IBT Journal of Business Studies Volume 15(1), 2019, 149-160



Investigating the Leadership role in Teacher Education Institutes: A study based on Sindh Government Institutes

Shah Nawaz Sahito^{1*}

Abstract

The main purpose of this research study is to determine the leadership role in public sector teachers training institutes in Sindh, province of Pakistan. The study is focused on themes the problems/ pressures such as social, political influence particularly at managerial/leadership level, intrinsic sense of responsibility, operational procedures in department, individual responsibility and challenges in faculty training and development faced by top leadership of Teachers training institutes. The primary source of data collection used for the professionals is based on the comprehensive survey; welldesigned tools such as questionnaire comprised of thirty closed ended items on a five-pointLikertscale which was developed in consultation with the language and subject experts that are used as sampling instruments, and certain items were revised after pilot testing. After this procedure, construct and content validity of questionnaire was determined, the researcher has visited personally those institutions which were included in the population of research study, and random sampling has been used as sampling technique to collect the data. Ethical consideration was ensured in research to save respondents from any problem in the future; special care was given to the language so as not to hurt the respondents' race, caste, creed and culture. Theresponses had been analyzed statistically using regression analysis. The respondents of the study included officers of Grade 17 and above from the Leadership of Education & literacy Department. Priority was given to those offices that possessed experience in academic as well as managerial level such as teacher educators /trainers, professors and Heads of Teachers Training Institutions in Sindh, a province of Pakistan. The findings of this study is concluded on the effectiveness of the leadership provided by the head figure in these teachers training institutes is not greatly affected due to problems such as non-availability of physical facilities in the institutions, or the financial problems and academic, professional qualification and experience. However, the effectiveness of teacher education leadership was significantly affected due to political influence, undue transfers of intuitions heads, suspensions or punishment had the negative impact on the effectiveness of leadership. The study suggested reasonable modifications in internal process of institutes and their practical application such as recruitment and appraisal on merit basis and avoiding undue suspension or transfer of management staff.

Keywords: Teacher Education Leader, Educational Institutes, Teacher Education Institutes, Leadership

1- School Education & literacy Department Govt of Sindh, email: sahitoshahnawaz3@gmail.com

INTRODUCTION

Overview of the Study

The role of education for the advancement of a society has been called as important and essential as oxygen for the living species. Social violation, inequality, crime, and domestic combats had been labeled as some of the repercussions of lack of education in certain societies. Inadequacy of education has remained a root cause of poverty. Historical studies had suggested that the existence of those nations, who failed to understand the significance of education had always remained under threat, had lagged behind the rest of the progressing countries and even their economies had struggled severely with no signs of improvement.

The teachers' training institutes of the public sector in Pakistan had been facing great challenges and could also be termed as victims of social and political influence at every hierarchal step (Memon, 2007). A leader leads his subordinates to a destination. A leader's sole duty is to resolve the internal conflicts, arrange for sufficient resources and provide solution for quality education.

Background of the Study

The great challenge for today's HRM practices in educational institutes is political influence (Tessema & Soeters, 2006). It has also been noted that a leader should also be confident and fearless against this influence and leader must possess the courage to handle pressure that arises from political side that creates hurdles to efficiency. It had become so pervasive that major decisions such as hiring, selection, promotion, firing and transfer of employees are largely politically dictated (Ferlie, Musselin & Andresani, 2008).

The public and private sectors both exhibited noteworthy divergence. The results thus showed that research is required in order to modify the educational system.

Kazmi (2005) acknowledged the importance of human potential and growth of human resource to achieve preferred goals. The study highlighted that the most vital role in human development was played by Education. Globalization brought both many chances and challenges. The nations that have had achieved the required levels of knowledge and ability can benefit from such opportunities. Hence, it had been termed as highly necessary for countries to aim for appropriate education and training which is relevant to the global environment; that encourages an informed public and the neglected areas of society. Primary education had been known as the most beneficial investment in the Third World countries if employment opportunities are provided as a part of the process. Comprehensive physical and mental health had remained important for human resource development, both in the developed nations and progressing nations throughout the world.

Significance of the Study

The Study had been prepared to evaluate the Role of the TeacherEducation Leadership in the Public Sector of Sindh, Pakistan and the issues and challenges that the public sector is encountering (Tessema & Soeters, 2006).

The capacity of these institutions is to be assessed and improved so that these colleges can meet the quantitative and qualitative requirements of teacher training. The officials of education department who play a pivotal role in the policy, administration, planning and management. At present there are many challenges in teacher education colleges of Sindh such as shortage of Faculty; lack of regular in-service training; shortage of well-equipped venues for conducting in-service teaching

Page | 150

training programs; lack of co-ordination between various donor agencies involved in teacher training programs i.e. Department of Education, district governments and poor supervision of Teacher Training institutions by Government Agencies outdated curriculum, non-availability of books on teacher education and outdated weight age to various subjects. In some colleges, the academic staff is available but the students are few in number while in other colleges the academic and physical facilities are not available, but many students are interested to get education. The academic supervisors or managers are not given due importance by the administrators and head teachers of schools or colleges.

Statement of the Problem

This study's main aim is to investigate Leadership role for the educational who are trying to prove all facilities required for government elementary colleges of Education of Sindh for imparting quality education to the teachers of elementary level. These colleges offer certificate/degrees/c in OTC, CT, PTC, ATC etc. Recently CT and PTC had been replaced by ADE (associate degree in Education) and B.Ed. now is of four years.(Iram & Munshi, 2015). The Leadership role of a Teacher Institutes can have significant influence over the improvement of teaching and learning, it also has crucial role in motivating the students. This study is focused on role of HRM Practices in Education sector for the establishment of betterment in the role of teacher's leadership. The conclusion and the recommendations of this study are based on statistical techniques such as Regression model and T- Test. The study takes into account primary source of data collection by means of a well-furnished questionnaire and interviews.

Hypotheses

- H1: Intrinsic sense of responsibility has significant impact on the performance of teachers' leadership.
- H2: Operational procedures in departments have significant impact on the performance of teachers' leadership.
- H3: Political pressure has significant impact on the performance of teachers' leadership.
- H4: Social pressure has significant impact on the performance of teachers' leadership.
- H5: Teachers' training and development has significant impact on the performance of teachers' leadership.

LITERATURE REVIEW

Teacher Training Institutes in Pakistan.

The early decades of nationalization of education were a time of change and challenge. As per the study of Shamim (2011), the society here is still moving a little tardily and a little stubbornly from an established traditional system of education. The training colleges are also affected for the sheer reason that teachers obviously are not mere "educational islands". Teachers have their due of ups and downs, pressures and counter- pressures, resistance and dynamism. So for a meaningful change it must be a leap forward, towards complex ventures leading ultimately to new, sophisticated techniques and methodologies which must pass through competitive venues. There cannot be a rebirth without travail. The study of Thompson (1965) discussed the work of Weber (1952) and critically analyzes public administration. The study found that bureaucracy had slowed down innovation; it creates a mechanical process rather than problem solving. The study suggested that leadership requires training and development and an environment for creativity. However, the authoritative use of power as is exercised in bureaucracy does not improve the efficiency.

It is the only profession available on this planet that gives birth too many other professions. Teachers are also role models for the society. Parents send their kids to schools to be groomed by these teachers. Hence, these teachers need to be properly trained even before joining schools professionally as teachers so that when these teachers start teaching professionally in different schools; they wouldn't feel alien or unprepared. The training of these teachers in teachers training institutes should not only revolve around theories, course books and assignments but practical approach should also be there. It had been observed that a large number of existing teachers training institutes which had been operating in Pakistan since decades had failed to deliver quality instructors and teachers due to lack of qualified and trained staff and teacher's trainers (Sharma, Forlin, Deppeler & Yang, 2013). Sindh Curriculum Implementation Framework

It has strengthened the education and literacy department of the government of Sindh and its affiliated subdivisions to upgrade and freshen up in the in the district of the curriculum. The main focus should be on creating understanding of the upgraded curriculum, the revised approach and educating the public on a bigger forum about the significance of the revised curriculum. It had been suggested in the study that the information of the revised curriculum could be spread by using print and electronic media. Seminars, meetings, public speaking events and workshops should also be organized in order to give orientation to all the stakeholders about the updated curriculum.

RESEARCH METHODOLOGY

Research Model Framework

Proposed model has been based on on-site observation, available literature and hypothetical concept of most influential factors affecting leadership in Sindh, Pakistan.

The model Framework may be as follows:



Figure 3.1 Model Frame Work

This model is aimed to investigate the effects of various factors on the Performance of Leadership.

The Linear Regression is the basic tool to test the effect of Independent variables on the dependent Variables.

Performance of teachers' leadership may be considered as dependent variable. The influencing factors may be considered as independent variables:

Independent Variables:

- Intrinsic sense of responsibility (IR)
- Operational procedures in Departments (OP)
- Political pressure (PP)
- Social pressure (SP)
- Teachers' training and development (TTD)

The format of linear regression is as follows:

$$Y = \alpha + X_1\beta_1 + X_2\beta_2 + \dots + \mu$$

The proposed regression model may be as follows:

$$PTL = \alpha + IR\beta_1 + OP\beta_2 + PP\beta_3 + SP\beta_4 + TTD\beta_5 + \mu$$

Here:

- PTL = Performance of teachers' leadership
- IR = Intrinsic sense of responsibility
- OP = Operational procedures in departments
- PP = Political pressure
- SP = Social pressure
- TTP = Teachers' training and development

Sampling Design

Convenient sampling has been used as sampling technique to collect the data. A sample of 103 respondents had been selected on random basis from officers working in educational institutes in Sindh province of Pakistan such as teacher trainers, professors, and heads of the departments and grade 17 or above officers in professional institutes of Teacher Education, Bureau of Curriculum and Extension Wing, Sindh Text Book Board and Education and Literacy Department. The respondents were provided a well-designed questionnaire and were requested to select the options they considered most suitable. The data was collected under peaceful environment.

Instrumentation

The primary source of data collection used for the professionals was a well-designed questionnaire. The respondents of the survey were teacher trainers, professors, and heads of the departments and grade 17 or above officers in professional institutes such as Bureau of Curriculum & Extension Wing (BOC & EW) Sindh Jamshoro, Sindh Text Book Board (STBB) Jamshoro, Provincial Institute of Teacher Education (PITE) Nawabshah, Faculty of Education University of Sindh, Education and Literacy Department, Government of Sindh. A well-prepared questionnaire was designed and provided to the respondents. The questionnaire comprised of thirty close ended items on a five-point liker scale.

Reliability analysis of the instrument was also carried out and is shown as follows:

Table 3.2 Reliability Statistics				
Cranach's Alpha N of Items				
0.617	30			

Table 3.1Reliability Statistics

The investigation of the reliability of the instrument had been done via Cornrash's Alpha. The results of the test had been depicted in table 3.2. The value of "Corn rash's Alpha" was 0.617, which was higher than bench mark value 0.5. It had suggested that the data is reliable to be used.

RESULTS OF THE STUDY

Demographic Details

The following is the analysis of the institutes and their staff:

Grades of officers	Education of the officers	Total		
BPS	Master	MPhil	PhD	
17	31	5	1	37
18	28	5	0	33
19	20	6	3	29
20	1	2	0	3
21	0	0	1	1
Total	80	18	5	103

 Table 4.1

 Grades and Education of the Officers Interviewed

The table described that in teacher education institutes the highest grade i.e. grade 21 is awarded to PhD holder, whereas, the 17th and 18th Grade is filled with candidates having master degree with only few candidates having M.Phil. degree.

Number of Subordinates under control					Total
Grades of officers	0 to 5 subordinates	6 to 10 subordinates	11 to 15 subordinates	more than 15 subordinates	
17	34%	2%	1%	0%	37%
18	27%	4%	1%	1%	33%
19	13%	3%	1%	12%	29%
20	0%	0%	1%	2%	3%
21	0%	0%	0%	1%	1%
Total	74%	9%	4%	16%	103%

Table 4.2					
Grades and Number of Subordinates of the Officers	s Interviewed				

The number of subordinates being led by respondents on grade wise basis has been illustrated in table 4.2. The table had depicted that grade 17 and grade 18 officers mostly control 0 to 5 subordinates, whereas, grade 19 officers had been observed as controlling mostly 0 to 5, as well as more than 15 subordinates. On the other side, officers of grade 20 and grade 21 have control of more than 15 subordinate.

 Table 4.3

 Teacher Education Institutes and Grades of the Officers Interviewed

Grades of the Officers Interviewed						
Teacher Education Institutes	17	18	19	20	21	Total
G.E.C.E	17	20	2	0	0	41
G.C.E	4	3	20	0	0	29
R.E.E.C	2	2	1	0	0	0
BOC, Jamshoro	1	0	3	2	0	6
P.I.T.E	4	2	2	0	0	9
D.E.T.R.C	5	4	1	0	0	10
Sindh Text Book Board	0	1	0	0	0	1
Education and Literacy Department, Sindh	4	1	0	1	1	7
Total	37	33	29	3	1	103

The number and grades of officers interviewed has been shown in Table 4.3. The respondents are comprised of officers working not only in Teacher Education, but also regulatory departments such as Education and Literacy Department, Sindh Text Book Board and Bureau of Curriculum. Most of the respondents have been interviewed from the G.E.C.E and G.C.E, D.E.T.R.C and P.I.T.E, who had been actively involved in teaching and training of the teachers.

Hypotheses Testing

The findings of the study which had been obtained through questionnaire had suggested that data may be used for further analysis based on regression analysis. Therefore, the model was used. The data yielded from hypotheses 1 through 5 were used to measure independent variables that included intrinsic sense of responsibility, operational procedures, political pressure, social pressure and teachers' training and development while hypotheses 6 through 35 were used to measure the dependent variable (leadership performance).

ANOVA						
	Sum of Squares	DF	Mean Square	F	sig Value	
Regression	4.619	5	.924	208.942	.000	
Residual	.429	97	.004			
Total	5.048	102				

The results of the regression analysis have been provided in the following tables

The Anova table had showed the result of Regression. The sig value was 0.000 which was lesser than 0.05. It had rejected the null statement for the equality of mean; hence it had showed that the model is significant. Based on the results of Regression, it has been concluded that the regression model that had been deployed here is Significant and the results might be considered as reliable.

	В	Std. Error	t-value	sig value
Constant	3.699	.666	5.557	.000
Intrinsic sense of responsibility (IR)	.326	.089	.683	.000
Operational Procedures in Departments (OP)	.000	.120	.0013	. 999
Political Pressure (PP)	243	.072	-3.397	.001
Social Pressure (SP)	168	.127	-1.328	.187
Teachers' Training and development (TTD)	.170	.053	3.187	.002

Table: Coefficients of Regression

The table Coefficients of Regression showed the results of Regression Model. The hypotheses made were investigated on the significance of the Beta Coefficients. The following discussion provides the significance and acceptance/rejection of the designed hypotheses.

H1: Intrinsic sense of responsibility has significant impact on the performance of teachers' leadership. The coefficient of intrinsic sense of responsibility (IR) was 0.23 having sig value 0.000. The sig value for the coefficient was less than 0.05, showing that the coefficient was significant. The significant value of beta showed that the three was significant impact of intrinsic sense of responsibility (IR) on the performance of teachers 'leadership. Therefore, thirty first hypotheses (H1) of the study was accepted. It might be stated that intrinsic sense of responsibility had significant impact on the

performance of teachers' leadership. Besides, the positive value of beta exposed that intrinsic sense of responsibility had significant positive impact on the performance of teachers' leadership.

H2: Operational procedures in departments have significant impact on the performance of teachers' leadership.

The H2 is related to the Operational Procedures in Departments OP). Table showed the sig value 0.99. The sig value for the coefficient was higher than 0.05, showing that the coefficient was insignificant. It showed that there was insignificant impact of operational procedures in departments on the performance of teachers' leadership. Therefore, statement (H2) of the study was rejected. It might be stated that operational procedure has insignificant impact on the performance of teachers' leadership.

H3: Political pressure has significant impact on the performance of teachers' leadership.

The coefficient of political pressure (PR) was -0.243 having sig value 0.001. The sig value for the coefficient was less than 0.05, showing that the coefficient was significant. The significant value of beta showed that there was significant impact of political pressure (PR) on the performance of teachers' leadership. Therefore, the statement (H3) of the study was accepted. It might be stated that political pressure had significant impact on the performance of teachers' leadership. Besides, the negative value of beta exposed that political pressure had significant negative impact on the performance of teachers' leadership.

H4: Social pressure has significant impact on the performance of teachers' leadership.

The H4 was related to the social pressure. Tableshowed the sig value 0.187. The sig value for the coefficient was higher than 0.05, showing that the coefficient was insignificant. It showed that there was insignificant impact of social pressure on the performance of teachers' Leadership. Therefore, statement (H4) of the study was rejected. It might be stated that social pressure has insignificant impact on the performance of teachers' leadership.

H5: Teachers' training and development has significant impact on the performance of teachers' leadership.

The coefficient of teachers' training and development (TTD) was 0.17 having sig value 0.002. The sig value for the coefficient was less than 0.05, showing that the coefficient was significant. The significant value of beta showed that the three was significant impact of teachers' training and development (TTD) on the performance of teachers' leadership. Therefore, statement (H5) of the study was accepted. It might be stated that teachers' training and development had significant impact of teachers' leadership. Besides, the positive value of beta exposed that teachers' training and development has significant positive impact on the Performance of teachers' leadership 4.4. Section4: Qualitative Analysis

The quantitative data collected though the questionnaire formed the base for further deeper investigation, through qualitative method. Phenomenological viewpoint of the data collection had been used for interpretation of gathered data. Open ended interview questions were developed after the review of related literature.

The obtained responses (interviews) from the teacher educators ranged from few words to sentences. The quotes, codes and themes drawn from the interviews of the respondents made the foundation of the qualitative approach. The interviews were conducted from April 05, 2014 to May 23, 2014. Each interview was detailed and in depth and took 50 to 60 minutes.

The researcher started data processing through open coding of each participant's responses to concept and themes. Finally, three themes came into existence from the collected data. These themes were considered final after a thorough review and discussion and consultation with some of the respondents and experts. The final themes extracted included:

Intrinsic sense of responsibility, inspirational leadership, and corruption

DISCUSSIONS, CONCLUSION, POLICY IMPLICATIONS AND FUTURE RESEARCH DISCUSSION

It had been accepted that the effective teacher education leader struggles and works hard for the betterment and enhancement of education and the teacher education leader also get involved in resolving any kind of conflicts or issues that arise at the institute. Ideally the teacher education leader supervises the subordinates properly and solves their difficulties. It had also been accepted that the teacher education leader withdraws from his/her responsibilities due to social pressure. In respect of conflict resolution, the respondents agreed that the teacher education leader did avoid any sort of power conflict or interference in the authority of other members.

CONCLUSION

It had been concluded that the effectiveness of teacher education leadership was not merely based on academic, professional qualifications and experience. In addition to this it was found that the effectiveness of teacher education leadership was not affected due to climate, pay& other benefits. However, it could be further concluded that the effectiveness of teacher education leadership was significantly affected due to political influence and environmental challenges. The undue transfers or suspensions were unnecessary as signs of punishment as they had negatively impacted the effectiveness of leadership.

The practical implementation of laws, policies and procedures and the proper delegation of authority are the best tools for ensuring the effectiveness of teacher education leadership. The continuous monitoring and evaluation can remove hindrances in the system. Further, the better coordination between stakeholders is necessary for achieving the objectives.

Recommendations

On the basis of conclusions of the study, following recommendations had been proposed:

- 1. The enforcement of internal processes should be analyzed carefully to ensure that such enforcements are made only for the larger good.
- 2. The government should stabilize the effectiveness of teacher education leadership by looking after the procedural flaws in the education department.
- 3. Technical considerations and procedural work is required to secure the educational Leaders from political and social pressures.
- 4. Effective training and moral support is required to motivate the staff and the leader not to bypass merit.
- 5. The teacher educators may be assigned those subjects, which are related to their area of specialization.
- 6. For the physical and social advancement of trainers and students co-curricular activities / study tours should be organized.

Policy Implication

The study suggested reasonable modifications in internal process of institutes and their practical application such as recruitment and appraisal on merit basis and avoiding undue suspension or transfer of management staff. Further, the leader faces political and social pressures, therefore, supportive measurements are necessary to stabilize and enhance the effectiveness of the leaders.

Future Research

This study was limited to the teacher training institutions in the Sindh Province of Pakistan. Future

Page | 158

research is required to be carried out in all four Provinces of Pakistan including Kashmir. However, the survey may be improved by including few more variables and extending the questions.

REFERENCES

- Ahsen, N. F., Batul, S. A., Ahmed, A. N., Imam, S. Z., Iqbal, H., Shamshair, K., & Ali, H. (2010). Developing counseling skills through pre-recorded videos and role play: a pre-and postintervention study in a Pakistani medical school. BMC Medical Education, 10(1), 7.
- Ali, T. (2011). Understanding how practices of teacher education in Pakistan compare with the popular theories and theories and narrative of reform of teacher education in international context. International Journal of Humanities and Social Sciences, 1(8), 208
- Bhatti, R. (2012). INFORMATION LITERACY: Furthering the Cause of Higher Education in Pakistan. Pakistan Library & Information Science Journal, 43(1).
- Biggs, J., & Tang, C. (2011), Teaching For Quality Learning At University. McGraw-Hill International. 4th Edition
- Bechet, B., S., & Garin., E. (2012) Using Technology to Enhance Teacher Education, in
- Laura A. Wankel, Patrick Blessinger (ed.) Increasing Student Engagement and
- Retention Using Social Technologies (Cutting-edge Technologies in Higher

Education, 6, 235 – 261.

- Caikler, W., & Wood, P., (2016). Mentors and student-teachers "lesson studying" initial teacher education. International Journal for Lesson and Learning Studies, 5, 2, 84 – 98.
- Dahar, M. A., Faize, F. A., Niwaz, A., Hussain, M. A., &Zaman, A. (2010). Relationship between the Leadership Styles and Academic Achievement at the Secondary Stage in Punjab (Pakistan). International Journal of Academic Research, 2(6).458-4
- Fakhar, Shahzad, R. A. (2012). Impact of Organizational Culture on Organizational Performance. Interdisciplinary Journal of Contemporary Research in Business, 3, 45-54.
- Hoy., A., H., (2013), A Reflection on the Place of Emotion in Teaching and Teacher Education. Emotion and School: Understanding how the Hidden Curriculum Influences Relationships, Leadership, Teaching, and Learning (Advances in Research on Teaching, 18, 255 – 270.
- Hasan, D. S., &Subhani, M. I. (2012). Top management's snooping: Is sneaking over employees' productivity and job commitment a wise approach? African Journal of Business Management, 6(14), 1-11
- Iram, S., &Munshi, D. P. (2015). Application of Information and Communication Technology (ICTS) In Teaching And Learning At Teacher Training Institutions. The Sindh University Journal of Education-SUJE, 44(2).
- Laurillard, D. (2013), Rethinking University Teaching: A Conversational Framework for the Effective Use of Learning Technologies. Routledge.2nd Edition
- McGrath, S. (2010). Education and Development: Thirty Years of Continuity and Change. International Journal of Educational Development, 30(6), 537-543.
- Nawaz, M. M., &Bodla, M. A. (2010). Comparative Study of Full Range Leadership Model among Faculty Members in Public and Private Sector Higher Education Institutes and Universities. International Journal of Business and Management, 5(4), 208-214
- Novelli, M. (2010). The New Geopolitics of Educational Aid: From Cold Wars to Holy Wars? International Journal of Educational Development, 30(5), 453-459
- Rizvi, M., (2015) Teacher Education Pedagogies Related to Preparing Preservice Teachers as Leaders in Pakistan, in Lily Orland-Barak, Cheryl J. Craig (ed.) International Teacher Education: Promising Pedagogies (Part B) (Advances in Research on Teaching, 22, 7 – 30.

- Shafique, F, Mehmood, K. (2010). Changing Research Scenario in Pakistan and Demand for Research Qualified L/S Professional, Source Library Review, 59(4), 291-3
- Salfi, N. A. (2011). Successful leadership practices of head teachers for school improvement: Some evidence from Pakistan. Journal of Educational Administration, 49(4), 414-432.
- Shah, R., Maber, E., Cardozo, M. L., & Paterson, R. (2016). Peacebuilding, Education and Advocacy in Conflict-Affected Contexts Programme. UNICEF Programme Report 2012-2016. UNICEF.
- Shamim, F. (2011). English as the language for development in Pakistan: Issues, challenges and possible solutions. Dreams and realities: Developing countries and the English language, 291-310.
- Sharma, U., Forlin, C., Deppeler, J., & Yang, G. X. (2013). Reforming teacher education for inclusion in developing countries in the Asia Pacific region. Asian Journal of Inclusive Education, 1(1), 3-16.
- Syed, A. A. S. G., Bhatti, N., Michael, S., Shaikh, F. M., & Shah, H. (2012). Job satisfaction of faculty members of universities in Pakistan: A case study of university of Sindh-Jamshoro. Modern Applied Science, 6(7), 89.
- Tayyaba, S. (2012). Rural-urban gaps in academic achievement, schooling conditions, student, and teachers' characteristics in Pakistan. International Journal of Educational Management, 26(1), 6-26.

Taylor, F. W. (2013). Scientific Management. Rutledge.

Yuen, C. Y. (2010). Dimensions of diversity: Challenges to secondary school teachers with implications for intercultural teacher education. Teaching and Teacher Education, 26(3), 732-741.