

Training Need Analysis of UG and PG Teaching Staff

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Abstract

The aim of this study is to identify training needs of university faculty members, to understand the impacts of a proper training need analysis and understand the skill gap. A list of training needs of faculty members will be developed in terms of technological innovations in general, developing skills of faculty members in the use of technological innovations and promoting university faculty members in quality assurance skills. The data collection is based on a questionnaire developed to assess university faculty members' needs in different areas. The study will recommend a program for training faculty members, to use technological innovations, meet their scientific research needs, university teaching, and community service and meet course requirements in terms of quality standards and performance indicators. Both Primary and secondary research have been performed. For primary research, questionnaire was circulated to the professors of UG and PG universities. The responses are analyzed and hypothesis testing is performed. Chi square test of independence is used to conclude the objectives. We were able to successfully conclude that training need analysis impacts the satisfaction and career development of the teaching staff.

Keywords: Training, analysis, Satisfaction, Career Development

INTRODUCTION

Modern technology, as well as regional and international changes in teaching, learning methods, scientific research, and educational quality, are all key consumers of university education.

Faculty preparation and professional growth are being prioritised by educational institutions all over the world. Programs for increasing their performance and creating the suitable environment are provided to assist them in properly carrying out their tasks. However, numerous studies have shown that as a result of globalisation, information, revolution, and modern technology, university education faces numerous obstacles. Academic failure, disengagement, and poor academic achievement are instances of these.

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Self-Development

This refers to a faculty member's attempts to improve themselves by activities such as attending seminars, lectures, conferences, workshops, conducting research, and translating, among others.

Institutional-Development

This is performed through training workshops, seminars, research, and exchange visits with other universities offered by the university. In order to achieve excellence in university education, a growing reliance on technological discoveries, expanding social demand for education, and the need to spend resources to cope with sustained development are all issues that must be addressed.

Technological advancements are not objective; their efficacy is decided by how competent and trained faculty members employ them in the teaching and learning process. The following are some of the advantages of assessing staff training needs:

1. Making plans for training
2. Establishing workout goals
3. Creating training programmes that help people attain their goals
4. Improving the efficiency of training
5. Recognizing and resolving issues with employee performance
6. Getting employees involved in community service
7. Assisting trainers in developing programmes that meet the needs of trainees
8. Activity planning for training programmes that is effective
9. Defining training programme assessment criteria
10. Increasing the efficiency of university education

Given these advantages, the current study aims to identify university faculty training needs in order to increase their skills and knowledge through the use of cutting-edge technology.

CONDUCTING TNA

Everyone recognises the importance of training in improving the quality and productivity of our workforce. Unfortunately, training might be done in a haphazard manner. Our limited training budget must be allocated in a systematic manner to the areas that demand the most improvement. Training needs analysis solves the problem of systematically establishing the actual gaps in the workforce's needed capabilities (TNA).

Identification of Training Needs and Analysis

Individual and group training needs identification is the first and most important step in the training process for people, groups, and organisations to achieve their objectives. It aids in the creation of an individual's dominating attitude as well as the environment of an organisation. Before assessing training needs, it's critical to understand what training and training needs mean. Training is any structured activity that is the result of stated learning needs and is intended to improve an individual's or organization's performance.

Based on these critical criteria, here are some examples of how to successfully perform TNA in the institute. It is the process of bringing an organization's people resources up to the desired level of performance, behaviour, and attitude from where they are now. As a result, stimulating training needs is a requirement for progressing to the required level of performance, allowing workers to be satisfied at work while also achieving organisational objectives. This requirement applies to all organisations, regardless of whether they are social or economic, government or non-government, for profit or not for profit.

Here are some examples of how to successfully execute TNA in the institute based on these crucial characteristics:

Establishing the Objectives

The criteria will be determined by the training budget, as well as the company's existing and future labour skill requirements. For measuring the effectiveness of training, it's crucial to set goals.

Examining Previous and Present Training Programs

Checking on current training activities is essential for ensuring coordination and minimising duplication of effort. It is vital to examine prior performance in order to learn about their strengths and limits in order to make the current programme more effective.

Analyzing Job Functions

It would be pointless to hunt for something unrelated to the job description of the individual. Because of a lack of accounting skills, a worker who is simply responsible for keeping the office tidy would not be considered for a post. However, there are difficulties that must be thoroughly investigated because what is written may not exactly match the actual work function. It's probable that the job description's tasks will need to be defined. At this level, preliminary observations can be made.

Categorizing the types of Training needed

For the best results, training should be tailored to the type of training desired. One way to achieve this is to look at individual, vocational, and organisational skills and demands. For example, technical training may merely include enough knowledge to allow management to discuss the situation.

Design and Implementation of Training Needs Survey

The HR manager must be aware of how to obtain critical information. It's critical to ask the correct survey questions and collect data in the right way. In certain cases, a personal interview is required, while in others, a form may suffice.

Higher Management Results

In many cases, the results must be presented in a specific format so that upper management can appreciate the proposals' validity and worth. In order for the programme to be approved, this is required. Assessing your training needs is the first step in creating a successful training programme.

1. The method of training requirements analysis is chosen depending on the job type of the employee and the skill gap analysis that must be undertaken. There are a few popular training demand analysis approaches in the business world
2. **Direct observation-** In a variety of contexts, the training supervisors observe the employees' working patterns. Managers might use this observation to learn about performance discrepancies. The technical procedures utilised to do the job, as well as the functional components of the job and the employee's conduct, are all examined during the observation. It provides both qualitative and quantitative feedback on the current performance of the employee.
3. **Interviews-** It's a one-on-one conversation on how the employee does his or her job. By speaking with each individual or a group of employees, you can obtain information on production gaps. The interview might be conducted in a formal or informal setting. The interview might take place either in person or online.
4. **Focus groups-** It's a brainstorming session to determine where the employee's skills are lacking. Employees are encouraged to discuss and debate ways for improving their performance at work. The training manager pays close attention to this conversation and analyses it in order to establish the organization's training requirements.
5. **Assessments/surveys-** Surveys are a simple and quick way to determine where a department's performance is weak. To determine their training needs, employees are given a well-designed questionnaire to fill out. Open-ended and closed-ended questions, as well as rating and projective questions, may be included in the survey. Employees can respond anonymously to the poll, enhancing its trustworthiness.
6. **Client Feedback-** In most service industries, performance flaws are discovered through customer feedback. The customer's immediate input identifies the exact job area that need improvement.
7. **Others:** There are a few additional methods of determining training needs, such as consulting with people in key positions within the business, studying relevant literature in the work area, and using reports, records, and work samples.

Process

Depending on the work profile of its employees, organisations use several degrees of training requirements assessments. However, there is a set method that must be followed in all sorts of training needs analyses. The process of determining training needs is divided into four steps:

1. **Step 1: Performance Gap Analysis:** To identify performance gaps, this stage compares current and desired employee performance results. A performance gap is the difference between the required and actual productivity of an organisation.
2. **Step 2: Root Cause Analysis:** Root cause analysis is a method for determining the source of performance inconsistencies. The issues are grouped into five categories: skills, resources, incentives, motivation, and information such as feedback. It is established which areas are contributing to poor performance and which areas require improvement using root cause analysis.
3. **Step 3: Needs Analysis:** A complete analysis is carried out in order to identify and implement the suitable intervention to address the performance issues. This stage focuses on a single area in need of change identified through the root cause analysis. A job analysis, task analysis, environment analysis, and a cost-benefit analysis of the target audience for the training are all part of this analysis.
4. **Step 4: Recommendations:** A relevant training option is suggested in this phase. It specifies the type of training programme that should be implemented by a company in order to increase overall productivity.

Organizational Level

Employee training that is not aligned with the company's goals is considered a waste of resources. It is vital that the organization's training programmes support personnel in accomplishing the company's strategic business goals. The organisational level training need analysis employed data sources such as company goals, skill inventory, employee inventory, organisational culture, and customer satisfaction data to determine the training needs of employees.

- Which department requires the most training?
- What is the organisational level of training requirement analysis?
- Which training programme will help the Institute solve its problems?

To improve the success of the training programme, a clear and measurable training outcome is identified at the organisational level.

Operational Level

- A job level analysis indicates what kind of training an employee needs to achieve the desired level of work proficiency. It specifies the knowledge and skills required to execute a certain position within the organisation. The operational level training need analysis employed data sources such as work performance standards, job descriptions, job specifications, and study of operational difficulties to establish staff training needs.
- What is the expected level of performance for the job?
- How should the teachers carry out the assignment in order to satisfy the set performance standards?
- What training programme should be employed to improve the teachers' talents, knowledge, and skills in order to execute the assignment successfully?

Individual Level

- The individual training needs analysis confirms how the employee does their job. To identify the employee's training needs, the gap between expected and actual performance is investigated. Individual level training need analysis employs data sources like as performance reviews, employee skill assessments, interviews and questionnaires, customer surveys, and work samples to determine an employee's training needs.
- Do the employees have the essential skills and knowledge
- What are the hurdles to achieving proficient performance at the individual level of training requirement analysis can answer a lot of issues
- What is the ideal training programme for the employee to help him or her achieve the desired results?

REVIEW OF LITERATURE

The country's teacher education programme includes a significant amount of training. Instructors' continued progress in the desired direction is unquestionably aided by in-service education programmes. Our state's educational system has experienced significant adjustments in the last decade. Based on their past experience, teachers do not have enough training to meet the present demands of students. As a result, the Sarva Siksha Abhiyan (SSA) is constantly providing customised teacher training to meet specific objectives. It emphasises activity-based learning and a student-friendly environment in the classroom. The current training is aimed at filling any gaps in teacher preparation and fine-tuning it as needed. The goal of this study is to examine teachers' and professors' training needs in order to analyse and provide recommendations for how to improve their training courses so that teachers can work more effectively. The researches have studied various national and international papers to understand the concept of TNA. The summary is given in this section

India is witnessing tremendous changes as a result of worldwide societal transition. Despite the fact that it is often disregarded in India, the value of a good teacher is important. They play a vital role in the overall development of the students. They are responsible not just for imparting academic knowledge, but also for establishing suitable values and beliefs in their students.

Teaching is a blend of both an art and a science. It is considered artistic since so many qualities must be blended and presented in a logical, rhythmic, and attractive manner. The procedures and principles are scientifically founded, so it's science. It is both an art and a science because it affects the learners' cognition and psyche. A teacher must be a thinker as well as a doer. Because he understands the educational and theoretical foundations, he can effectively perform these duties. As a practitioner, he must work as a facilitator, stage setter, motivator, counsellor, and career master, among other things.

The process of assessing an organization's or an individual's performance is known as training need analysis. Its goal is to discover areas where training can make a significant difference in improving organisational performance. The importance of conducting a thorough training need analysis is critical because if the training requirement does not match the problem being addressed, the entire training effort will be wasted. (Truelove, S. 2000) [1]

Training criteria are produced on a scientific basis to aid training programme designers in establishing successful programmes that will help reach realistic and well-defined goals (Florian and Hegarty, 2004).[2] According to Haesner et al. (2015) [3], identifying professional needs is crucial for any successful training process. Training needs are the most crucial component of a successful training programme provided they are correctly identified. According to Pop and David (2009) [4], the first step in establishing and organising any successful training programme is determining the need for training. The necessity of recognising training needs has been justified by (Mohamed and Osman, 2014) [5, 6] for the following reasons: 1. Designing training programmes is the first step. 2. Assist in focusing on performance enhancement. 3. Providing guidance to learners and determining the sorts of training and expected outcomes. 4. Resolve the issues of squandering money, effort, and time. Many connected institutions participate in the process because determining training needs is an organised survey based on cooperative effort by members of the organisation to close the gap between target objectives and reality (Kaufman, Hughes, and Riccio, 2010) [7].

A lack of suitable orientation, training, and growth is one of them. They looked at the value and availability of numerous faculty traits in addition to technical talents. They also advocated for higher professional education institutions to prioritise teacher development. The researcher's purpose is to determine the effectiveness of higher professional education institutions' training and development procedures for faculty development so that they can broaden their competency domain and progress in the appropriate direction. Punia and Kundu (2005)

The old pattern of training doesn't match any more with the modern professional development practices. There is a need to reform and redesign the teachers' learning programs (Darling Hammond & McLaughlin, 1995). One possible reason for the unsatisfactory results of in-service teacher training might be that the objectives of programs were not conceived as per the teachers' personal and classroom needs (Baird et al., 1993).

Training without objectives and purpose may not lead to any desired direction (Noh, Cha, Kang, & Scharmann, 2004). Baird and Rowsey (1989) also underline the teachers' complaints regarding the ineffectiveness of the training for which time and energy was wasted as it was found that such programs did not meet the needs. Without prior need analysis, any proposed change may not yield any results (Rhodes & Beneicke, 2003).

In order to achieve the aim of qualitative education in higher institutions, the following essential steps must be taken: (Inskipp, 2004). [9] 1. Support of quality management system 2. Establishing a culture of quality among members of the institution. 3. Developing university human resources and updating curricula. 4. Involving all faculty members in performance improvement. 5. Identifying needs of stakeholders inside and outside the educational institution. 6. Practicing self-evaluation effectively (Yunna et al., 2014) [8][11] 7. Developing a system for data gathering to help make sound decisions. 8. Involving all concerned staff in plans of quality achievement.

The absence of market competitiveness of university graduates. 2. The poor learning outcomes in some specializations. 3. Unemployment of higher education graduates due to poor skills and abilities. 4. Over-emphasis on rules and regulations. 5. Dominance of traditional methods of teaching encouraging memorization over analysis and creativity. Such obstacles have directly affected the effectiveness of university education for the following reasons: 6. Neglecting the use of educational technology. 7. The gap between results of scientific research and applications in society. 8. Lack of interaction between university and society. 9. Mismatch between university learning outcomes and community needs. 10. Emphasis on quantity over quality in academic preparation of graduates (Lytras et al., 2010). [10]

Establishing quality control systems that can improve review and develop courses. 2. Focusing efforts on satisfying actual needs of society and labor market. 3. Building a set of organizational frameworks that work on achievement of quality. 4. Constant improvement of academic performance. 5. Overcoming effects of lack of competitiveness of graduates in labor market. 6. Satisfying needs and facing social problems. 7. Improving quality of services. 8. Raising the levels of performance. Formulation of objectives: general/specific, knowledge, skills and attitudes. 2. Course design: study plans- course description evaluation. 3. Teaching and learning: methods, techniques, strategies, and technology. 4. Faculty members: quality- quantity- ratio of students to staff. 5. Learning resources: library- databases- labs equipment- websites. 6. Internet. 7. Students' evaluations: tests. 8. Students' portfolios: course descriptions, course reports, student activities sample, and course plans. 9. Quality assurance: educational development, quality guides, internal assessment. 10. Supportive services: psychological guidance, academic guidance, and medical care.

RESEARCH DESIGN

Research Objectives

- Understand the impact of effective training need analysis on the satisfaction of the staff w.r.t training needs
- Study the relationship of training needs analysis in overall career development of the teachers through carefully targeted training

Research Methodologies

Both, primary and secondary research has been conducted to understand the training need analysis.

Secondary Research

Training is the process of acquiring the necessary skills (competencies) and knowledge to efficiently perform a task. The majority of training is practical in nature. Rarely does someone arrive at work with all of the necessary abilities, knowledge, and traits to perform at their best right away. Frequently, some type of training or knowledge growth is required. Training and development can also be used to up-skill your current personnel so that they can advance in their careers or take on new jobs in your company. Training is an investment in your company that can result in better productivity, engaged employees, higher morale, higher profits, and a positive brand image. Managers must assess what training employees, particularly new employees, require in order to ensure that they are capable of completing the work you require. A training requirements analysis is the usual name for this procedure (TNA). TNA can assist a company in determining what training is required to bridge the gap between an employee's present skill level and the skill level required. Consider the following factors to ensure that your training investment is well-targeted:

- Whether each staff person has the abilities and expertise to do what you need them to do; and
- The role of each staff member and what you want them to achieve and contribute to your firm. If not, determine what skills or information they require and provide training in these areas to help them advance.

A TNA can be used by everyone in the company, from individual employees to entire departments. A training needs analysis is a methodical approach to determining what training is required. It is carried out in three stages: at the organisational, individual, and work levels, with each stage being referred to as an organisational, individual, and job analysis.

Once these analyses are over, the results are collated to arrive upon the objectives of the training program. Another view of the training need is that, it is the discrepancy between 'what is' and 'what should be.

After these studies are completed, the results are compiled to determine the training program's objectives. Another perspective on the training requirement is that it is the gap between "what is" and "what should be."

Because teacher performance is a complicated behaviour requiring a wide range of skills, any single type of teacher behaviour cannot be expected to have a significant impact on student accomplishment, and teacher training approaches differ greatly. Effective training is training that works because the participants can put its contents into effect in their classrooms and in their daily lives. For the creation of training modules, scientifically specified objectives are essential.

“Training Need Analysis (TNA) is important to understand the training and development needs of teaching staff, so they can perform efficiently and effectively.”

On the basis of these important characteristics, here are some ways of how successfully conduct TNA in the University/Institute:

- i. Establishing the Objectives
- ii. Reviewing the past and current training program
- iii. Analyzing the job Functions
- iv. Categorizing the types of Training Needed
- v. Designing and Implementation of Training Needs Analysis
- vi. Communicating the results to concerned authorities

Inputs of Training Needs Analysis:

- i. Process Analysis
- ii. Operational Analysis
- iii. Organizational Analysis

Primary Research*Sample*

The teachers/professors of the various Universities of India are selected which are teaching the graduate or the post graduate students. The sample size is 141 with a rejection rate of 30%

Data Collection

1. A questionnaire is a collection of questions. A total of 26 questions were posed to the professors and teachers. During the interviews, several of the questions were added to obtain more relevant information. The inquiries were all of a scientific nature. To ensure validity, the questions were created using training-related studies and with the assistance of our supervisor, Dr. Sudhakar Gaokar.
2. Content analysis: Because the responses were objective in nature, they were afterwards content examined by creating tables and graphs of pertinent data. The total participants were 141, out of which 77% were male and rest were female as shown in Table 1 and they were within the age of 30 to 65+ years as shown in Table 2. Mostly teachers have more than 20 years of work experience as shown in Table 3.

Table 1. Gender

Male	77%
Female	21.30%

Table 2. Age

30-39	16.40%
40-49	31.10%
50-59	31.10%
60+	16.40%

Table 3. No. of Years working as a teacher

More than 20 years	57.40%
11-15 years	9.80%
6-10 years	11.50%

Statistical techniques

Statistical methods like percentages, standard deviations have been used in the research. Mainly chi-squares test have been used. The collected data have been analysed with the help of chi-squares test.

Mathematically it is represented as:

$$\chi^2 = \sum_{i=1}^n \sum_{j=1}^m \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

Where.

O stands for observed frequency

E stands for expected frequency of the same event

i,j are the row and column indices

n,m are number of rows and columns respectively

χ^2 stands for various Values of Chi-square at various levels of significance with various degrees of freedom.

The values of chi square test have been calculated with the help of above formula through MS Excel tool.

Hypotheses

- a) To test the interdependence between effective training Need assessment and satisfaction of the teaching staff, chi square test is applied. The hypotheses stand as follows:

Null Hypothesis: There is no interdependence between efficient TNA and Staff training needs, i.e. the two categorical variables are independent and have no relation. Thus,

H0: There is no relationship between efficient TNA and staff satisfaction with training

Alternate Hypotheses- Efficient TNA and Staff training needs hold interdependence and impact each other. Thus,

H1: There is a relationship between efficient TNA and staff satisfaction with training

- b) To test the interdependence whether targeted training impacts the career development of the teaching staff, chi square test is applied. The hypotheses stand as follows:

Null Hypothesis- There is no interdependence between targeted training and career development of the staff, i.e. the two categorical variables are independent and have no relation. Thus,

H0: There is no relationship between targeted training and career development of the teaching staff

Alternate Hypotheses- Targeted training and carer development of staff hold interdependence and impact each other. Thus,

H1: There is relationship between targeted training and career development of the teaching staff

Test of Hypotheses

- a) The application of chi square test for independence is done through the analysis of responses received. A 5-point Likert scale was used for understanding the responses towards an effective TNA presence in the university and the satisfaction of training needs of the teaching staff. In the Likert scale of 1 to 5, 1 means strongly disagree and 5 means strongly agree.

Hypotheses have been tested as per the following.

Level of significance, $\alpha = 0.05$

Degree of freedom (d.o.f) = $(r-1)*(c-1) = (2-1)*(5-1) = 4$

{r- no of rows; c- no of columns} {reference to table 4}

Table 4. Staff Satisfaction with Training (in terms of needs met (Observed Data))

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	TOTAL
TNA Effectiveness	Effective TNA exists	6	15	19	23	11	74
	TNA does not exist	18	7	13	13	16	67
	TOTAL	24	22	32	36	27	141

Observed data: data collected from the responses in the questionnaire about effective TNA practices existing in the institution. [Table 4]

Table 5. Staff Satisfaction with Training (in terms of needs met) (Expected Data)

TNA Effectiveness		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	TOTAL
	Effective TNA exists	12.59574	11.5461	16.79433	18.89362	14.17021	74
	TNA does not exist	11.40426	10.4539	15.20567	17.10638	12.82979	67
	TOTAL	24	22	32	36	27	141

Expected data: Data calculated as per the expected responses from the questionnaire about effective TNA practices existing in the institution. [Table 5]

Table 6. Staff Satisfaction with Training (in terms of needs met) Deviations

TNA Effectiveness		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	TOTAL
	Effective TNA exists	3.453853	1.0332	0.289681	0.892491	0.709252	6.378476
	TNA does not exist	3.814703	1.141146	0.319946	0.985736	0.783353	7.044884
	TOTAL	7.268556	2.174346	0.609627	1.878227	1.492605	13.42336

Deviations: Deviations observed from table Actual observed data and expected data. [Table 6]

Table 7. Calculated Result

Parameters Calculated	Values	Comparison	Result
p value	0.009382	< 0.05	Null hypothesis is rejected in favour of the alternate hypothesis
Table Value at d.o.f 4	9.487729		
Test Statistics	13.42336	> 9.487729	

- The tabulated value of the chi square χ^2 for the 4 degree of freedom at 0.05 percent level of significance is 9.487729, and the calculated value is 13.42336.
- The calculated p value of the chi square χ^2 for the 4 degree of freedom is 0.009382, which is significantly less than the alpha level, 0.05. [Table 7]

Thus, considering the p value and critical value approach, we reject the null hypothesis and accept the alternate hypothesis. Hence, the categorical variables are not independent and hold relation with each other.

- The application of chi square test for independence is done through the analysis of responses received. A 4 point Likert scale was used for understanding the responses towards an effective TNA presence in the university and the satisfaction of training needs of the teaching staff. In the Likert the impacts studied are No Impact, Small Impact, Moderate Impact, Large Impact

Hypotheses have been tested as per the following;

Level of significance, $\alpha = 0.05$

Degree of freedom (d.o.f) = $(r-1)*(c-1)$ {r- no of rows; c- no of columns} = $(2-1)*(4-1) = 3$

Table 8. Impact on career development of staff (Observed Data)

Targeted Training		No Impact	Small Impact	Moderate Impact	Large Impact	TOTAL
	Practiced	9	31	28	22	90
	Not Practiced	25	8	11	7	51
	TOTAL	34	39	39	29	141

Observed data: data collected from the responses in the questionnaire about impact of TNA practices in the staff career development. [Table 8]

Table 9. Impact on career development of staff (Expected Data)

Targeted Training		No Impact	Small Impact	Moderate Impact	Large Impact	TOTAL
	Practiced	21.70212766	24.89362	24.893617	18.51064	90
	Not Practiced	12.29787234	14.10638	14.106383	10.48936	51
	TOTAL	34	39	39	29	141

Expected data: Data calculated as per the expected responses from the questionnaire about impact of TNA practices in the staff career development. [Table 9]

Table 10. Impact on career development of staff (Deviations)

Targeted Training		No Impact	Small Impact	Moderate Impact	Large Impact	TOTAL
	Practiced	7.434480601	1.497891	0.3876341	0.657765	9.97777
	Not Practiced	13.11967165	2.643336	0.6840602	1.160761	17.60783
	TOTAL	20.55415225	4.141227	1.0716943	1.818526	27.5856

Table 11: Calculated Result

Parameters Calculated	Values	Comparison	Result
p value	4.4372E-06	< 0.05	Null hypothesis is rejected in favour of the alternate hypothesis
Table Value at dof 3	7.8147279		
Test Statistics	27.5855993	>7.8147279	

- The tabulated value of the chi square χ^2 for the 3 degree of freedom at 0.05 percent level of significance is 7.8147279, and the calculated value is 27.5855993.[Table 10]
- The calculated p value of the chi square χ^2 for the 3 degree of freedom is 4.4372E-06, which is significantly less than the alpha level, 0.05.[Table 11]

Thus, considering the p value and critical value approach, we reject the null hypothesis and accept the alternate hypothesis. The given variables are not independent and show association.

FINDINGS AND DISCUSSION

From the result of Hypothesis in section 4, we have successfully studied the objectives of the research. From Hypothesis (a), we were able to conclude that an effective training needs analysis is associated with the satisfaction of the teaching staff. This can be due to reasons that an efficient training analysis provides the suitable learning opportunities to the staff, thus minimizing the skill gap and providing the teaching staff to cope up with the weak areas.

Another objective was to understand the relationship between targeted training of training need analysis and the overall career development of the teachers. With the finding in Hypothesis (b), we can conclude that targeted training and career development have a positive relationship. Therefore, a targeted training methodology can be helpful to provide better growth opportunities to the teaching staff. Targeted training is applicable only after a thorough need analysis is performed. As stated, training without objectives and purpose may not lead to any desired direction (Noh, Cha, Kang, & Scharmann, 2004). Baird and Rowsey (1989) also underline the teachers' complaints regarding the ineffectiveness of the training for which time and energy was wasted as it was found that such programs did not meet the needs. Without prior need analysis, any proposed change may not yield any results (Rhodes & Beneicke, 2003). We have successfully studied that an effective training need analysis can help in the individual satisfaction as well as the career development of the teaching staff for UG and PG universities.

This can be promoted by understanding and defining the objectives before developing the training and

development framework for the university staff. This shall help in better satisfaction and enhanced performance of the staff members. Achieving targeted training and personalized learning is neither complicated nor difficult, but it requires thought and planning. Although the element of personalized learning has been available for many years, corporate education and training has focused on training large numbers of people without significantly improving individual training methods. The design and architecture of a comprehensive learning program (targeted training) is successfully achieved by educating many and learning to one using learning goals and technologies. The result of these efforts is, as part of the whole, a happy, informed, educated and productive professional who can make a meaningful contribution to the success of the institute.

CONCLUSION

The development and implementation of training programs is listed as one of the most widely used and well-understood activities in the field of human resources development. Human resource development is primarily related to learning, raising awareness and acquiring knowledge and information in different areas of the world of work. Conceptual and implementation tasks are very important. With the research, we successfully concluded that a training need analysis helps in better framework of training and development process in universities. In addition, the satisfaction level of professors shows a positive dependence on a firm and formulated training needs assessment. The career development of the professors is also significantly affected through a targeted training methodologies. To conclude, training needs assessment affects the training and development of professors, thus impacting their performance as whole. To train the professors, a need analysis must be conducted in order to yield better outcomes.

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