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Cost-effectiveness of Training Programmes in Insurance Sector of India

Surbhi JAIN
Commerce Department
M.D. University
Rohtak 124001, Haryana, India
surbhijain78@gmail.com

Abstract. *In the present era of globalization, trough competition and advancement of information technology, the paradigm for success has shifted towards intellectual assets. New ways of commerce and management structures are required to effectively exploit intellectual assets foremost to an improved approach on the development of human capital. Training requires substantial allocation of monetary, human and time resources. A systematic evaluation of training programs is the call of the time. The insurance sector has been playing a vital role in the process of economic advancement since independence in India. The objective of the present study is to identify the cost-effectiveness of training programs in the insurance sector in India. A sample of four companies has been randomly selected. This study is descriptive in nature. Secondary data has been analysed. Effectiveness-cost ratios were calculated and inferences have been drawn accordingly. Finding suggests that training programs in public insurance sector is more cost-effective as compared to private insurance sector in India.*

Keywords: *cost-effectiveness, training programs, training evaluation, insurance sector, India.*

Introduction

In the present era of globalization, considering the hard competition and the advancement of information technology, the paradigm for success has shifted towards intellectual assets. Increasingly, the main source of competitiveness in business organizations is the ability to develop and use the skills of the workforce. New ways of business and management structures are required to effectively take advantage of intellectual assets leading to a renewed focus on the development of human resources (Donovan, Hannigan & Crowe, 2001). Training requires substantial allocation of monetary, human and time resources. Human resources efforts are not complete until the outcomes have been measured. However, among many of the most prominent evaluation researchers, their views of what evaluation is and how it should be carried out are differing widely.

Training is an essential human resource development (HRD) function of any organization. In the Indian organizational development context, the training needs, strategies, methods and investments on training have all undergone a sea change since the last decade. It is also true that knowledge conversion processes can be responsible for the creation of new knowledge, without any intervention from outside the organization (Nestian, 2013). But information and technology is mounting faster than in the past. To tackle the global competition in many sectors, the former conventional approach in training policies of organizations has undergone a change to one which is more liberal, concept-based, wide-ranging, systematic, strategic, well planned and energetic.

Flippo (1984) has defined training as "the act of increasing the knowledge and skills of an employee for doing a particular job". Training evaluation has been defined as "the systematic collection of descriptive and judgmental information necessary to make effective training decisions related to the selection, adoption, value, and modification of various instructional activities" (Goldstein, 1993, p.147). Training evaluation is also considered a systematic process to determine the worth, value, or meaning of a training program or process and how it has affected the organization (Phillips, 1997a).

Kirkpatrick and Kirkpatrick (2006) concluded that there are three general objectives or reasons to evaluate training:
"(1) to justify the subsistence and budget of the training department by showing how it contributes to the organization's objectives and goals,
(2) to decide whether to continue or discontinue training programs, and
(3) to gain information on how to improve future training programs.".

The evaluation of a training program is important for a number of reasons, not the least of which is to ascertain whether the organization's investment pays off in terms of performance improvements (Goldstein, 1993). From a cost-effectiveness perspective, if performance does not improve relative to the cost of implementation, then the training program should be discontinued or modified. It is important to determine whether a training program is accomplishing its objectives, cost-effectiveness ratio, clarity and validity of the content to determine training effectiveness.

Objective of the study

The main objective of the study is to measures the cost-effectiveness of training programs in insurance sector in India. Till now, cost-effectiveness

analysis is used mainly in the health sciences and a very little use of cost-effectiveness analysis was found in the commerce and management literature. In insurance sector only 1-2 studies were found. It's very hard to measures the precise value of training programs since various soft values or non-monetary values are also included in the outcomes. Further, suggestions will be provided for future researches.

Literature review

Review of related literature is an important part of any research problem. It gives us the background necessary to understand how to solve a problem, what could be the variables, what statistical tools could be used, on what kind of data the study should focus etc.

Schmidt, Hunter and Pearlman (1982) describe and illustrate the adaptation of the linear regression equations used to estimate the impact of valid selection procedures on workforce productivity to evaluate the intervention programs designed to improve job performance. The appropriate equations are derived and explained, and the use of these equations is illustrated by means of a hypothetical example.

Birch and Gafni (1992) observe in their research paper that despite the growing literature on economic evaluation of personnel development programs, little attention has been paid to the theoretical foundations of cost-effectiveness analyses (CEA) and cost utility analyses (CUA), as well as to the validity of the decision rules adopted as methods of achieving the stated goals. They show that although applications of the techniques can be used to pursue some managerial objectives in the context of highly constrained environments, such applications are inconsistent with some other economic objectives.

Tatto, Nielsen, Cummings, Kularatna and Dharmadasa (1993) measure the costs and effectiveness of three approaches to elementary teacher education in Sri Lanka: per-service, conventional in-service, and distance in-service are examined. The effectiveness of these approaches was measured on various grounds. Costs borne by the sponsoring institution and the teachers were evaluated. Findings are important given the more difficult situations in which they taught.

Campbell (1994) discusses the need to justify training expenditures with targeted effectiveness. In this article author provides details on how to calculate direct, indirect, and full costs of a training course or program. Also

he describes the feasibility of linking training outcomes to organizational improvements and the selection of training outcomes (effectiveness) to be measured and quantified.

Following on from part one Campbell (1995) describes four practical methods for determining the cost-effectiveness of training. The four methods for justifying a training investment presented in this study were selected because they are practical, relatively easy to use and generally familiar to higher management. The four methods described are: return on investment (ROI); cost-effectiveness ratio; bottom-line evaluation; and payback period. It ends with a skill check which provides an opportunity to apply the content covered.

Arthur, Bennett, Edens and Bell (2003) used meta-analytic procedures to examine the relationship between specified training design and evaluation features and the effectiveness of training in organizations. The choice of evaluation criteria (i.e., the dependent measure used to operationalize the effectiveness of training) is a primary decision that must be made when evaluating the effectiveness of training. Kirkpatrick's (1959 and 1996) evaluation criteria (i.e., reaction, learning, behavioural, and results) were used for evaluation. Authors identified specified training design and evaluation features and then they used meta-analytic procedures to empirically assess their relationships to the effectiveness of training in organizations. Their results suggest that the training method used, the skill or task characteristic trained, and the choice of training evaluation criteria are related to the observed effectiveness of training programs.

Wirtz, Heracleous and Pangarkar (2008) explore the nature of Singapore Airline's human resource (HR) management practices that enable the company to deliver consistent service excellence in an efficient manner and achieve sustainable competitive advantage. The study finds that Singapore Airlines' HR practices involve stringent selection and recruitment processes, extensive training and retraining, successful service delivery teams, empowerment of front-line staff to control service quality, and motivating staff through rewards and recognition. The paper contributes to the understanding of how HR practices contribute to service excellence and competitive advantage, this being a key dimension of strategic alignment.

Greenberg and Cebulla (2008) use the tools of meta-analysis to assess cost–effectiveness studies of 50 mandatory welfare-to-work programs that were targeted at Aid for Families with Dependent Children recipients and evaluated by random assignment. More specifically, these techniques are used in this article to synthesize findings from multiple cost–effectiveness

evaluations of welfare-to-work programs. The central finding of this meta-analysis is that welfare-to-work programs often fail the cost–effectiveness test from the government perspective or the societal perspective. The net effectiveness of these programs could be improved by emphasizing lower cost program services alongside financial incentives.

Kumar, Kumar and Vidya Sagar (2012) carried out a study of India-based private insurance branches to identify current evaluation methods, and identify the predominant barriers to the implementation of effective training and development programs. Casual factors were found to be inadequate training and development objectives and evaluation mechanisms, which steam from a number of barriers.

Onkham, Karwoski and Ahram (2012) present the literature review of human total ownership cost (HTOC) and cost impacts on overall system performance. Economic value assessment models such as cost-effectiveness analysis, risk-cost trade-off analysis, and expected value of utility function analysis, growth readiness matrix, multi-attribute utility technique, and multi-regressions model were introduced to reflect the HTOC and human performance technology trade-offs in terms of the dollar value. According to economic models, cost-effectiveness analysis can reflect the human performance and learning curve in terms of cost of investment, and risk-cost trade-off analysis can illustrate the trade-off between cost of technology and human performance. Authors illustrated the preliminary regression model of HTOC which considers the human factor aspect, human reliability, and technology and environment factors. However, the major limitation is the lack of database in term of quantitative data and metrics associated with these factors is still questionable. Therefore, there are no specific economic models that can quantify the human soft cost drivers (subjective components) such as human factors aspects (cognition, physical, perceptual, skill and knowledge).

Human resources management (HRM) is the most important operational and functional area of the management. As can be seen from the existing literature, more research in the field of cost–effectiveness of training programs is necessary. In fact, evaluation is paramount to the success of any training program. Training not only must be cost effective but also must teach participants skills and concepts that they can readily use in their organizations after the training has been completed. There is a shortage of research in this area, especially in India where the topic is almost untouched by academicians. No comprehensive research study has been undertaken so far to evaluate the cost-effectiveness of training programs in insurance sector of India.

Global training scenario and the need for training evaluation

In 2011 the corporate and the government consumption for preparing exercises in North America was nearly $130B. The normal consumption for all corporate training exercises spoke the truth 7% of yearly incomes. At the end of the day the bigger the organization is, the more it spends on preparing as a percentage of income. Organizations that are more innovative have a tendency to spend more, while organizations which are more administration-based have a tendency to spend significantly less. Approximately 75% of the worldwide training investment is in North America and Europe, Asia and India. Companies in North America spend roughly 58% of their preparation spending plan on sourced exercises (individuals, offices, and so forth).Around 42% of their financial plan is spent on outsourced administrations. Companies spend about 43% of their training related dollars on employees, compared to 50% on customers, and 7% on suppliers and channel partners. The Nissan auto plant in Sunderland, the UK, had the most abnormal amounts of profitability in Europe, a key component being that they had one of the best training records in the nation; they were in the main top 10 of 850 UK building and assembling firms for their dedication to training. Along these lines, the significance of assessing training effect is progressively being recognized.

McKinsey (2014) forecasts that premiums in mature markets will grow with 3% yearly between 2013 and 2020, as they have over the last four years - which is significantly better than the 2% growth over the last decade. Training focus has shifted from only job oriented to skills enhancement and motivating an attitude to serve. Innovative methods of imparting training should be used instead of conventional methods.

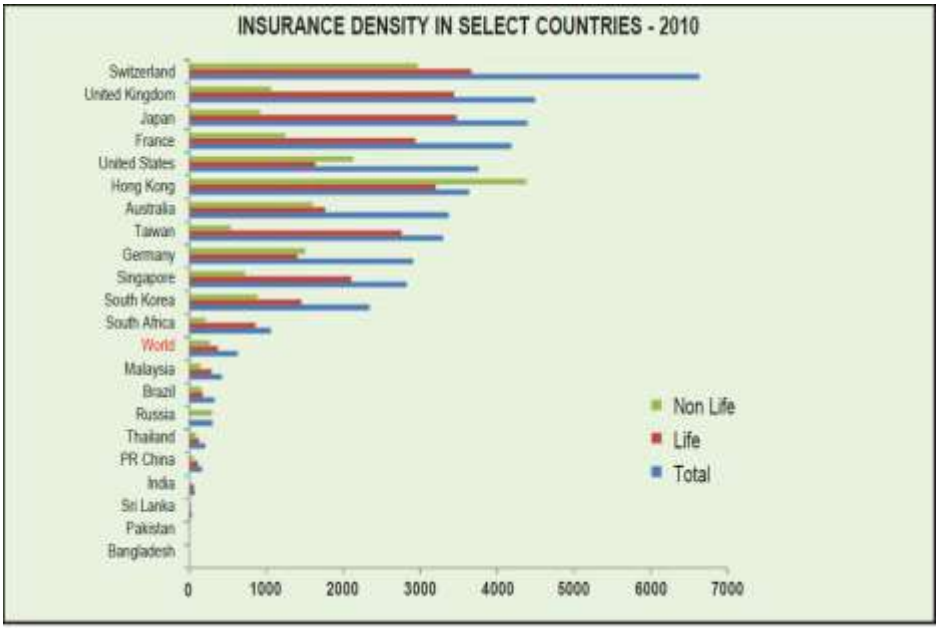

Figure 1. Insurance Density in Selected Countries -2010 *(Source: Annual report IRDA 2010-11. Data is in USD)*

The measure of insurance density reflects the level of development of insurance sector in a country. Insurance density is calculated as the ratio of premium to population (per capita premium). Figure 1 shows that various under-development countries are far lag behind for insurance business as compared to many developed countries. And thus there are a lot of opportunities in near future especially for under-development countries. It will increase the demand for trained personnel in the coming years.

Hence, such a booming industry puts a lot of emphasis on its human resource development programs, and advancement of human capital through training projects. Training interventions require huge amounts of investments. Expenditures of such a huge degree call for a periodic sharp look. Gone are those days, when corporations used to feel that training is expenditure. In this changing scenario, business organizations are taking training as an investment rather than expenditure. Hence, they need to evaluate training programs for the return on investments.

Research methodology

Type of research study: The research study is descriptive in nature. *Descriptive research* includes surveys and fact-finding enquiries of different

kinds. The major purpose of descriptive research is description of the state of affairs as it exists at the present. In social sciences and business research we quite often use this kind of research design. In descriptive studies, the researchers do not have control over the variables; they only report what is happening or has happened (Kothari, 2004).

Source of Data Collection: The main tasks in the research process are data collection and data analysis. Whatever the data is collected should be relevant to the problem. Present study is based on secondary data. All these data was collected from the annual reports of sample companies and from the annual reports of Insurance Regulatory and Development Authority of India (IRDA). IRDA is an apex institute for regulating the insurance industry in India and overseas business from India. All annual reports are publicly accessible on the websites of all sample companies, on the website of IRDA and could be used for research. The data so collected has been tabulated and inferences have been drawn accordingly.

Population: All items in any field of inquiry constitute a 'Population'. A complete enumeration of all items in the 'population' is known as a census inquiry. In statistical terms population usually refers to the collection of units (be they people, plants, cities, suicidal authors, etc.) to which we want to generalize a set of findings or a statistical model. In the present study the investigated population is all insurance companies of India.

Sample size: There are various sampling techniques, broadly, classified into two main categories: random sampling techniques and non-random sampling techniques. The choice of the sampling technique was influenced by the objectives of the study, time and money constraints, etc. Top 4 companies were taken as sample for the present study so that a justifiable comparison could be made.

As per IRDA annual report FY 2011-2012 top ten insurance companies in India were:

Life Insurance Sector:
Life Insurance Corporation of India (202,889.28) (Public Company)
ICICI Prudential Life Insurance Co. Ltd. (14,021.58) (Private Company)
SBI Life Insurance Co. Ltd. (13,133.74) (Private Company)
HDFC Standard Life Insurance Co. Ltd. (10,202.40) (Private Company)

General Insurance Sector:
New India Assurance Co. (8542.87) (Public Company)
United India Insurance Co. Ltd. (8179.29) (Public Company)

ICICI Lombard General Insurance Co. Ltd. (5150.14) (Private Company)
Bajaj Allianz General Insurance Co. Ltd. (3286.62) (Private Company)
IFFCO Tokio General Insurance Co. Ltd. (1975.24) (Private Company)
Tata AIG General Insurance Co. Ltd. (1641.57) (Private Company)
(Figures in brackets are Gross direct premium income in Rs. Cr.)

Four companies were considered for the study, two from life insurance sector (one from public and one from private sectors) and two from general insurance sector (one from public and one from private sectors), which were in the top in the above report. Namely, Life Insurance Corporation (LIC) of India and Industrial Credit and Investment Corporation of India (ICICI) Prudential Life Insurance Co. Ltd. (for life); New India Assurance Co. Ltd. and ICICI Lombard General Insurance Co. Ltd.(for non-life).

Span of the study: The study was done over a period of five years (2007-2012).

Limitations of the study: Having a very large population size, sampling approach has been used in this study. As such, the study suffers from the limitations of sampling. The sample size could be small. There was very little literature available in the insurance companies regarding the HRD system. The study also depends on secondary financial data collected from the published financial annual reports of companies. Thus study may incorporate all the limitations that are inherent in the financial statements. Despite these limitations the researcher tried to make a clear data analysis and interpretation as far as possible.

Data analysis and interpretation

To achieve the objectives of the study, we compare costs for training programs with the benefits which organizations could get after running training programs. For this, we calculate cost-benefit ratio of the training programs. Cost-effectiveness refers to the relationship between monetary inputs and the desired outcome(s). Cost-effectiveness analysis is one of a number of techniques of economic evaluation, where the choice of technique depends on the nature of the benefits specified. A cost-effectiveness analysis is a type of evaluation analysis that generates results where cost is in the numerator, and a measure of effectiveness is in the denominator (Lin, Zimmerman, and Smith, 2013). Cost-benefit analysis is one such technique for evaluation of programs. Cost-effectiveness analysis and cost-benefit analysis are similar analytic techniques (Steven, Graham, and Arnold, 1992). For this purpose, we took training cost, number of employees and number of

policies from the annual reports of the sample companies. Training cost is divided by number of employees. Again, we divide the number of policies by number of employees. And then calculate cost-benefit ratio.

Table 1.Calculation of the Cost-benefit ratio for 2007-2008

2007-08						
	Training Cost#	Employees#	No: of Policies#	Trg_cost/ Emps	Policies/ Emps	C/B ratio*
	In Rs. Lac	*In No:*	*In '000*			
LIC of India	1,172.72	1,14,045	233941.00	0.0103	2.05	0.005024
ICICI Prudential Life	31,443.61	28,998	5355.00	1.0843	0.18	6.023889
New India Assurance	224.89	19,827	10420.88	0.0113	0.53	0.021321
ICICI Lombard Gen.	104.16	5,570	3526.96	0.0187	0.63	0.029683

**Cost-benefit ratio*
#Data from annual reports of the concerned sample company
C/B ratio= Training cost per employee/ Policies sold per employee

Table 1 depicts that in 2007-08, the cost-benefit ratio of Life Insurance Corporation (LIC) of India is0.005024, which is the lowest among the sample companies. The cost-benefit ratio of ICICI Prudential Life Insurance Co. Ltd. is 6.023889, which is the highest among the sample companies. The New India Assurance (NIA) Co. Ltd. and ICICI Lombard Co. Ltd. Are presenting almost the same cost-benefit ratio, 0.021321 and 0.029683 respectively. It shows that in 2007-08, LIC of India spends less on training per policy sold as compared to other 3 sample companies.

Cost-benefit ratio is an indicator that attempts to summarize the overall value for money of a project. The utility of cost-benefit analysis extends beyond a tool for cost comparison to decision support (Venton, 2010). The goal of cost-benefit analysis is to identify whether the benefits of an intervention exceed its costs. A positive net social benefit indicates that an intervention is worthwhile from an economic perspective.

Table 2. Calculation of the Cost-benefit ratio for 2008-2009

2008-09						
	Training Cost	Employees	No: of Policies	Trg_cost/ Emps	Policies/ Emps	C/B ratio
	In Rs. Lac	*In No:*	*In '000*			
LIC of India	1,945.41	1,14,916	257823.00	0.0169	2.24	0.007545
ICICI Prudential Life	16,363.42	24,489	6449.00	0.6682	0.26	2.57
New India Assurance	245.41	19,523	33454.62	0.0126	1.71	0.007368
ICICI Lombard Gen.	240.33	5,697	3957.05	0.0422	0.69	0.061159

Table 2 depicts that in 2008-09, the cost-benefit ratio of New India Assurance Co. Ltd. is0.007368, which is the lowest among the sample companies. Cost-benefit ratio of ICICI Prudential Life Insurance Co. Ltd. is 2.57, which is the highest among the sample companies. The cost-benefit ratio of LIC and ICICI Lombard Co. Ltd. are 0.007545 and 0.061159 respectively. It shows that in 2008-09, NIA spends less on training per policy sold as compared to other 3 sample companies. But in the previous year 2007-2008, LIC was on the top position. ICICI Prudential Life Co. Ltd. improves a lot as compared to the previous year`s ratio. It reduces its ratio more than half, which shows a very good performance of the company. ICICI Lombard Co. Ltd. comes little down as compared to the previous year.

Table 3. Calculation of the Cost-benefit ratio for 2009-2010

2009-10						
	Training Cost	Employees	No: of Policies	Trg_cost/ Emps	Policies/ Emps	C/B ratio
	In Rs. Lac	*In No:*	*In '000*			
LIC of India	1,586.97	1,15,966	278563.41	0.0137	2.4	0.005708
ICICI Prudential Life	19,416.96	20,435	6321.04	0.9502	0.31	3.065161
New India Assurance	256.71	19,569	10978.34	0.0131	0.56	0.023393
ICICI Lombard Gen.	89.65	4,634	4461.40	0.0194	0.96	0.020208

Table 3 shows that in 2009-10, the cost-benefit ratio of LIC of India is0.005708, which is the lowest among the sample companies. The cost-benefit ratio of ICICI Prudential Life Insurance Co. Ltd. is 3.065161, which is

the highest among the sample companies. The New India Assurance Co. Ltd. and ICICI Lombard Co. Ltd. are showing almost the same cost-benefit ratio, of 0.023393 and 0.020208 respectively. It shows that in 2009-10, LIC of India spends less on training per policy sold as compared to the other 3 sample companies. Again this year LIC comes on the top and NIA goes a little back as compared to the previous year.

Table 4. Calculation of the Cost-benefit ratio for 2010-2011

2010-11						
	Training Cost	Employees	No: of Policies	Trg_cost/ Emps	Policies/ Emps	C/B ratio
	In Rs. Lac	*In No:*	*In '000*			
LIC of India	2,435.16	1,15,362	285936.21	0.0211	2.48	0.008508
ICICI Prudential Life	16,308.49	13,567	6251.47	1.2021	0.46	2.613261
New India Assurance	329.20	19,033	19703.33	0.0173	1.04	0.016635
ICICI Lombard Gen.	118.09	4,264	5644.84	0.0277	1.32	0.020985

Table 4 shows that in 2010-11, the cost-benefit ratio of Life Insurance Corporation of India is0.008508, which is the lowest among the sample companies. The cost-benefit ratio of ICICI Prudential Life Insurance Co. Ltd. is 2.613261, which is the highest among the sample companies. The cost-benefit ratio of New India Assurance (NIA) Co. Ltd. and ICICI Lombard Co. Ltd. are 0.016635 and 0.020985 respectively. It shows that in 2010-11, LIC of India spends less on training per policy sold as compared to the other 3 sample companies. In this year ICICI Prudential Co. Ltd. gets success in achieving some improvements in this ratio as compared to last year.

Table 5. Calculation of the Cost-benefit ratio for 2011-2012

2011-12						
	Training Cost	Employees	No: of Policies	Trg_cost/ Emps	Policies/ Emps	C/B ratio
	In Rs. Lac	*In No:*	*In '000*			
LIC of India	2,270.87	1,19,767	291591.32	0.019	2.44	0.007787
ICICI Prudential Life	18,433.51	12,786	6068.44	1.4417	0.47	3.067447
New India Assurance	292.38	19,110	28843.28	0.0153	1.51	0.010132

ICICI Lombard Gen.	181.52	7,208	7574.17	0.0252	1.05	0.024

Table 5 depicts that in 2011-12, the cost-benefit ratio of LIC of India is0.007787, which is the lowest among the sample companies. The cost-benefit ratio of ICICI Prudential Life Insurance Co. Ltd. is 3.067447, which is the highest among the sample companies. The New India Assurance Co. Ltd. and ICICI Lombard Co. Ltd. are showing the cost-benefit ratio as 0.010132 and 0.024 respectively. It shows that in 2011-12, LIC of India spends less on training per policy sold as compared to other 3 sample companies.

Table 6. Calculation of the Cost-benefit ratio – annual average

Average						
	Training Cost	Employees	No: of Policies	Trg_cost/ Emps	Policies/ Emps	C/B ratio
	In Rs. Lac	*In No:*	*In '000*			
LIC of India	1882.226	116011.2	269570.988	0.016	2.324	0.006885
ICICI Prudential Life	20393.198	20055	6088.99	1.017	0.304	3.345395
New India Assurance	269.718	19412.4	20680.0896	0.014	1.065	0.013146
ICICI Lombard Gen.	146.75	5474.6	5032.8838	0.027	0.919	0.02938

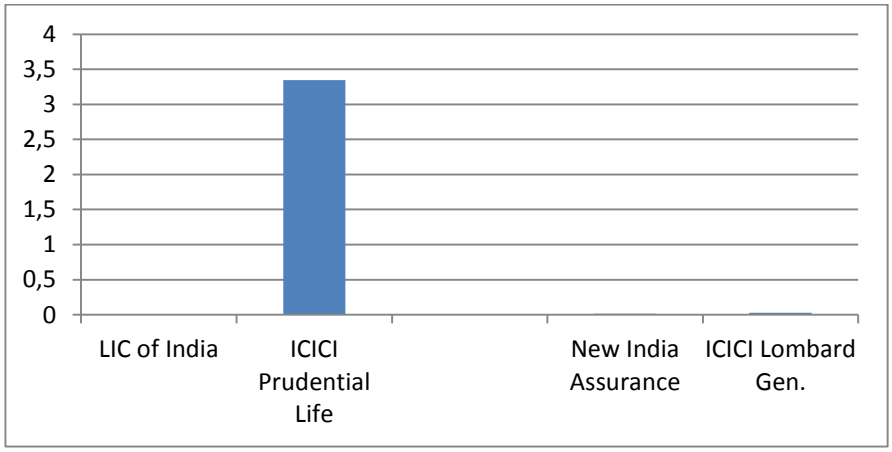

Figure 2. Average (C/B ratio)

Above Table 6 and Figure 2 indicate that on an average cost-benefit ratio, LIC is the lowest. It means LIC of India spends less on training per policy sold as

compare to the other 3 sample companies. Thereafter is New India Assurance Co. Ltd. ICICI Prudential Life Insurance Co. Ltd. is having the highest cost-benefit ratio. In Indian Insurance sector public players spend less per policy sold on training than do private players.

Life Insurance Corporation of India (LICI) dominated the Indian Life Insurance market. But the situation drastically changed since the beginning of the year 2000. With the development of the IRDA Act in 1999, private players started entering into the life insurance market. With private players paying more attention to advertising and promotional activities, LIC, too, was forced to make efforts to increase its visibility and enhance its brand image. The company commenced intense, systematic and well-focused public relations and publicity activities both at the corporate and operational levels. LIC upped its ad spend to tackle competition and succeeded in forging way ahead.

There could be some other factors which are responsible for such differences in private and public sector companies, i.e., government policies for public sector companies; still people could have more faith in public sector companies in India, good investment options given by public sector companies, difference in the age of public and private sector companies.

In other words, often there are various non-economic outcomes, which are very difficult to convert in monetary terms. Hence, while interpreting the results one should take proper consideration for all such points.

Limits of cost-effectiveness/ cost-benefit ratio analysis

There are always few presumptions for cost-effectiveness analysis, as it is by and large unrealistic to gauge all things required for a far reaching examination (Weintraub et al., 2009).

The best cost-benefit ratio is not necessarily the smallest one, but it will be the one that maximizes the integration of humans and system. As a result, this analysis can be applied to evaluate and quantify human procurement cost in terms of 1)Cost of technology vs. human performance and cost of technology vs. learning curve 2) Cost of technology vs. risk reduction, 3) Cost of training vs. human performance, and 4) Associated costs on human performance (Onkham et al., 2012).

The measure cost-effectiveness ratio is very common to use in medical sciences where benefits of programs are not possible to measure in dollar

value. Since it's a very useful measure in such cases but one should take proper data interpretation measures for getting a fully reliable picture of the results from these ratios.

Findings

Training is an essential human resource development function of any organization. It requires a huge amount of dollars. Thus now-a-days, evaluation of training programs` effectiveness becomes a very important activity for any organization. The objective of the present study is to measure the cost-effectiveness of training programs for employees. From the above data analysis the author summaries the following major findings:

- From the analysis of data, it was found that Life Insurance Corporation of India has consistently secured the lowest cost-benefit ratio among the sample companies in all the years from 2007-08 to 2011-12 and scored the highest rank for all the years under study except one year 2008-09.It shows that LIC of India spends less on training per policy sold as compared to the other 3 sample companies for the study period. Thus, Life Insurance Corporation of India has consistently been a cost-efficient organization.

- In year 2008-09, The New India Assurance Co. Ltd. secured the lowest cost-benefit ratio. It shows that in this year the New India Assurance Co. Ltd. spends less on training per policy sold as compared to the other 3 sample companies. But in other years of study period, its cost-benefit ratio is good enough.
- ICICI Prudential Life Insurance Co. Ltd. was the having highest cost-benefit ratio for all the years under study. It means that ICICI Prudential Life Insurance Co. Ltd. spends very high on training per policy sold as compared to the other 3 sample companies. Its cost-benefit ratio was highest for all the years from 2007-08 to 2011-12.
- ICICI Lombard General Insurance Co. Ltd. was having satisfactory cost-effectiveness ratio and improves.
- Average cost-benefit ratio of sampled companies for the study period is 0.0069 for LIC of India, 3.345 for ICICI Prudential Life Insurance Co. Ltd, 0.013 for the New India Assurance Co. Ltd. and 0.0293 for ICICI Lombard General Insurance Co. Ltd. By analysing the data we conclude that on an average for spending on training per policy sold in Insurance sector in India, LIC of India is spending the least, then comes the New India Assurance Co. Ltd. ICICI Prudential Life Insurance Co. Ltd. is spending the highest amount in this regard and ICICI Lombard General Insurance Co. Ltd. is performing satisfactory.

- All the sample companies are using different kinds of training programs focusing on achievement of behavioural skills and technical knowledge of their employees.

In the Indian Insurance sector public players spend less per policy sold on training than do private players. Both public sector companies are performing better than private companies; there could be some other factors like trust of public on the government companies, subsidies to the government companies, less employee turnover in government companies etc., which could not be available to the private sector companies.

Discussions and conclusions

The insurance sector has been playing a crucial role in the process of economic development since the independence of India. The global market for training expenditures in 2011 was about $287B. Approximately 75% of the global training expenditure is in North America and Europe, Asia and India. Although most research scholars mention the importance of evaluation of the training programs, none of the studies use cost-effectiveness measures. Since it is very hard to isolate the training effects on productivity, managers want to know the effectiveness of their training programs. Increasingly, training professionals are being asked to justify whether training is a worthwhile investment.Our findings suggest that since every organization want to improve while keeping its expenses in control. But it doesn't mean that they don't want to spend even a penny on their training programs or any other programs. Evaluation means organizations should know the worth and value of their training programs.

For the present study, we can conclude that on an average for spending on training program per policy sold in the Insurance sector in India, LIC of India is spending the least then comes the New India Assurance Co. Ltd. Both are public sector companies, thus we can say that public sector companies are more cost-efficient than their counterparts' private sector companies. Moreover, public sector companies may have different operational strategies as compared to private sector companies. ICICI Prudential Life Insurance Co. Ltd. is spending the highest in this regard and ICICI Lombard General Insurance Co. Ltd. is performing satisfactory.

Training assessment enhances the proficiency of training, in this manner lessening expenses. It gives data on the most proficient method to enhance future training projects. Assessment of training programs illuminates choices on whether to keep training projects. The mentor must be a specialist at

conferring specialized abilities or delicate aptitudes. Evaluation of training viability ought to be dealt with not just as a restorative measure for the current training projects offered, additionally as an expert dynamic measure for making future training projects viable. There is a requirement for a simultaneous program of training for each person to act as an individual from a compelling group and initiate the possibility to accomplish the organization's objective. Managers ought to gather information amid execution of the preparation projects to guarantee criticism on its preparation programs. The training needs to move from conventional training, to a recent innovative approach. Training`s centre needs to move from negligible learning advancement to a greater amount of aptitude improvement and making an appropriate environment for management. Human-asset arranging and vocation advancement arranging ought to be connected through training programs.

Human resources development is the vital link between the employees and the organization's operation, vision, strategies and goals. While evaluation has long been a fundamental part of learning, training programs and HRD professionals continue to tussle with developing an evaluation system that measures the value of the training with the same precision as financial and accounting evaluation systems measures. Assuming this trend continues, it should force training professionals to turn to the science of training for empirically verified guidelines regarding how to optimize training outcomes and how to evaluate whether training has been effective in reaching organizational goals. As the pressure grows to show an impact on the bottom line, training practitioners will do well to employ sound principles, guidelines, specifications, and lessons learned from academic literature, rather than relying on a trial-and-error approach. For this reason, we believe a new epoch of training has begun - one in which a truly mutual relationship between training research and practice will be realized.

Suggestions for future research

There is a call for meta-analysis studies to integrate the cross-sectional, multi-level and cross-countries studies. A cross-country study will be of great help to find out the most cost-effective ways of imparting training. A comparative study between developed and under developed countries regarding training programs could also be a productive effort in this direction.

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