

**Pan-Commonwealth Forum, 9-12 September 2019, Edinburgh, Scotland.**

**Significant Effects of Human Resource Management Practices on Open and Distance Teacher Educator (ODTE)  
Development: In Bangladesh Perspective**

**ABSTRACT**

The purpose of the present study is to examine the significant effects of HRM practices on open and distance teacher educator (ODTE) development in Bangladesh. ODTE development is claimed to be a new human resource development practice through selected human resource management practices (human resource development climate, performance appraisal, training, manpower planning and recruitment & selection) that distance teacher training college in Bangladesh can use in order to cope with the uncertainty of competitive educational conditions. However, in the open and distance 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 ODTE development and how and why the benefit individual open and distance teacher educator and teacher training colleges, still require answers. A total of 360- open and distance 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 effects on ODTE development. Consequently open and distance 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.

**Keywords:** open and distance teacher educator development, HRM practices, human resource development climate, performance appraisal, training, manpower planning, recruitment, selection

**Introduction of the Study**

Human resource management (HRM) is 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 open and distance teacher educator (ODTE), which is imparted through varied HRM programs (Achoui, 2009). Open and distance 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 & Sufiana, 2005). Open and distance teacher educator development in Bangladesh is an essential academic and social part as well as economic infrastructure for an emerging nation (Carpenter & Linton, 2016). Bangladesh has one of the weaker open and distance teacher educator development processes in the World. In the last four decades, the number of institutions of teacher training has grown enormously. Today, there are 15 public and 120 private teacher training colleges in Bangladesh who are delivering their education service through the teacher educator to the student teacher of many schools and colleges' teacher (UGC & National University Bangladesh Report, 2015). There is no any specific government or law enforcement body who helps to apply HRM practices to open and distance teacher training college. Under these backdrops, a thorough research is timely and warranted in ODTE development.

Hence, the present study is therefore an attempt to validate, proof and find out the significant effects of HRM practices on the ODTE's development at teacher training college area. The open and distance teacher educator (ODTE) is considered as most crucial factor in implementing all educational reforms at the grass root level. There is a dire need to develop and manage this human resource potential through HRM practices and revolutionary changes in the national education system particularly of ODTEs in teacher training colleges as it holds the run up badge position in Bangladesh.

**The Research Problem**

The development of open and distance teacher educator across the country is the greatest challenge for teacher training colleges. Suggesting that, number of ODTE in teacher training colleges will not decline in near future. This trend reflects international challenges among ODTE development (ODTED) as well as teacher-training college's development in national level of the country. This study is designed to explore the application of HRM practices in ODTE development of Bangladesh. Examination of ODTED from the stand point of HRM practices is a new innovation in education sector this study tries to explore. Few studies have investigated on the use of HRM practices across education sector and recommended further studies in view of the potential opportunities for ODTED in using HRM practices (Naris & Ukpere, 2012; Noorjehan & Nayak, 2007).

The trend of ODTED process always changes due to government findings and sponsorship. 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 raveled very slow development of ODTE 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 ODTE development as destination.

There is a lack of understanding in open and distance teacher training colleges about human resource development climate, manpower planning, recruitment & selection, performance appraisal and training through HRM can affect teacher educator college's reputations. Most research of HRM on teacher education sector in Bangladesh is conducted based on scenario analysis, hypothetical settings or the use of fictitious scenarios (Carpenter & Linton, 2016). Very few research of HRM practices on education sector in Bangladesh have done and no study sufficiently covers all the divisions in Bangladesh. This study intends to contribute teacher educator knowledge through HRM practices by filling these gaps.

### **Objectives of the Study**

The specific objectives of this study area are as follows:

- 1) To explore the effects of human resource development climate on ODTE development in teacher training colleges.
- 2) To measure the effects of performance appraisal on ODTE development in teacher training colleges.
- 3) To explore the effects of training on ODTE development in teacher training colleges in Bangladesh.
- 4) To measure the effects of recruitment & selection and manpower planning on ODTE development in teacher training colleges in Bangladesh.

### **Methodology of the Study**

The researcher used quantitative research method in this study. In this study researcher adopted multistage sampling method and data were collected through questionnaire from open and distance teacher educator (ODTE) of teacher training colleges. Different type of statistical tools such as descriptive statistics (frequency, mean, median, SD and range), reliability analysis, correlation analysis, hierarchal regression analysis, SPSS 23.0, PLS-SEM 2.0 have used to analysis collected data.

### **Significance of the Study**

An ideal system of teacher education is supposed to play a more innovative, more aggressive and more revolutionary role in the affairs of ODTE development of the nation. The open and distance teacher educator educational set up must be able enough to promise human resources development in the country (Islam & Alam, 2013). There is no wonder to make the growth of ODTE development in Bangladesh. The recruitment and selection of ODTEs in colleges, manpower planning of teacher educators, performance appraisal for quality consciousness of open and distance teacher educators, autonomy in teacher education colleges all these are viewed in the angle of human resources development in this study. Unfortunately, the ODTE's development area is remaining barren in this respect. Successful teacher training college not only believe in bringing the best teacher educator, but also bringing the best out of the ODTE.

### **Scope of the Study**

This study pays attention on significant effects of HRM practices (human resource development climate, performance appraisal, training, manpower planning and recruitment & selection) exclusively to open and distance teacher educator (ODTE) development of teacher training colleges in Bangladesh.

### **Overview of HRM Practices and Open and Distance Teacher Educator Development (ODTED)**

The importance of open and distance teacher educator development in management and human resource management literature is never understood. Kleinsasser (2014) highlights that teacher educator is the essence of the teacher training colleges, this implies that worth of ODTE is very crucial and important. Open and distance teacher educator is not defined clearly with specific and precise wording. For a long time, research on teacher educator development conducted without proper conceptual definition (Iqbal & Sufiana, 2005). Thereby, HRM policies define theoretical and practical referential built to make possible the reaching of a teacher training college objectives and purposes, operating as thinking and acting guides for the HRM practices and ODTE development area. This section presents review of articles from journals, thesis papers, books and relevant academic text, which are relevant to the themes and constructs adopted in this study. It is presented as followings:

**i. Human Resource Development Climate (HRDC) and ODTE**

The human resource development climate (HRDC) is an essential practice of HRM for developing ODTE in teacher training college of Bangladesh (Islam & Alam, 2013). An optimal level of HRDC is essential for facilitating HRM practices (Rao & Abraham 1996). 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). There is no systematic studies conducted in the context of ODTE development of teacher training colleges in Bangladesh so far to the best knowledge of the researcher. Thus, the present study suggests the existence of positive relationship between HRDC and ODTE development of teacher training colleges in Bangladesh.

**ii. Performance Appraisal (PA) and ODTE**

Performance appraisal has become a term used for a variety of activities through which teacher training colleges seek to assess the development of ODTE and develop their competence, improve performance, and allocate rewards (Elliott, 2015). Appraising ODTE performance in teacher training college is a complex and challenging task. Performance appraisal has been considered as a key component in the success of ODTE development of teacher training colleges for most of the twentieth century (Hamid, Musa & Juhari, 2011). Performance appraisal allows teacher-training college has to develop and inform their educators about their rates of growth, their competencies, and their potentials.

**iii. Training (TR) and ODTE**

Training has been seen as one of the most significant practice in HRM, which affect ODTE's development (Berman, Schultz & Weber, 2012; Hampel, 2009). Teacher training colleges, which provide training to the educators for improve their skills and knowledge will have lower turnover intention. On the other hand, there have some studies stated that training practically increase ODTEs development as well as their skills and knowledge that is why they can get better opportunity from other teacher training colleges. There are several researched have stated that, training is an important practice of HRM to increase ODTE development among educators at workplace and have positive relationship between training and TED (Carpenter & Linton, 2016). Training is therefore, being adopted as a HRM practice on ODTE in this study .

**iv. Manpower Planning (MP) and ODTE**

Manpower planning factors represents intended orientation of the teacher training college's management and how the college consider HRM practices as important commitment and the various means through which HRD is emphasized, internationalized and embraced by the whole teacher training colleges (Tabiu & Nura,2013). As an educational institution teacher training college face competitive teaching challenges, the need to increase teaching quality of ODTE becomes ever more important (Tabiu & Nura, 2013). 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 ODTE in teacher training college.

**v. Recruitment & Selection (RS) and ODTE**

Another important practice of HRM is recruitment & selection, which adopt and disseminate among teacher training colleges. Sophisticated recruitment & selection system can ensure a better fit between the ODTE's abilities and the teacher training college's requirement. Garavan and Carbery (2012) in a study on the teacher education colleges found that recruitment & selection positively related to all ODTE's 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 college have to make because they are prerequisite to the development of an ODTE.

To conclude the empirical studies reviewed show a consensus that human resource development climate, training, performance appraisal, recruitment & selection and manpower planning directly and indirectly do ODTE development as human resource management practices.

**Framework of the Study**

Based on the extensive literatures reviewed the researcher identified five independent variables (IVs) that are the major HRM practices as it affects ODTE development in Bangladesh. 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 ODTE development (ODTED). In line with the research objectives, basis of indebtedness, literature review, different HRM theories and models the following research framework has developed:

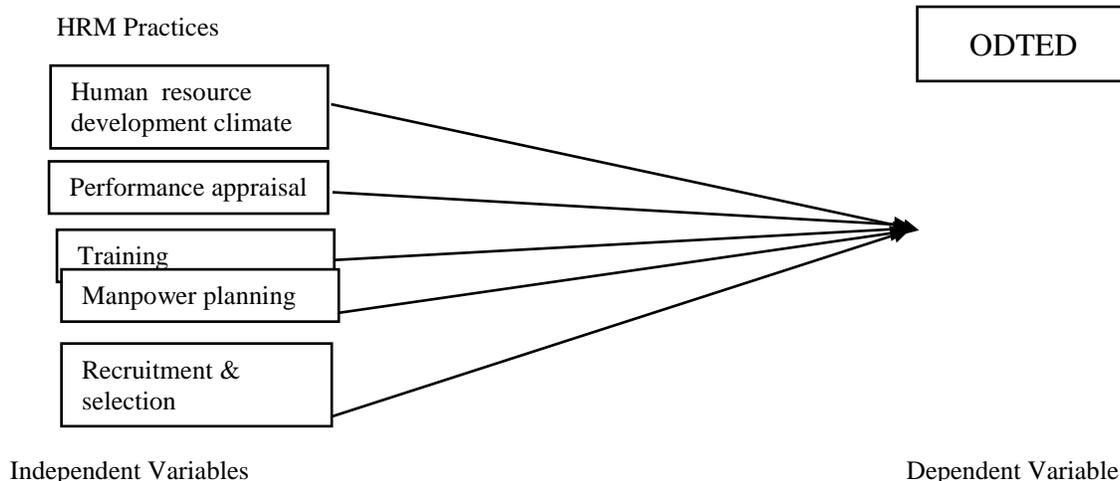


Figure 1: Research Framework of the Study

**Hypotheses of the Study**

Cognizant of the research objectives and taking into account most of supporting literatures that were discussed and reviewed the following constructs were adopted for the study together with proposed research hypotheses.

- H1: Human resource development climate can positively lead to ODTED.*
- H2: Performance appraisal can positively lead to ODTED.*
- H3: Training positively influences ODTED.*
- H4: Manpower planning positively influences teacher-training colleges to adopt ODTED practices.*
- H5: Recruitment & Selection positively influences teacher-training colleges to adopt ODTED practices.*

**Population of the Study**

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 depicts the summery of entire population 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

## Questionnaire Design

In this study structured questionnaires have been used to collect data from different public and private teacher training colleges from thrice-bigger division in Bangladesh. Questionnaire consisted of items measuring independent variables and ODTE development as the dependent variable.

## Data Analysis and Findings

This part covers the data analysis and findings of the present research. The collected data have been analyzed using PLS-SEM technique to investigate the relationships between exogenous and endogenous variables. This part also includes the summary of hypotheses testing results obtained from the data analysis. The results obtained from smart PLS-SEM 2.0 software. The topics includes :

### i. Descriptive Statistics Analysis

The present study collected all the responses with a five point likert scale ranging from 1 for strongly disagree to 5 for strongly agree. Table 2 shows the descriptive statistics of the variables used in this study. The statistics include minimum and maximum value, mean and standard deviation of the research variables, which are human resource development climate, performance appraisal, training, manpower planning, recruitment & selection and ODTE development.

Table 2: 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
Open and Distance Teacher Educator (ODTE) Development	3.686	0.504	5	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.

### ii. PLS-SEM Analysis Results

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. The present study has five exogenous variables and one endogenous variable. The findings of measurement model are also documented in table 2.

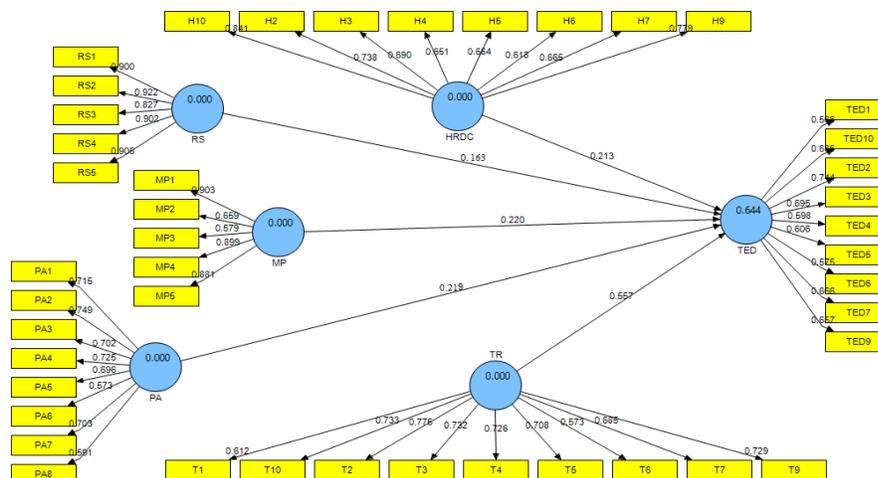


Figure 2: PLS measurement model

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 are measured in PLS-SEM analysis. The criteria of reliability and validity tests are discussed below:

**iii. Reliability Test**

As shown in table 3, all the Cronbach alpha and composite reliability values are above 0.70 which indicates good internal consistency of data (Hair et al., 2016) and the reliability of all constructs are established in this study.

Table 3: 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			
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			
Open and Distance Teacher Educator Development (ODTED)	ODTED1	0.566	0.824	0.865	0.517
	ODTED2	0.744			
	ODTED3	0.695			
	ODTED4	0.598			
	ODTED5	0.606			
	ODTED6	0.575			
	ODTED7	0.666			

	ODTED8	0.677			
	ODTED9	0.657			
	ODTED10	0.685			

**iv. 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 5 shows the findings of the structural model for hypotheses testing.

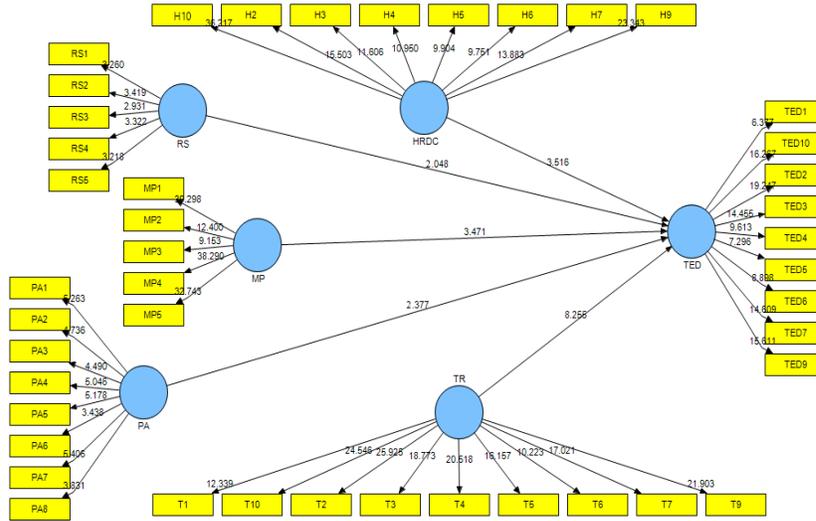


Figure 3 : PLS structural model output

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 5: The Structural estimates

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

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

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., 2016).

**v. Hypothesis Testing Findings**

Table-7 presented the findings generated from data analysis of the study. Data collected from 192 respondents were analyzed to test the research model of the study. The hypotheses testing results reveal that out of five hypotheses developed in this study, all five were supported.

Table 7: Summary of hypotheses testing findings

<b>Hypotheses</b>	<b>Descriptions</b>	<b>Comments</b>
Hypothesis 1	Human resource development climate can positively lead to ODTED.	Supported
Hypothesis 2	Performance appraisal can positively lead to ODTED.	Supported
Hypothesis 3	Training positively effects ODTED.	Supported
Hypothesis 4	Manpower planning positively influences teacher-training colleges to adopt ODTED.	Supported
Hypothesis 5	Recruitment & selection positively influences teacher-training colleges to adopt ODTED practices.	Supported

### **Recommendations for Future Study**

The present study has found that HRM practices (HRDC, PA, TR, MP and RS) have significant effects on open and distance teacher educator (ODTE) development. This present study introduced invaluable insights into the HRM practices and its significant effects on ODTED in the context of open and distance teacher training colleges in Bangladesh. This study offered new knowledge relating to HRM practices and ODTED discipline in open and distance teacher training colleges in Bangladesh. It is recommended that future studies are undertaken with teacher education institutes in other countries to compare the findings. Besides this, future scholars may investigate into findings of this study in more detail and explore the salience of college authority and ODTED 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 significant effects between independent and dependent variables involved in the research model. Secondly, future research should investigate the framework of the study for more than nine months. In that, 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 ODTED 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 ODTED in open and distance teacher training colleges.

### **Conclusion**

This study has made an unique contribution to the body of literature concerning the effects of HRM practices (HRDC,PA,TR,MP and RS) on ODTED by using the population of teacher educators of open and distance teacher training colleges listed under thrice bigger divisions of Bangladesh. In this respect, the study examined the HRM practices that were able to influence ODTED in the Bangladeshi public and private open and distance teacher training colleges. The study involved 360 open and distance teacher educators from 30 public and private open and distance teacher-training colleges in Bangladesh. The results of this study have found that the level of development of ODTE in teacher training colleges in Bangladesh is generally low. The findings confirmed that there is a positive and significant effect of five related HRM practices on ODTED, namely human resource development climate (HRDC), performance appraisal (PA), training (TR), manpower planning (MP) and recruitment & selection (RS).

The main contribution of the study is it proves that a few of the HRM practices significantly effects on ODTED in the public and private Bangladeshi open and distance teacher training colleges. The study also provides empirical evidence that the use of the selected HRM practices can indeed lead to increased ODTE development. In conclusion, the uses of HRM practices have effected to foster ODTED in open and distance teacher training colleges of Bangladesh. This study is significant for at least three parties, i.e. open and distance teacher educator, open and distance teacher-training college and the relevant authority bodies, to strategize on increasing the development of ODTE by using the selected HRM practices.

Finally, this study contributes to both academic and practitioners individuals in the teacher training and education field of Bangladesh. The findings may have some policy implications about the effects of HRM practices on ODTE development and government policy, ODTE with increased development will be loyal to the open and distance teacher training college and

perform their teaching service well.

## References

- Achoui, M.M. (2009), "Human resource development in Gulf countries: an analysis of the trends and challenges facing Saudi Arabia", *Human Resource Development International*, Vol. 12 No. 1, pp. 35-46.
- Berman, K. M., Schultz, R. A., & Weber, C. L. (2012). A lack of awareness and emphasis in preservice teacher training: Preconceived beliefs about the gifted and talented. *Gifted Child Today*, 35(1), 18-26.
- Carpenter, J. P., & Linton, J. N. (2016). Edcamp unconferences: Educators' perspectives on an untraditional professional learning experience. *Teaching and Teacher Education*, 57, pp.97- 108.
- Elliott, K. (2015). Teacher Performance Appraisal: More about Performance or Development? *Australian Journal of Teacher Education*, 40(9), p6-18.
- Garavan, T. N., & Carbery, R. (2012). A review of international HRD: incorporating a global HRD construct. *European Journal of Training and Development*, 36(2/3), pp. 129-157.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Hamid, A., Raja, M., Musa, R., Juhari, H.A., (2011). The Development of Human Resource Practitioner Competency Model, Malaysian human resource practitioners and consultants, Malaysia.
- Iqbal, Z. & Sufiana, K. (2005). A study on some problem areas of teacher education in Pakistan, *Pakistan Journal of Education*, Islamabad, Allama Iqbal Open University.
- Islam, M., & Alam, M. (2013). Human Resources Development in the Context of Challenges of Globalization with Reference to Teacher Education in Bangladesh. *ASA University Review*, 7(1).
- Kleinsasser, R. C. (2014). Teacher efficacy in teaching and teacher education. *Teaching and Teacher Education*, 44, 168-179.
- Ministry of Education of Bangladesh. (2010). *Bangladesh National Education Policy-2010*, Dhaka: Ministry of Education. Bangladesh.
- Naris, S. N., & Ukpere, W. I. (2012). Evaluation of human resource development and training at a higher educational institution in Namibia. *African Journal of Business Management*, 6(49), p118.
- Noorjehan, N.G. and Nayak, S.V. (2007). *Human Resource Development and Teacher Education*. Discovery Publishing House, New Delhi.
- Rao, T.V. and Abraham E. (1996) HRD Climate in Indian Organizations. In *Recent Experiences in Human Resource Development*. Rao and Preira (Eds.). New Delhi: Oxford and IBH.
- Sekaran, U., & Bougie, R. (2013). *Research Methods. For Business: A Skill Building Approach* (6th ed.). West. Sussex, UK: John Wiley & Sons Ltd.
- Tabiu, A., & Nura, A. (2013). Assessing the effects of human resource management practices on employee job performance: A study of Usmanu Danfodiyo University Sokoto. *Journal of Business Studies Quarterly*, 5(2), 247-259.
- UGC (2015, 2014, 2013). *University Grants Commission of Bangladesh, Annual Report*, UGC press, Dhaka, Bangladesh.