

EFFECTIVENESS OF TNA BASED TRAINING IN KARACHI'S PHARMACEUTICAL INDUSTRY

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Abstract

This research sets out to examine the effectiveness of Training Need Analysis (TNA) based training and to determine whether it is helpful in achieving organizational goals, enhancing Knowledge Skills and Attitude and increasing number of customer (customer index). This research focuses on pharmaceutical organizations of Karachi. A survey of 180 sales employees of pharmaceutical companies was conducted. SPSS Software was used for statistical analysis. This research concluded that TNA based training enabled employees to reach their sales target, enhanced their Knowledge, Skills and Attitude and increased the customer index.

Keywords: Training, Organizational goals, KSA, Customer index, Measuring effectiveness of Training

JEL Classification: Z 000

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Introduction

Background of the Study

In this competitive era companies are looking to increase their revenues, improve their productivity and efficiency and finding ways to boost their workers performance. Companies used to consider training as a cost and training was usually the target of budget cuts but companies are now considering this as an investment. Though training is of immense importance, if the training is not right then it is a cost for the company. Therefore, it is essential to analyze the gap between the desired skills and current skills and then design the training program accordingly.

Problem Statement

From the background it can be derived that TNA plays an effective role in employee development and their performance. Yet, in Pakistan TNA is not given the importance before training which leads to ineffective training and hence training is then seen as more of a cost rather than investment. The research problem deals with the Merck's training program. To check whether TNA based trainings are effective or not. The study aims to focus on the following questions:

- ❖ Are TNA based trainings effective?
- ❖ Have such trainings played an important role in employee productivity?
- ❖ Are there significant differences in the skills transfer of participants after conducting TNA based trainings?

Research Objectives

The primary objective of this research is to measure the effectiveness of TNA based trainings. The secondary objectives of the study are presented here to guide the direction of research. These objectives are:

- ❖ Determine whether TNA based training has played significant role in achieving goals.

- ❖ Determine whether TNA based trainings has enhanced KSAs of participants
- ❖ Determine whether TNA based trainings has improved the customer index.

Literature Review

Training

Training can be defined as a planned learning process aimed at improving the competency of employees (Gillen, 2000). Part of the training process is Training Need Analysis (TNA). For an effective training program, Training Need Analysis is the essential step in identifying the gaps (weaknesses) through highlighting the desired level and current level (Mitchell, 1998). TNA can also focus on strengths and how will further training strengthen the capacity. TNA provides solid information and takes designing of the training program in the right direction (Caffarella, 2002). Therefore, organizations must conduct training need analysis before designing the training programs (Caffarella, 2002). Training need analysis helps an organization to identify the gap between the current knowledge & skills and desired knowledge & skills and Training need analysis is always derived from objectives of the business (Clevend, 2001). Effective and efficient training or development, basically depends on knowing that what is required - for the individual, than the respective department and finally the organisation as a whole (Conner, 1994). Moreover with restricted budgets along with the requisite for cost-effective solutions, all the organisations need to confirm that the resources devoted in training are effectively targeted towards those areas, where training and development is needed and secondly an encouraging return on the investment is certain (Railey, Improving Employee Performance, 1999). Effective Traing need analysis (TNA) is predominantly vibrant in today's changing workplace as new and improved technologies and springy working practices are becoming widespread, moreover, leading to parallel changes in the skills and abilities needed (Raily, 1999).

Training Need Analysis (TNA)

Training need analysis is basically an ongoing process to gather data which in turn describes the existing training needs, this all

helps in an organization to improve the employee performance and hence achieve the organizational objectives (Brown, 2002). The process is fundamental to the success of a training program. Often the organizations develop and implement the training program without first conducting a need analysis. Moreover these organizations run the risk of over doing training and not only this but also doing too little training or missing an important point completely. (Brown, 2002) Training need analysis assists company in identifying set of Knowledge, Skills and Attitude and helps in forming bottom line objectives for the training at 3 levels (Lowell, 2002). So analysing what the training needs are, is a vital precondition for any sort of effective training event or programme. Merely throwing training at individuals may miss priority needs, or even cover areas that are not indispensable or crucial (Lowell, 2002). Training need analysis allows the organisations to strain resources into the zones where they will basically contribute the most to employee development, and thus enhancing the employee performance as well as organizational performance and also leads towards enhancing the morale (Lowell, 2002). Training need analysis is a natural function of evaluation systems and also is key necessity for the award of Investors in People. Having completed TNA, findings should be implemented and evaluated and able to generate bottom line objective and results. (Philip, 2002)

Analysis of training needs is not only a task of specialists alone. Today managers are often answerable for many forms of people's management, comprising of the training and development of their team, and therefore should have a clear cut understanding of training needs analysis in order, to be able to implement it successfully (Bashir & Memon, 2005).

Basic Purpose of Training Need Assessment

Training needs analysis is the most important phase in planning the training, which will effectively close the gap between actual and desired situations (Osinski, 1996). It certifies that the right cure is applied to the right problem. As limited budgets are available for training, therefore the preferred areas of training must be those that ensure, that the expected outcome will be achieved, and there are

maximum gains for the professionals and their respective organization (Osinski, 1996).

Effectiveness of Training Need Analysis (TNA)

Effective and efficient Training Need Analysis (TNA) comprises of a systematic planning, examination and harmonization across the organisation, to guarantee that the priorities of the organization are taken into account, to avoid the duplication of priorities and lastly to achieve economies of scale (Mitchell, 1998). All prospective trainees must be included in the process, rather than merely depending on the idiosyncratic evaluation of managers (Mitchell, 1998).

Preferably, managers should also obtain training in the process of Training Need Analysis (TNA) itself, to elucidate what they are trying to achieve, and what their approach should be (Waldrop K. , 2006).

For the training and development function training needs assessment is a very critical activity. One should be adept at performing a training needs assessment despite of the fact that whether he or she is a human resource generalist or a specialist (Caffarella, 2002).

The assessment begins with a “need” which can be recognized in numerous ways but is commonly described as a gap between what is presently in place and what is needed. Gaps can include differences between:

- What actually happens and what the organization expects to happen
- Current and preferred job performance.
- Current and desired skills and competencies (Waldrop, 2004)

Need assessment can also be used to assist with:

- Competencies and performance of work teams.
- Productivity or Problem solving issues.

- The need to prepare for an answer to the future changes in organization or the job duties (Brinkerhoff, 1987).

The outcome of the need assessment allows the training manager to establish the training objectives by mainly answering two key questions: who, if anybody, requires training and what training is required. Sometimes training alone is not the answer (Gillen, 2000). Some performance gaps can be abridged or removed through other management solutions for example communicating expectations, arranging consequences, providing a helpful work atmosphere checking job fit and removing obstacles. So once the need assessment is concluded, training objectives are clearly identified. (Osinski, 1996)

Doing a need assessment is very important. Secondly, if a training need is identified then you are in a better position to negotiate with the management as they usually are concerned with the budget and costs related to training (Cekada, 2011). So providing them with the information regarding the need assessment may earn you management support.

Thirdly and most importantly is that you are able to analyse the effectiveness of the training program on the employee's performance prior to its execution. This would help in determining the areas where the results could visibly be seen after the training session is conducted (Cekada, 2011). Then one aspect of this is also, that effective training need provides basis for the cost benefit analysis done for the training program being conducted. So that training is taken as an investment rather than a cost, but our research mainly focuses on the relationship between the training need analyses based trainings and the employee performance (Cekada, 2011)

It doesn't matter whether it's a profit or non-profit organization, training need analysis is critical for effective and efficient training. The main advantage of doing TNA is its clear linkage with organizational goals and strategies (Cekada, 2011). However, TNA has its impact on different areas but most importantly it is related to the employee performance. It directly improves and enhances the

knowledge, skills and attitude of an employee in whichever area required (Cekada, 2011).

Lack of Motivation or Absenteeism

Performance is highly correlated with the motivation of the person. According to Maud Emmanuelle Labesse, (2008) motivation can be increased through the value attributed to the work and level of its performance. The greater the value an individual attributes to their work, the higher the performance, and the greater will be the motivation of the individual. The opposite of this is also true. In such situations, a training need analysis can help detect the causes of lower performance or bring into consideration the undeveloped skills. Efficient training can quickly raise the level of self-confidence (Maud Emmanuelle Labesse, 2008).

Glennllopis, (2012) emphasized that motivation enhanced performance. There are many motivational theories but the challenge is to construct a connection between meaningful work and performance. To motivate employees, managers need to give them clear guidance about goals and rewards, admire creativity and make them notable, open doors for employee future but never underestimate or reject poor performance. Moreover managers need to understand the real motivating factor for an individual as it may be monetary or non-monetary.

Employee Performance

The employees having adequate knowledge in terms of job specific qualifications would be able to solve on the job problems more effectively and may finally develop expertise in their area (English, 2002). Secondly, in order to equip them with performing the tasks in limited time, improved skills may be required. Finally, once they are qualified and have the appropriate skills, it would motivate them to develop a positive attitude towards learning and training. (English, 2002)

Effectiveness of TNA for Employee Performance

Why TNA is closely associated with employee performance? It is because employees are said to be the most valuable asset of an organization (Hurst, 2002). They are the ones that do not have any depreciable value like other assets (Hurst, 2002). And it is through them that the organization can achieve their objective which is why the employees have to be competitive and qualified enough to have an edge over the other organizations, or in other words well trained and well learned employees are a prerequisite for an organization's competitive advantage. So Inadequate needs assessment can result in unsuitable and ineffectual interventions, which could either have no impact or have a venomous impact on the actual performance problem (Hurst, 2002)

Taking in view the employee's performance, there are basically two possible causes to poor performance, one is the contextual factors of an organization like inadequacy of equipment or poor reward systems, and secondly it is the lack of skills, knowledge and attitude of the employees that hinders effective performance (Thacke, 2003). And it is these employees who are sent for the training and this rule is in line with the definition of the training itself, which is a systematic procedure of providing an occasion to learn KSAs for current and future jobs (Thacke, 2003)

Hence training employees whose performance problems are not caused by lack of KSA is a big mistake (Jamil, 2005). As this puts a negative impact on employee's performance and make the training a cost for the organization rather than an investment, not only this, if doing TNA is the initial stage of the training process then assessing employee performance is the final stage of this cycle which also helps in evaluating our training. The cycle represents a clear relationship between doing TNA and employee performance. (Jamil, 2005)

Research Design and Methodology

Hypothesis

Following hypothesis were formulated

H1: TNA based training has played an important role in achievement of goals.

H2: TNA based training has enabled the participants to enhance their knowledge skills and abilities (KSA).

H3: TNA based trainings have increased number of customers (customer index).

Sample

Sample of 180 sales employees of local and multinational pharmaceutical organizations in Karachi were reviewed. Also, due to time, money and respondents' availability and other resources limitations, this convenient sampling method was adopted. The participants are permanent employees based in Karachi and employed in sales functions. With regard to demographics, the ages of the respondents' were from 28 to 40 and all participants were male. The qualifications of respondents were graduation and Masters.

Procedure

As discussed in the literature review that effectiveness of the training is measured through the performance of employees. To measure the effectiveness of training on sales people, it is easy if there targets are measured and their knowledge skills and abilities are checked. The data was collected in a questionnaire which consisted of five questions. The questionnaires were distributed and respondents filled questionnaires manually. Participation was voluntary and the responses were anonymous. The respondents were informed about the purpose of the research. As with all study participants, they were assured that all information would be kept confidential. As discussed earlier the significance of the response is crucial. The questionnaire was sent to 180 participants of whom 135 responded making the respond rate 75%. Five percent of the response was disregarded and not considered relevant.

Statistical Analysis

The result is compiled through SPSS software. Each question shows the frequency of how much the respondents have chosen a certain option. The tables show the mean independent one-sample t-test connected with a 0.05 significance level.

Data

The method adopted for primary data collection was 'Research Questionnaire'. Literature review is used to support the background of study and to build a conceptual framework.

Statistical significance

The hypotheses that were stated earlier will be tested in the next chapter where it will be rejected or accepted. Since any sample will almost certainly vary somewhat from its population, it must be judged whether these differences are statistically significant or insignificant (Cooper & Schindler, 2001:486). A probability value (p values) is a method of presenting a test statistic that reports agree or disagree of null hypothesis. This method has become popular because analyst wants to know what percentage of the sample lies beyond the curve. The p value is compared to the significance level (""). This helps in acceptance or rejection of null hypothesis. If the p values is less than the significance (0.05 or 0.001), the null hypothesis is rejected. If p value is greater than or equal to the significance level, the null hypothesis is not rejected.

Inferential statistics

It is the method used to draw conclusion for the population itself. Since the descriptive analysis allows the researcher to draw conclusion on sample of a population, the inferential analysis allows the researcher to make conclusions for the population. (Terre Blanche & Durrheim, 2002:101). Different inferential techniques will be used for inferential analysis such as: frequency distribution, chi-square test, t-test.

Data Analysis and Research Findings

This chapter deals with the data analysis and research findings, obtained after t-test, using SPSS software.

Hypothesis

- H1A₀: TNA based training has not enabled participants in achieving their sales goal
- H1A_a: TNA based training has enabled participants in achieving their sales goal
- H2A₀: TNA based training has not enhanced product knowledge of participants.
- H2A_a: TNA based training has enhanced product knowledge of participants.
- H2B₀: TNA based training has not enhanced selling skills of participants.
- H2B_b: TNA based training has enhanced selling skills of participants.
- H2C₀: TNA based training has not enhanced positive teamwork of participants
- H2C_c: TNA based training has not enhanced positive teamwork of participants
- H3A₀: TNA based training has not increased customer index.
- H3A_a: TNA based training has increased customer index.

Analysis and research findings for achievement of goals

- H₁: TNA has played an important role in achievement of goals.
- H_a: TNA has not played an important role in achievement of goals.

	N	Mean	Std. Deviation
Sales Target	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Sales Target	0.000	1.00	.000	58	0.000

Conclusion: At 5% significance level it can be concluded that trainings based on TNA have enabled the participants to achieve goals with more success.

Analysis and research findings for increase in KSA

- H_{2a}: TNA has helped enhancing product knowledge of participants.

H_{2a}: TNA has not helped in enhancing product knowledge of participants.

	N	Mean	Std. Deviation
Sales Target	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Sales Target	0.004	.810	.042	58	0.008

Conclusion: At 5% significance level, it can be concluded that TNA based trainings add more knowledge to the participants' existing knowledge.

Analysis and research findings for strengthened selling skills

H_{2b}: TNA based trainings has strengthened selling skills of participants.

H_{2c}: TNA based training has not strengthened selling skills of participants.

	N	Mean	Std. Deviation
Selling Skills	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Selling Skills	0.000	.100	.000	58	0.000

Conclusion: At 5% significance level, it can be concluded that TNA based trainings has helped strengthened the selling skills.

Analysis and research findings for positive team work

H_{2c}: Trainings based on TNA have provided positive teamwork.

H₂: Trainings based on TNA have not provided positive teamwork.

	N	Mean	Std. Deviation
Team work	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Team work	0.004	.892	.000	58	0.009

Conclusion: At 5% significance level, it can be concluded that after TNA based trainings participants are seen to engage in positive teamwork.

Analysis and research findings of customer index

H₃: TNA based trainings have increased customer index.

H₃: TNA based trainings have not increased customer index.

	N	Mean	Std. Deviation
Team work	135	2.3667	1.03335

One Sample Independent t-test

	F	Sig	T	df	p-value
Team work	0.006	.894	.001	58	0.008

Conclusion: At 5% significance level, it can be concluded that trainings based on TNA have increased the customer index through retention and expansion of territory.

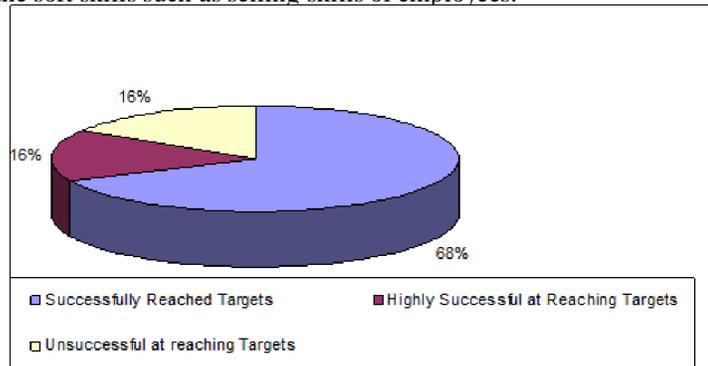
Results and Discussions

Summary

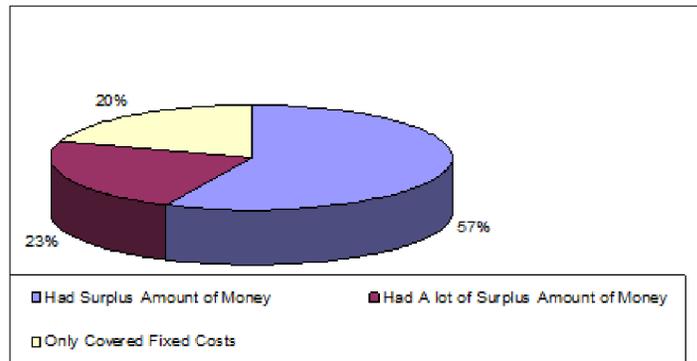
The results are summarized in the following format.

Hypothesis	Statement	p-value	Significance
Sales Target	TNA based training has enabled participants in achieving their sales goal.	0.000	Positive
Product Knowledge	TNA based training has enhanced product knowledge of participants.	0.008	Positive
Selling Skills	TNA based training has enhanced selling skills of participants.	0.000	Positive
Teamwork	TNA based training has enhanced positive teamwork of participants.	0.009	Positive
Customer Index	TNA based training has increased customer index	0.008	Positive

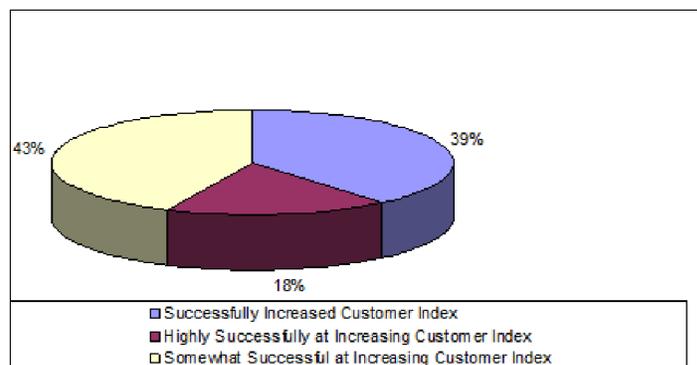
The study has demonstrated the significance of TNA based trainings. Training helps an organization to sustain and gain a competitive edge in the market. The pre requisite of training is training need analysis which leads to profitability. This research has proved that trainings that are conducted after appropriate gap analysis enhance the product knowledge and lead to increased customer index. This study has also identified that TNA based training strengthened the soft skills such as selling skills of employees.



This study also indicates that TNA based trainings help employees in reaching their targets. 68% of the participant shows that they have been successful in fulfillment of their targets after participating in trainings that are TNA based. 16% of the participants indicated that they have been highly successful in achieving their targets; however 16% of the participants said that they have not been successful.



When asked about success with respect to the territory coverage, 57% said that they have surplus amount of money and 23% said that they have a lot of surplus money. Whereas only 20% said that they only covered their fixed costs. This indicates that TNA based trainings lead to profitability.



When asked about the success in increasing the customer index, 39% said that they are successful and 18% said that they are highly successful in increasing the customer index after participating in TNA based trainings. Whereas 43% said that they are somewhat successful in increasing the customer index. This proves that TNA based trainings are of immense importance in an organization.

Discussions

TNA Based Training

Training needs analysis is the critical step training cycle. If it is done properly then it can effectively close the gap between actual and desired performance. It ensures that the right cure is applied to the right problem. As the training budgets are limited, therefore the preferred areas of training must be those that ensure, that the expected outcome will be achieved, and there are maximum gains for the professionals and their respective organization. TNA based training also makes training more of an investment rather than a cost for the organization as the benefits of it exceeds the cost. The result of TNA based training is enhanced KSA for the employee which in turn increases the ability to reach sales targets and increases customer index.

Performance Gaps

Organizational performance depends on having the right quality and quantity of human capital. Through TNA based training managers can analyze the current job performance and the preferred job performance. This answers two main questions: who, if anybody, requires training and what type of training is required. The result of this will be increased profitability.

Cost Benefit Analysis

Managers are usually concerned with the costs related to training and because TNA based training helps to analyses the effectiveness of the training program on the employee's performance prior to its execution, training can be focused on areas where the results could visibly be seen, hence, increasing the benefits of training and making it an investment rather than a cost. 57% of the managers claimed that they had sufficient about of surplus money available due to TNA based training, 23% claimed that had a lot of surplus money available and only 20% claimed to be just meeting their fixed costs.

Enhancing Knowledge Skills and Abilities - KSA

TNA based training makes sure the employees are getting trained in areas which are beneficial for the organization so as to reduce the performance gaps. This means that the employees are getting educated in a manner that is resulting in the organization meeting its goals. Training is will only be able to properly address the needs of employees if knowledge and skill deficit are properly identified. Hence, product knowledge gets increased due to TNA based training. Eliminating the knowledge deficit makes it easier for the employees to sell the product (increasing selling skills) and reduces the skill deficit. This creates a positive environment to work in (increases positive teamwork).

Achieving Sales Target

Once the Employees are able to eliminate their knowledge and skill deficit, it puts them at a better position to effectively and efficiently meet their sales target. Meeting the sales target is an important step for an organization as it helps to achieve the main organizational goal that has been set. Through TNA based training 68% of the employees said that they successfully reached their sales target, 16% said that they were highly effective at reaching their sales target whereas only 16% said that they were unsuccessful at reaching their sales target.

Increasing Customer Index

TNA based training empowers the employees in a way that motivates them as they are better able to perform their job effectively. This provides an incentive for them to work harder and give back to the organization. Hence, TNA based training increases the retention rate which results in an expansion of the territory for the organization. 39% of the employees stated that they successfully increased their customer index, 18% stated that they were highly successful at

increasing their customer index and only 43% stated that they were somewhat successful at increasing their customer index.

Implications for Managers

Training can be successful if training manager has properly identified the gap between the desired and the current skills of the employees and training will only be able to properly address the needs of employees if knowledge and skill deficit are properly identified. Following recommendations were identified during this study.

Awareness about TNA should be increased within an organization since it explores ways in which competency, capability and potential of an organization can be enriched. Proper communication between line manager and training manager is must, without it, training content could not be designed properly.

Proper usage of information regarding knowledge deficit is highly significant. After knowledge deficits are identified, that information should also be shared with line manager so they can work on reducing if not eliminating this deficit. Eliminating knowledge deficit will result in eliminating skills deficit as well. Once the employee has better knowledge he will be able to increase his selling skills which is highly beneficial for an organization.

Employees were seen to have met their sales target more efficiently after TNA based training, hence, this will increase the profitability of firms. Therefore, managers may even be able to increase their sales target for next year because of TNA based training.

Majority of employees that are dissatisfied with their work leave their current job as they either start looking for another one or are in the planning phase. One reason of this is that they are not motivated because they don't have sufficient knowledge or skills to meet their sales target. Managers can increase the retention rate and increase their territory through TNA based training.

Conclusion

This research paper concludes that training can be effective if the gaps or deficiencies are identified properly through Training Need Analysis. Employees who receive training on the basis of proper Training Need Analysis show improved results, achieved business targets and higher customer retention.

Limitations of the Study

The research is a part of course project requirement therefore the study conducted is based on the data collected from pharmaceutical organizations. Hence, the results are for pharmaceutical organizations and cannot be applied for all organizations of Pakistan and Pakistan as a whole. The results and analysis done is through SPSS, the results only show t-test to check effectiveness.

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