Skills	1.042	.672	.766	.000			
Computer Skills	.760	1.068	1.003	1.185	.000		
Work place ethics	.865	1.074	.493	.423	1.281	.000	

	Supervisory skills	Health & Safety	Stress management	Presentation Skills	Computer Skills	Work place ethics	Communication
Supervisory skills	.000						
Health & Safety	1.357	.000					
Stress management	.392	1.249	.000				
Presentation Skills	1.042	.672	.766	.000			
Computer Skills	.760	1.068	1.003	1.185	.000		
Work place ethics	.865	1.074	.493	.423	1.281	.000	
Communication	1.221	.505	1.267	.981	.679	1.287	.000

The dimension used to help understand continuing training needs are supervisory skills, health and safety, stress management, presentation skills, computer skills, workplace ethics and communication. Out of these stress management, computer skills and workplace ethics were closely related with supervisory skills where as health and safety, presentation skills and communication were not closely related with supervisory skills, workplace ethics were closely related with stress management where as computer skill and communication were not closely related with stress management, communication is closely related with presentation skills, workplace ethics and computer skills were not closely related, there is a distance between communication and workplace ethics.

Conclusion

Training and Development has positive effect on Organizational Performance. Training and development programs play a vital role in PDO organization. In PDO training programs improve the employee performance at workplace, it updates Employee Knowledge and enhances their personal Skills and it helps in avoiding Managerial Obsolescence. With the use of these programs, it is easier for the management to evaluate the job performance and accordingly take decisions like employee Promotion, rewards, compensations, welfare facilities, etc. In PDO (Petroleum Development of OMAN) organisation, they are conducting various programmes for enrichment of the manpower development. The PDO organisation mainly concentrates or conducts some technical training programme for the employees for the better of quality of work life. Based on the current research work, researcher has discussed clearly about the various values and discussion related to training need analysis of employees in PDO organisation.

REFERENCES

Aswathappa, K. (2000), "Human resource and Personnel Management", Tata Mcgraw-Hill Publishing Company Limited, New Delhi.

Carlos A. Primo Braga.1995. "The Impact of the Internationalization of Services on Developing Countries". Article based on a World Bank report, Global Economic Prospects and the Developing Countries Washington.

Flynn, B.B., Schroeder, R.G., Sakakibara, S. 1995. "The impact of quality management practices on performance and competitive advantage", Decision Sciences, Vol. 26 pp.659-91

Michael Armstrong. 2000. "Understanding training". Human Resource Management Practice. 8th Edition. Kogan page limited, London.

Mark A. Griffin. Andrew Neal.2000. "Perceptions of Safety at Work: A Framework for Linking Safety Climate to Safety Performance, Knowledge, and Motivation". Journal of Occupational Health Psychology Vol. 5(3), pp:347-358.

Michel Armstrong (2001), "A Handbook of Human Resource Management Practice", Kogan Page, 8th Editon.

Phillip Seamen .Anita Eves. 2005. "The management of food safety—the role of food hygiene training in the UK service sector". International journal of hospitality management Vol. 25(2), pp: 278-296.

P. Subba Rao (2009), "Essentials of Human Resource management and Industrial Relations" , Himalaya Publication House, 3rd Revised & Enlarged Edition.

Tsaur, S.H., Lin, Y.C.2004. "Promoting service quality in tourist hotels: the role of HRM practices and service behavior", Tourism Management, Vol. 25 pp.471.