

# **Pedagogical Orientation of Decision-Makers to Change the Training Implementation, Evaluation and Result Oriented Improvements in Developing Countries: A Public Sector Case of Pakistan**

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## ***Abstract***

*The effectiveness of training is an abstract idea in Pakistan. We argue that in-formalized trainings are conducted in a formalized structural environment of public sector in Pakistan; resultantly, the pedagogical orientation of decision makers has become fragmented in the organizations and shrink to formality of practices. The mainstream research articulates that ‘formality of practices’ affects job quality of employee in the organization. Drawn from the pertinent literature review, learning transfer theory underpins the assumptions that takes on the premise how mediation of certain variables affect training effectiveness. The testing of hypotheses embarked on the application of multiple mediation as well as controls using bootstrap method given by Preacher and Hayes’ (2008). The three potential mediators were taken into account in context of public sector among learner readiness, training evaluation and return on investment. Employing a sample from Pakistani public organizations, an empirical evidence was acquired that supports the presence of mediating effect. The quantitative findings indicated that training evaluation and return on investment partially mediate between training program characteristics and workplace environment. Surprisingly, learner readiness did not show mediation for which future research may conduct qualitative investigation by the constructionists. The quantitative findings lay the need of critical reorientation of training through evaluation that has implications for management and practionerss. The empirical investigation draws on to propose a new TAM theory that emphasizes on ‘Trainees Activation Management’ among Pakistani training population. The paper also discusses the role of TPC & WPE in augmenting training effectiveness.*

**Keywords** – *Public sector, Training Program Characteristics, Work place environment, multiple mediation, Training effectiveness*

## **1. Introduction**

Managing training is different in different organizations but over the years it has become prey to formalities in developing countries like Pakistan. The effectiveness of training is an abstract idea in Pakistan. We argue that in-formalized trainings are conducted in a formalized structural environment of public sector in Pakistan; resultantly, the pedagogical orientation of decision makers has become fragmented in the organizations and shrink to formality of practices. The mainstream research articulates that ‘formality of practices’ affects job quality of employee in the organization. Formality becomes strong with size of the

firm and reflects accordingly at workplace (Storey, 2002). A score of researches conducted in the U.S. (Kaman, McCarthy, Gulbro, & Tucker, 2001), the UK (Kersley, 2006; Australia (Kotey & Slade, 2005), & Canada (Golhar & Deshpande, 1997) identify a number of indicators that accentuate the presence of formality with the workplace size and the organization in its entirety. A research conducted by Rooke, Koskela, & Kagioglou, (2009) found that most of the organizations become adhered to formal practices around formal methods. This formality of practices ultimately influences the organizational outcome negatively (Storey, 2002).

Public employees are blamed for their performance and conduct. The problem is how they can be developed to overcome these gaps (Mthokozisi Mpfu, Clifford Kendrick Latywayo, 2015). Literature provides recognition to the fact that an organizational performance is affected by training very much (Said, Alkhanaizi, 2018) but there is always a need to know the empirical evidence in this regard. This study conceives the idea that ineffectiveness of training may be attributed to trainees' lack of activation. However, little is known about trainees' activation in context of large public organizations. Moreover, there is a critical dearth of judgmental studies on the significance of trainees' activation. Furthermore, it triggers a new facet in training. In this background, the premise followed by this research is built on pedagogical argument that training effectiveness is attributed to capacitated training characteristics along with synergetic cohesion of workplace environment. This study focuses to gather insiders' perceptions about training and its effectiveness prevalent in the local conditions. To examine the mediating role of certain variables like learner readiness, training evaluation and return on investment on relationship between TPC & WPE with training effectiveness that eventually contributes to organizational performance.

## 2. Literature review

Facilitated by rapid advancement in information as well as communications technology, training effectiveness is a phenomenon that targets to develop human resources (Smith, Callan, Tuck, & Smith, 2019). Training literature provides evidence that training helps organizations to increase performance (Saks & Burke, 2014). This milestone is hard to achieve until training is evaluated for its contribution. Though measuring the long term results delivered by training programs is a hard nut to crack (Brinkerhoff, 2005), that may be owing to unawareness about effective instrumentation for training evaluation. A number of training scientists underpinned the significance of training and its allied factors (Baldwin and Ford, 1988; Holton, (2003), this research considered the ideas delivered by Holton, (2000) in LTSI theory to measure training effectiveness as this has been less researched area and application of this theory often faced criticism due to less sample size (Hutchins, 2013). Researcher being a part of a public training institution believes that until current training is not evaluated seriously, future is likely to remain blur. Over the years, public sector in Pakistan reflects static practices as mainstream of this sector still capitalizes on customary administrative practices that signals the fragmentation among decision makers and demands pedagogical orientation (Khalid, 2015). This scenario foretells that the area is under-researched being unclear to practitioners (Hodge, Smith, & Barratt-Pugh, 2016).

### 2.1 Training program characteristics

The training literature unveils that Organizations as well as individuals are affected by a certain range of training characteristics relating to the three phases of training, before, after and during (Salas and Cannon-Bowers, 2001). These include factors like training design and delivery along with training methods, trainer presentation, training content and training objectivity (Kirkpatrick & Kirkpatrick, 2006; Iqbal, Maharvi, Malik, and Khan, 2011) that influences trainees' retorts (Jeng, & Hsu, 2005) as well as learning levels (Tan, Hall, & Boyce, 2003). Moreover, the training features enable to transfer knowledge towards the work (Kontoghiorghes, 2002). The training stimuli, linked with diverse methods of instructions, and the interface between the trainer and the trainees create an adequate learning environment that helps to promote knowledge transfer (Nikandrou, Brinia, and Bereri, 2009). Thus, training literature provides justification to

investigate the impact of training characteristics including sub-items such as self-efficacy, knowledge acquisition, skill acquisition, change in attitude, instructional style (trainer), workplace culture, job performance, innovative environment, trainee' perception on training effectiveness in public sector organizations in Pakistan.

### ***2.2 Workplace Environment Characteristics***

Hazards exist at the workplace on account of illiteracy, absence of adequate supervision, inadequately applied rules as well as human error, all leads to negligence, absence of monitoring, inattentiveness, and reckless evaluation (Khdair, Shamsudin, and Subramanim, 2011). A public office is characterized by its peculiar culture and flawed strategy implementation (Rubae, and Al-Maniri, 2011). Moreover, the training implementation, evaluation as well as orientation of improved results are recklessly ignored (Khalid, 2015). Work environment therefore, serves as a critical avenue to watch generation of desirable outcomes (Erdogan & Bauer, 2005). In this backdrop, examining conditional effects relating to workplace is missing in training literature. Holton III, Bates, & Ruona, 2000, pp.333-360) argued that in spite of the proven importance of the training, its relationship with implementation at workplace has been less studied in developing countries (Cheng, and Ho, 1998). Furthermore, public sector is called engine of economic growth that seeks to stabilize the economy (Tordo, Tracy, and Arfaa, 2011). Therefore, subsequent of the significance of training in PSOs of Pakistan, examining workplace environment characteristics (Workplace culture, job performance, innovativeness of environment and training perception) and its subsequent effects on training effectiveness is justified.

### ***2.3 Multiple Mediation in training research***

Oberman, (1996) underlines that training programs mainly target to promote efficiency as well as effectiveness among employees throughout the organizations. However, with the inclusion of certain elements, training process can be made more borne fruit. In this background, this study resorts to identify the mediating role of certain variables on the relationship of predictors with outcomes and their ultimate outcome on training effectiveness. For this purpose, it explores the mediation of learner readiness, training evaluation and ROI measured through sub-items such as (*learner willingness, environment & ability, transfer motivation, peer support, supervisory involvement, content validity, training design, individual capacity, practice opportunity, self-efficacy, expected efforts, expected outcome of performance, feedback and openness to change*).

### ***2.4 Mediating Learner readiness***

Learning new knowledge, retaining and transfer all requires learner readiness (Kim, Park, & Kang, 2019; Bhatti, Battour, Sundram, and Othman, 2013). Prior to this, Holton et al. (2000, 2007) highlighted learner readiness as “the extent to which individuals are prepared to join training” (page 183). It requires basic skills to execute different tasks (Awais, 2010). Abdullah, (2019) suggested that role of new life style and work life cannot be ignored in the contemporary digital age. This underpins the need to empirically evaluate the readiness of learners towards the training.

### ***2.5 Mediating training evaluation***

Organizations are experiencing a serious concern in terms of low performance and rigid behavior from employees (Ferreira, & Bates, 2015). Literature on training evaluation reveals that managers give three times greater importance to the training content instead of its transfer to the workplace environment (Pool, 2011). Despite considerable research on training evaluation, concept of training evaluation is still blurred for many in developing countries. Ongoing training proves instrumental in handling the confronting issues and challenges (Eerde, Simon, & Talbot, 2008). Formalized training is conducted on enduring basis but without evaluating the results properly (Bulut, & Culha, 2010). This underpins the need to develop evaluating rubric (a guide of tools) that could be used to evaluate the quality of trainees. The ensuing factor suggested to affect training effectiveness is return on investment delineated next.

## 2.6 Mediating Return on Investment

Linked with the above, Training program are designed to deliver improvement in terms of attaining higher profits for the organization (Saks, and Burke, 2012) and learning for trainees to advance their career and get professional excellence (Holton, 2000). It was pointed out by Mackey, and Gass, (2015) that organizations are not able to get ROI of their employees' training. This may be due to lack of encapsulation of certain individual and collective factors involved in the phenomenon. Moreover, measuring the contribution of training in term of results is cumbersome mostly owing to lack of evaluation instruments (Brinkerhoff, 2005; and Nickols, 2005). Scaduto, Lindsay, and Chiaburu, 2008) opined that variables those were overlooked and unheeded by the past research, should be adopted for testing. In this background, the extant research is determined to find answers to the following research questions:

## 2.7 Research questions

1. How does training and development lead to address training effectiveness in public organizations of Pakistan?
2. How does training and development lead to adopt training evaluation in public organizations of Pakistan?
3. How to test the effectiveness of mutual association between training program characteristics and workplace environment with training effectiveness in public sector environment.
4. What is the impact of training program characteristics and workplace environment (as individual factors) on training effectiveness through the effects of mediating variables such as learner readiness, training evaluation and return on investment as category factors?
5. How to assist organizations and management in developing justification for making investment in human development program.

Drawn on the above, this research embarks on to engage a score of individual and organizational factors that can provide backup to augment performance of training programs.

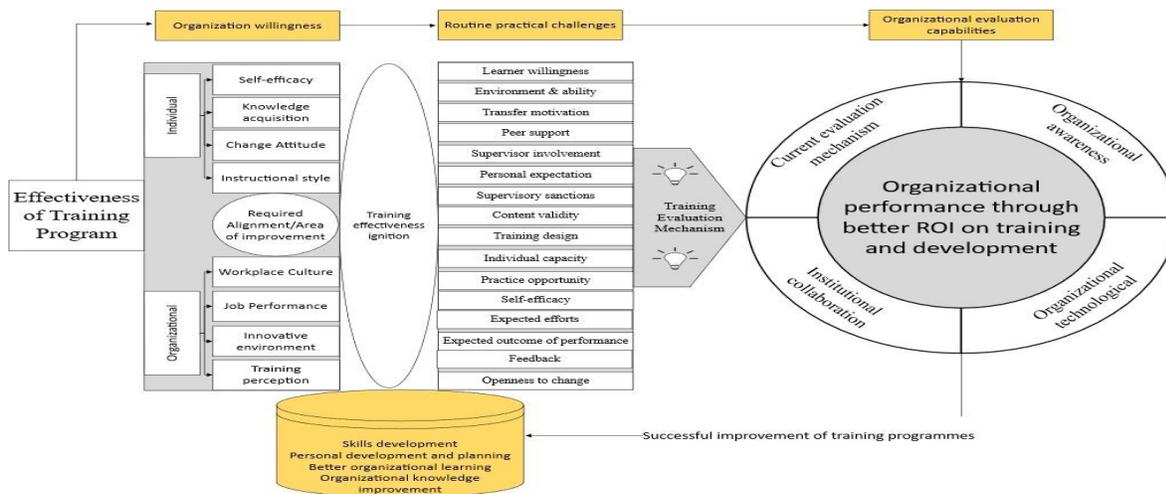


Fig 1: Research theoretical framework that displays all-purpose representation having relationships amid things in an assumed phenomenon.

The assumed phenomenon seeks to illustrate that the organizational evaluation mechanism can operate well through raising organizational awareness, organizational technological base, and developing institutional collaboration. Subsequently, successful improvement of training program may result in skills development, personal development and planning, better organizational learning, and marked organizational knowledge improvement.

## **2.8 Research hypotheses**

The above debate leads to propose the following hypotheses to test:

- H1: Training program characteristics and learner readiness have significant and positive correlation in public sector organizations (POSs).
- H2: Training program characteristics and training effectiveness have significant and positive correlation in POSs.
- H3: Learner readiness mediates significantly on relationship between training program characteristics and training effectiveness in POSs.
- H4: Training program characteristics and training evaluation have significant and positive correlation in POSs.
- H5: Training evaluation mediates significantly on relationship between training program characteristics and training effectiveness in POSs.
- H6 (path a): Training program characteristics and return on investment have significant and positive correlation in public sector organizations.
- H7 (path b): Return on investment mediates significantly on the relationship between training program characteristics and training effectiveness in PSOs.
- H8 (Path a): Workplace environment and learner readiness have significant and positive correlation in PSOs.
- H9 (Path b): Workplace environment and training effectiveness have significant and positive correlation in public sector organizations.
- H10 (Path c): Learner readiness mediates on the relationship of workplace environment with training effectiveness in public sector organizations.
- H11 (Path a): Workplace environment and training evaluation have significant and positive correlation in public sector organizations.
- H12 (Path b): Training evaluation mediates on the relationship of workplace environment with training effectiveness in public sector organizations.
- H13 (Path a): Workplace environment and return on investment have significant and positive correlation in public sector organizations.
- H14 (path a): Training program characteristics and training evaluation have significant and positive correlation in public sector organizations.
- H14 (Path b): Return on investment mediates the relationship on workplace environment with training effectiveness in public sector organizations.

## **3. Methodology**

As positivism refers to epistemological type where sensory information prevails only and takes the position of true knowledge (Quinlan, 2011), this study adopted positivistic approach that finds support from deductive reasoning to test the assumptions engaged in the suggested hypotheses. This study utilized survey multi-source data from among 550 public managers, non-managers, supervisors and training managers under non-contrived natural conditions from three major cities Lahore, Gujranwala and Faisalabad of Punjab province. Therefore, training program is the unit of analysis for this study. A self-administered

questionnaire was distributed internally and in person during the training among target respondents of public organizations after obtaining permission from higher authorities. Response rate remained 450/550 (82%). We employed Likert-type scale because of its capacity to assess psychological attitudes with items 1-5 covering the independent dimensions (Strongly Agree (5) Agree (4) Neutral Agree (3) Disagree (2) Strongly Disagree (1). Cronbach's alpha were calculated as a measure of judging internal consistency (Cronbach, 1987). Values of Cronbach Alpha for the current study crossed the threshold of .67 that indicates high internal consistency and reliability (Hair, Black, Babin, Anderson, and Tatham, 2006). Correlation statistical test as shown in Figure 1 gives us normality of relationship between variables under study.

#### 4. Results and Discussion

In order to test the hypothesis, a multiple test of mediation model was applied using PROCESS macro 2.15 through SPSS 26.0 created by Preacher and Hayes, (2008). This research employed the bootstrapping technique to control the limitation posed by the approach expounded by Baron, and Kenny, (1986) based on causal steps that lays the need to infer indirect effects instead of testing (Hayes, 2009). Many simulation studies substantiated the effectiveness of bootstrapping procedures in mediation as a potent method and to analyze indirect effect (Hayes, Abraczinskas, Scaccia, and Wanderman, 2016); Hodder, MacKinnon, Ralhan, & Keir, (2010). Mediation initiates with independent variables X1 & X2 advances towards dependent variable (Y) following a linear regression path along C referred to as "total effects". 3rd party serves as a mediating variable (M) between X and Y, X takes one to M that in turn leads towards (Y). With the addition of mediator, the C path (direct effect) goes on smaller. To Preacher and Hayes (2008), as path a carries statistical significant value along path b this indicates the existence of mediation having indirect effect. The following table illustrates the results pertaining to mediation analysis for this study:

**Table 4.1** Mediation regression analyses through Preacher and Hayes Method

Relationship P-VALUE	Total Effect	Direct effect	Indirect effect
TPC → LR → TEEF .0515	-.0466	.0238	-1.9526
TPC → Te → TEEF .0000	.2503	.0263	9.5303
TPC → RO → TEEF .0000	.3473	.0224	15.5258
WPE → LR → TEEF .0112	-.0516	.0202	-2.5478
WPE → Te → TEEF .0000	.1359	.0283	4.7984
RO → RO → TEEF .0000	.3159	.0210	15.0295

TPC=Training program characteristics, LR=Learner readiness, Te=training evaluation, TEEF=Training effectiveness, WPE=Workplace environment

**Table 4.2** Multiple linear regression to explain training effectiveness

Coefficients						
Dependent Variable: Training effectiveness	Unstandardized Coefficients				Collinearity Statistics	
	B	Std. Error	Standardized Coefficients	Sig.	Tolerance	VIF

Model A						
(Constant)	1.509	0.118		0.000		
TPC	0.04	0.023	0.065	0.085	0.716	1.396
LR	-0.047	0.024	-0.075	0.051	0.691	1.448
Te	0.25	0.026	0.537	0.000	0.756	1.323
ROI	0.347	0.022	0.537	0.000	0.849	1.178

Model B						
(Constant)	0.612	0.157		0.000		
WPE (X2)	0.404	0.049	0.323	0.000	0.581	1.721
LR	-0.052	0.02	-0.083	0.011	0.837	1.195
Te	0.136	0.028	0.19	0.000	0.567	1.764
ROI	0.316	0.021	0.489	0.000	0.839	1.192

The Model A examines as to whether independent variables (IV) effects mediators, the unstandardized coefficient emerges is 0.065 with p-value 0.000 that holds the model statistically significant. The Model B examines as to whether independent variables effects mediators, the unstandardized coefficient emerges is 0.323 with p-value 0.000 that holds the model statistically significant. The values of VIF being less than 5 indicates no problem of severe multi-collinearity. In model A, hypothesis 1 assumed that TPC positively relates to LR. A non-significant negative relationship ( $\beta = -0.047$ ) was found between TPC and learner readiness. The results did not confirm this hypothesis. This findings are in reverse of research conducted by Machin (2002) who stresses upon trainee' utmost readiness before training. In addition, Tannenbaum et al. (1993) found that trainee readiness significantly effects training outcomes. H2 assumed the relationship between learner readiness and training effectiveness. The results confirmed that both have significant relationship ( $\beta=1.509$ ). The finding is in line of findings of Baldwin et al. (1991), Holton (1996), and Tannenbaum et al., (1991) that trainee readiness predicts the degree of learning motivation found among trainees. H3 postulated that training program characteristics relates to training effectiveness. Results supported this hypothesis ( $\beta =1.509$ ). Results confirmed hypothesis H3 that TPC is positively and significantly correlated with training effectiveness ( $\beta = 0.04$ ,  $P < 0.01$ ). The results are consistent with the findings of (Hansen, 2001; Tai, 2006; Klein, Noe, and Wang, 2006; Bell and Ford, 2007). Other studies found TPCs as a potential contributor to foster training effectiveness (Seyler, Holton III, Bates; Gegenfurtner and Gruber, 2009). H4 assumed that TPC relates to Te. Results confirmed the hypothesis ( $\beta=0.25$ ). The results enable practitioners to understand the effectiveness of certain training characteristics thereby raising investment in these to get the desirable results, in the light of trainee' perceptions. It was hypothesized in H5 that Te has significant relationship with training effectiveness. The results support the hypothesis ( $\beta =1.509$ ). Thus, organizations and training professionals should ponder to undertake training evaluation (Te) to make the training successful as per trainees' perceptions. H6 assumed that TPC relates to ROI. Results confirmed the hypothesis ( $\beta=0.347$ ). The finding is in line of that of Brinkerhoff, (2005). It was hypothesized in H7 that ROI is associated with training effectiveness. The results supported the

hypothesis ( $\beta=1.509$ ). The results provide guidance to practitioners to adopt return on investment as an evaluating method to make sure that training is successful.

In model B, hypothesis 8 assumed that WPE positively relates to LR. A non-significant negative relationship ( $\beta = -0.052$ ) was found between WPE and learner readiness. The results did not confirm this hypothesis. These findings deviate from the findings given by studies on trainee readiness by Machin (2002) & Tannenbaum et al. (1993) both emphasize upon trainee' readiness to get significant training outcomes. H9 hypothesized that learner readiness affects training effectiveness, the results ( $B=0.612$ ) supported the assumption and remained in line with the research carried out by Machin (2002) & Tannenbaum et al. (1991). While looking for mediation, H10 assumed that learner readiness mediates between training program characteristics and training effectiveness, surprisingly the results did not support the hypothesis and contradict the past studies conducted by Awais, 2010; Pynes, (2013). H11 postulates that WPE relates to training effectiveness. Results ( $B=0.612$ ) confirmed hypothesis H11 that WPE positively and significantly correlates with training effectiveness (path C) ( $B = 0.404, P < 0.01$ ). It was hypothesized in H12 (path b) that training evaluation is associated with training effectiveness. The results supported the hypothesis ( $B=0.612$ ). H13 assumed that WPE relates to ROI. Results ( $B=0.316$ ) positively confirms the hypothesis. It was hypothesized in H14 that return on investment serves to mediate the relations among workplace environment as well as training effectiveness. The acquired results ( $B=0.612$ ) support the hypothesis and found consistent with the past research conducted by (Awais, 2010; Pynes, 2013).

The training literature reflects a gap as less empirical research engaged training program characteristics as conclusive predictors that target training outcomes (Aluko & Shonubi 2014; Homklin et al., 2013). This necessitates the need to conduct an empirical research in local context to examine the impact of TPC & WPE on training effectiveness. The another gap pertains to shortage of research on the impact of individual and organizational factors on the learning transfer to deal with the confronting issues (Homklin et al., 2014; Giangreco et al., 2009; Iqbal et al., 2011; Salas and Cannon-Bowers, 2001). Furthermore, training evaluation has been an abstract idea in developing countries (Buckley and Caple, 2004; Goldstein and Ford, 2002). Furthermore, a lot of research was executed on training evaluation in developed world (Powell and Yalcin, 2010), less research was conducted on training evaluation at reaction level in context of a developing country like Pakistan (Khalid, M. &. 2015). The above grounds provide ample justification to conduct this research in local context. It is widely acknowledged that public organizations make heavy investment in training, yet training is not evaluated seriously due to which it becomes difficult to determine the extent of training effectiveness. LTSI theory provides an evaluation criteria for the last 3 decades to measure training effectiveness. This study sets out to evaluate application of LTSI theory in eastern context and suggest concurrent improvement. It is argued that LTSI does not account for certain individual and category factors, training program characteristics and workplace environment and mediation effects on training effectiveness. To make heady way, this study conducts an investigation on variables of training program characteristics and workplace environment selected as IVs and their subsequent effects on training effectiveness taken as DV. The objective set for this study is to make identification of the training variables such as learner readiness, training evaluation, and return on investment for affecting training effectiveness that eventually impact organization performance. This study has taken training program characteristics as pre-training intervention. Quantitative research method was followed to achieve the objective as it is considered the best proven method to cover wider population (Zikmund et al., 2010). The study was conducted during and instantly afterward completion. To test the hypotheses, a sample was selected employing convenience sampling from among trainees working in tax organizations located in Pakistan. To obtain the validation of the research model, SPSS software and structural equation model (AMOS) was deployed. The lacking area of training evaluation was aided by this study by developing LTSI through examining the impact of training program characteristics (TPC) on different levels of LTSI and to make training effective in tax organizations of Pakistan during the training proceedings.

This research conducted empirical investigation on the mediating effects of learner readiness, training evaluation and return on investment on the relationship of training program characteristics with workplace

environment on training effectiveness. This study made empirical literature contribution by highlighting that TPC serves as the potential factor influencing training activities encompassing employee expectations, behavior and performance. Literature was contributed by the facts that trainees self-efficacy has significant relationship with trainees learning. Training program characteristics impact positively and significantly training effectiveness through the relationship between learning morale (self-efficacy), learning, and behavior of trainees. Similarly, Training program characteristics impact positively and significantly training effectiveness through the relationship between workplace culture and job performance. Furthermore, training program characteristics impact positively and significantly training effectiveness through innovative environment and trainees' perception. A contribution to the literature has been made through trainees' reaction towards training program characteristics.

Furthermore, the study has been able to contribute by reflecting that trainer instructional style significantly affects trainees' perception, attitude and job performance. Moreover, empirical results reflect that trainee perception affect workplace culture and job performance, so workplace environment significantly relates to training effectiveness. The findings designate that training program characteristics as well as practices significantly and positively relate to expectations about training outcomes, and learner readiness significantly and positively relates to the expectations about training effectiveness. The results confirmed the existence of significant and positive correlation of trainer performance, with trainees' reactions, and learning; additionally, training environment (content, objectivity) significantly and positively impacts workplace environment.

This research accentuates that training objectives after training content potentially affects behavior. Practical position reveals that the findings delivered by this research carry significant as well as practical implications for trainers, training managers, designers, and supervisors to create effective trainings. Additionally, a framework is contributed by this study for the purpose of carrying evaluation of training effectiveness.

Finding of current study reveal that both training evaluation and return on investment were found directly mediating the relationship between TPC and WPE and training effectiveness. However, quite unexpectedly learner readiness was perceived as non-significant and negatively mediates between TPC & WPE. We refer this matter to constructionists for future research through conducting an in-depth qualitative study for determining learner readiness in local context.

Our results unveil that trainees in developing countries make an advanced perception about the training and this thinking leads to block change. Trainee activation therefore, seems vital in form of advance preparation of trainees to make training successful. Hence, main outcome of this research results in trainees' activation that can be measured through application of new knowledge by the trainees beyond expectations (Eun, Sunyoung, Hye, Kang, 2019). Nonetheless, operationalization of training effectiveness lies in transfer of training (Hodge, Smith, & Barratt-Pugh, 2016). These contextual conditions signal to propose a new TAM theory that lays the need of 'Trainees Activation Management' and thrives upon developing countries to make sure that their trainees are actively prepared to attend training in this way, training program characteristics impact behavior that plays a critical role in transfer of training to the workplace.

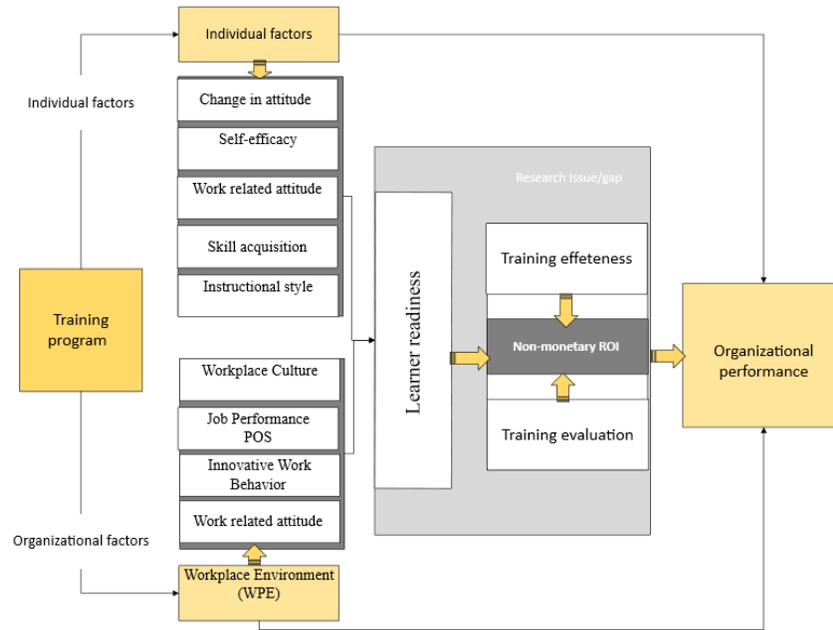


Fig 1: Conceptual Framework

Our findings empirically analyzed both individual and collective factors and found them impacting training effectiveness. The core aim remains with this research is to investigate the potential impact/contribution of both TPC&WPE on training effectiveness comparing the past studies that accentuated TPC for supporting training effectiveness (e.g. Iqbal et al., 2012). Our study advances contributions in multiple ways. Firstly, this seems the unique effort in context of a developing country to investigate the dispositional antecedents of training effectiveness. Secondly, the role of learner readiness, training evaluation and ROI was studied in explaining the association of TPC & WPE with TE. This enables us to propose that training is likely to remain successful if these elements are made an important part of training program. Thirdly, results in this direction helped to develop ‘training activation management theory’ (TAM) that may enable training practioners to suggest proximal interventions for aspiring desirable training outcomes.

## Conclusion

Drawn on the fact that low performance and productivity is often reported in public sector organizations that has instilled a negative performance image of training in the society. The quantitative findings lay the need of critical reorientation of training through evaluation that has implications for management and practioners. This scenario makes the training management to adopt the pedagogical stance for which this research has been able to propose an exigency framework with mediation of learner readiness, training evaluation and return on investment on the relationship between TPC & WPE and training effectiveness. To conclude, the present study is able to find that TPC & WPE are positively associated with TEEF. Results highlight that Te & ROI partially mediates the relationships between TPC & WPE and TEEF. While learner readiness surprisingly, did not show mediation for which matter may be investigated through qualitative research in future by the constructionists. Cultural difference among working population of other public and private organizations may obstruct the generalization of results driven by this data set developed on the population of tax organizations. Future research may look for longitudinal design to analyze the effects of training effectiveness on organizational performance overcoming the limitations of cross sectional design. Findings further reveal that future research ought to consider training implementation at different stages. Moreover, data was gathered from organizations of a solitary province that poses another limitation.

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## References

5. Abdullah, N. I. (2019). *The relationship between effectiveness of job training and job satisfaction among academic staff at UiTM Pahang branch, Jengka Campus.*
6. Awais, M. a. (2010). "The role of individual and training design factors on training transfer". *Journal of European Industrial Training*, Vol. 34 No. 7, pp. 656-72.
7. Al-Rubae, F. R. and Al-Maniri, A. (2011). Work Related Injuries in an Oil field in Oman. *Medical Journal*.26, (5), 315-318
8. Alvelos, R., Ferreira, A. I., & Bates, R. (2015). **The mediating role of social support in the evaluation of training effectiveness.** *European Journal of Training and Development.*
9. Bulut, C., & Culha, O. (2010). **The effects of organizational training on organizational commitment.** *International Journal of Training and Development*, 14(4), 309-322
10. Baron, R. M., and Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality & Social Psychology*, 51, 1173-1182
11. Brinkerhoff, R.O. (2005). The success case method: A strategic evaluation approach to increasing the value and effect of training. *Advances in Developing Human Resources*. 7(1), 86–101.
12. Baldwin, T. T. and Magjuka, R. J. (1991). Organizational training and signals of importance: Linking pretraining perceptions to intentions to transfer. *Human Resource Development Quarterly*, 2 (1), 25-36
13. Buckley and Caple (2009). *The theory practice of training*, London: Kogan Page.
14. Baldwin, T. T. (1988). Transfer of training: A review and directions for future research. . *Personnel Psychology*, 41, 63-105. .
15. Barnett, M. L. (2006). Corporate reputation: The definitional landscape. *Corporate Reputation Review*, 9(1), 26–38.
16. Bhatti, M., Battour, M., Sundram, V. and Othman, A. (2013). Transfer of training: Does it truly happen? an examination of support, instrumentality, retention and learner readiness on the transfer motivation and transfer of training. *European Journal of Training and Development*, 37(3), 273 - 297.
17. Brown, T. J. (2006). Identity, intended image, construed image, and reputation: An interdisciplinary framework and suggested terminology. *Journal of the Academy of Marketing Science*, 34(2), 99–106.
18. Cheng, E. W. L., and Ho, D. C. K. (1998). The effectiveness of some attitudinal and organizational factors on transfer outcome. *Journal of Managerial Psychology*, 13, 309–317.
19. Cronbach, L. J. (1987). Statistical tests for moderator variables: Flaws in analyses recently proposed. *Psychological Bulletin*, 102(3), 414-417
20. David J. Storey., G. S.-G. (2010). "Linking HR formality with employee job quality: The role of firm and workplace size". Volume49, Issue2 Special Issue: Entrepreneurship March/April 2010.
21. Eun-Jee Kim, S. P.-S. (2019). "Support, training readiness and learning motivation in determining intention to transfer", *European Journal of Training and Development*, <https://doi.org/10.1108/EJTD-08-2018-0075>.
22. F.R. Aluko & O.K. Shonubi (2014) Going beyond Kirkpatrick's Training Evaluation Model: The role of workplace factors in distance learning transfer, *Africa Education Review*, 11:4, 638-657, DOI: [10.1080/18146627.2014.935007](https://doi.org/10.1080/18146627.2014.935007)

23. Giangreco, A., Sebastiano, A. and Peccei, R. (2009). Trainees' reactions to training: an analysis of the factors affecting overall satisfaction with training. *The International Journal of Human Resources Management*, 20 (1), 96–111
24. Hodge, S., Smith, E., & Barratt-Pugh, L. (2016). Towards a model of learning and development practice. *International Journal of HRD Practice Policy and Research*, 1(2), 7-25.
25. Holly M. Hutchins, K. N. (2013). "Can the LTSI Predict Transfer Performance? Testing intent to transfer as a proximal transfer of training outcome". *International Journal of Selection and Assessment* Volume 21 Number 3 September.
26. Holton III, F. E. (1996). The Flawed Four-Level Evaluation Model. *Human Resource Development Quarterly*, 7(1), 5-21
27. Hicks, W. D., & Klimoski, R. J. (1987). Entry into training programs and its effects on training outcomes: A field experiment. *Academy of management journal*, 30(3), 542-552.
28. Holton, E. C. (2003) "An examination of learning transfer system characteristics across organizational settings", *Human Resource Development Quarterly*, Vol.14No.4,pp.459-482.
29. Holton III, E. F., Bates, R. A., & Ruona, W. E. (2000). Development of a generalized learning transfer system inventory. *Human resource development quarterly*, 11(4), 333-360
30. Hair, J.F., Black, W C., Babin, B. J., Anderson, R.E.. and Tatham R.L (2006). *Multivariate Data Analysis*, 6<sup>th</sup> ed., Upper Saddle River, New Jersey: Pearson Education Inc
31. Hayes, H., Scott, V., Abraczinskas, M., Scaccia, J., Stout, S., and Wanderman, A. (2016). A formative multimethod approach to evaluating training. *Evaluation and Program Planning*, 58, 199-207
32. Homklin, T., Takahashi, Y. and Kriengkrai, T. (2013). Effects of Individual and Work Environment Characteristics on Training Effectiveness: Evidence from Skill Certification System for Automotive Industry in Thailand. *International Business Research*, 6 (12), 1-16.
33. Homklin,T., Yoshi Takahashi, Y. and Techakanont, K. (2014). The influence of social and organizational support on transfer of training: evidence from Thailand. *International Journal of Training and Development*, 18 (2), 116-131.
34. Hodder, J. N., MacKinnon, S. N., Ralhan, A., & Keir, P. J. (2010). Effects of training and experience on patient transfer biomechanics. *International Journal of Industrial Ergonomics*, 40(3), 282-288.
35. Iqbal, M.Z., Maharvi, M.W., Malik, S.A. and Khan, M.M., (2011). An Empirical Analysis of the Relationship between Characteristics and Formative Evaluation of Training. *International Business Research*, 4(1), 237-286.
36. Idson, T. (. (1990). Establishment size, job satisfaction and the structure of work. *Applied Economics*, 22(8), 606–628.
37. Imran, M. K. (2016). What's organization knowledge management strategy for successful change implementation? *Journal of Organizational Change Management*, 29(7), 1097-1117.
38. Jeng, Y. C., & Hsu, P. C. (2005, May). Establishment of evaluation indicators for student practical training in insurance industry. In proceedings of international conference on redesigning pedagogy: research, policy, practice. *National Institute of Education*, Nanyang Technological University, Singapore.
39. Kontoghiorghes, C. (2002). Predicting motivation to learn and motivation to transfer learning back to the job in a service organization: A new systemic model for training effectiveness. *Performance Improvement Quarterly*, 15, 114-129
40. Kaman, V. M. (2001). Bureaucratic and high commitment human resource practices in small service firms. *Human Resource Planning*, 24(1), 33–39.
41. Kersley, B. A. (2006). *Inside the workplace: Findings from the 2004 Workplace Employee Relations Survey*. Abingdon, UK: Routledge.
42. KHALID, M. &. (2015). SSLO-E: A TRAINING EVALUATION MODEL FOR LEARNING TRANSFER. *Journal of Global Research in Education and Social Science*, 5(3), 141-147. Retrieved from <http://www.ikpress.org/index.php/JOGRESS/article/view/1877>.

43. Khalid, M., Rehman, C. and Ashraf, M. (2012). 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. *African Journal of Business Management*, 6(1), 274-279
44. King, B. G. (2008). Rethinking the relationship between reputation and legitimacy: A social actor conceptualization. *Corporate Reputation Review*, 11, 192–208.
45. Kirwan, C. a. (2006). “Transfer of learning from management development programmes: testing the Holton model”. *International Journal of Training and Development*, Vol. 10 No.4, pp. 252-268.
46. Khdaif, W. A., Shamsudin, F. M. and Subramanim C. (2011) .Improving safety performance by understanding the relationship between management practices and leadership behaviour in the oil and gas industry in Iraq: A proposed model’, *International Conference on Management and Artificial Intelligence, IPEDR vol.6 IACSIT Press, Bali, Indonesia.*  
<https://fas.org/sgp/crs/mideast/RL34064.pdf>
47. Kirkpatrick, D. L. and Kirkpatrick, J. D. (2006). *Evaluating training programs: the four levels*. 3<sup>rd</sup> ed. San Francisco, CA: Berrett-Koehler.
48. Kim, E. J., Park, S., & Kang, H. S. T. (2019). Support, training readiness and learning motivation in determining intention to transfer. *European Journal of Training and Development*.
49. Kissack, H. C. (2010). The reciprocal influence of organizational culture and training and development programs: Building the case for a culture analysis within program planning. *Journal of European Industrial Training*, 34(4), 365-380.
50. Kotey, B. &. (2005). Formal human resource management practices in growing small firms. *Journal of Small Business Management*, 43(1),16–40.
51. Machin, M. A. (2002). *Planning, managing, and optimizing transfer of training*. In K. Kraiger (Ed.) *Creating, implementing, and managing effective training and development*, 263–301, San Francisco, CA: : Jossey-Bass.
52. Mackey, A. and Gass, S. (2015). *Second language research: Methodology and design*. New York: Routledge
53. Mthokozisi Mpofo, Clifford Kendrick latywayo, (2015),”*training and development as a tool of improving basic service delivery; case of a selected municipality*”
54. Noe, R. a. (1986). “The influence of trainee attitudes on training effectiveness: test of a model”. *Personnel Psychology*, Vol. 39 No. 3, pp. 497-523.
55. Nikandrou, I., Brinia, V. and Bereri, E. (2009). Perspective on practice: trainee perceptions of training transfer: an empirical analysis. *Journal of European Industrial Training*, 23(3), 255-70
56. Nickols, F. W. (2005). Why a stakeholder approach to evaluating training. *Advances in Developing Human Resources*, 7(1), 121-134
57. Oberman, G. (1996). An approach for measuring safety training effectiveness. *Journal of Occupational Health and Safety*, 65(12), 48-58
58. Pynes, J. E. (2013). *"Human resources management for public and nonprofit organizations: A strategic approach."* Somerset: Jossey-Bass.
59. Pham, N. T. (2011). The Effect of the Trainees’ Perception of the Training Design on Transfer of Training. *Building Learning Experiences in a Changing World*, 215–233. doi:10.1007/978-94-007-0802-0\_13.
60. Phillips, J. (. (1991). *Handbook of Training Evaluation and Measurement Methods*. 2nd Edition, Gulf Publishing Company, Houston.
61. Pool, Roald (2011), “Training for results: innovative synergy between learning and business performance”, *Industrial and Commercial Training*, Vol. 43, No. 1, pp.31–40.
62. Richard Paul Griffin, (. (2010). "Means and ends: effective training evaluation", *Industrial and Commercial Training*, Vol. 42 Issue: 4, pp.220-225, <https://doi.org/10.1108/00197851011048582>.

63. Rooke, J. A. (2009). Informality in organization and research: A review and a proposal. . *Construction Management and Economics*, 27(10), 913-922. <https://doi.org/10.1080/01446190903273950>.
64. Sabrine El Baroudi, D. Y. (2018). "Training effectiveness during technological changes in Dubai-based companies: perspectives from managers and employees", *Development and Learning in Organizations: An International Journal*. Vol. 32, Issue; 3, pp. 1-3.
65. Saks, A. M. and Burke, L. A. (2012). An investigation into the relationship between training evaluation and the transfer of training. *International Journal of Training and Development*, 16, 118-27
66. Said Taan EL Hajjar, M. S. (2018). "Exploring the Factors That Affect Employee Training Effectiveness: A Case Study in Bahrain." <https://doi.org/10.1177/2158244018783033>.
67. Saks, A. M.-S. (2014). 'Is transfer of training related to firm performance?' *International Journal of Training and Development*, 18, 2, 104–15.
68. Scaduto, A., Lindsay, D., and Chiaburu, D. S. (2008). Leader influences on training effectiveness: Motivation and outcome expectation process. *International Journal of Training & Development*, 12(3), 158–170
69. Said Taan EL Hajjar, Madina Sughra Alkhanaizi, (2018), "Exploring the Factors That Affect Employee Training Effectiveness: A Case Study in Bahrain" <https://doi.org/10.1177/2158244018783033>
70. Salas, E. T.-J. (2012). 'The science of training and development in organizations: what matters in practice', *Psychological Science in the Public Interest*, 13, 2, 74–101.
71. Salas, E. and Cannon-Bowers, J. A. (2001). Reflections on shared cognition. *Journal of Organizational Behavior*, 22, 195-202.
72. Smith, A. (2003). 'Recent trends in Australian training and development', *Asia Pacific Journal of Human Resources*, 41, 2, 231–42.
73. Smith, A. B. (2008). *Approaches to Measuring and Understanding Employer Training Expenditure*. (Adelaide: NCVER).
74. Smith, E. C. (2019). Employer training in Australia: current practices and concerns. . *International Journal of Training and Development*, 23(2), 169–183. doi:10.1111/ijtd.12152 .
75. Storey, D. J. (2002). *Education, training and development policies and practices in medium-sized companies in the UK: Do they really influence firm performance?* *Omega*, 30(4), 249–264.
76. Tannenbaum, S. I., Mathieu, J. E., Salas, E., & Cannon-Bowers, J. A. (1991). Meeting trainees' expectations: The influence of training fulfillment on the development of commitment, self-efficacy, and motivation. *Journal of Applied Psychology*, 76, 759 –769. <http://dx.doi.org/10.1037/0021-9010.76.6.759>
77. Tan, J. A., Hall, R. J., & Boyce, C. (2003). The role of employee reactions in predicting training effectiveness. *Human Resource Development Quarterly*, 14(4), 397-411
78. Tordo, S., Tracy, B., and Arfaa, N. (2011). *National Oil Companies and Value Creation*, Washington, DC: The World Bank Group, <http://siteresources.worldbank.org/INTOGMC/Resources/9780821388310.pdf>
79. **Van Eerde, W., Simon Tang, K. C., & Talbot, G. (2008). The mediating role of training utility in the relationship between training needs assessment and organizational effectiveness. *The International Journal of Human Resource Management*, 19(1), 63-73**
80. Zikmund-Fisher, B. J., Fagerlin, A., & Ubel, P. A. (2010). A demonstration of "less can be more" in risk graphics. *Medical Decision Making*, 30(6), 661-671.