Journal of Education and Social Sciences
Vol. 1(2): 31-55, 2013

Impact of Human Resource Management Practices on Teachers' Performance: A Mediating Role of Monitoring Practices

S. Nazneen Waseem * Reema Farooghi† Sahar Afshan ‡

Abstract: *The purpose of this paper is to measure the impact of HRM on teachers' performance in the context of Pakistan. Impact of HRM practices on teachers' performance has been an under-researched area in Pakistan. For the human development of any society the major share of responsibility lies with the teachers of that society, so in this study, we have investigated how HR practices affect the teachers' performance. We proposed a mediation model in which monitoring acts as a mediating mechanism to transmit the positive effects of HR practices on teachers' performance. Therefore teachers' performance is an issue that if addressed adequately, can speed up the process of eliminating illiteracy from the country. This study examines the impact of HR practices i.e. training & development and performance management on performance of teachers of private schools, Karachi. Cross sectional data was collected from 135 private schools teachers of Karachi through structured questionnaires containing a five point Likert scale. Exploratory and confirmatory factor Analysis was performed to verify the reliability and validity of the measurement model. The findings of the research confirm that all HR practices included in the model except the evaluation in our study which is a significant predictor of teachers' performance. Thus, the contribution of this study for academics and practitioners is that HRM practices in educational sector will affect teachers' performance through HRM outcomes to increase the excellence of teachers as well as the overall quality of education.*

Keywords: Human Resource practices, Teachers Performance, Mediation, Monitoring, Private Schools, Karachi

1 Introduction

Education plays a vital role in building ones' character. It is considered as the most influential instrument to make people responsible citizens to eliminate poverty and also to progress social and economic growth of the society. For socio-economic development of a country education is a vital investment. Pakistan is the sixth most heavily populated country in the world but unluckily more than half of its adult population is illiterate. These people do not even

*Assistant Professor, IQRA University, Karachi 74600, Pakistan. E-mail: nazneen_waseem@yahoo.com
†Assistant Professor, KASBIT, E-mail: reemafrooghi@yahoo.com
‡Lecturer, Dadabhoy Institute of Higer Education, E-mail: sahar_khan09@hotmail.com

know how to read and write. Many schools are open in almost every corner of the roads and they do not maintain the quality of education. That's why the education standard is very low in Pakistan. There are other reasons too for the low education standard in Pakistan. Almost all areas of the education sector require improvement through training and development of teachers; professional development of teachers; teacher compensation system, career development; and performance management of the teaching workforce. This has sector always remained neglected by our Government, as a very minimal percent of the total budget is allocated for the education sector.

The quality of teaching workforce needs to be improved in order to enhance the education standard of Pakistan. For the achievement of higher teaching standard, it is essential to determine the factors enhancing teachers' performance. To effectively achieve the goals and objectives of higher quality educational standards, teacher performance management plays a vital role as it is a continuous process for identifying, evaluating and developing the work performance of teachers.

It is also well recognized that Human resources play a vital role in achieving the performance of organizations. Although there is an abundant literature that has investigated the relationship between HRM and organizational performance (Bibi, Lanrong, Haseeb, & Ahmad, 2012; Khera, 2010; Mondy, 2010; Shahzad, Bashir, & Ramay, 2008; Gerhart et al., 2007; Wright, Gardner, & Moynihan, 2003; Delaney & Huselid, 1996), there is a shortage of literature on the strength of the relationship between HRM practices and teachers performance specifically in Pakistan. Unfortunately only a few researches have been conducted on issues such as impact of HR_practices (Bibi et al., 2012; Shaheen, Sajid, & Batool, 2013) such as training & development (Shahzad et al., 2008) or Impact Analysis of HEC- Based training programs on the performance of the university teachers (Khan, Khan, & Khan, 2011).

To enhance the teachers' quality, a good performance management system i.e. planning, monitoring, and supervision of teachers and teachers' training needs to be provided in the schools. In our study, we will also test the effect of monitoring mechanism as a mediator between the training practices and its effectiveness on teachers' performance. As we are specific to performance monitoring we realized during the survey that some of the school teachers responded to monitoring mechanism as a threat or just a psychological pressure if conducted in their class rooms. So, our study will also test its Mediation effect if it either improves or the quality decreases the teachers' performance within the Pakistani context. Thus, teachers' performance is an issue that if addressed adequately, can speed up the process of development of our society and our teachers can really act as change agents. This research is beneficial for the policy makers to follow HR practices in educational institutions for the enhancement of the teacher's performance and to improve the current educational situation by implementing better policies regarding training & development and performance management.

Research Questions:

Therefore, the present study aims to answer the following two research questions in order to investigate this in the context of Private school teachers of Karachi, Pakistan:

- How well can we predict teachers' performance using a combination of evaluation, on-the-job training, planning and training & development?
- Do 'Monitoring Mechanisms' mediate the positive relationship between 'training and development' and 'teachers' performance'? Using age, education and experience as control variables

2 Theoretical Background and Hypotheses

2.1 Review of Related Literature

The resource-based view of the firm (RBV) indicates that HRM can generate sustainable competitive advantage through recruiting, developing and retaining exceptional human talent (Steinkellner, Czerny, & Lueger, 2010). Human resource management (HRM) practices have been widely researched and accepted as playing an instrumental role in creating and sustaining organizational performance (Becker & Gerhart, 1996). Performance is a process used by organizations to make certain that their workforce is capable of producing quality goods or delivering quality services as per the requirement of an organization. For instance, training and development is one of the most effective Human resource development practices which includes, on-the-job training, job rotation, mentoring, professional development programs, capacity building for teachers, case study etc. These can help to improve the knowledge, skills, experience, expertise, performance and motivation of all employees. Good Human resource practices lead to good functioning of internal organization which eventually become the source of creativity, innovation and succeeded performance of organization as per Ahteela, Blomqvist, Puumalainen, and Jantunen (2010). Thus HRM should be considered as a strategic issue. The policies, systems and practices influencing attitude, behavior and performance of employees compose the HRM (Noe, Hollenbeck, Gerhart, & Wright, 2007). HR practices and its impact on employees' performance is the center of attention by researchers and its stated that the success of any organization greatly depends on the performance of its employees. Hence, numerous researchers have tried to give due coverage to this particular topic in their research studies.

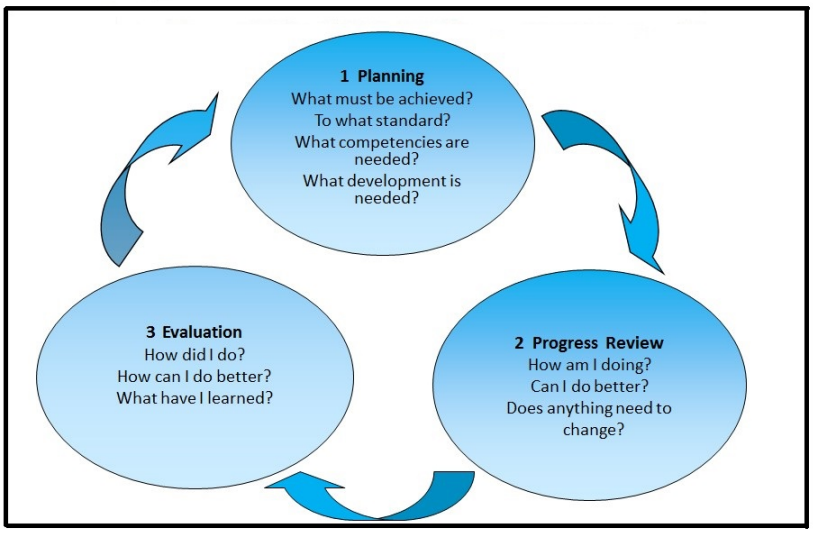
Hypothesis 1a: Overall model is significant

Performance management process is a HR process increasingly popular since 1980s basically concerned with getting the most out of individuals and teams in the organizations which ultimately increases the overall organizations' performance (Amerstrong & Baron, 1998; Armstrong & Baron, 2000). It has been

seen particularly in Pakistan that there are very few educational institutions in which there is proper HR department. Particularly when talking about performance management, if it would be implemented in schools, it would be very helpful for enhancing the teachers' quality and education standard especially nowadays since 2002-03 because Pakistan's have realized greater awareness of QA and the autonomous bodies are talking about quality assurance practices in focus. Performance appraisal is the ongoing process of evaluating and managing both behavior and outcome in the work place (Carrel, Elbert, & Hatfield, 1995). If the goal is to achieve quality education and reforming the education sector, it is essential for educational institutions to implement the proper performance management system in their organizations for achieving such results (Buchner, 2007; Rhodes & Beneicke, 2002; Down, Chadbourne, & Hogan, 2000).

Education is a never ending process. In order to enhance the quality the of education sector it is very essential to practice or consider the performance management in schools so that achievements can be managed and help sustaining that enhanced quality could be provided (Fitzgerald, 2000). For the consistent results and activities of schools, performance management plays a very important role. (Silcock, 2002) Performance management helps improving the competency of the teams and individuals and provides continuous achievement to the organizations (de Waal, Hafizi, Rahbar, & Rowshan, 2010; Amerstrong & Baron, 1998). Using the below model we have used the Processes of Planning, Monitoring and evaluations as independent variables to judge Performance Management process at schools.

Figure 1: The Performance Management Cycle



Performance management is a systematic process for creating a common understanding which involves the required goal of the organization i.e. what they want to achieve and the action plan for achieving it. Action plan involves the courses of actions, guidelines and a strategy to formulate them. It helps motivating people of their organization because their contributions are monitored, evaluated, eventually provide benefit to them. Moreover; planning of programs manages people by giving supervision and feedback. (Kagioglou, Cooper, & Aouad, 2001; Storey, 2002; Pretorius & Ngwenya, 2008). Van Adelsberg (1999) advice that Human resource practitioners should play their part at the initial stage of planning training programs to avoid unneeded items or modules. Erawan (2011) investigated a path analysis and found that program planning was the strongest predictor of teaching efficacy. The authors in their study are interested in planning with respect to Training and development. Hence the hypothesis postulated is:

Hypothesis 1b: There is significant impact of Planning in improving the Teachers performance

Shahzad et al. (2008) examined the effect of implementing HR Practices on the University Teachers in Pakistan. Independent variables for this study are compensation, promotion, and performance evaluation practices, whereas the dependent variable is perceived employee performance. The results concluded that for enhancing teachers' performance, compensation and promotion practices should be strong enough because the results show a strong positive correlation whereas, there is a negative relation between performance evaluation practices and the teachers' performance. Performance evaluation or appraisal is a structured and formal interaction between a subordinate and supervisor, in which the work performance of the subordinate is examined and discussed, in order to identify the weaknesses and strengths as well as the opportunities for improvement. There is a frequent agreement that the purpose of faculty evaluation is to help teachers improve their performance but the primary focus remains on making personal decisions, concluded by (Emery, Kramer, & Tian, 2003). Wati (2011) examined the productivity level of Indonesian English teachers which was improved by proper HR practices procedural implementation. The performance appraisal and feedback of evaluation can play a valuable role in enhancing the employees' job satisfaction Hence, the following hypothesis is posited:

Hypothesis 1c: There is significant impact of Evaluation in improving the Teachers performance.

Training facilitates both, the development of individual, as well as the productivity of organization, to improve the performance (Hong, Hao, Kumar, Ramendran, & Kadiresan, 2012) Training can be physically, socially, intellectually and mentally all are very essential for the growth. Training and development practices are very important, as every individual requires training in order to

function effectively and efficiently in the organization, as well as for achieving the proficiency and the competency that are related to the job (Olaniyan & Ojo, 2008). Achievement of goals require effective training program. It helps organizations in sustaining their growth. Effective training program includes; adjusting fresh employees to the workplace, providing orientation about the jobs, motivating them to do their jobs in a productive manner, enhancing their skills, knowledge and qualify them for the future opportunities and growth. (Drummond et al., 1990) one of the dimension of HRM, employees should receive high level quality trainings in order to perform their roles better (Bibi et al., 2012). Huczynski (1983) argued that if trainers are serious in achieving the training learning outcomes they should focus more on the training designs, contents of training programs and adjust changes as per the requirements of trainees. Hence, based on the related literature, the following hypothesis is suggested:

Hypothesis 1d: There is significant impact of Training Design in improving the Teachers performance.

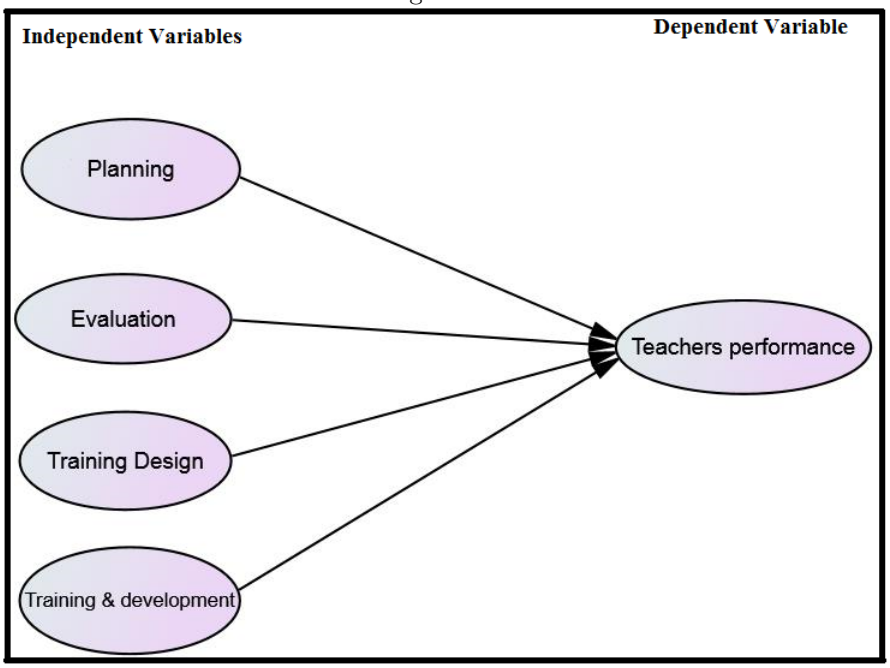
Malik and Khan (2006) investigated the benefits by providing teachers' training program at the higher education level and concluded such programs of short term training are found to be extremely constructive and workable. Olaniyan and Ojo (2008); Kumar, Rose, and D'Silva (2008) investigated that in order to enhance the teaching and learning of any new technology there is a need of well-designed and well equipped training workshops as well proper training manuals. Shaheen et al. (2013) also concluded that college management needs to offer more training courses for improvement and to get better performance from their teachers. Analoui (1994) concluded that training plays a central role in individual success, organizational development and improving the performance or development at a national level. Abdullah, Saupwa, and Naser (2009) gave results that indicated the teaching skills, abilities, proficiency, knowledge and job responsibility are the main factors for the improvement of teachers' productivity, whereas productivity can be enhanced through teachers' training.

(Iqbal, Arif, & Abbas, 2011) examined the result of currently used HRM practices in public and private universities in Punjab region of Pakistan and discovered that in public and private universities there was a significant difference in the practices of Human Resource Management practices. In public universities training and development of teachers, compensation system, team work or team orientation, employees' involvement and participation were better than private universities. In private universities, performance appraisal method was found better than in public sector universities. Researcher recommended that there is a need to improve the HRM practices on both private and public universities so that their both employees and organization can get benefit from it and actually lead to improving the performances. The well planned and designed training sessions will enable teachers to improve their teaching competencies and capacity building. Hence, the following hypothesis is posited:

Hypothesis 1e: There is significant impact of On job training on improving the Teachers performance

Following is our final Research framework with the below mentioned hypothesis of our study to be tested:

Figure 2:



2.2 Monitoring as a Mediator:

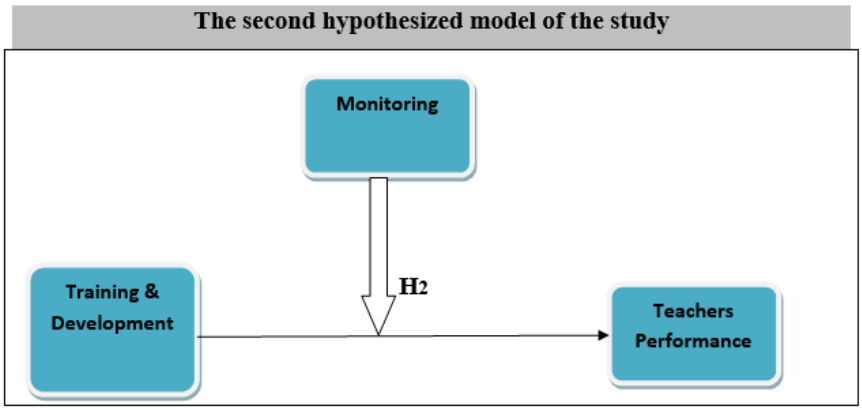
Performance management and monitoring are mostly argued and researched with high on agenda with the managers of different industries across the world (Hudson, Smart, & Bourne, 2001). Monitoring has been classified as a leader behavior (Fleishman et al., 1992) , this involves a heightened awareness of what others are doing during task execution. Members in order to monitor effectively should be better able to understand and be aware of the other members situation (Bolman, 1980; Salas, Prince, Baker, & Shrestha, 1995), and to analyze rhythm, timing, and pace of team member activities, which facilitates coordination (Kozlowski, 1998). We were unable to identify studies in Pakistan, finding the impact of monitoring as Mediator between the relationship of Human Resource Practices and its performance based outcomes. In the present study, monitoring was chosen as the situational factor as performance monitoring on the job in various forms of observations at workplace (Lyon, 1994).

This paper is particularly interested in whether ones' perception of Monitoring can mediates the relationship between training and its effectiveness on

performances. Khan et al. (2011) identifies the productivity of employee's performance by providing Training and Development to the employees. In this study the dependent variable is organizations performance and independent variable is training & development with Monitoring as a mediating Variable. Monitoring has positively impacted the performance outcomes or mediation effects has been reported in various other researches (Lyon, 1994; Dean & Kiu, 2002; Duflo & Hanna, 2005). Another implication of the agency theory is that it is also required to take greater account of psychological, behavioral and social factors so that it can be more useful for management practitioners to study the impact of monitoring (Loughry & Tosi, 2008) on employees' performances. For that purpose the following second hypothesis was developed to test the argument.

Hypothesis 2: Monitoring positively mediates the positive relationship between training practices and Teachers performance, Using age, education and experience as control variables

Figure 3:



3 Research Framework

3.1 Sample, Data Collection and screening

A sample of 135 respondents was collected, out of which 125 were used for further analysis after data screening. Data was collected through Random sampling from teachers of private schools of Karachi, using a structured questionnaire written in English. The Dependent variable was Teachers performance

with trying to predict the significant impact of various HR_practices; On-the-job training, training design, planning and evaluation as independent variables. The data was checked for missing values which were replaced with Series Mean method as suggested by (Lynch, 2003) by using data from all available valid observations using the "all-available approach" (Hair, 2010) The Mahalanobis distance is the distance of a case from the centroid of the rest of the cases, where the centroid is a point in space determined by the means of all the variables (Tabachnick & Fidell, 2007). The usual measure of multivariate outliers is the Mahalanobis distance so using it ten Multivariate sure outliers with Mahalanobis distance D2 <0.001 used as the threshold value for designation. (Hair, Black, Babin, Anderson, & Tatham, 2009; Tabachnick & Fidell, 2007) as an outlier were identified and were removed from the data set. Thus, after removing 10 outliers a sample size of 125 were usable for further analysis, with subjects-to-variables ratio greater than 5 supported by (Arrindell & Van der Ende, 1985; Gorsuch, 1990; Bryant & Yarnold, 1995; MacCallum, Widaman, Zhang, & Hong, 1999; Garson, 2008), minimum 5 observations per item (Hair et al., 2009).

3.2 Data Analysis and Results

The type of investigation is Multivariate analysis with minimum researcher interference carried out in Non-Contrived study setting, in order to establish the relationship between training & development, performance management and employee performance (Lucy, 1996) Teachers' performance is the dependent variable and predicted for On-the-job training , training design variables, planning and evaluation taken as independent variables. The researchers has used statistical software SPSS 18.0 and Amos 21 for analysis of this study. This Study is based on Primary Data and the desired data has been collected from different private schools of Karachi. In order to analyze data four steps have been performed:

1. Examine the assumptions of multivariate analysis and to uncover any violated assumption.
2. Perform an exploratory factor analysis (EFA) with varimax rotation.
3. Perform Regression Analysis.
4. Test the measurement models for each factor by performing confirmatory factor analysis (CFA), to establish if the extracted elements in step 2 offered a good fit to the data.
5. Test the mediation effect of Monitoring in the model. Table 1 displays the composition of the data used in this study.

Table 1: **Composition of the data (N=125)**

		Age			
		Frequency	Percent	Valid Percent	Cummalative Percent
Valid	20-25	8	6.4	6.4	6.4
	26-30	35	28.0	28.0	34.4
	31-35	16	12.8	12.8	47.2
	36-40	21	16.8	16.8	64.0
	41-45	30	24.0	24.0	88.0
	46-50	3	2.4	2.4	90.4

		Qualification			
		Frequency	Percent	Valid Percent	Cummalative Percent
Valid	B.A/B.Sc/B.Com	28	22.4	22.4	22.4
	M.A/M.Sc/M.Com	52	41.6	41.6	64.0
	B.Ed	36	28.8	28.8	92.8
	M.Ed	5	4.0	4.0	96.8
	Others	4	3.2	3.2	100.0
	Total	125	100.0	100.0	

		Experience			
		Frequency	Percent	Valid Percent	Cummalative Percent
Valid	Less than one year	6	4.8	4.8	4.8
	1-3 Years	16	12.8	12.8	17.6
	4-6 Years	24	19.2	19.2	36.8
	7-10 Years	34	27.2	27.2	64.0
	Above 10 Years	45	36.0	36.0	100.0
	Total	125	100.0	100.0	

3.3 Descriptive Statistics

Table 2 shows the means, standard deviations, Pearson correlations and reliabilities among the six variables used in this study. As given in the Table 2, the highest correlation coefficient value between Monitoring and Teachers Performance, is 0.725, which is less than 0.90 which confirms that no serious issue of multicollinearity problem exist among the constructs in the measurement model (Hair, 2010; Lin & Lee, 2004). As per the findings it was observed that all of the data was negatively skewed implying that most of the scores of the variables tend to accumulate at higher scores of the scale whereas fewer scores occur toward the lower score of the scale. It was checked before analyzing the data are the assumptions regarding the sample size, the scale of variables, the multivariate normal distribution and outliers, as well as multicollinearity (Hair et al., 2009)

Table 2: Means, Standard Deviations, Pearson Correlations, and Overall Reliability

		Statistics					
		Avg_TP	Avg_OJT	Avg_TD	Avg_PL	Avg_EV	Avg_MN
N	Valid	125	125	125	125	125	125
	Missing	0	0	0	0	0	0
Mean		4.013	3.626	3.645	3.622	3.542	3.627
Std. Deviation		0.616	0.766	0.625	0.680	0.683	0.672

Table 3: **Correlations**

		Avg_MN	Avg_TP	Avg_OJT	Avg_TD	Avg_PL	Avg_EV
Avg_MN	Pearson Correlation	(0.811)***					
Avg_TP	Pearson Correlation	.725**	(0.776)***				
Avg_OJT	Pearson Correlation	.586	.482**	(0.931)***			
Avg_TD	Pearson Correlation	.490**	.587**	.316**	(0.806)***		
Avg_PL	Pearson Correlation	.449**	.475**	.393**	.394**	(0.940)***	
Avg_EV	Pearson Correlation	.424**	.464**	.308**	.579**	.264**	(0.864)***

Overall Cronbach's Alpha reliability of the measuring scale = 0.704 (25 loaded items)
** Correlation is significant at the 0.01 level (2-tailed)
*** Cronbach Alpha Reliability coefficient
Notes: TP=Teachers Performance; OJT=On the Job Training; TD=Training & development; PL=Planning, MN=Monitoring and EV=Evaluation

3.4 Exploratory Factor Analysis, Reliability and Validation

The study used principal components type of factoring which reduced a total of 25 questionnaire Likert-based items into the required 6 components based on the idea that these six components theoretically would estimate the relationship between HR Practices and employee's Performances. For extraction of dimensions of each construct, EFA with Varimax rotation with 5 iterations were performed. Kaiser-Meyer-Olkin measure of sampling adequacy was 0.717(>0.5), which depicts that the sample is sufficient for performing factor analysis (Barkus, Yavorsky, & Foster, 2006; Leech, Barrett, & Morgan, 2005). The Bartlet Test of Sphericity is also significant p¡0.05 rejecting the null hypothesis thus no Correlation identity matrix exist. The six factors extracted based on Eigen value greater than 1 explain 73.91% of total variance. All factor loadings are greater than 0.58 thus assuring convergent validity, also factor loadings in excess of 0.55 are considered good (Hair, 2010; Tabachnick & Fidell, 2007).

Rotated component matrix doesn't show any cross loading among the variables used in the study, which firstly helps to indicate that there exists no discriminant validity (see Table 6)

Cronbachs' alpha is a test reliability technique that requires only a single test administration to provide a unique estimate of the reliability for a given test. Cronbachs' alpha is the average value of the reliability coefficients one would obtained for all possible combinations of items when split into two halftests. The closer Cronbachs' alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale (Hair et al., 2009). After exploratory factor analysis, the reliability (Cronbach Alpha) of each of the factor was computed as shown in last column of Table 10. The overall reliability of 25 items loaded after exploratory factor analysis was 0.704.

3.5 Regression Model

The dataset was checked for normality, outliers as discussed in Section 3.1, collinearity diagnostics and missing values were checked. On the basis of literature reviews and the analysis of all variables, a conceptual model has been

Table 4: **Rotated Component Matrix**

	Compoenet					
	1	2	3	4	5	6
OJT4	.916					
OJT5	.906					
OJT2	.901					
OJT3	.884					
OJT6	.850					
OJT1	.810					
PL4		.922				
PL2		.920				
PL3		.918				
PL1		.903				
TD1			.867			
TD3			.857			
TD2			.842			
TD4			.610			
TD5			.586			
TP4				.798		
TP1				.782		
TP2				.769		
TP3				.713		
EV1					.898	
EV2					.895	
EV3					.838	
MN2						.889
MN1						.873
MN3						.769
	OJT	PL	TD	TP	EV	MN
Eigen Value	4.854	3.77	2.945	2.783	2.238	1.889
Percentage(%) of variance	19.415	15.075	11.781	11.131	8.952	7.555
Cumulative % of variance	19.639	34.495	46.275	57.406	66.358	73.913
Cronbach Alpha α	0.931	0.94	0.806	0.776	0.864	0.811

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.
b. Notes: TP= Teachers Performance; OJT=On the Job Training TD=Training & development, PL=Planning, MN=Monitoring and EV=Evaluation

developed for the research and on the basis of that the complete regression model of the research is as follows:

$$EP = \alpha_o + \beta_1(OJT) + \beta_2(TD) + \beta_3(PL) + \beta_5(EV) + \epsilon \tag{1}$$

Where, EP represents Employee Performance, OJT represents On Job Training, TD represents Training and Design, PL represents Planning, EV represents Evaluation and ϵ represents error term.

3.5.1 Regression Analysis & Model Significance

Table 5: **Model Summary**

Model					Change Statistics				
	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.760[a]	.578	.564	.401	.578	41.138	4	120	0.000

a. Predictors: (Constant), Avg_EV, Avg_PL, Avg_OJT, Avg_TD

The regression results using SPSS 18 using the Enter method are given above. R illustrates Multiple correlation i.e the linear association among variables is 76.0% proves that there is a above moderate correlation between dependent variable(DV), EP(Employee performance) and independent variables(IVs) (Planning, Evaluation, Training and Development and On job Training). In the above Model summary Adjusted R square is 0.564 means 56.4% variation in the DV is explained by the changes in IVs. As per the results of ANOVA test; the Value of F=41.13(120), p=.000 which implies the overall model is significant and clearly acceptable.

Hypothesis 1a: Overall model is significant

Thus, Accept H1a: β_1=β_2=β_3=β_4=β_5 $\neq$0

3.5.2 Individual Significance Test (t-test)

Table 6: $Coefficients^a$

Model		Unstandardized Coefficients		Standardized Coefficients			CollinearityStatistics	
		B	Std.Error	Beta	t-Stats	Sig.	Tolerance	VIF
1	(Constant)	.690	.265		2.606	.010		
	Avg_OJT	.283	.052	.356	5.414	.000	.812	1.232
	Avg_TD	.363	.068	.375	5.308	.000	.703	1.423
	Avg_PL	.200	.061	.220	3.276	.001	.778	1.286
	Avg_EV	.069	.053	.089	1.308	.193	.759	1.318

a. Dependent Variable: Avg_TP

All independent variables including Planning, Training & Development and On job Training were found to have significant impact on teachers performance and were considered significant predictors except Evaluation. No issue of multicollinearity exist all values of VIF are less than 9, tolerance greater than threshold 0.3 (Hair et al., 2009). The final regression model after excluding insignificant variable using the stepwise backward method is:

$$EP = 0.326 + 0.098(OJT) + 0.215(TD) + 0.130(PL) + .569(MO) + \epsilon$$

"Thus, our Hypothesis 1b, 1d and 1e were accepted while hypothesis 1c was rejected, as variable 'Evaluation' do not have a significant impact on teachers performance".

3.6 Confirmatory Factor Analysis

For evaluation of the construct validity, first order Confirmatory Analysis was carried out using the statistical package AMOS. CFA consisted of 25 items that were used to measure six latent variables that includes Evaluation, Training and development, Planning, On Job training, Monitoring and Teachers performance. In order to run CFA we develop a measurement model CFA=MM projects then links between the observed and unobserved variables (Byrne, 2013, 1998)

Table 7: **Summary of Confirmatory Factor *Analysis*[a] (First order)**

Model	CMIN/DF	χ^2 (df)	CFI	RMSEA	NFI	SRMR
Null	2.296	996(434)	0.772	0.076	0.66	
Single factor b	7.774	2371(275)	0.078	0.239	0.079	0.2494
Two factor c	7.198	1979.3(275)	0.157	0.228	0.147	0.2419
Three factor d	6.50	1806.4(274)	0.242	0.095	0.217	0.2331
Six factor e (hypothesized)	1.335(p=0.000)	334(251)	0.959	0.052	0.851 TLI(.951)	.00699
Final model extracting common method biases f	1.326(p=0.000)	331(250)	0.960	0.051	0.858 TLI(.952)	0.0698

Note: **N=125**
a. Our study Data file, was used for the confirmatory factor analysis.
b. A single factor was composed of a single latent factor of Teachers Performance with 25 indicators.
c. A two-factor model composed of two factors: Factor 1 (composed of 22 items referencing PL, EV, TD, OJT and TP), Factor 2 (composed of 3 items MN)
d. A three-factor model composed of three factors: Factor 1 (composed of 15 items referencing PL, TD, OJT and TP), Factor 2 (EV) and Factor 3 (MN) composed of three items each.
e. Six factor Hypothesized Measurement model (CFA=MM)
f. Final Measurement model extracting Common method biasness with Common Method Variance variable

The Chi-Square value is the traditional measure for evaluating overall model fit and, 'assesses the magnitude of discrepancy between the sample and fitted covariances' matrices' (Hu & Bentler, 1999). A good model fit would provide an insignificant result at a 0.05 threshold (McIntosh, 2007), thus the Chi-Square statistic is often referred to as either a 'badness of fit' (Kline & Santor, 1999) or a 'lack of fit' (Mulaik et al., 1989) measure. The chi-square statistic was significant, indicating a difference between the hypothesized model and actual structure. However, because structural equation modeling is extremely sensitive to sample size, in judging goodness of fit, the chi-square statistic should be divided by the degrees of freedom (referred to as the normed chi-square, (Kline & Santor, 1999). The result of analysis shows that our Relative chi-square value is a good fit $CMIN/DF$ (1.326<2), which shows a good fit between the model and the proposed variables.

Table 8: **Hu and Bentlers' Two-Index Presentation Strategy (1999)**

Fit Index Combination	**Combinational Rules**
NNFI (TLI) and SRMR	NNFI of 0.96 or higher and an SRMR of .09 or lower
RMSEA and SRMR	RMSEA of 0.06 or lower and a SRMR of 0.09 or lower
CFI and SRMR	CFI of .95 or higher and a SRMR of 0.09 or lower

As provided in the Table 8, the last two combination rules are met about the fitness of our measurement model. (Hu & Bentler, 1999). The RMSEA tells us how well the model, with unknown but optimally chosen parameter estimates would fit the populations' covariance matrix (Byrne, 2013) Our RMSEA value for the final model was lower than the recommended value (RMSEA = 0.051).The Comparative Fit Index (Hu & Bentler, 1999) is a revised form of the NFI which takes into account sample size (Byrne, 1998) that performs well even when sample size is small (Tabachnick & Fidell, 2007), the CFI value for our hypothesized model was found as CFI=.960. The combination of these results

suggests that the CFA=MM (measurement model) appears to show a very good fit between the observed and unobserved variables (Byrne, 2013).

Although we feel safe to conclude the higher-order model of HR_Practices fits the data reasonably well, previous researchers have suggested good fitting models can suffer from misspecification, suggesting that alternative models should be considered when using structural equation modeling (Mulaik et al., 1989). Thus, we compared our hypothesized model to three competing models. First, we compared our five-factor model with a null model in which only measured items are included. The results of this comparison indicate the six-factor model is superior (see Table 7). Second, we compared our six-factor model with a single-factor model, in which all 25 items represent a single latent factor that could be labeled as TP. Thus, in a direct comparison between the higher-order six-factor model and the lower-order general model, the $\triangle\chi^2$(df) (331(250)< 2371(275), p =0.000) demonstrated the superiority of the higher-order scale (see Table 7).

Finally, we compared our six-factor model with a three-factor model. We decided to test the fit of a three-factor model, the comparison of this three-factor model with the six-factor final model indicated the final model fit the data better, $\triangle\chi^2$(df)(331(250)< 1806.4(274), p =0.000) See Table 4. After successfully identifying model fit Average Variance explained (AVE), Max Shared Variance and Composite reliability was checked. In contrast with Cronbach Alpha, the composite reliability was measured for the overall reliability of a collection of heterogeneous but similar items (Molina, Lloréns-Montes, & Ruiz-Moreno, 2007; Lin & Lee, 2004). Table 9 shows the results of construct and convergent validity including Cronbach Alpha (after EFA), composite reliability (henceforth, CR) of scale, and average variance explained (henceforth, AVE) separately for each of the 6 latent constructs. Overall CR of each variable as shown below reflect a good measurement model (Molina et al., 2007).

The discriminant validity of the model was checked whether the models' scales correlate in such a way as to justify their conceptualization as related through distinct construct. The Average variance extracted values of the constructs Evaluation, planning, Monitoring and on the job training are greater than 0.5, confirming the convergent validity but showing convergent validity issue in the variables teachers Performance and Monitoring, because the items might be were ambiguous for the respondents, and CV is based on responses rather than the items itself (Linn, 1980). The Maximum shared Variance of all constructs is less than AVE and the square root of AVE of all constructs are greater than inter-construct correlations, thus assuring no discriminant validity of all constructs.

Table 9: Construct validity, composite reliability, and total variance explained

Latent Constructs	Indicator on CFA model	Standardized loading *a	Items in questionnaire	Alpha*a CR*b AVE*c
Planning	PL4	0.922	PL1) Each training syllabus is approved by a management committee.	0.94
	PL3	0.918	PL2) The Committee performs theperformance appraisal of a teacher.	0.946 b
	PL2	0.920	PL3) A teacher is encouraged to proposed necessary changes to the trainings programs, while planning programs.	.814 c
	PL1	0.903	PL4) The Committee is authorized to provide and get feedback from the faculty regarding training .	
On Job Training	OJT6	0.850	OJT1)Trained teachers help improving the financial position of the school	0.931
	OJT5	0.906	OJT2)Trained teachers usually aremore engaged in their responsibilities.	0.918 b
	OJT4	0.916	OJT3)Training sessions helpidentifying strengths and weaknesses of teachers.	0.657 c
	OJT3	0.884	OJT4)Teachers training program isan effective way of developing new and required skills among teachers	
	OJT2	0.901	OJT5)The Principal provides teachers with new knowledge and skills to enable them working in teams.	
	OJT1	0.810	OJT6)Teachers perform considerablywell after training programs.	
Monitoring	MN3	0.769	MN1) MN All teachers are aware that there may be a surprised visit of the committee in any of their classes	0.811
	MN2	0.889	MN2)The Committee makes regularvisits to classes at random basis.	.810 b
	MN1	0.873	MN3) A teacher may discuss any class-related issues with any member of the Committee.	.590 c
Teachers Performance	TP4	0.798	TP1) The teachers teach from the key book only.	0.776
	TP2	0.769	TP2) The teachers are gettingcompetitive salaries/benefits	.707 b
	TP1	0.782	TP3) Teachers encourage /prefer?home tuition? over classroom tuitions.	.384 c
	TP3	0.713	TP4) The teachers usuallyunderstand the topics in depth.	
Training & development	TD5	0.586	TD1) In our schools pilot testing of a training program is done before conducting any training program to prevent costly mistakes.	0.806
	TD4	0.610	TD2) In our school observation,interview and questionnaire techniques are used for determining the specific training needs.	.817 b
	TD3	0.857	TD3)Training programs are conductedby external consultants.	.492 c
	TD2	0.842	TD4) Effective Communication Skills is necessary for delivering quality training.	
	TD1	0.867	TD5) Interpersonal skills such a sempathy, positive motivation and effective body language are necessary to deliver quality content to trainers.	
Evaluation	EV3	0.838	EV1) We believe that evaluation helps an organization in formulating goals and strategies for the betterment of the future performances.	0.864
	EV2	0.895	EV2) Assessment criteria are properly communicated to all teachers well in advance	.856 b
	EV1	0.898	EV3) In our school near the end of course students are given questionnaire and asked to rate their teachers on various grounds	.666 c

Table 10: Reliability and Validity Values

Constructs	Composite Reliability	Avg. Variance Extracted	Max. Shared Variance	Avg. Shared Variance
TP	0.707	0.384	0.103	0.035
OJT	0.918	0.657	0.031	0.008
PL	0.946	0.814	0.006	0.004
TD	0.817	0.492	0.010	0.004
EV	0.856	0.666	0.103	0.023
MN	0.810	0.590	0.061	0.020

3.7 Common Method Biasness (CMV)

The problem of Common Method biases is now addressed by various researchers and reporting it is becoming a common practice now. Common method biasness is considered one of the main sources of measurement errors in models (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Bagozzi, Yi, and Phillips (1991) noted that one of the main sources of systematic measurement error is method variance that may arise from a variety of sources. Podsakoff et al. (2003) has reported number of sources of method biasness causing variances and also recommended some statistical techniques to extract the biasness form the model. In this research paper we have applied two techniques as suggested by Podsakoff to partial out the effects of Method biasness from the items and constructs of our model. In this research paper two methods were used to partial out the effects of common method biasness in the study.

Harmans' single-factor test:was used by researchers to address the issue of common method variance. All variables included in the study were loaded to exploratory factor analysis (Aulakh & Gencturk, 2000; Andersson & Bateman, 1997) and unrotated factor solution was examined to determine the number of factors that are necessary to account for the variance in the variables. The extraction in EFA was fixed to one factor only and it was observed that the single factor accounted for only 19.41% of the total variance thus one general factor do not account for the majority of the covariance among the measures. Assuming no issue of CMV.

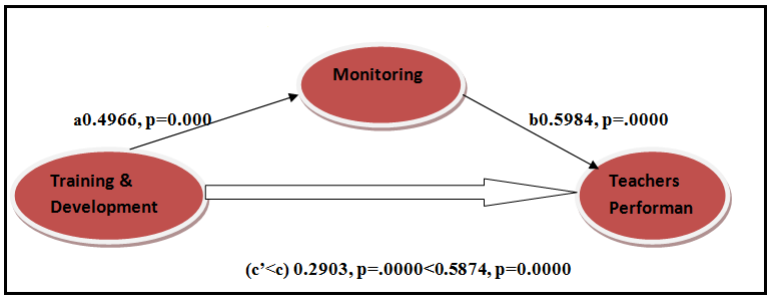
Common methods variance factor: As suggested by Podsakoff et al. (2003) in order to control the effects of an unmeasured latent factor, items were loaded on their theoretical constructs, as well as on a latent common methods variance factor, and the significance of the structural parameters is examined both with and without the latent common methods variance factor in the model. In this research also, CFA higher order final model was run and its standardized estimates were compared with CFA model with CMV factor standardized estimates. The difference of the two estimates were all less than 0.02 thus assuring no serious issue of Common method Biasness. The author suggested carrying any future further analysis with this final model as its fit indices also got better than the final six factor CFA model.

3.8 Hypothesis testing for Mediation through SPSS

Based on the supported literature discussed in section 2.2, Hypothesis 2 for Mediation analyses were tested using the bootstrapping method with bias-corrected confidence estimates (MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2004). In the present study, the 95% confidence interval of the indirect effects was obtained with 5000 bootstrap resamples (Preacher & Hayes, 2004). Results of the mediation analysis confirmed the mediating role of Monitoring in the relation between Training & Development and Teachers Performance (CI =.1428 to .4684). In addition, results indicated that the direct effect of TD on TP still remain significant (B =0 .2903, t (119) = 5.609, p = .0000) when controlling for age, education and experience variables, thus suggesting Partial mediation. Note that the CI is asymmetric, zero does not lie in between lower and upper boundary. The effect of mediation on the relationship of Training and Teachers performance is 13.48%. Also values differ to sampling error (Done using the Hayes & Preacher macro) this confirm that indirect relationship exists in the model between IV and DV and is significant, thus suggesting Partial mediation. Thus the second hypothesis was accepted.

Hypothesis 2: Monitoring positively mediates the positive relationship between training practices and Teachers performance, Using age, education and experience as control variables **Accepted**

Figure 4: Effect of Mediation



4 Conclusion and Discussion:

The findings of the research revealed that all HR practices included in the model i.e Training Design, On Job Training and Performance Management measures including Planning are significant predictors of teachers' performance confirming the previous studies (Shaheen et al., 2013) except evaluation as the teachers view practice of feedback and evaluation as insignificant and a routine practice. Shahzad et al. (2008) in their study found evaluation was found to have negative correlation with the teachers' performances.

Malik and Khan (2006) studies indicated that on-the-job training encourages good performance and facilitates the individuals as well and so is the result in

our study that shows the positive significant relationship between the On-the-job Training and teachers' performance. Positive and significant relationship is found between the training design and teachers' performance, Olaniyan and Ojo (2008) found the non-availability of the well-designed training cannot enhance the teachers learning, so the importance of the training design cannot be ignored, rather, a lot more emphasize is required to put on the design as it is showing a very significant impact on teachers' performance. Planning and Monitoring are also found to have the significant impact on Teachers' Performance.

The result for evaluation has been found to have a positive but an insignificant impact on Teacher's Performance, and Shahzad et al. (2008) suggests that in Pakistan there is no proper system of monitoring and evaluating teachers and thus it is the reason that employees does not accept the teachers' performance evaluation and feedback mechanism in a very positive manner. Results of the mediation analysis confirmed the mediating role of Monitoring in the relation between Training & Development and Teachers Performance, thus indirect effect exists. This significant positive impact of monitoring mediation has worth considering implications for educationists and policy makers while designing the monitoring programs or techniques for training programs, in order to be implemented in most effective way to enhance the teachers performance positively.

5 Managerial Implications

Human Resource Management Practices has a very escalating scope in Pakistan but we are still at the primary stage from the global perspective. In the context of Pakistan, also very little is known regarding the effects of HR_practices on the school teachers performances therefore, findings from this study would be beneficial for all academics and educationists who intend to bring innovative ideas and strategic HR initiatives for high-quality collaborative learning which will lead towards improving the performance of the teachers. The constructs planning, evaluation, training practices has helped us in determining the overall effects of HR_Practices on job performance of teachers by accumulating the data from the teachers of primary schools of Karachi. Moreover, findings proposed that if HR_initiatives are properly planned in schools then performance among teachers will significantly increases but the variable evaluation of teachers was not found significant in improving the teachers' performances. The monitoring mechanism of trainings for teachers also significantly mediate the relation between training practices and teachers' performances.

6 Limitations of the study and Future research:

Some limitations of the study should be noted. First, our measures of HR_practices and mediating effects of monitoring should be validated. The second limitation of the research is that it was cross-sectional and was conducted within the organization, which limits generalizability and inferences about causality.

Also, the sample size was not large enough due to limitation of resources and time constraints. Also, there might be other relevant variables which could not have been included in the study to be considered in future studies. Thirdly, this study has tested the hypothesis using teachers' performances or primary schools. Future research could replicate the current study in the context of different types of educational institutions, such as higher educational institutions.

References

Abdullah, A. G. B., Saupwa, A., & Naser, A. (2009). The effects of teacher training programme on teachers' productivity in caprivi region, namibia. *International Journal of African Studies*, *2*, 14–21.

Ahteela, R., Blomqvist, K., Puumalainen, K., & Jantunen, A. (2010). Hrm practices, innovativeness and performance: the mediating role of organisational trust. *International Journal of Strategic Change Management*, *2*(2), 241–261.

Amerstrong, M., & Baron, A. (1998). Performance management: The new realities. *Institutes of Personnel and Development*.

Analoui, F. (1994). Training and development: The role of trainers. *Journal of management Development*, *13*(9), 61–72.

Andersson, L. M., & Bateman, T. S. (1997). Cynicism in the workplace: Some causes and effects. *Journal of Organizational Behavior*, *18*(5), 449–469.

Armstrong, M., & Baron, A. (2000). Performance management. *Human resource management*, 69–84.

Arrindell, W. A., & Van der Ende, J. (1985). An empirical test of the utility of the observations-to-variables ratio in factor and components analysis. *Applied Psychological Measurement*, *9*(2), 165–178.

Aulakh, P. S., & Gencturk, E. F. (2000). International principal–agent relationships: control, governance and performance. *Industrial Marketing Management*, *29*(6), 521–538.

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative science quarterly*, 421–458.

Barkus, E., Yavorsky, C., & Foster, J. (2006). Understanding and using advanced statistics. *Faculty of Health & Behavioural Sciences-Papers*, 393.

Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of management journal*, *39*(4), 779–801.

Bibi, A., Lanrong, Y., Haseeb, M., & Ahmad, I. (2012). The effect of human resource management practices on employees' job satisfaction in the universities of pakistan. *Business Management Dynamics*, *1*(12), 01-14.

Bolman, L. (1980). Aviation accidents and the theory of the situation. *NASA. Ames Res. Center Resource Management on the Flight Deck p 31-58(SEE N 80-22283 13-03)*.

Bryant, F. B., & Yarnold, P. R. (1995). Principal-components analysis and exploratory and confirmatory factor analysis.

Buchner, T. W. (2007). Performance management theory: A look from the performer's perspective with implications for hrd. *Human Resource Development International*, *10*(1), 59–73.

Byrne, B. M. (1998). *Structural equation modeling with lisrel, prelis, and simplis: Basic concepts, applications, and programming*. Psychology Press.

Byrne, B. M. (2013). *Structural equation modeling with amos: Basic concepts, applications, and programming*. Routledge.

Carrel, M. R., Elbert, N. F., & Hatfield, R. D. (1995). *Human resource management: global strategies for managing a diverse workforce.* Prentice Hall.

Dean, A. M., & Kiu, C. (2002). Performance monitoring and quality outcomes in contracted services. *International Journal of Quality & Reliability Management*, *19*(4), 396–413.

Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management journal*, *39*(4), 949–969.

de Waal, A., Hafizi, R., Rahbar, A. H., & Rowshan, S. (2010). Studying performance management in iran using an adapted performance management analysis. *Journal of Transnational Management*, *15*(3), 246–264.

Down, B., Chadbourne, R., & Hogan, C. (2000). How are teachers managing performance management? *Asia-Pacific Journal of Teacher Education*, *28*(3), 213–223.

Drummond, K. E., et al. (1990). *Human resource management for the hospitality industry.* Van Nostrand Publishing.

Duflo, E., & Hanna, R. (2005). *Monitoring works: Getting teachers to come to school* (Tech. Rep.). National Bureau of Economic Research.

Emery, C. R., Kramer, T. R., & Tian, R. G. (2003). Return to academic standards: A critique of student evaluations of teaching effectiveness. *Quality Assurance in Education*, *11*(1), 37–46.

Erawan, P. (2011). A path analysis for factors affecting pre-service teachers' teaching efficacy. *American Journal of Scientific Research*, *13*, 47–58.

Fitzgerald, T. (2000). Middle managers in secondary schools: Who are they and what do they need to know. *New Zealand Journal of Educational Administration*, *15*(4), 71–75.

Fleishman, E. A., Mumford, M. D., Zaccaro, S. J., Levin, K. Y., Korotkin, A. L., & Hein, M. B. (1992). Taxonomic efforts in the description of leader behavior: A synthesis and functional interpretation. *The Leadership Quarterly*, *2*(4), 245–287.

Garson, G. D. (2008). Path analysis. *from Statnotes: Topics in Multivariate Analysis. Retrieved*, *9*(05), 2009.

Gerhart, B., et al. (2007). *Fundamentals of hrm.* New York, The McGraw hill companies, Inc.

Gorsuch, R. L. (1990). Common factor analysis versus component analysis: Some well and little known facts. *Multivariate Behavioral Research*, *25*(1), 33–39.

Hair, J. F. (2010). Multivariate data analysis.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Multivariate data analysis* (Vol. 9). Pearson Prentice Hall Upper Saddle River, NJ.

Hong, E. N. C., Hao, L. Z., Kumar, R., Ramendran, C., & Kadiresan, V. (2012). An effectiveness of human resource management practices on employee retention in institute of higher learning: A regression analysis. *International journal of business research and management*, *3*(2), 60–79.

Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, *6*(1), 1–55.

Huczynski, A. (1983). Training designs for organisational change. *Journal of European Industrial Training*, *7*(3), 24–27.

Hudson, M., Smart, A., & Bourne, M. (2001). Theory and practice in sme performance measurement systems. *International Journal of Operations & Production Management*, *21*(8), 1096–1115.

Iqbal, M. Z., Arif, M. I., & Abbas, F. (2011). Hrm practices in public and private universities of pakistan: A comparative study. *International Education Studies*, *4*(4), p215.

Kagioglou, M., Cooper, R., & Aouad, G. (2001). Performance management in construction: a conceptual framework. *Construction management and economics*, *19*(1), 85–95.

Khan, R. A. G., Khan, F. A., & Khan, M. A. (2011). Impact of training and development on organizational performance. *Global Journal of Management and Business Research*, *11*(7).

Khera, S. N. (2010). Human resource practices and their impact on employee productivity: a perceptual analysis of private, public and foreign bank employees in india. *DSM Business Review*, *2*(1), 65–86.

Kline, R. B., & Santor, D. A. (1999). [principles & practice of structural equation modelling]. *Canadian Psychology*, *40*(4), 381.

Kozlowski, S. W. (1998). Training and developing adaptive teams: Theory, principles, and research.

Kumar, N., Rose, R. C., & D'Silva, J. L. (2008). Factors influencing the effective use of technology among malaysian teachers. *European Journal of Social Sciences*, *6*(4), 108–124.

Leech, N. L., Barrett, K. C., & Morgan, G. A. (2005). *Spss for intermediate statistics: Use and interpretation*. Psychology Press.

Lin, H.-F., & Lee, G.-G. (2004). Perceptions of senior managers toward knowledge-sharing behaviour. *Management Decision*, *42*(1), 108–125.

Linn, R. L. (1980). Issues of validity for criterion-referenced measures. *Applied Psychological Measurement*, *4*(4), 547–561.

Loughry, M. L., & Tosi, H. L. (2008). Performance implications of peer monitoring. *Organization Science*, *19*(6), 876–890.

Lucy, T. (1996). Does image of country-of-origin matter to brand equity. *Journal of Product and Brand Management*, *4*(1), 48-68.

Lynch, S. M. (2003). Cohort and life-course patterns in the relationship between education and health: A hierarchical approach. *Demography*, *40*(2), 309–331.

Lyon, D. (1994). *Computers, surveillance, and privacy*. U of Minnesota Press.

MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological methods*, *4*(1), 84.

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate behavioral research*, *39*(1), 99–128.

Malik, N. H., & Khan, A. S. (2006). Evaluation of teachers' training programme at higher education level. *Journal of Agriculture & Social Sciences*, *2*(2), 112–113.

McIntosh, C. N. (2007). Rethinking fit assessment in structural equation modelling: A commentary and elaboration on barrett (2007). *Personality and Individual Differences*, *42*(5), 859–867.

Molina, L. M., Lloréns-Montes, J., & Ruiz-Moreno, A. (2007). Relationship between quality management practices and knowledge transfer. *Journal of Operations Management*, *25*(3), 682–701.

Mondy, R. W. (2010). *Human resource management 11th ed.* Pearson.

Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological bulletin*, *105*(3), 430.

Noe, R. A., Hollenbeck, J. R., Gerhart, B., & Wright, P. M. (2007). *Fundamentals of human resource management* (Vol. 5). McGraw-Hill.

Olaniyan, D., & Ojo, L. (2008). Challenges against implementation of introductory technology curriculum in nigerian junior secondary schools. *European Journal of Scientific Research*, *24*(1), 112–118.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, *88*(5), 879.

Preacher, K. J., & Hayes, A. F. (2004). Spss and sas procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers*, *36*(4), 717–731.

Pretorius, S., & Ngwenya, V. (2008). Teachers' perceptions of and attitudes towards performance appraisal in zimbabwean schools. *Africa Education Review*, *5*(1), 144–164.

Rhodes, C., & Beneicke, S. (2002). Coaching, mentoring and peer-networking: Challenges for the management of teacher professional development in schools. *Journal of in-service education*, *28*(2), 297–310.

Salas, E., Prince, C., Baker, D. P., & Shrestha, L. (1995). Situation awareness in team performance: Implications for measurement and training. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, *37*(1), 123–136.

Shaheen, I., Sajid, M. A., & Batool, Q. (2013). Impact of hr practices on performance of teachers in colleges of azad kashmir. *International Journal of Management Sciences & Business Research*, *2*(3).

Shahzad, K., Bashir, S., & Ramay, M. I. (2008). Impact of hr practices on perceived performance of university teachers in pakistan. *International review of business research papers*, *4*(2), 302–315.

Silcock, P. (2002). Can we manage teacher performance? *Education 3-13*, *30*(3), 23–27.

Steinkellner, P., Czerny, E., & Lueger, G. (2010). Nd. development-focused performance management from a resource-based perspective. *Advances in Business-Related Scientific Research Journal*.

Storey, A. (2002). Performance management in schools: Could the balanced scorecard help? *School Leadership & Management*, *22*(3), 321–338.

Tabachnick, B., & Fidell, L. (2007). Multivariate analysis of variance and covariance. *Using multivariate statistics*, *3*, 402–407.

Van Adelsberg, D. A. (1999). It's time for training to measure up. *Directorship*, *25*(2), 21–22.

Wati, H. (2011). The effectiveness of indonesian english teachers training programs in improving confidence and motivation. *Online Submission*, *4*(1), 79–104.

Wright, P. M., Gardner, T. M., & Moynihan, L. M. (2003). The impact of hr practices on the performance of business units. *Human Resource Management Journal*, *13*(3), 21–36.