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Evaluating the Effectiveness of training using Kirkpatrick model in Software industry-study in Q-spiders unit of Test Yantra Software Solutions, Bangalore

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Abstract

An effective training creates an employee extra efficient and productive. It is sine-qua-non for augmenting the skills, capabilities and knowledge of the worker. Training benefits the organisation also in making the use of other resources like Money, Materials, Machines, Markets, Methods and Minutes besides Manpower to perform effectively to reach the organisational objectives. The significance of the training totally depends on what it achieves. Appraisal of training effectiveness is an essential endeavour because it scrutinises to what extent the acquired knowledge is actually passed on to the workplace. This study based on Kirkpatrick model was aimed to conduct an assessment of training effectiveness especially in software industry, one of the fastest growing sectors in Indian business environment. Besides this study attempts to relate the four levels of Kirkpatrick model of training evaluation with the demographic variables like gender, department, age and qualification and in that way the study is novel and significant.

Keywords: Training Effectiveness, Assessment, Learning Outcomes, Software Industry, Kirkpatrick Model.

Introduction

Training is one of the basic components of human resource development. It's involved with developing human resource and making it performance ready. It's involved with developing selected abilities to the desired level by various methods ranging from lecture to Hands-on training. Training is highly useful tool that can bring an employee into a position where they can do their job correctly, effectively, and consistently. Training is the feat of escalating the knowledge and skill of an employee for performing a particular job. It is a process of learning a series of programmed behaviour. It is application of knowledge. It gives individuals the cognizance of the rules and procedures to direct their behaviour to the desired levels. Its endeavour is to improve their performance on the present job or make them ready for a planned

future job. The term training may be defined as "An activity by which the abilities, skills and competencies of individual employees to accomplish specific jobs are built-up." Thus, training is concerned with imparting specific skills or increasing the knowledge of particular employees for particular purpose.

The term training and development are closely related and are often used as identical concepts, there are some important distinctions in their meanings in the context. Training and development is a subsystem of an organization which highlight on the enhancement of the performance of individuals and groups. Training and development process which involves the sharpening of skills, concepts, competencies, changing of attitude and gaining more knowledge to enhance the performance of the employees.

Efficient and effective training of employees assists in their skills and competencies development, which eventually helps a company to grow. Training is about recognising where you are in the present and after some time where will you reach with your abilities. By training, people can pick up new information, new methodology and revitalise their existing competencies and skills. it's application of information. It provides folks awareness of the principles and procedures to guide their behaviour. It attempts to boost their performance on the job or prepare them for an identified job. The term training could also be outlined as "A method which suggestsways to enhance thepersonal power, skills and capacities of individual workers to perform specific jobs or train them for future jobs." Hence training ponders over inculcation of specific skills or increasing competency level of particular employees for certain purpose.

Dale S. Beach defines training as 'the organized procedure by which individuals learn competency and/or ability for a certain purpose'. Training refers to the teaching and learning activities carried on for the purpose of serving to members of a corporation acquire and apply the knowledge, skills, abilities and attitudes required for the selected job and the organization.

According to Duecento and Robbins, 'programmes that are more present day oriented, focuses on individual's current job, enhancing skills and abilities to immediately perform their job called training'

Kirkpatrick's Four Level of Evaluation of Training

Level 1 Evaluation-Reaction

The level-one evaluation, i.e. the reaction stage, assesses how the trainees feel about a program. Kirkpatrick (Kirkpatrick, 1998b) states that "assessing reaction is comparable to gauging customer satisfaction. If training is to be effective, it is important that students react favourably to it." This evaluation is often conducted using questionnaires given to the trainees after the training is complete. Kirkpatrick also states that if trainees do not react "favourable" to a training program, they usually are not motivated to learn.

Level 2 Evaluation-Learning

Learning measures the extent to which participants change their attitudes, improve their knowledge, and increases their skills as a result of attending the program. Level two is a test to

conclude if the learning transfer has happened. Kirkpatrick (Kirkpatrick 1998b) states that "it is important to assess learning because no change in behaviour can be envisaged unless one or more of these learning objectives have been achieved. This step is vital because if learning does not take place, behaviour cannot change and no before and after training measure of job performance to quality changes in knowledge, skills, attitudes, and behaviour after training.

Level 3 Evaluation-Behaviour

Level three evaluates the job impact of training. After "learning" has been assessed, an evaluator can establish if the training caused in any behaviour changes. In order to evaluate behaviour, Kirkpatrick again suggests testing before and after training. When evaluating this change, it is also imperative to give time for the training to take effect. It depends on the type of training that is given as to when the trainees should be evaluated for behavioural changes. For example, he states that for some training, a good "rule of thumb" for assessment is after two or three months and for others, after six months is more practical (Kirkpatrick 1998b). In order to measure this desired change in behaviour, Kirkpatrick suggests using surveys or interviews, or a combination of the two.

Level 4 Evaluation-Results

This final level of evaluation, the result stage, is often the most difficult, but most required evaluation. Kirkpatrick remarks that always results will solely be seen on a long-run basis like improved morale or quality of work-life. Kirkpatrick also cautions the evaluator to consider the cost of evaluation against the benefits. If it is too costly to quantify the results of a program, and the first three levels are sufficient, then the benefits of conducting an evaluation of results does not outweigh the costs.

Review of Literature

Kirkpatrick, 1998, from Kirkpatrick's doctoral research, the concept of the four Kirkpatrick measurement levels of evaluation engaged. While authoring an article about training in 1959, Kirkpatrick (1996) mentioned these four-dimension levels as the four steps of evaluating the effectiveness of training. It is unclear even to Kirkpatrick model, but this description persists today. As reported in the literature, this method is most frequently applied to either educational or technical training.

Binna Kandola (2000) has mentioned a number of the difficulties related to correct and helpful analysis of training effectiveness significantly within the department of soft skills that embrace skills with reference to human relations and management. The author cites some existing training analysis techniques then outlines a model of training analysis that presently is found to achieve success within the United Kingdom.

Moses (2000) observed that companies can no longer guarantee employees promotions, it is important that training and development help employees with career planning and skills development. Some organizations are anxious that career planning may communicate to workers

that their jobs are at risk, but it can be structured differently to convey that they are ready to devote in helping employees achieve their potential.

Yadapadithaya (2001) studied the current practices of evaluating training and development programs in the Indian corporate includes High pressure for increased quality, innovation, and productivity acts as a major driving force for the Indian corporate training and development programs, Most of the key result areas of training and development arena are associated to the quantification and evaluation of training effectiveness. Nearly 6 per cent of the private sector, 81 per cent of the public sector, and all the MNCs evaluate the training effectiveness in one approach or the other. The major objective of evaluation is to establish the effectiveness of the different components of a training and development program. Organizations depend mostly on the participants' reactions to examine the effectiveness of training. An overwhelming majority of the organizations deploy "questionnaires" as an instrument to collect relevant data for evaluation. In majority of the cases, evaluation was conducted immediately after the training.

Natarajan and Deepasree (2002) made a study on Training environment in the Burn Standard Company Limited, Salem", a Public sector undertaking. A structured questionnaire was circulated to 145 employees at random. The result of the study shows that training climate in the organization seems to be at an average level of (50%). For improvement, the scope is significantly high.

Selvam, M.Panchalan, R(2003) in his article "Evaluation of executive training at NLC Ltd: a case study" assesses the transfer of learning to the workplace and evaluation of tangible or intangible benefits of training to the business. This study endeavours at evaluating the effectiveness of executive training and its practical application. This study targets at evaluating the effectiveness of executive training of NLC Limited, a public sector undertaking situated at Neyveli, Tamilnadu. Seven major dimensions were identified and embraced for the evaluation of training. Relevant sub-factors were included for assessment under each of the major factor. Using random sampling technique, fifteen executive training programs were selected. 15 respondents were selected for the evaluation of training from each training program. The results of the study displayed that the training programs of the organization are generally effective. In only four out of 15 training programs chosen for evaluation, there was transfer of learning to the workplace after the training programme. It indicated dearth of follow up activities after training at NLC.

Sundararajan S. (2007) in his article on "Employees attitude towards training and development in private sector industries" suggests that, in the current competitive business environment, the demand of organizations compels Indian Industries to reconsider their vision and mission about Human Resource Development (HRD) procedures and routines using training and development. Today's industries are moving towards globalization, and this process is characterized by intense competition, technological innovations, customer satisfaction, competitive advantages etc. Impetus training and development is provided to human resource to deal with such competitive and complex situations in the business world.

Another study on "Impact of training climate on effectiveness of training programs" was presented by Anu Singh Lather and Harsh Sharma (2008). That study implies that training in

organization is getting increasing mind space of top managers. However, training has to come out from the periphery of corporate wheel to the centre of corporate functioning to assert its rightful place, and contribute proactively towards the attainment of organizational objectives. Showing commitment towards enhancing the value of training by the training professionals is a major requirement for this. The process of training delivery is mediated by pre and post-delivery training climate. This paper addresses all the vital issues of training climate and the role performed by various stakeholders in developing this. Using case study method, the study attempts to explain the importance of developing favourable training climate and negative impact of unfavourable training climate.

Reliability statistics

Training Evaluation questionnaire based on the Kirkpatrick model was developed by the author for conducting this study which is a multi-dimensional and consists of 28 items in the form of statements with a built-in 5-point scale for the respondent to choose the appropriate answer that is most descriptive of the perception of him/her: Strongly disagree, Disagree, Neutral, Agree, Strongly agree. It has both positive and negative points. The Training Evaluation questionnaire measures four (4) dimensions of training effectiveness namely reaction level, learning level, behaviour level and results level. The scores obtained under each dimension represent the level of effectiveness in each area.

Cronbach's alpha, test retest and split-half coefficients were used to determine reliability while facial and content validity was tested for the Training Evaluation scale.

Table No.1.0 shows the reliability statistics and proves the data could support 90.4 percentages reliable to do this analysis. The developed questionnaire has undergone Cronbach Alpha testing for testing its reliability and the value is given below:

Table 1. Reliability Statistics

Cronbach's Alpha	N of Items
.904	28

Objectives of the Study

The study will have the following objectives:

- i. To find out that the end result meets the business and end user requirements.
- ii. To evaluate the work products such as requirements and design.
- iii. To find out whether the training meets the company requirements.
- iv. To evaluate the training in software industry on the basis of Kirkpatrick's model of evaluation.

Research Methodology

Every study is based on certain methodology, which is a way to systematically solve the problem or attain its objectives. According to Clifford `Woody, "Research Methodology comprises of

defining and redefining problems, collecting, organizing and evaluating data, making deductions and researching to conclusions."

Type of Research

The type of the study can be classified as descriptive and quantitative type. Information was gathered from various sources like textbooks, magazines and internet web site. The approach to the study was through a survey conducted to the trainees.

Sources of Data

In this study, mainly two sources of data are used; a) Primary data, and b) Secondary data.

Primary Data

Primary data are those, which are collected afresh and for the first time and thus happen to be original in character. However, there are many methods of collecting data; all have not been used for the purpose of this project.

Secondary Data

Secondary data is collected from previous researches and literature to fill in the respective project.

Sample Size

A sample size of 100 candidates was selected using simple random sampling method, from a total population of 500 candidates. As the sample size is around 20% of the total population, it will be a true representative of universe.

Table 2: Overall Analysis of Evaluating the Effectiveness of Training Using Kirkpatrick's Model

Sl. No	Evaluation Levels	Mean Value
1	Reaction	4.3
2	Learning	4.22
3	Behaviour	4.35
4	Results	4.31

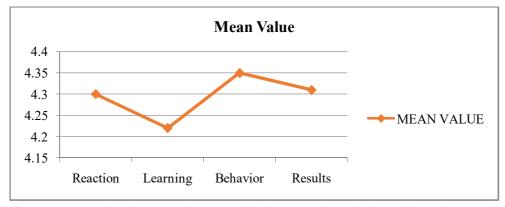


Chart 1: Overall Analysis of Evaluating the Effectiveness of Training Using Kirkpatrick's Model

From the above data with the four levels of training evaluation, it is analysed that the overall concentration should be given for learning changes which has 4.22 as mean value and then the concentration may be turned to reaction level which is with 4.3 as mean value as these two areas are very low compared to other two areas i.e., behaviour level with 4.35 as mean value and results level with 4.31 as mean value. The learning and reaction level scores can be augmented by testing the trainees one more time and by providing more support to apply what they have learnt.

Table 3: Gender Wise Analysis of Reaction Level of Training

Sl. No	Respondents	Mean Value	Number of Respondents
1	Male	4.28	61
2	Female	4.32	39
	Total		100

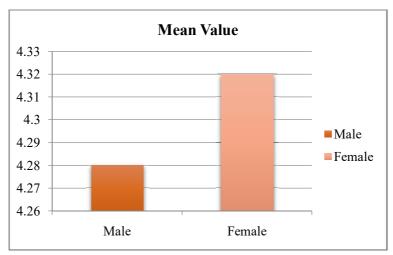


Chart 2: Gender Wise Analysis of Reaction Level of Training

The above data and graph with male and female respondents in the reaction level of training has the difference in mean value. whereas, the mean value of male respondents is 4.32 and mean value of female respondents is 4.28. This shows that the mean value of male respondents is less, compared to the female respondents and this signifies that reaction level of male respondents in training is less and they should be concentrated to give positive reaction immediately after the training is over.

Table 4: Gender Wise Analysis of Learning Level of Training

Sl. No	Respondents	Mean Value	Number of Respondents
1	Male	4.2	61
2	Female	4.26	39
	Total		100

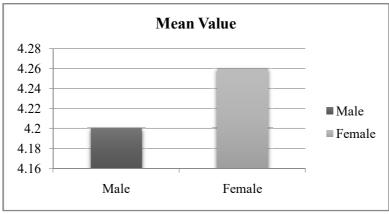


Chart 3: Gender Wise Analysis of Learning Level of Training

From the above data and graph representing the mean value of male and female respondents in learning level of training with the value of male respondents as 4.2 and value of female respondents as 4.26, it clearly states that female respondents find the training more useful than the male respondents in the learning area and more concentration is required in improving the learning level of male candidates.

Table 5: Gender Wise Analysis of Behavior Level of Training

Sl. No	Respondents	Mean Value	Number of Respondents
1	Male	4.33	61
2	Female	4.38	39
	Total		100

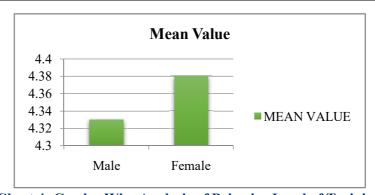


Chart 4: Gender Wise Analysis of Behavior Level of Training

From the above data it is clear that comparatively difference is less in value between the male and female respondents as male respondents has 4.33 as mean value and female respondents has 4.38 as mean value.

Table 6: Gender Wise Analysis of Results Level of Training

Sl. No	Respondents	Mean Value	Number of Respondents
1	Male	4.31	61
2	Female	4.3	39
	Total		100

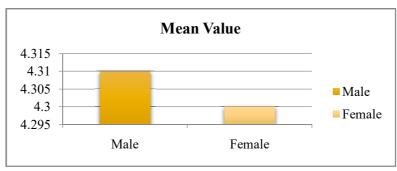


Chart 5: Gender Wise Analysis of Results Level of Training

From the above data we can infer that in the results level of training, male respondents have 4.31 as mean value and female respondents has 4.3 as mean value. This states that the mean value of female respondents is less, compared to the mean value of male respondents and the difference is quite marginal. But when we compare all the four levels of analysis based on gender, it shows that female respondents possess more value in three levels viz., reaction, behaviour and learning and the male respondents possess more value in only one level namely results in the Kirkpatrick model in software training.

Table 7: Department Wise Analysis of Reaction Level of Training

Sl. No	Departments	Mean Value	Number of Respondents
1	Testing	4.27	57
2	Development	4.33	43
	Total		100

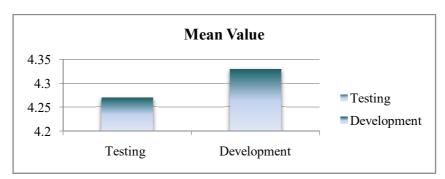


Chart 6: Department Wise Analysis of Reaction Level of Training

The above data and graph representing the difference between the mean value of two different departments i.e., testing and development. The mean value of testing department is less compared to development department as they have 4.27 and 4.33 as mean value respectively. The reaction level of training in testing department is found to be less than the level of development department.

Table 8: Department Wise Analysis of Learning Level of Training

Sl. No	Departments	Mean Value	Number of Respondents
1	Software Testing	4.19	57
2	Software Development	4.27	43
	Total		100

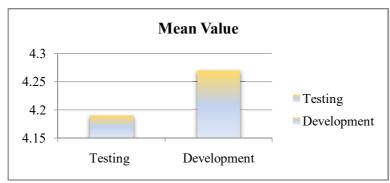


Chart 7: Department Wise Analysis of Learning Level of Training

From the above data we can conclude that there is slightly higher difference of value between testing and development department with the mean value of testing department as 4.19 and mean value of development department as 4.27 and it clarifies that effective learning is more in development department compared to the testing department in the learning level of training and more concentration on the testing department personnel is needed.

Table 8: Department Wise Analysis of Behavior Level of Training

Sl. No	Departments	Mean Value	Number of Respondents
1	Testing	4.33	57
2	Development	4.38	43
	Total		100

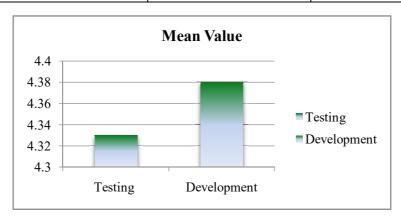


Chart 8: Department Wise Analysis of Behavior Level of Training

From the above data and graph, we can infer that in the behaviour level of training, testing department has 4.33 as mean value and development department has 4.38 as mean value. It signifies that the mean value of testing department is less, compared to the mean value of development department which implies that changes in behavioural level through training is less identified in testing department.

Table 9: Department Wise Analysis of Results Level of Training

Sl. No	Departments	Mean Value	Number of Respondents
1	Testing	4.27	57
2	Development	4.36	43
	Total		100

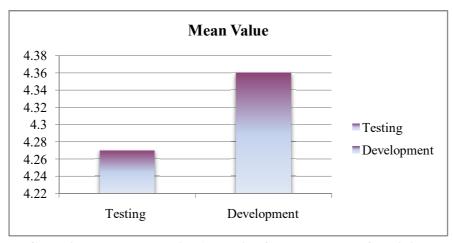


Chart 9: Department Wise Analysis of Results Level of Training

Interpretation

From the above data and graph, it can be inferred that there is significant difference in the mean values between testing department and development department in results level of training as compared to other levels of training evaluation. As the mean value of testing department is 4.27 which is less than the development department which has 4.36 as mean value. Hence, more concentration should be given to testing department personnel.

Mean Value **Number of Respondents** Sl. No Age 20 and 21 4.3 14 1 22 and 23 55 4.3 3 24 and 25 4.28 31 Total 100

Table 10: Age Wise Analysis of Reaction Level of Training

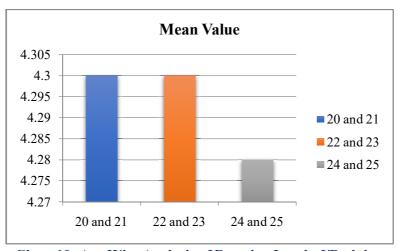


Chart 10: Age Wise Analysis of Reaction Level of Training

From the above data and graph of reaction level of training amongst the age groups, it is clear that the mean value of age group 20 & 21 (is 4.3), 22 & 23 (is 4.3) and 24 & 25 (is 4.28). Though there is no significant difference in mean values giving more concentration on the age group of 24 and 25 may yield positive results.

Table 11: Age Wise Analysis of Learning Level of Training

Sl. No	Age	Mean Value	Number of Respondents
1	20 and 21	4.11	14
2	22 and 23	4.21	55
3	24 and 25	4.29	31
	Total		100

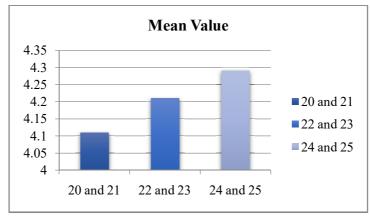


Chart 11: Age Wise Analysis of Learning Level of Training

The above data and graph clearly show that the difference in mean value of each group is high, the mean value of age group 20 & 21 is 4.11, 22 & 23 is 4.21 and 24 & 25 is 4.39. Comparatively the first age group is less in mean value than the other next two age group which shows that the age group of 20&21 personnel are to be concentrated at learning level of training.

Table 12: Age Wise Analysis of Behavior Level of Training

Sl. No	Age	Mean Value	Number of Respondents
1	20 and 21	4.29	14
2	22 and 23	4.4	55
3	24 and 25	4.3	31
	Total		100

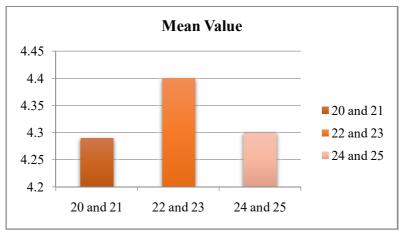


Chart 12: Age Wise Analysis of Behavior Level of Training

From the above data and graph, we can infer that there is a fluctuation in the mean values between three age groups in behaviour level of training. The mean value of age group 20& 21, 22 & 23 and 24 & 25 goes respectively as 4.29, 4.4 and 4.3. This comparison between the three-age groups defines that 1st and 3rd age group have less mean value than the 2nd age group and the difference is not that significant.

Table 13: Age Wise Analysis of Results Level of Training

Sl. No	Age	Mean Value	Number of Respondents
1	20 and 21	4.28	14
2	22 and 23	4.33	55
3	24 and 25	4.29	31
	Total		100

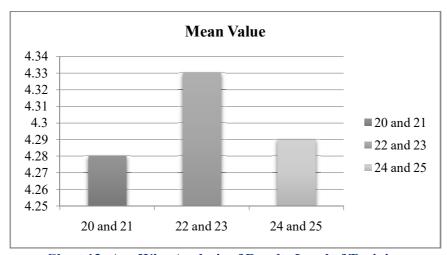


Chart 13: Age Wise Analysis of Results Level of Training

When the data of results level of training it is analysed it is found that the age group 20 & 21 has 4.28 as mean value, 22 & 23 has 4.33 as mean value and 24 & 25 has 4.29 as mean value. This difference in value defines that the 1st and 3rd age group has less mean value than the 2nd age group. Hence, from the above it is clear that mean value of 2nd age group is more than the mean value of 1st and 2nd age group and these two age groups must be concentrated more at the results level of training.

Table 14: Qualification Wise Analysis of Reaction Level of Training

Sl. No	Qualification	Mean Value	Number of Respondents
1	Graduate Professional	4.22	70
2	Graduate	4.39	12
3	Post Graduate	4.51	18
	Total		100

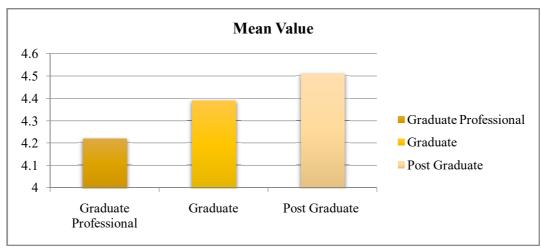


Chart 14: Qualification Wise Analysis of Reaction Level of Training

Qualification wise analysis of the data at the reaction level of training shows that the graduate professionals have 4.22 as mean value, graduateshave 4.39 as mean value and Post graduatesscore 4.51 as mean value. Based on the mean values it is observed that the mean value of graduate professional is less compared to graduates, and the post graduates have highest value compared to others.

Table 15: Qualification Wise analysis of Learning Level of Training

Sl. No	Qualification	Mean Value	Number of Respondents
1	Graduate Professional	4.17	70
2	Graduate	4.17	12
3	Post Graduate	4.46	18
	Total		100

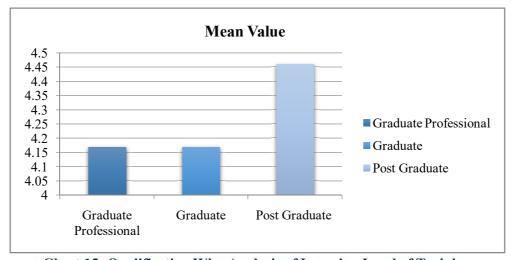


Chart 15: Qualification Wise Analysis of Learning Level of Training

The above data and graph shows that under learning level of training, graduate professional and graduate has the same mean value as 4.17 and post graduate has 4.46 as mean value. On this level it is understood that the level of learning by the graduate professional and graduate is lesser than the post graduate who posses high level of mean value and learning abilities comparatively.

Table 16: Qualification-Wise Analysis of Behavior Level of Training

Sl. No	Qualification	Mean Value	Number of Respondents
1	Graduate Professional	4.3	70
2	Graduate	4.47	12
3	Post Graduate	4.49	18
	Total		100

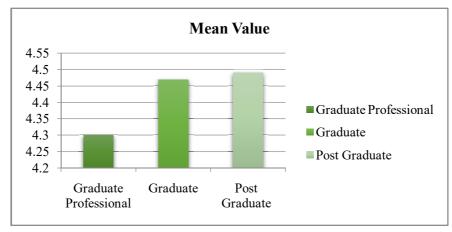


Chart 16: Qualification-Wise analysis of Behavior Level of Training

From the above data and graph we can infer that the graduate professional has less mean value than the graduate and post graduate. Whereas, the mean value of them as 4.3, 4.47 and 4.49 respectively and on this observation it is clear that there is less impact on graduate professional when it comes to behavioural change than the graduates and post graduates who has more behavioural change.

Table 17: Qualification Wise Analysis of Results Level of Training

Sl. No	Qualification	Mean Value	Number of Respondents
1	Graduate Professional	4.24	70
2	Graduate	4.38	12
3	Post Graduate	4.53	18
	Total		100

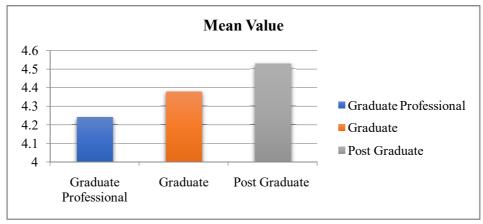


Chart 17: Qualification Wise Analysis of Results Level of Training

From the above data and graph we can analyse that in the results level of training, the graduate professional is less with its mean value of 4.24, compared to graduate which has 4.38 as mean value and post graduate with 4.53 as mean value, and by this we can say that the graduate professional is less result oriented based on the training. On the overall analysis of all the levels of training under qualification, it is observed that graduate has less mean value in all the levels and should be concentrated more, compared to graduate and post graduate.

Findings in reaction level dimension

- a) Comparatively, based on the mean values and number of respondents it is found that the level of changes in reaction of male respondents towards the training session is less. (Table 2)
- b) On department wise, with the mean values in the dimension of reaction level of trainees in testing department is less than the others. (Table 6)
- c) It is observed that the maximum trainees from the age group of 22 & 23 feel that the training has less impact on the reaction of the trainees at the end of the training program. (Table 10)
- d) Considering the respondents from different qualifications, the majority of trainees from graduate professional are found to be experiencing low level of reaction in the training sessions. (Table 14)

Findings in learning level dimension

- a) Majority of the trainees i.e., male respondents feel that the training program has not increased the learning perspective of them as compared to the response of female respondents. (Table 3)
- b) A significant number of respondents from the development department agree that this training program has helped them to learn many technologies and increase their skill set. (Table 7)
- c) More than half of the respondents from the age group of 20 & 21 and 22 & 23 feel that the training program has increased the ability of learning new skills. (Table 11)
- d) Maximum number of the trainees from graduate and graduate professional can be seen finding the training program making a less impact in their learning changes based on the values evaluated. (Table 15)

Findings in behaviour level dimension

- a) A large number of male respondents on gender based analysis, feel that there was not much of the changes in their behaviour even after completion of the training program. (Table4)
- b) Majority of the respondents from the testing department feel, the training has not created much of impact on their behavioural changes in learning many technologies and vice-versa is the feeling of respondents from development department. (Table 8)
- c) Maximum number of respondents from age group of 22 & 23 agree that the training program has increased the behavioural level of the trainees and it is also helping them to increase the efficiency and confidence of the respondents. (Table 12)
- d) It is been found that based on the value, graduate professional have not experienced changes in behaviour like the graduate and post graduates experienced by the training program provided to them. (Table 16)

Findings in results level dimension

- a) It is observed that more than half of the respondents i.e., male and female agree that the training session provided to them are of result-oriented program. (Table 5)
- b) Based on the values, a considerable number of respondents from testing department does not feel that training sessions were not completely result giving program and the respondents from development department feel it as a result oriented. (Table 9)
- c) Majority of the trainees from the age group 22 & 23, agree that the training session has been a result giving program and helped to gain knowledge in different technologies trained on. (Table 12)
- d) By considering base on the qualification of trainees, it is found that the maximum respondents i.e., graduate professionals find the training as less result oriented, while the graduates and post graduates feel it as highly resulting program. (Table 17)

Suggestions

Some suggestions are offered based on the findings given above:

The institute/organization should concentrate more on all the trainees to get 100% positive feedback and to find good behavioural changes in the trainees. Adoption of various new methods of training delivery could make the training program more result oriented.

The trainer should make the training more effective, so that the trainees not only understand the concept and learn things easily, but also can make the reaction by the trainees towards the training positive.

The session leader should concentrate more on the male candidates to improvise their reaction level towards the training and to gain positive feedback.

Superior quality of training materials and training aids provided to the trainees will increase their involvement in learning.

Adoption of modern technology, techniques and methods of teaching will help to increase the learning perspective of all trainees in the institute/organization.

The preference of trainees regarding teaching methods should be collected and followed during the course, as it will increase their interest in learning.

Acknowledging the problems and addressing them in the right way will have a chance to make behavioural changes in the trainees and can be examined that how it plays a major role in their actual work life.

To attain overall positive results, more concentration should be given irrespective of age and reaching out everyone will improve the strength of the training session and also will increase the interest of candidates to attend various new programs arranged by the organization.

The organization may consistently apply new strategies for the evaluation of training and development initiatives, and customized training module to be used to make the training program more result oriented as it may create more future references to take up the training programs.

Conclusion

It is a great opportunity given to study the evaluation of training program that too applying the Kirkpatrick model, so that the different nuances of training could be well understood. The rapidly changing and competitive global environment requires organizations to become more effective in the recruitment and development of a skilled and efficient workforce. Training function is an important issue for every sector in general, and to the growth oriented soft-ware sector in particular. Organizations are benefitted by effective training and development of trainees as trainees who have attended the training program gain significantly from the training in terms of improved job performance, transfer of skills, job satisfaction, team work, work motivation, chances of promotion, skills level, and knowledge and communication.

References

- Abrahams, I.; Millar, R. (2008) Does Practical Work Really Work? A study of the effectiveness of practical work as a teaching and learning method in school science. International Journal of Science Education, 30, 1945-1969.
- Alwarez, K., E. Salas, and C.M. Gorofano (2004), An Integral Model of Training Evaluation and Effectiveness, Human Resource Development Review 3, pp 385-407.
- Antonio Giangreco, Antonio Sebastiano and Riccardo Peccei (2009), Trainee's reactions to training: an analysis of the factors affecting overall satisfaction with training, The International Journal of Human Resource Management, 20(1), pp 96-111.
- Aragón-Sánchez, A.; Barba-Aragón, I.; Sanz-Valle, R. (2003) Effects of training on business results. International Journal of Human Resource Management, 14, 956-980.
- Baldwin, T. T. and Ford, J.K. (1988), Transfer of training: a review and directors for future research, Personnel Psychology 41, pp 63-103. Quoted in Scaduto Anne, Lindsay Douglas & Chiabur S. Dan (2008), Leader influences on training effectiveness: motivation and outcome expectation process, International Journal of Training and Development 12(3), pp 158-170.
- Borate, N.S.; Borate, S.L. A Case Study Approach for Evaluation of Employee Training Effectiveness and Development Program. SSRN Electron. J. 2016, 2.
- Broad, M.L.; John, W. Newstrom, Transfer of Training: Action-Packed Strategies to Ensure High Payoff from Training Investments; Addison-Wesley Publishing: Boston, MA, USA, 2012.
- Brown, G. and Read, A.R., (1984), Personnel and Training Policies-Some Lessons for Western Companies, Long Range Planning, 17(2), pp 48-57.
- Daniels, S. Employee training: A strategic approach to better return on investment. J. Bus. Strat. 2003, 24, 39-42.
- Deros, B.M.; Saibani, N.; Yunos, B.; Rahman, M.N.A.; Ghani, J.A. Evaluation of Training Effectiveness on Advanced Quality Management Practices. Procedia Soc. Behav. Sci. 2012, 56, 67-73.
- Devi, R. & Shaik, N. (2012). Evaluating training & development effectiveness: A measurement.

- Edmondson, A.C.; Nembhard, I.M. Product Development and Learning in Project Teams: The Challenges Are the Benefits. J. Prod. Innov. Manag. 2009, 26, 123-138.
- Farjad, S. The Evaluation Effectiveness of Training Courses in University by Kirkpatrick Model (Case Study: Islamshahr University). Procedia Soc. Behav. Sci. 2012, 46, 2837-2841.
- Ford, J.K., Weissbein, D.A. Transfer of Training: An Updated Review and Analysis. Perform. Improv. Q. 2008, 10, 22-41.
- Gist, M.E., Bavetta, A.G., & Stevens, C.K (1990), Transfer Training Method: It's Influence on the Acquisition and Maintenance of Complex Interpersonal Skills, Personnel Psychology, 44, pp 837-861.
- Hall. L. Michael, Nania Sharon, (1997), Training Design and Evaluation: An example from a satellite based distance learning program, Public Administration Quarterly, pp370-385.
- Hinrichs JR (1976), Personnel Training. In Dunnette MD (Ed.), Handbook of Industrial/ Organizational Psychology, pp 829-860. New York: Rand McNally.
- Holton, E.W. Bates, R.A. & Naquin, S.S., (2000), Large-scale Performance Driven Training Needs Assessment: A Case Study, Public Personnel Management, 29, pp249-26827. Human Resource Development Quarterly, 11, pp333-360.
- Honeycutt, V.Howe, and T.N. Ingram (1983), Shortcomings of Sales Training Programs, Industrial Marketing Management, pp 117-123.
- Huque A.S and Vyas L (2008), Expectations and performance: assessment of public service training in Hong Kong, The International Journal of Human Resource Management, 19(1), pp 188-204.
- Jiménez, S.; Juárez-Ramírez, R.; Castillo, V.H.; Ramírez-Noriega, A. Integrating affective learning into intelligent tutoring systems. Univers. Access Inf. Soc. 2018, 17, 679-692.
- Kirkpatrick DL (1978), Evaluating in-house training programs. Training and Development Journal, 38, pp32-37.
- Leach P. Mark & Liu H. Annie., (2003), Investigating interrelations among sales training evaluations, Journal of Personal Selling & Sales Management, XXII (4), pp327-339.
- Lee, K. Augmented Reality in Education and Training. Tech Trends 2012, 56, 13-21.
- Manju. S & Dr. Suresh B.H (2011). Training Design Interventions and Implications for the productivity Effectiveness, Synergy, 9(1) pp 52-68.
- Model. Asian Journal of Management, 2(1), 722-735. [accessed Oct 10 2022].
- Mollahoseini, A.; Farjad, S. Assessment Effectiveness on the Job Training in Higher Education (Case Study: Takestan Uni-versity). Procedia Soc. Behav. Sci. 2012, 47, 1310-1314.
- Nemec, J.; Burak, E. Comparative analysis of the on-job training for tax officials in V4 countries. Teach. Public Adm. 2018, 37, 3-11.
- Niraj Kishore Chimote (2010), Training Programs: Evaluation of Trainees' expectations and experience. The IUP Journal of Organizational Behaviour, IX(3), pp28-47.
- Noe A. Raymond (1996). Trainees' Attributes and Attitudes: Neglected Influences on Training Effectiveness Academy of Management Review, 11(4), pp 736-749.

- Noe, R.A. Employee Training and Development, 5th ed.; McGraw Hill: New York, NY, USA, 2007.
- Ozioma Obi-Anike, H.; Ekwe, M.C. Impact of Training and Development on Organizational Effectiveness: Evidence from Selected Public Sector Organizations in Nigeria. Eur. J. Bus. Manag. 2014, 6, 66-75.
- Scaduto Anne, Lindsay Douglas & Chiabur S. Dan (2008), Leader influences on training effectiveness: motivation and outcome expectation process, International Journal of Training and Development 12(3), pp 158-170.
- Schmidt Steven W (2009), Employee demographics and job training satisfaction: the relationship between dimensions of diversity and satisfaction with job training, Human Resource Development International, 12(3), pp 297-312.
- Shahzadi, I.; Javed, A.; Pirzada, S.S.; Nasreen, S.; Khanam, F. Impact of Employee Motivation on Employee Performance. Eur. J. Bus. Manag. 2014, 6, 159-166.
- Shek, D.T.; Pu, E.X.; Wu, F.K. Evaluation of the Training Program of the Tin Ka Ping P.A.T.H.S. Project in Mainland China. Int. J. Child Adolesc. Health 2017, 10, 189.
- Tennant, C.; Boonkrong, M.; Roberts, P.A. The design of a training programme measurement model. J. Eur. Ind. Train. 2002, 26, 230-240.
- Tseng, Y.C.; Hsu, H. Investigating the influence of experiential training on the ability to anticipate risks of caught-in accidents. Int. J. Occup. Saf. Ergon. 2020, 1-7.
- Yadapadithaya P.S, Stewart Jim (2003), Corporate training and development policies and practices: a cross-national study of India and Britain, International Journal of Training and Development, pp 108-123.