

Full Length Research Paper

Exploring the link between Kirkpatrick (KP) and context, input, process and product (CIPP) training evaluation models, and its effect on training evaluation in public organizations of Pakistan

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In the awake of performance gap detected in public organizations of Pakistan, this paper proposes a training evaluation framework to ensure training transfer. This study is based on theoretical perspective of literature review and finds a link between Kirkpatrick (KP) and context, input, process and product (CIPP) training evaluation models to enhance efficacy of training in Pakistan. This study reiterates that pre-training context is imperative to finding viable training criterion to make training successful. Evaluation lacks criteria setting in Pakistan training institutions. This study is attempting to propose a training evaluation framework using KP and CIPP models to ensure financial viability as well as, alleviating and declining performance of public organizations. The framework proposes a strategy to ensure training transfer. Context is seen as a primary requirement in this framework, to help framing a viable training design aimed at training transfer. It thus, presents useful information for organizations with limited resources, human resource research fellows and research students as well. This paper proposes a new framework of training evaluation based on vision of Kirkpatrick and Stufflebeam (CIPP) models. It also emphasizes on understanding the entire situation of the organization from the beginning, aids in tracking organization needs, its operational objectives, training designs, implementation and monitoring. These items will pave way for subsequent evaluation. The researcher has shared his experience as a trainer with body of knowledge on training evaluation.

Key words: Pakistan, training evaluation framework, transfer of training, Kirkpatrick, CIPP models.

INTRODUCTION

Pakistan is a fertile land of four seasons, which has grown amidst crisis of governance, poor performance of public institutions in terms of lack of accountability, inefficient management and external debts. Public sector has a keynote role in socioeconomic development of the country, makes use of a significant part of the country's resources, creates wealth competencies and better innovative services (Jia and Fan, 2008).

Efficiency of the public service largely depends upon the quality of its people that constitute the public service (Garavan and McGuire, 2001). Its performance and productivity boost the progress and efficiency of other sectors. During the last decades, there has been a question mark about the declining performance standards of public sector employees. To fill the performance gap, training intervention has been an effective tool, in developing the workforce and ensuring transfer of training to the workplace.

The purpose of this study is to check whether training investment has been effective, enabled training transfer

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and contributed to improved performance on job.

IMPORTANCE OF TRAINING EVALUATION

Training has been accepted as a viable human resource practice to get workplace transformation (Pidd, 2004). Training has a structured plan and format, targets employees to improve efficiency and enhance performance on job (Baldwin and Ford, 1988). But training is not like a garage where people problems can be solved in a short period of time (Holton, 1996). Training is not always an affair of skill acquirement (Saks and Belcourt, 2006). It aims to contribute to improved job performance on workplace and augments training efficacy (Pidd, 2004). Despite, the gross importance of training, training evaluation is not carried out in majority of organizations. Almost 99% of organizations do not like to evaluate impact of training on performance (Alvarez et al., 2004). This is due to scantiness of feasible training evaluation methods (Aghazadeh, 2007). Little work has been done in developing countries to introduce fresh approaches to evaluate training (Kontoghiorghes, 2004). Evaluation means overall social and financial value of a training system in delivering worth (Pineda, 2003). Training loses its efficacy when it is evaluated loosely (Burke and Hutchins, 2008). Evaluation should be a part of planning process (Meignant, 1997). Information generated by evaluation becomes vital, for planning, decision making and training of an investment and not expense.

Brinkerhoff (2006) regards training as an investment and according to him, every investment bears an return on investment (ROI) value. He uses \$ value at level 3 of his training evaluation model to reduce margin of errors. The benefits associated with investment in training are enormous but hard to measure (Kirkpatrick, 1994). Training affects attitude of employees, and if they show positive change in behavior on job, expense on training becomes investment (Brinkerhoff, 2006). Training can therefore be planned, to assess any change in performance, and behavior on job to know training effectiveness. If a trainee accepts learning during training, he will definitely transfer it to the workplace (Bartlett, 2001).

Impact of training on training transfer

Training transfer refers to an application of knowledge, skill and attitude (KSA), learnt during training at the workplace (Baldwin and Ford, 1988). Transfer of training is not so high in developing countries, as a result, skills learnt are faded not applied on job. Investment made on training wastes away and training loses its efficacy (Pineda, 2008). There is the need is to know what trainees learn during training so as to reproduce it on job, in form of better performance. A study with samples of

150 organizations reported that, within 6 months to 1 year after training, less than 50% of staffs on average were able to transfer the training to the job (Saks and Belcourt, 2006). This gives a disheartening outcome of training. Another study, showed dismal results when it was found that less than 15% trainees are able to learn and transfer to workplace in form of improved job performance (Velda et al., 2007). This scenario warrants creating a model to ensure training transfer to workplace within prescribed time. Conditions look bleaker when it was researched that 10 to 15% of learning in a training program is applied on job (Brinkerhoff, 2006). Various other studies found transfer rates between 10 to 40% (Baldwin and Ford, 1988; Burke and Hutchins, 2007). Transfer of training to the workplace is imperative in raising the efficacy of training and its effectiveness (Barlow, 2006).

To ensure transfer of training, training program must be evaluated at all levels (Bartlett, 2001). Any study identified as faltering factors inhibit transfer of training. Pidd (2004) conducted a study and identified two factors, that is, personal characteristics of trainees and social support at workplace; the key factors that supplement transfer rate to the workplace. Characteristics of trainees such as, ability, aptitude, personality, self efficacy, desire for success, willingness to attend training, value beliefs about training, and prior experience of trainees, enables training transfer (Swanson, 1996). Workplace characteristics such as, management support and job atmosphere were found important predictors of training effectiveness (Baldwin and Ford, 1988; Maqsood et al., 2011). Situational factors like, line management commitment and organization support in form of equitable reward system, also contributes to transfer of training to the work place (Kontoghiorghes, 2004). Trainees' quest for learning is a prerequisite in learning something new to apply on job (Lim and Johnson, 2002; Alvarez et al., 2004) and adds good training design to ensure training impact. Appropriate design and delivery of a training program is a stepping stone to transfer of learning (Axtell et al., 1997; Maqsood et al., 2011). According to the findings of Noe (2004) salient features of the learning environment helps in building an effective training design. Another study found that personal characteristics of the trainees and the social support given at the workplace prove supportive in implementing training (Pidd, 2004).

When we look at trainees' characteristics and social support at workplace in Pakistani scenario, these two areas were found to be weak (Khilji, 1999). Transfer of training takes place when trainees effectively apply KSA learnt during training (Saks and Belcourt, 2006). In this context, a training evaluation mechanism is direly needed to verify training transfer to workplace in developing countries environment. This seems an effective way to address performance gaps in public organizations. To search such framework, four models were taken into account and they are presented thus.

Table 1. Techniques for evaluating training programs.

Level of measurement	Application	Critics
Level 1 Participant's degree of satisfaction is taken during or after the training session	participants' reaction towards training and its effectiveness is captured through a questionnaire. Verbal feed, body language and observation of participants are a part of reaction.	it is silent about measuring ability of participants to ensure transfer of training to the workplace.
Level 2 Learning What did they learn during training?	Pre-test before the start of training and post test at the end of the training gives a clue of learning.	It does not guide about the future ability of trainees to carry their learning from training environment to the job environment (Bushnell, D.S 1990)
Level 3 Behavior Is there visible change or variation occurred in behavior required to apply on the job	Pre and Post training tests are conducted to determine change in behavior. Later a 360°assessment is conducted through survey and interview using control group technique.	This does not reflect any change in behavior and it is not able to guarantee positive impact on the organization.
Level 4 Results Change in Performance outcomes after the training program	Results obtained are compared with training goals to check transfer of training to the workplace	It does not identify cost versus achievement (Brinkerhoff R.O. 2006)

Source: Kirkpatrick (1959).

Swanson model of training evaluation

Swanson (1996) presented a training evaluation model based on performance, learning and satisfaction (PLS) factors. To evaluate training results in terms of training transfer to the workplace, Swanson guides to compare training goals with results achieved after training.

Holton evaluation model

Holton evaluation model postulates that, evaluation takes two forms: Generic and specific. Generic evaluation covers the aspects such as, level of satisfaction of trainees and transfer of training to the workplace. Evaluation is conducted through a questionnaire. Specific evaluation focuses on learning, educational, transfer capability of trainees and impact of training in post training scenario (Holton, 2005). Holton training evaluation model stresses upon the following dimensions to evaluate transfer of training to the workplace:

Dimension 1 - job profile of employees: Job profile of an employee includes his personal characteristics (age, gender) and workplace features like location, office type.

Dimension 2 - learning acquired: Learning acquired can be sought through a well knitted set of questions; what type of learning did you acquire? To what extent learning was achieved? To what degree training meets the needs of the trainees?

Dimension 3 - implementation of training: What type and extent of improvement occurred in performance after training? Whether improvement directly relates with the skills acquired during training? Whether skills learned during training relates to need areas?

To ensure implementation of training, any other valid factor can be incorporated.

Dimension 4 - factors affecting implementation; This dimension relates to individual motivation and organizational back up that affects transfer of training. Personal characteristics include motivation and expectations while organizational characteristics include workplace conditions, and available resources (Holton, 2005). Every organization can develop an instrument as per its needs and culture.

Kirkpatrick four level learning model

Kirkpatrick offered training evaluation framework based on four concise levels; Level 1 (reaction), Level 2 (learning) Level 3 (behavior) Level 4 (results). Despite criticisms, this model bears credible reputation and is recognized as an age old training evaluation model since 1959 (Holton, 2005) (Table1).

Use of Kirkpatrick each level of evaluation: Table 2 shows the percentage age of use of each level of Kirkpatrick in the organizations. Reaction based Level 1 has greater use at 95%. Effectiveness at level 1 could be measured in the awake of scoring 4 out of 5 in each area

Table 2. Percentage age of use of KP.

KP four levels	Percentage age of use	Use of each level in the organizations (%)
Level 1	95	86-100
Level 2	37	71-90
Level 3	13	43-83
Level 4	3	21-49

Source: McMurrer et al. (2000) and Twitchell et al. (2000).

being rated. If all the trainees rate the area 4 out of 5, level 1 would be showing 100% effectiveness. If 50% shows response at 4, training will be considered 50% effective (McMurrer et al., 2000; Twitchell et al., 2000). Kirkpatrick (1959) confirms that Level 1 evaluation can be used for all type of courses. At Reaction Level 1, Learners will be able to illustrate their learning experiences. At learning level 2, learning experience will reveal change in knowledge, skill and attitudes before and after the knowledge occurrence. As this knowledge learnt, will be applied on workplace, behavior evaluation occurs and this is level 3 behavior. Results obtained at level 4, raise organizational value.

CIPP model (1987)

The CIPP model (context, input, process and product) was proposed by Stufflebeam (1987). He presented a systematic methodology through a series of questions to probe into the curriculum development process:

1. Context: Obtaining situational data to determine program objectives and learning linked with it
2. Input: Strategies are devised to achieve the desired results
3. Process: It involves program implementation
4. Product: To evaluate the outcome in terms of program worth and effectiveness.

Commentary

Swanson and Holton talked about performance, learning and satisfaction. In Pakistan, there is less stress on these factors. Trainings are conducted to comply with mandatory regulations. There is no real learning or deep satisfaction or training transfer involved in this phenomenon. Training evaluation is loosely conducted in a bureaucratic environment. Critical analysis reveals that, Kirkpatrick model is silent about measuring ability of participants to ensure transfer of training to the workplace. Moreover, it does not guide about the future ability of trainees to carry their learning from training to the job environment to bring change in behavior that will

guarantee positive impact on the organization (Bushnell, 1990). Brinkerhoff (2006) finds out that, Kirkpatrick model does not identify cost against achievement.

To enhance efficacy of training and improvement in job performance, context (training criteria) needs to be set, while planning a training course. For developing countries, CIPP model has more attraction with its context approach and KP model can be trusted onward. Context approach helps to build training criteria with a pre-defined outcome. In this backdrop, KP and CIPP models have practical validity in Pakistani environment. This study aims to integrate these two models and look for a workable training evaluation framework. The proposed diagrammatic flow of model is presented in Figure 1.

This framework covers the key dimensions of training evaluation to ensure training effectiveness through achieving objectives at desired situations. At stage 1, evaluation begins when the proposed model focuses on the pre-training context as fundamental requirement. This framework is expected to overcome diverse evaluation practices of public sector organizations and offer a methodical strategy. The proposed framework is standing on five stages; context, reaction, learning, behavior and results. These stages deal with evaluation activity effectively. It is an interlinked and integrated chain of processes that covers the entire training evaluation right from planning to training outcome.

DISCUSSION

In Pakistan, heavy investment is made on training of civil servants. To maintain check and balance on the public investment, a viable training evaluation framework is direly needed. The proposed framework offers step by step evaluation of a training activity right from the inception (criteria setting) to execution (results). Literature review suggests that, all the evaluation methods offer different analytical tools to evaluate training activity in developed countries but their application in under developed countries, like Pakistan, is debatable where mind set and educational levels are stunningly low. Experts have agreed that employees have diverse evaluation needs (Nijman et al., 2006). Evaluation needs

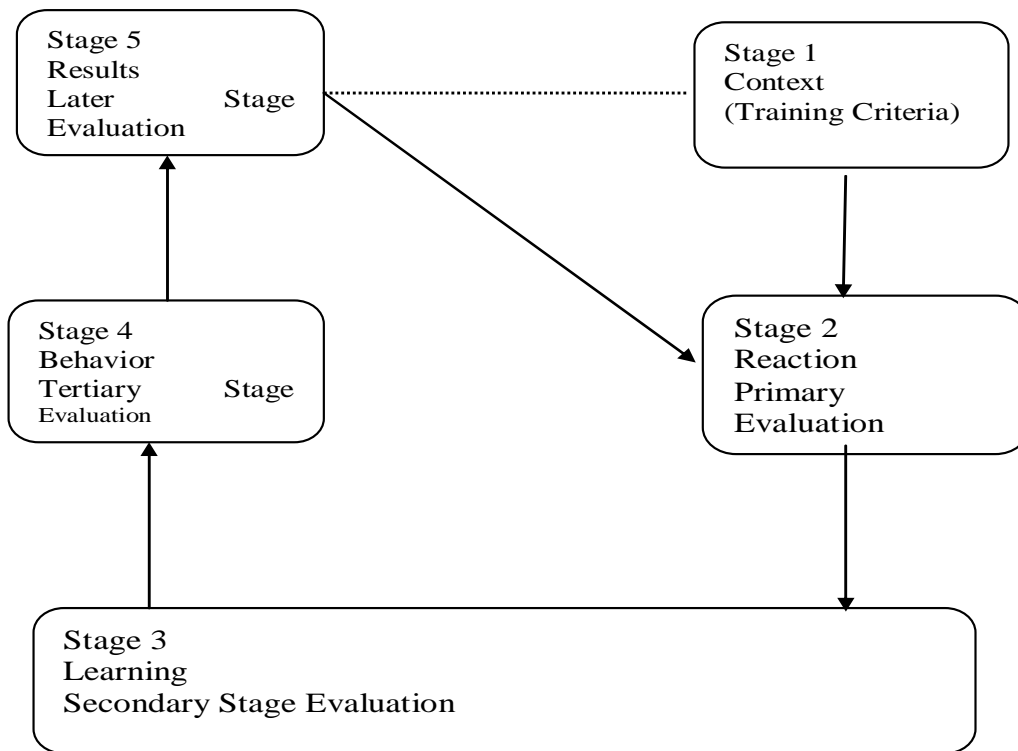


Figure 1. Diagrammatical flow of proposed training evaluation framework (source: Author); dotted line indicates continuous and unbroken link between stage 5 and stage 1. context is seen as a primary requirement to help framing a viable training design aiming training transfer; —> arrow shows flow of events and their direction of impact.

of employees of developed and developing countries are distinct (Khilji, 1999). Kirkpatrick training evaluation model, takes its initiative from participants’ reactions. CIPP model starts training evaluation from context which focuses on development of criterion of training. Context is important in Pakistani environment and training plan needs to be designed on real time indicators to produce positive results. Should in case, this stage is ignored and training plan is designed carelessly, trainees’ on board will reflect negative reaction. Trainees’ reactions cannot provide substantial base to get reliable results. Reaction may undergo change at any of the three stages of training, that is, before, during, and after training. Literature review suggests that training criteria, management support and social support will serve as input to implement training afterwards.

The framework re-engineered on the basis of KP and CIPP training evaluation models will run its evaluation at all levels and is proposed for application in developing countries because, situation prevailing in developing countries cannot be matched with developed countries. Low educational standards, static mentality, and unwillingness to learn are frequently found in developing countries and people’s perception are hard to evaluate in

this environment.

PESTLE model has already identified that the political, economic, sociological, technological, legal and environmental factors prevailing in a country cannot be ignored. These factors are beyond the control of business. PESTLE model scans the political conditions as (peace or turmoil), economic graph (going upward or downward), sociological (social norms and cultures), technological (modern technologies or old methods), legal situation (litigations) and finally environment (polluted or pollution free). This study gets support from the PESTLE model.

CONCLUSIONS

There is no second opinion about the importance of training and to make the investment in training fruitful is the priority of every nation so as, to lay stringent check on public investments. Training evaluation system is considered vital for public or private organizations and in order to get desired efficacy of training, evaluating training is a fruitful activity. Currently, there is a gap between desired and actual performance in Pakistani

public organizations. This situation is alarming. Every country needs a viable training evaluation framework to get training outcome. Literature review identifies that, trainings are conducted without predefined criteria in Pakistan. This gap needs to be filled with due planning to ensure training transfer to the workplace. This study reiterates that pre-training context is imperative to finding training criteria successful. This study offers new strategy in the area of training evaluation and various studies have already worked in the direction of this study. Literature review, training evaluation models and experts opinion leads to a conclusion that training conditions in a particular sector, office, or area needs to be explored carefully to design an effective training program. This is taken as context (training criteria) in the proposed framework. As a result of the exploration of training conditions, factors like training criteria, management support and social support will serve as input to implement training adequately and these factors can be used as input while developing training design and delivery. Conceptual framework presented in this study came into being as result of integration of CIPP and KP training evaluation models. These model provided a base to help in evaluating training activity. The proposed framework is expected to enhance efficacy of training.

The subject framework emphasizes on the understanding of the entire situation of the organization from the beginning and aids in tracking organization needs, operational objectives, training design, realization and monitoring. These items will pave way for subsequent evaluation. The framework proposes a strategy to ensure training transfer. Context is seen as a primary requirement in this framework, to help in framing a viable training design aimed at training transfer. This ambition will remain unfulfilled until other characters such as training management, trainer and trainees take active part to make the training event a success story.

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