

EFFECTS OF HUMAN RESOURCE MANAGEMENT PRACTICES ON TEACHER EDUCATOR DEVELOPMENT IN BANGLADESH

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ABSTRACT

The purpose of the present study is to examine the effects of HRM practices on Teacher Educator Development (TED) in Bangladesh. Such HRM practices to name some are human resource development climate, performance appraisal, training, manpower planning and recruitment & selection can be used in order to cope with the uncertainty of competitive educational conditions. However, in the education and teacher training college community the concepts remain new. Therefore, the concept requires rigorous seminal studies to validate it. Given that practical use of HRM, practices have outstripped the currently available research evidence, fundamental questions as which variables most contribute to TED and how and why the benefit individual teacher educator and teacher training colleges, still require answers. A total of 360-teacher educator from thirty teacher training college in Bangladesh participated in this study. Data were collected through questionnaires. The Partial Least Squares approach to Structural Equation Modeling (PLS-SEM) was the main statistical technique employed in the study. The findings of the study revealed that, human resource development climate, performance appraisal, training, manpower planning and recruitment & selection were found to have a significant effect on TED. Consequently, teacher training colleges should focus on training, performance appraisal, human resource development climate, manpower planning and recruitment & selection in order to make HRM practices more effective and productive.

Key Words: Teacher educator development (TED), HRM practices, human resource development climate, performance appraisal, training, manpower planning, recruitment, selection

INTRODUCTION

Human Resource Management (HRM) practices are the most precious domain for the development of education and society. As the contemporary age encompasses all issues related to HRM and management, therefore even the field of education is hedged about with similar principles. The basis of HRM in educational institutions includes skill based and professional development of teacher educator, which is imparted through varied HRM practices (Achoui, 2009). A series of such practices does enhance the role of a teacher educator, which is essential and crucial in the field of education. Yusuf and Lanre (2016) stated that, the development of specialized studies has impacted the enormous field of education in adding different directions to its areas and domains. In this respect, HRM has offered a whole

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range of options for capacity building and training of teacher educators as its main focus is on integrated and holistic, mindful and practical approach to changing teaching related knowledge and behavior (Knowles, Holton and Swanson, 2014; Pounder, 2009). The global approach and practices of HRM towards education establish definite links with the essential area for policy framework, which generates a wholesome program (Al-Asfour and Khan, 2014). In the developing countries, the importance of education has grown-up with the understanding that inexpensively low and socially deprived classes can enter the main stream through academic achievements (Ball, Sleep, Boerst and Bass, 2009). With the ever-growing rate of population, Bangladesh offers productive areas of testing and research. Bangladesh, a land with 170 million people, has to evolve strategic systems to develop its manpower in a native way. Human resource management practices have to obtain due significance in the country so that educational, social, economic and cultural cohesion could be generated for the growth of a better country (Chalofsky, 2007).

There are about 135 private and public teacher-training colleges throughout the country. However, very few initiatives were implemented for teacher educator's development. Even after forty-five years of independence, most of the curriculum and programs are outdated and new perspectives are hardly incorporated in the teacher's training colleges in Bangladesh. In fact, it is realized that the faster track of human resources development in the field of education could be through different HRM practices for capacity enhancement of the existing teacher educators. Even though the community of teacher educators represents a substantial number in the country but as the budgetary support is extremely low, it remains mostly ill organized and hence unable to deliver the expected standards (Iqbal and Sufiana, 2005). Hence, the present study is therefore an attempt to validate, proof and find out the significant effects of HRM practices on the teacher educator's development at teacher training college context.

RESEARCH PROBLEM

The development of teacher educator across the country is the greatest challenge for teacher training colleges. These developments have challenge teacher educator's college to apply HRM practices in educator development through the service delivery of colleges (Nambiar and Thang 2016). This study is designed to explore the application of HRM practices in teacher educator development of Bangladesh. Examination of teacher educator development from the stand point of HRM practices is a new innovation in education sector this study tries to explore. The phenomenon of studying relationship of HRM practices in the context of Teach

Teacher Educator Development (TED) is a reflection of international education field reality, but focusing on TED using HRM practices is a reflection of performance gaining education development advantages and sustainability in education for developing country like Bangladesh (Andaleb and Saad, 2003). Education researchers agreed that, teacher educator development is a valuable asset in highly competitive education field. Few studies have investigated on the use of HRM practices across education sector and recommended further studies in view of the potential opportunities for TED in using HRM practices (Naris and Ukpere, 2012; Noorjehan and Nayak, 2007). However, due to peculiarities in different teacher training college's systems additional constructs will be required to fully explain educator's developments. The trend of educator development process always changes due to government findings and sponsorship. In addition, there appear to be fundamental change in TED in teacher training colleges due to the lacking of the use of HRM practices. This study will contribute to literature to fill the empty space. Besides the theoretical issues, identified education report from ministry of education of Bangladesh also revealed very slow development of teacher educator through the use of HRM practices (MOEB, 2013).

There is dearth of scholarly evidence to herald the confirmation of this assertion in educator development studies, particularly application of HRM practices in teacher educator development as destination. This study intends to contribute to teacher educator knowledge through HRM practices by filling these gaps. Apart from academic morality, logical and ethical reasons, strong HRM practices can actually help reinforce a teacher educator development and academic image. It can differentiate their educational services from other institutions. Poor human resource management activities can actually detract from a teacher educator development and can actually destroy the quality of a teacher training college (Ghosh, 2014). Moreover, the majority of related research has been done through scenario analysis of hypothetical settings rather than teacher educator's perceptions on real educational HRM issues and practices (Pounder, 2009). So further research is required to establish the nature and strength of the relationship of HRM practices and teacher educator development through primary data means which involves using teacher training colleges and teacher educators as the main sample population in Bangladesh. Human resource management practices like training, performance appraisal have been made compulsory for some of private organizations but not in government organizations and educational institutions in Bangladesh (Islam, 2011). To what extents are HRM practices and efforts in Bangladeshi teacher training colleges are successful and how well they are linked teacher educator's image remains an area that is least researched. There is a lack of understanding in teacher training colleges about human resource development climate, manpower planning, recruitment & selection, performance appraisal and training through HRM can

affect the reputations of teacher educators colleges. Some researchers suggested that the lack of teacher educator awareness about HRM practices in teacher training colleges could be deemed as a major limitation in affecting student teachers and their evaluations (Bautista and Ortega-Ruiz, 2015; Loughran, 2014).

According to Harvey and Knight (1996), there is a need to prove that HRM practices are correlated to teacher educator development so as to convince teacher training colleges about the potential benefits not just for educator but also for the teacher training colleges in the long run. Most research of HRM practice on teacher education sector in Bangladesh is conducted based on scenario analysis, hypothetical settings or the use of fictitious scenarios. Thus, this study attempts to identify such HRM practices namely human resource development climate, manpower planning, recruitment & selection, performance appraisal and training on teacher educator development in Bangladesh. More specifically, this study seeks to answer the following questions:

1. Does human resource development climate influence teacher educator development?
2. Does performance appraisal influence teacher educator development?
3. Does training influence teacher educator development?
4. Does recruitment & selection influence teacher educator development?
5. Does manpower planning influence teacher educator development?

LITERATURE REVIEW

Human Resource Development Climate (HRDC) and TED

The Human Resource Development Climate (HRDC) of a teacher training college plays a significant role in ensuring the competency, motivation and development of its educators. The human resource development climate can be created using appropriate human resource management systems and leadership styles of top management (Preiyag & Hosany, 2013). Studies by Lim, Song, Choi and Kim, (2013) found that HRDC had a significant relationship with teacher educator behavior, while Naris and Ukpere (2012) found that HRDC led to human resource development. Human resource development climate is very much in line with Poell, Rocco and Roth (2014) view of teacher educator duties and responsibilities, which requires teacher-training colleges to comply to all rules and by rules governing competition in the education field. There is evidence to suggest that HRDC can influence both job performance and educator's satisfaction (Lawler, Hall, and Oldham, 1974). An optimal level of HRDC is essential for facilitating HRM practices (Rao and Abraham 1990). A healthy HRDC certainly bolsters the overall internal environment of the teacher training college and fosters teacher educator development, involvement and satisfaction with the job. In teacher training college context, HRDC consists of the

prevailing conditions within the college that affect the development of teacher educator and the activities within the college (Smith, 2012). For a positive HRDC to prevail within a teacher training college, it must be built on eight important culture characteristics identified by Rao and Abraham (1996). These characteristics are; openness, confrontation, trust, autonomy, proaction, authenticity and collaboration (OCTAPAC). However, teacher-training colleges differ in the extent to which they are able to align with these characteristics. A number of research studies have been conducted to determine the level of HRDC in a teacher training college and the factors affecting it. Krishna and Rao (1997), carried out an empirical study on HRDC in teacher training college and found that HRD climate encouraged teacher educators to experiment with new methods and try out creative methods. Singh (2007) studied the dimensions of HRDC and observed a positive relationship between all those dimensions and development of the teacher educator in teacher training college. Abraham (1990) stated that a good HRDC is actually responsible for teacher-training college's performance. Many researchers like Srimannarayana (2009), Purang (2008), Mishra and Bhardwaj (2002) identified that HRDC affects performance of the organization in a positive manner and boosts educator's commitment and their performance. This positive HRDC makes existing systems more effective and makes the teacher training colleges more receptive to the introduction of relevant additional system. Mittal (2013) found that, teacher educator having different age group, experience and qualification have the same perception towards general climate. Hassan, Hashim and Ismail (2006) conducted a study to measure teacher educator's perception of their affective, normative and continuance commitment in relation to the prevailing developmental climate within the teacher training college. Though many studies conducted in the area, HRDC suggests positive relationship between HRDC and teacher educator development as discussed above. Thus, the present study suggests the existence of positive relationship between HRDC and teacher educator development of teacher training colleges.

Performance Appraisal (PA) and TED

HRM practices should have the objective of promoting among the teacher educator, attitudes and values, which will make them, work with dedication for the benefit of student teachers (Bautista and Ortega, 2015). Effective performance appraisal for best teaching motivates teacher educator largely. Recognition will sustain the motivation of good teachers and will prompt the others to improve. Any discussion of HRM practices for teacher educator is incomplete without a discussion on performance appraisal (Budiharso, 2015). The HRM package without provision for performance appraisal of teacher educator is like providing all amenities, scholarships and the best possible environment to the educator but freeing them from accountability (Elliott, 2015). Zarim and Zaki, (2014) declared that performance appraisal requires institutes to be transparent, responsible and accountable

for their actions otherwise all HRM efforts would be futile being transparent, being ethical conducts, responsible teacher education management and teaching are amongst the key aspects of good performance appraisal. Performance appraisal has become a term used for a variety of activities through which teacher training colleges seek to assess the development of teacher educator and develop their competence, improve performance, and allocate rewards. Appraising teacher educator performance in teacher training college is a complex and challenging task. Perceiving of the fairness on the appraisal process could influence the teacher educator satisfaction and resulted in the positive relationship between the institutions. There are many decisions in modern teacher training college that depend on performance appraisals, and they are widely used in most teacher training colleges in developed countries for developing their teacher educator (Aloo, Ajowi and Aloka, 2017). Performance appraisal has been considered as a key component in the success of teacher educator development of teacher training colleges for most of the twentieth century (Deneire, Vanhoof, Gijbels and Van, 2014; Irs, 2012). According to Hsu and Chen (2015), the evaluators or principals of the teacher training colleges tend to adjust the actual measurement when they are focusing on maintaining a good relationship of teacher educator, reputation and adjusted to teacher training college goal. Performance appraisal allows teacher-training college to develop and inform their educators about their rates of growth, their competencies, and their potentials (Rahman, 2013). From the above literature researcher finds that there is a strong relationship between performance appraisal and teacher educator development in teacher training college.

Training (TR) and TED

Bello and Ayelaagbe (2015) contend that most theoretical models of human resource assume that, a direct link between educator development and training and proposed a model. Training has been seen as one of the most significant practice in HRM, which affect teacher educator's development (Berman, Schultz and Weber, 2012; Hampel, 2009). Moreover, teacher educator training can enhance their skills, capabilities, abilities, and it also directs and helps teacher educators to reach long-life career development and competency at their career. Teacher training colleges, which provide training to the educators for improving their skills and knowledge will have lower turnover intention. On the other hand, there have some studies stated that training practically increases teacher educator's development as well as their skills and knowledge that is why they can get better opportunity from other teacher training colleges (Haines et al., 2010). There are several researched have stated that, training is an important practice of HRM to increase teacher educator development (Brownell, Ross, Colon and McCallum, 2005). There is a lack of understanding about the training method through which HRD affects to college development. Carpenter and Linton (2016) found that HRD practices could enhance teach

er-training college's value for student teacher with high public awareness. Training is therefore, being adopted as a HRM practice on TED in this study.

Manpower Planning (MP) and TED

Manpower planning factors represent intended orientation of the teacher training colleges management and how the colleges consider HRM practices as important commitment and the various means through which HRD is emphasized, internationalized and embraced by the whole teacher training colleges. Manpower planning is fundamental as an organization seeks to maintain and improve its ability to achieve objectives by developing strategies which are designed to increase the present and future manpower. This is the important point whereby the various departments within the teacher training colleges would be expected to identify the present and future needs of their teacher educator taking into account the obtaining situation. Advantages of manpower planning may be that the right number of teacher educator is recruited at each level in the hierarchy and the educator requirements can be better balanced and movement of educators is made easier to live up to the expectations. As an educational institution teacher training college face competitive teaching challenges, the need to increase teaching quality of teacher educator becomes ever more important. It has become critical to say that a college needs the right people, in the right place, at the right time- although that is critical to strategy. Thus the need for manpower planning has become an ever more important aspect of the teaching planning process and development of teacher educator in teacher training college (Hue, 2010). Manpower planning plays an important role in enabling teacher training college to provide quality service and develop to teacher educators (Alam, 2013). Manpower planning remains critical in teacher training colleges as it helps in identifying teacher educator needs and also takes care of the future teaching environment. Drucker (1977) observed that a key goal of organization planning is to get the right number of people with the right skills, experience and competencies in the right jobs. The future trend for manpower planning in teacher training college includes use of skilled teacher educators that will impact heavily on the performance of some of the educators. Dessler (2015) observes that manpower planning involves gathering of information, making objectives, and making decisions to enable the organization achieve its objectives. This study aims to explore how manpower planning impacts on teacher educator's development.

Recruitment & Selection (RS) and TED

Another important practice of HRM is recruitment & selection, which adopt and disseminate among teacher training colleges. The recruitment & selection process determines the decision as to which candidates get employment offers (Sahlberg, 2011). The aim of this practice is to improve the fit between teacher educator and the teacher training colleges, teams, and teaching requirements and

thus to create a better teaching environment. Sophisticated recruitment & selection system can ensure a better fit between the teacher educator's abilities and the teacher training colleges requirement (Cooper and Alvarado, 2006). Guarino, Santibanez and Daley (2006) in a study on the teacher education colleges found that recruitment & selection are positively related to all teacher educators' development and organizational performance variables such as efficiency, innovation and quality. Recruitment & selection decisions are among the most important of all decisions that principals of teacher training colleges have to make because they are prerequisite to the development of a teacher educator. The development of teacher educator in the teacher training colleges heavily depends on the influenciveness of this HRM practice (Tenore, Dunn, Laughter and Milner, 2010). Thus, the overall aim of recruitment & selection within the teacher training college is to obtain the number and quality of teacher educator that are required to satisfy the strategic objectives of the institute at minimal cost. Recruitment & selection play a pivotally important role in shaping a teacher educator's development, influenciveness and performance. Teacher training colleges undertake HRD initiative as a strategy to flourish in a highly competitive or developed educational environment (Ghosh, 2014). Hill, Kuchinke and Zinser (2013) states that large teacher training colleges often play the role of actions to promote HRM practice among smaller colleges. Since recruitment & selection, the need for being challenging education system is seen as an important practice of HRD adoption and dissemination among teacher educator's colleges.

To conclude the empirical studies reviewed show a consensus that human resource management practices such as human resource development climate, training, performance appraisal, recruitment & selection and manpower planning directly influence teacher educator development. Thus, how these human resource management practices simultaneously affect the development of teacher educator are left unanswered in teacher training colleges of Bangladesh.

Based on the extensive literatures reviewed the researcher identified five independent variables (IVs) that are the major HRM practices as it affects teacher educator development. Accordingly, these independent variables are: (1) human resource development climate, (2) performance appraisal, (3) training, (4) manpower planning and (5) recruitment & selection. On the other hand, the dependent variable (DV) of the study is teacher educator development (TED). In line with the research objectives and literature review, the following research framework and hypotheses were developed for the study.

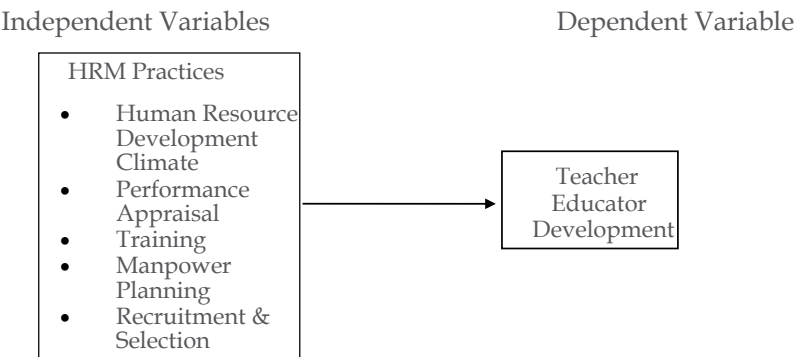


Figure 1: Research Framework of the Study

- H1: Human resource development climate positively influences teacher educator development.
- H2: Performance appraisal positively influences teacher educator development.
- H3: Training positively influences teacher educator development.
- H4: Manpower planning positively influences teacher teacher educator development.
- H5: Recruitment & Selection positively influence teacher and educator development.

METHODS

Population and Sample

The population of the study comprises all active teacher educators in 30 private and public teacher-training colleges in thrice-bigger division of Bangladesh namely Dhaka, Rajshahi and Chittagong. Following table 1 depicts the summery of entire population and sample size of this study.

Table 1: Sample size from three divisions

SL No.	Name of Divisions	No. of Teacher training college	Total No. of Teacher Educator	No. of Teacher training college considered	No. of respondents of each total	Total Sample size
1	Dhaka	31	465	10	12	120
2	Rajshahi	19	304	10	12	120
3	Chittagong	25	375	10	12	120

Measures

In this study researcher used quantitative research method and adopted multistage sampling for data collection. The collected data have been measured and analyzed using PLS-SEM technique to investigate the relationships between 5 IVs and 1 DV. After analyzing the data, the findings of PLS measurement and structural equation

models have been documented sequentially. The measures used to understudy six variables in this study through the respondents' profile and frequency analysis, descriptive statistics analysis, convergent validity analysis, discriminant validity, coefficient of determination, structural model assessment for hypotheses testing, effect size assessment, reliability and validity analysis. The results measured and obtained from smart PLS-SEM 2.0 software.

RESULTS

Profile of Sample

Table 2 presents profile of respondents. Respondents were comprised of 30 teacher-training colleges of thrice bigger and leading divisions in Bangladesh, bringing the total sample size to 360 respondents to make a valuable and reliable contribution to this study.

Table 2: Profile of Respondents (in detail)

Sl No.	Name of teacher training colleges	Name of Divisions	No. of Teacher Educator	Sample size
1	<u>Bangladesh Teacher's Training College</u>	Dhaka	21	12
2	<u>Biam Teacher's Training College</u>	Dhaka	15	12
3	<u>College of Education & Development Studies</u>	Dhaka	16	12
4	<u>Sher-E-Bangla Teacher's Training College</u>	Dhaka	16	12
5	<u>Dhaka Metropolitan Teacher's Training College</u>	Dhaka	15	12
6	<u>Faridpur Teacher Training College</u>	Dhaka	23	12
7	<u>Ideal Teacher's Training College</u>	Dhaka	15	12
8	<u>Modern Teacher's Training College</u>	Dhaka	17	12
9	<u>Teachers' Training College Dhaka</u>	Dhaka	21	12
10	<u>T.I. Ganguli Teacher's Training College</u>	Dhaka	19	12
11	<u>Pabna Government Teacher Training College</u>	Rajshahi	23	12
12	<u>Adorso Teacher's Training College</u>	Rajshahi	17	12
13	<u>Natore Teacher's Training College</u>	Rajshahi	15	12
14	<u>Progressive Teacher's Training College</u>	Rajshahi	19	12
15	<u>Rajshahi Teacher's Training college</u>	Rajshahi	24	12
16	<u>Sugram Majhi Memorial Teacher's Training College</u>	Rajshahi	18	12
17	<u>Bogra B. Ed. College</u>	Rajshahi	16	12
18	<u>Rangpur Teacher Training College</u>	Rajshahi	21	12
19	<u>Uttarbangla Teacher Training College</u>	Rajshahi	17	12
20	<u>Sirajganj Teacher's Training College</u>	Rajshahi	18	12
21	<u>City Teacher's Training College</u>	Chittagong	16	12
22	<u>REMA Teacher Training College</u>	Chittagong	18	12
23	<u>Government Teacher's Training College</u>	Chittagong	25	12
24	<u>Modern Teacher's Training College</u>	Chittagong	19	12
25	<u>National Teacher's Training College</u>	Chittagong	17	12
26	<u>Parash-Pathor Teacher's Training College</u>	Chittagong	16	12
27	<u>Bangladesh Institute Of Teacher's Training College</u>	Chittagong	21	12
28	<u>Comilla Teacher Training College</u>	Chittagong	18	12
29	<u>Govt. Teacher's Training College</u>	Chittagong	23	12
30	<u>Mainamoti Teacher's Training College, Comilla</u>	Chittagong	22	12
			Total	360

The respondents have been included those who teach to the student teachers in teacher training colleges and have included those teacher educators from 25 years and above 46 years of age without any discriminations in terms of academic education, experience, level of teaching, gender, status of employment. This is so as most teacher educator in this age group would have already started working in the teacher training colleges of Bangladesh.

Descriptive Statistics Analysis

Table 3 reports means, standard deviations, minimum and maximum values of the research variables, which are human resource development climate, performance appraisal, training, manpower planning, recruitment & selection and teacher educator development.

Table 3: Descriptive statistics of variables

Variables	Mean	Standard deviation	Maximum value	Minimum value
Human Resource Development Climate (HRDC)	3.699	0.632	5	1
Performance Appraisal (PA)	3.858	0.515	5	2
Training (TR)	3.732	0.591	5	1
Manpower Planning (MP)	3.700	0.621	5	2
Recruitment & Selection (RS)	3.762	0.538	5	2
Teacher Educator Development (TED)	3.686	0.504	5	1

The descriptive statistics show the mean score for human resource development climate (HRDC) is 3.699; performance appraisal (PA) is 3.858; training (TR) is 3.732; manpower planning (MP) is 3.700; recruitment & selection (RS) is 3.762 and teacher educator development (TED) is 3.686. So all the means are above 3 and close to 4. Variability on the other hand, can be assessed by examining the values of the standard deviation column whereby it measures the amount of variability in the distribution of a particular variable. From Table 3, the standard deviation for all the variables is below 1. Based on the results obtained, the standard deviations for all the variables are relatively small which further indicates that a great deal of similarity exists between data points.

PLS-SEM Results

In Partial Least Square Structural Equation Modeling (PLS-SEM) analysis, the PLS measurement model gives the values of reliability test, validity test and path coefficient along with the coefficient of determination. In structural equation model based partial least squares analysis, all the variables are usually connected in one figure that shows the direction of relationship between exogenous and endogenous variables. In the PLS measurement model figure, three types of values are

seen. These are the path coefficient, item loadings and coefficient of determination (R2). The present study has five exogenous variables and one endogenous variable. The findings of measurement model are also documented in Table 4.

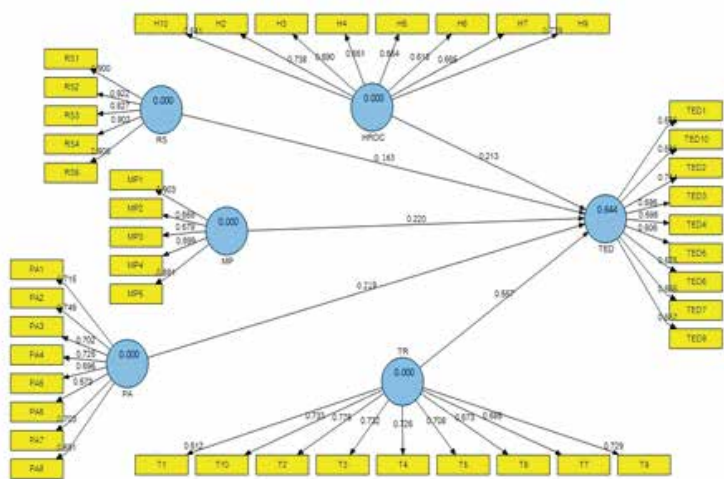


Figure 2: PLS measurement model

In PLS-SEM analysis, reliability test is done by observing the Cronbach alpha values, also the composite reliability. On the other hand, two types of validity, convergent and discriminant validity are measured in PLS-SEM analysis. The criteria of reliability and validity tests are discussed below:

Reliability Test

Reliability refers to the internal consistency of data (Hair et al., 2014). Cronbach’s alpha and Composite reliability values are used to assess reliability of constructs. For reliability, all constructs should have Cronbach alpha values above the threshold of 0.70 (Hair et al., 2012) and the composite reliability values of the all constructs should be greater than the threshold of 0.70 (Bagozzi and Yi, 1988). As shown in Table 4, all the Cronbach alpha and composite reliability values are above 0.70 which indicates good internal consistency of data (Hair et al., 2012) and the reliability of all constructs are established in this study.

Table 4: Measurement properties of constructs

Variables	Items	Loadings	Cronbach alpha	Composite Reliability	Average Variance Extracted(AVE)
Human Resource Development Climate (HRDC)	H2	0.738	0.863	0.889	0.503
	H3	0.690			
	H4	0.651			
	H5	0.664			
	H6	0.618			
	H7	0.665			
	H9	0.779			
	H10	0.841			
Performance Appraisal (PA)	PA1	0.715	0.836	0.874	0.568
	PA2	0.749			
	PA3	0.702			
	PA4	0.725			
	PA5	0.695			
	PA6	0.573			
	PA7	0.703			
	PA8	0.591			
Training (TR)	T1	0.612	0.869	0.895	0.589
	T2	0.775			
	T3	0.732			
	T4	0.726			
	T5	0.708			
	T6	0.573			
	T7	0.685			
	T9	0.729			
	T10	0.733			
Manpower Planning (MP)	MP1	0.903	0.843	0.893	0.633
	MP2	0.659			
	MP3	0.579			
	MP4	0.899			
	MP5	0.881			
Recruitment & Selection (RS)	RS1	0.900	0.947	0.950	0.795
	RS2	0.922			
	RS3	0.827			
	RS4	0.902			
	RS5	0.905			
Teacher Educator Development (TED)	TED1	0.566	0.824	0.865	0.517
	TED2	0.744			
	TED3	0.695			
	TED4	0.598			
	TED5	0.606			
	TED6	0.575			
	TED7	0.666			
	TED8	0.677			
	TED9	0.657			
	TED10	0.685			

Convergent Validity

To assess convergent validity, construct’s average variance extracted (AVE) and factor loadings are used. Convergent validity is established when all constructs have an average variance extracted (AVE) value greater than 0.50 (Fornell and

Larcker, 1981). Chin (1998) believes that, loadings below 0.5 still are acceptable if there exist other indicators in the block for comparison. Hair et al., (2012) suggested that an item loading of 0.40 could be acceptable if the AVE of a particular construct exceeds the cut off value of 0.50. Table 4 shows that all the item loadings are higher than 0.50 and also the items are significant which confirms convergent validity at indicator level. Therefore, 0.50 and above AVE values of all the constructs and, 0.50 and above values of item loading confirm the convergent validity of constructs in this study.

Discriminant Validity

Discriminant validity refers to the extent to which a particular latent construct is different from other latent constructs (Duarte and Raposo, 2010). Discriminant validity is established when the indicators loadings on their measured construct are all higher than the cross-loadings on other constructs and the square root of each construct’s average variance extracted (AVE) is larger than its correlations with other constructs (Chin, 1998). The square root of the AVE of each construct was compared with the correlation between that construct and the other constructs. As shown in Table 5, the square root of the AVEs exceeds the highest correlation between that construct and the other constructs, providing another support of discriminant validity (Chin 1998; Fornell and Larcker, 1981) of the constructs in this study.

Table 5: Discriminant validity assessment

	HRDC	MP	PA	RS	TED	TR
HRDC	0.709					
MP	0.272	0.795				
PA	0.157	0.106	0.753			
RS	0.072	0.080	0.038	0.891		
TED	0.415	0.604	0.230	0.338	0.719	
TR	0.261	0.581	0.162	0.332	0.547	0.767

*Square root of the AVE on the diagonal

Coefficient of Determination (R2)

The coefficient of determination (R2) value indicates how much variation in endogenous variable is caused by the exogenous variables. The present study has achieved an R2 value of 0.644 which indicates that the dependent variable is influenced by the independent variables by 64.40 percent. So the five independent variables namely, human resource development climate, training, performance appraisal, manpower planning and recruitment & selection are considered in this study have substantial effect on the teacher educator development.

Structural Model Assessment for Hypotheses Testing

Having assessed the measurement model for reliability and validity, the next step is the assessment of the structural model. In the structural model of PLS analysis, hypotheses testing can be done. Here the path coefficient, t statistics, p values and error are considered. Table 6 shows the findings of the structural model for hypotheses testing.

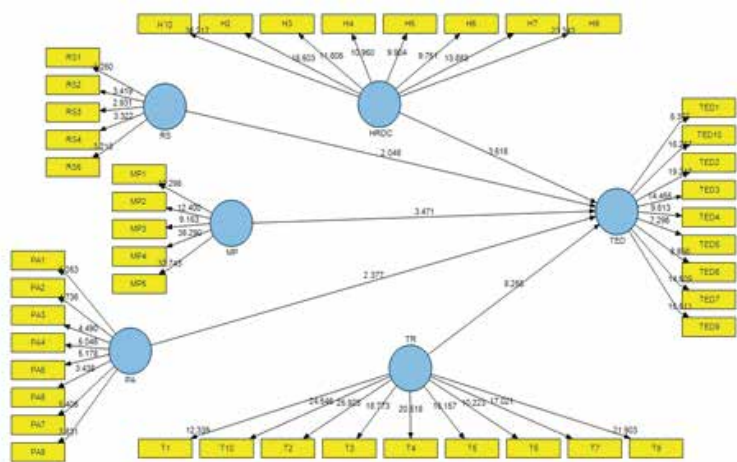


Figure 3 : PLS structural model output

To test the proposed hypotheses, the path coefficient between latent variables and their significance is assessed. After running a PLS model, estimates are provided for the path coefficients, which represent the hypothesized relationships linking the latent constructs.

Table 6: The Structural estimates

Hypothesized Path	Hypotheses	Path Coefficient	Standard Error	T-Value	P-Value	Level of Significance
HRDC->TED	H1	0.212	0.060	3.515	0.000	***
PA->TED	H2	0.219	0.049	2.377	0.018	**
TR ->TED	H3	0.557	0.067	8.254	0.000	***
MP->TED	H4	0.219	0.063	3.471	0.000	***
RS->TED	H5	0.163	0.060	2.048	0.041	**

Note: **P<0.05, ***P<0.01

In order to test the main hypotheses, the bootstrap approach was used to assess the significance of hypothesized relationships in the path model. Five thou

sand (5000) resamples were used to perform the bootstrap (Chin, 1998). The number of bootstrap cases equal to the original number of observations to generate standard errors and obtain t-statistics (Hair et al., 2013). A hypothesis can be accepted if it is significant at 5 percent ($p < 0.05$) level or if the t statistics is higher than 1.96 (Hair et al., 2014).

Hypothesis 1: Human resource development climate positively influences teacher educator development. The findings of present study prove this hypothesis. The path coefficient here is 0.212 with a positive sign and this value is significant at 1 percent ($t, 3.515; P < .01$) level. So, it is supported that human resource development climate positively influences teacher educator development.

Hypothesis 2: Performance appraisal positively influences teacher educator development. The finding of this hypothesis testing shows that performance appraisal is significantly and positively correlated with teacher educator development. The path coefficient for this variable is 0.219 and the t statistic is 2.377 which is significant at 5 percent level ($P < 0.05$). So the findings reveal that performance appraisal is a significant factor that positively influences teacher educator development which leads to the decision that hypothesis 2 is supported.

Hypothesis 3: Training positively influences teacher educator development. From the table 6, it is seen that training has a path coefficient value of 0.557 and the corresponding t statistics is 8.254 which is significant at 1 percent level ($p < 0.01$). Therefore, hypothesis 3, which posits that training positively influences teacher educator development, is supported.

Hypothesis 4: Manpower planning positively influence teacher educator development. This hypothesis is supported as the path coefficient has a positive value of 0.219 and the corresponding t statistics is 3.471 which is significant at 1 percent level ($p < 0.01$). Therefore, manpower planning is an important predictor of teacher educator development.

Hypothesis 5: Recruitment & Selection positively influences teacher educator development. This hypothesis is supported as the path coefficient value is 0.163 with a positive sign and the corresponding t value is 2.048 which is significant at 5 percent level ($p < 0.05$). Therefore, it is proved through this empirical study that recruitment & selection positively influences teacher educator development.

Effect Size Assessment (f^2)

Simply put, effect size is the relative effect of particular exogenous latent variable on endogenous latent variable by means of changes in the coefficient of

determination (Chin, 1998). It is computed by following the formula; $R^2 \text{ include} - R^2 \text{ exclude} / 1 - R^2 \text{ include}$. According to Cohen's (1988) argument, f^2 values of 0.02, 0.15 and 0.35 are described as having weak, moderate and strong effects respectively. The effect sizes of the five exogenous variables of the structural model are shown in table 7 below:

Table 7: Effect size

Variables	R ² include	R ² exclude	Effect size
DV: Teacher Educator Development			
Human resource development climate	0.644	0.581	0.176
Performance appraisal	0.644	0.614	0.084
Training	0.644	0.549	0.268
Manpower planning	0.644	0.602	0.118
Recruitment & selection	0.644	0.621	0.064

As shown in Table 7, the effect sizes for human resource development climate, performance appraisal, training, manpower planning and recruitment and selection on TED are 0.176, 0.084, 0.268, 0.118 and 0.064 respectively. As per Cohen's (1988) criterion, performance appraisal, manpower planning and recruitment & selection have small effect size on teacher educator development; training has large effect size while human resource development climate has an effect size of 0.176 which falls in the medium effect size range (Cohen's,1988).

Having presented all the results including main effects in the earlier sections, the summary of the entire results of all the hypotheses testing is reproduced in Table 8 below:

Table 8: Summary of hypotheses testing findings

Hypotheses	Descriptions	Comments
Hypothesis 1	Human resource development climate positively influences teacher educator development.	Supported
Hypothesis 2	Performance appraisal positively influences teacher educator development	Supported
Hypothesis 3	Training positively influences teacher educator development	Supported
Hypothesis 4	Manpower planning positively influences teacher educator development	Supported
Hypothesis 5	Recruitment & selection positively influences teacher educator development	Supported

DISCUSSION

Implications

This study contributes new knowledge to the body of research primarily with the effects of HRM practices (HRDC, PA, TR, MP and RS) and teacher educator development (TED) which is little known thus far. Initially comprehensive literature review has guided the development of the research framework of HRM practices and TED. This effort has provided some contributions to enhance the literature

on TED in the Bangladeshi teacher training colleges and higher educational institutions. Besides this study offers an insight into the teacher training colleges of Bangladesh, where most of the previous studies on TED were conducted in other educational areas such as universities, general colleges, high schools in western environment. The results obtained have contributed empirical evidence to the research framework and enriched the conceptual model in Bangladeshi teacher training college environment.

The importance of teacher educator development to a teacher training college has been well documented by previous literature. Teacher educator development with high quality allow a teacher training college to deliver premium education service as well as contribute a large education area in relation to competitions. From the student perspective, previous research has failed to explain precisely how students perceive and become loyal to teacher educator (Mestry and Grobler, 2002). Most of scholarly works in this area has been conceptual in nature. Therefore, this study established a teacher educator development based model that explain how HRM practice influence staff as well as teacher educator development. The teacher educator based development scale was comprised of five constructs related to teacher educator development: human resource development climate, performance appraisal, training, manpower planning and recruitment & selection. Instead, most empirical studies have simply focused on determining the most accurate method to measure the components (human resource development climate, performance appraisal, training, manpower planning and recruitment & selection) of teacher educator development; yet there is dearth of empirical evidence regarding how these practices effect teacher educator development.

This study contributes to the education academia since very few empirical research works exist on the HRM practices of TED for teacher training college. It advances the knowledge about how TED strategies especially for the teacher training college can be developed to create strong educator image in the minds of educators as well as students. Since the teacher training college is facing new challenges in the competitive education market to improve their performance through HRM practices which have an impact on favorable teacher educator development, could be an important resource for education researchers and human resource managers in the teacher education area. In this sense, the present study adds value to the body of knowledge in the teacher training college management literature. From empirical research the present study extends the existing knowledge on TED by evaluating the comments from a diverse group of teacher educators within education sector. The incorporation of insights from a teacher training college group of respondents on TED is a key contribution of the current study. The current study traces from the teacher educator group of participants on the HRM practices influencing the image

of teacher training college. Thus, it supplements empirical evidence to address the research gaps and responds to the calls for examining the TED of teacher training college.

Therefore, this research extended our understanding of teacher educator based development phenomena and its measurement, by exploring the determinants of TED from student point of view. The research framework in this study more accurately reflects the educator's perceptions in developing the teacher educator for teacher training college. Based on the results, this framework could be a predictor for future teacher educator performance and could be employed in future studies to examine other relationships of HRM practices constructs. Moreover, this framework could be replicated in other segments of the education area and lead to the development of future models. Finally, this study contributes to both academic and practitioner's individuals in the teacher training and education field of Bangladesh. The findings may have some policy implications about the effects of HRM practices on teacher educator development and government policy, teacher educator with increased development will be loyal to the teacher training college and perform their teaching service well.

Suggestions for Future Research

The present study has found that some of the HRM practices (HRDC, PA, TR, MP and RS) have significant effects on teacher educator development (TED). This present study introduced invaluable insights into the HRM practices and its effects on TED in the context of teacher training colleges in Bangladesh. This study offered new knowledge relating to HRM practices and TED discipline in teacher training colleges in Bangladesh. Thus, for future research there is a need to examine whether the same results can be achieved by examining these variables in different countries that have different education levels and areas development standards. It is recommended that future studies are undertaken with teacher education institutes in other countries to compare the findings. Nonetheless, although the results of this study presented a reasonable structure for TED, there is need for more research in order to confirm these results in other context of educational areas. Besides this, future scholars may investigate into findings of this study in more detail and explore the salience of college authority and TED by examining to what extent their influence can guide educator development to comply with HRM practices and policies.

In addition, future researchers may probe into the findings of the current study in detail and explore other key results by investigating a few suggestions: Firstly, this study is focused on the direct and indirect effects between independent

and dependent variables involved in the research framework. Besides direct and indirect relationships, the introduction of other variables could help to complete the framework. Secondly, future researcher should use time series or panel data, which might get new results to enrich the framework drawn by the current study. Thirdly, researchers are also recommended to investigate other HRM practices, such as incentives plan, rewards system, safety and security measures to examine their relationship with the TED in order to enrich the framework of the current study and assess the results. Fourthly, it is recommended for future studies to apply qualitative approaches such as, case studies specifically on each of the independent variables and moderators to better understanding teacher educator development in teacher training colleges.

CONCLUSION

This study has made a unique contribution to the body of literature concerning the effects of HRM practices (HRDC, PA, TR, MP and RS) on teacher educator development by using a sample of teacher educators of teacher training colleges listed under thrice bigger divisions of Bangladesh. In this respect, the study examined the HRM practices that were able to influence the TED in the Bangladeshi public and private teacher training colleges. The study involved 360 teacher educators from 30 public and private teacher-training colleges in Bangladesh. The findings confirmed that there is a positive and significant effect of five related HRM practices on teacher educator development, namely human resource development climate (HRDC), performance appraisal (PA), training (TR), manpower planning (MP) and recruitment & selection (RS). This study found that the selected HRM practices (HRDC, PA, TR, MP and RS) have shown significant effects on teacher educator development, which could be used as subjects of reference in determining the existence of TED in teacher training college area of Bangladesh. This is significant for at least three parties, i.e. teacher educator, teacher-training college and the relevant authority bodies, to strategize on increasing the development of teacher educator by using the selected HRM practices.

Finally, this study contributes to both academic and practitioner's individuals in the teacher training and education field of Bangladesh. The findings may have some policy implications about the effects of HRM practices on teacher educator development and government policy.

LIMITATIONS

The limitations of the current study could be discussed from few perspectives. Firstly, one of the limitations of the current study is that it is dependent on some selected

HRM practices to examine its effects on teacher educator development. Other study may choose to review different type of reports that include teacher educator development. Second limitation is the use of self-report measure because self-rating is sometimes unable to ensure that evaluation is of their own and honesty from their own hearts and not due to other factors. Thirdly, samples were obtained from the three divisions of Bangladesh only and did not include teacher training colleges of other divisions. Fourthly, the sample consists of teacher educators only not various levels of staff, management and controlling authorities of the college. Fifthly, the current study has designed a questionnaire and employed mainly quantitative method as the main research methodology to validate results. In addition, funding and time constraints prohibited the research from using a larger sample for data collection. Finally, this study was limited with some selected HRM practices not all factors of HRM which could be investigated in other studies.

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