The Mediating Effect of School Climate with Total Quality Management on School Performance in Pakistan

Author’s Details:
(1) Waqas Mahmood, (2) Siti Noor Ismail, (3) Mohd Sofian Omar-Fauzee,
(1) Ph.D Scholar, School of Education and Modern Languages, Universiti Utara Malaysia,
(2) Assistant Prof, School of Education and Modern Languages, Universiti Utara Malaysia,
(3) Prof, School of Education and Modern Languages, Universiti Utara Malaysia,

Abstract:
The global situation of education today calls for an investigation into the role of school climate and TQM in enhancing students’ performance generally and particularly in Pakistan. This study intends to examine the mediating effects of school climate with the application of total quality management (TQM) on schools’ performance in Pakistan. 300 questionnaires were distributed, out of which 232 were retrieved from respondents. This study employed the Statistical Package for Social Science (SPSS) as a statistical analysis tool. The result of the three out of the five direct hypotheses of TQM (i.e., training and education, continuous improvement and social climate) from the analysis provided support for the hypothesized relationships. Furthermore, it is apparent that there is a significant positive influence of TQM in enhancing student academic performance in the Pakistan. Similarly, it was found from the study that school climate mediates the relationship between total quality management and student academic performance. The study, therefore, concluded that school climate, continuous improvement, and the training and education of staff should be developed to enhance students’ academic performance in Pakistan.

Keywords: School climate, staff involvement, training and education, students’ commitment, TQM, Pakistan

1 Introduction
Various factors are responsible for academic performance such as the students’ interest in learning, school engagement, teacher effectiveness, school environment and facilities, student/teacher motivation, and quality of interaction among students, parents and teachers (Studsrod & Bru, 2012; Olwatimilehin & Ovoyele, 2012; Wormington, Corpus, Anderson, & College, 2011; Shumba et al., 2016; Ghazi, Azam, & Khan, 2009; Simons-Morton & Chen, 2009; Erginoz, Alikasifoglu, Erca et al., 2015; Guthrie & Klanda, 2014; Muraina & Muraina, 2014). The above factors can be grouped under three broad headings such as student, teachers/leaders, and school related variables. The three broad factors remain issues of discussion on the performance of students in the educational sector and in the research literature. According to Schneider and Colemen (2018), student performance can be linked to the school environment and organisation of activities engaged in by students. Their study centred on the relationship between social processes and achievement, the role of schools’ social systems on private and public schools’ achievements and the relevance of family background in the academic performance of students. The research by Schneider and Colemen (2018) led to more studies into the value of school climate and socio-economic factors in students’ academic performance. A significant relationship between school climate and students’ academic achievement was found by Wang and Degol (2016). On the other hand, Saied, Keyvan, and Esfandian (2015) revealed that teachers and parental background have an influence on achievement in mathematics for both genders but could not find any significant benefit of school climate on academic performance. Nichols and Nichols (2012) also did not find any relevant difference in school climate perception for children and parents when they compared high performing and low performing data of schools in language and mathematics. Therefore, there is no consistency in the reports on factors responsible for learners’ academic performance.

Kutsyuruba, Klinger and Hussain (2015), Gulnaz (2014), and Akhtar and Mahfooz (2016) carried out different studies focusing on constructs relating to parental background on students’ academic performance and found that the constructs are significantly relevant to the performance of learners. School climate in relation to student performance was also investigated by Khan (2016) who found that there is a significant effect of school climate on academic performance and the social adjustment of learners. In the same vein,
Wang, Selman, Dishion, and Stormshak (2010) revealed the effect of school discipline and positive student/teacher relationship in reducing students’ behavioural problems in learning. Despite vast research on school climate and other factors in performance, there is a need for further investigation by the relevant stakeholders in education. In view of the above mentioned studies, it is important to further carry out investigations into the moderating effects of school climate and TQM on students’ academic performance in Pakistan due to the level of education in the nation.

Problem Statement
It is obvious from the previous studies that Pakistan is not left out in the dehydrated situation of students’ low academic performance which calls for the urgent attention of educationists all over the world. The purpose of this study is to provide high school performance by investigating the dimension of TQM and school climate and their relationship.

2. Objectives of the research
1. To verify the effect of customer focus and TQM on students’ performance.
2. To investigate the role of training and education on academic performance.
3. To examine the effect of involvement of all staff on student academic performance.
4. To justify the effect of continuous improvement on students’ academic performance.
5. To determine the effect of school climate on the relationship between TQM and students’ academic performance.

School Climate
Previous studies have shown the importance of children’s perceptions of school climate for their academic performance and adjustment (Jia et al., 2009). Until recently, various studies have been carried out in this area to show the effect or impact of school climate and TQM on students’ academic performance. In the same vein, studies on the importance of school climate and the competing factors of student academic performance and adjustment were also carried out, thereby giving a wide viewpoint to provide strategies for school climate enhancement. The findings of such studies will help the Ministry of Education to provide support for the national education policy which focuses on the importance of improving the school environment and learning (Ministry of Education, 2009).

The possible effects of school climate and family background on student academic performance through student-specific variables were also studied. Keith and Joseph (2015) revealed that parental involvement in schooling affected the performance of students in math primarily through the efforts of students. School climate has also been reported to play a key role in engaging students through variables such as supportive teachers’ expectations of student behavior (Theresa, 2006). For parental involvement, low income families are predictors of low student-teacher conflicts (Wyrick & Rudasill, 2009). In view of this, it was revealed that student academic involvement and academic performance could also affect students’ emotional adjustment since the variables can contribute to their individual social acceptance and satisfaction. School variables like teacher support (Wang, Brinkworth, & Eccles, 2013) and academic performance (Rashmikant, 2014) were found as links to students’ performance in schools. The findings above reveal that many factors are related to student performance and adjustment. Thus, there are various student-specific variables such as aptitude, self-concept, achievement motivation, and effort which play crucial roles in engaging learners in learning. Therefore, engagement of students in academic tasks can prove some ratios of the students’ characteristics which also lead to encouraging learning outcomes of the learners.

The importance of learner involvement in learning for academic performance and success cannot be underestimated, and it can mediate between school and home related variables. Gulnaz (2014) also discovered that student academic involvement could influence academic performance and learners’ academic involvement and was found to be linked to learner perceptions of relationship in the classrooms, teachers’ fair treatment of students, less homework and fewer disciplinary issues. All these show that there are various factors in schools other than family background variables which are responsible for learning involvement and these relationships between variables are making the issue under investigation perplexing. It can be concluded that the school climate, learner background, and student characteristics are relevant to learner performance and adjustment. The concept of school climate is considered as a rival explanation with
TQM as mediating variables for student performance. However, it is evident that the school climate as a variable is influenced by home background and teachers/leaders of school on student performance. According to Thapa et al., (2013), the importance of school climate started over a hundred years ago. Many studies discovered that school climate varied and did not actually show the atmosphere of school life. They also held the view that school climate is the personality of the school, presenting a perception of the school routine, of teachers enhancing the behaviors and attitudes of students and the school. In the school climate, teachers are eager, accepting, and mutually valued their colleagues (Thapa et al., 2013). A principal that is supportive cares the satisfaction of the teachers, open to the teachers’ suggestions and listens to them. A supportive principal in a good school climate promotes transparency and skill discussion in the school. Such a supportive principal provides a conducive environment that leads to a place of pride for teachers. This support would also provide a good, friendly, and interactive working environment for teaching and learning. Another important factor for assessing the school climate is health (Hoy & Hannum, 1997). A healthy school encourages a harmonious working environment in the managerial, technical, organisational, and institutional aspects of school life. It also successfully manages external factors with the positive goal of working healthily together among students, teachers, leathers, administrative staff, and the community.

**Teacher Well-Being**

Studies by Deci and Ryan (2008) and Su, Tay and Diener (2014) have described well-being from a psychological point of view as health that comprises healthy relationships, purpose in life, subjective well-being, autonomy, engagement, mastery, and optimism. Other researchers meanwhile refer to it as an indicator of the quality of life (Davis, 2014). The theory of well-being is related to the self-determination theory which explains the human need for belonging, autonomy, and competence to live well (Davis, 2014). Therefore, according to Su et al. (2014) teacher well-being has to do with self-efficacy, trusted relationships, and control over destiny significantly contributing to well-being. They also see well-being as a difficult array of emotional, social, and mental health which can be categorized into eudemonic and hedonistic. The eudemonic well-being is concerned according to Davis (2014) with having an encompassing and purposeful life in the process of reaching one's potential. It is a state whereby one has realized a purposeful life, found a calling and has meaningful connections with people and personal calling (Davis, 2014). Teachers’ positive emotional well-being can develop their passion for their profession and be a source of inspiration to their students. Skaalvik and Skaalvik (2015) found that teachers are happy and encouraged when their teachings influence students’ lives and this encourages teacher efficacy. On the other hand, hedonistic well-being in a classroom consists of being grateful and happy in teaching. Therefore, emotional conditions like safety, confidence, and happiness can influence a sense of well-being when teaching in the classroom. Some instructors are full of happiness when teaching students while others are stressed and bored when teaching students in the classroom. Teachers’ positive emotional state of mind enhances the good relationship and interaction between teachers and students in and outside the classroom (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010).

Therefore, teacher well-being according to Spilt, Koomen, and Thijs (2011) is the state of mind of teachers concerning their profession, relation, and personality. Most teachers hardly acquire the three, and this reduces their well-being in teaching. Studies on teacher well-being and performance are without challenges in attaining high rates of teacher weakness particularly the new teachers and those working in schools with challenges and lack of support and commitment to the teaching profession (Skaalvik & Skaalvik 2015; Davis, 2014; Tait, 2008). Davis (2014) and Mansfield, Beltman, Broadley, and Weatherby-Fell (2016) revealed in their reviews of students and teachers’ well-being reported that teachers who were armed with personal resources (motivation, efficacy), contextual resources (trust relationships with leaders, fellow teachers, and students) would experience well-being in their teaching profession and strategies (problem solving, self-care, a work-life balance, and mindfulness) and committed teachers are more likely to attain positive outcomes than students whose teachers are less resilient and committed.

**TQM: Recruiting and Developing School Leaders and Teachers**

Yukl and Van Fleet’s (1992) idea centred on the question that guided most empirical leadership research, i.e., how an individual regarded as a leader can influence a second party or a group of individuals regarded
as confidants. Most psychologists agree that being a leader is an inherited trait predicting the first leadership paradigm. The theory believes that individuals meant to be leaders are born with the characteristics and required skills of a good leader. Traits identified by the theory are like integrity, persistence, sociability, charisma, motivation, intelligence, and willingness to lead. The major weakness in the behavioural approaches of leadership is that some leaders prominently see followers as subordinates and disregard issues of politics, values, and inspiration.

Therefore, Rich et al. (2012) and Patapas and Smalskys (2013) revealed that outside the central culture of an organisation, deeds of an organisation’s workforce and internal organisational practices denote the behaviours. However, the worker behaviours that improve cultural co-existence and organisational practices are well maintained. Conversely, organisational practices are enhanced by successful organisations while the ones that did not strengthen internal organisational practices were found to fall behind (Patapas & Smalskys, 2013). In order to enhance performance management as an internal organisational practice, schools should be sending their teachers and leaders for professional seminars, workshops and technical training for better performance. These programs should promote TQM in providing the required knowledge in the respective areas of the school. With regards to recruitment, a school organisation should ensure that the needs of the organisational processes are met. The recruitment and selection processes should also clearly portray teaching competence (Trussa et al., 2013). Employers should be flexible in their administration of schools and should ensure teamwork which is highly valued in a school climate. The managers and senior staff should demonstrate an understanding attitude towards the junior workers (Trussa et al., 2013). According to Welch (2011) and Chowne and Rayton (2014), TQM is the predecessor of job satisfaction, training, employee engagement, performance management, and development while worker development has to do with undergoing training programs to acquire new knowledge and develop skills through the sponsorship of the employer. In other words, the tools for quality management are gathered through training (Welch, 2011).

Knowledge acquisition and training are necessary for any organisation since it is the genesis of knowledge base enhancement among workers/employees (Park et al., 2013). Unfortunately, many employers do not invest in training their workers because of the expenses and fail to take into consideration the foundations of development. It should be noted that the pros of worker training exceed the cons (Park et al., 2013). Training teachers/employees help to improve the weaknesses that they have in their fields (Welch, 2011). According to Shuck, Reio, and Rocco (2011), training helps the majority of teachers/employees improve their performance in the classroom/work, the result of which is increased job satisfaction and engagement (Park et al., 2013).

The findings of Shantz, Alkes, Truss, and Soane (2013) indicate that ministries or organisations that encourage teachers and staff to further their training and education tend to perform better than those that neglect both. Furthermore, organisations that reserve resources for the training and education of their employees also perform better in their respective industries (Welch, 2011). In addition, Park et al. (2013) revealed that some small financial institutions failed to send their workforce for training in quality awareness which resulted in poor management and lack of proper organisational practices. They then depicted that for any organisation to be successful, their workers should be trained in their work.

3. Measurement and Data Collection

This study targeted respondents who are teachers in Pakistani secondary schools. The study used the cross-sectional design and the survey method. The questionnaire asks the respondents about their capabilities in fraud prevention. A total of 300 questionnaires were distributed. 232 questionnaires were returned, representing a 77% response rate. Out of the 232, 7 questionnaires were declared unusable due to incompleteness and ineligibility. Usable questionnaires were 225, constituting a 75% effective response rate. According to Linus (2001), a 50% response rate is considered as an acceptable response rate for any social science studies in Nigeria. This indicates that the study met the response rate requirement of 75% and had an effective response rate of 75%. All the measurement instruments for the six constructs (CF, TE, NS, CN, SC, and TC) in this study were adapted. All instruments were measured on a 7 point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree).
4. Data Analysis
4.1 Data Screening and Cleaning
Data screening is the method of checking for errors in the data collected (Pallant, 2010). The errors are expected to take various forms which may include missing data or data that is outside the normal range stated by the researcher (out of range data). Data cleaning is essential in conducting any multivariate analysis. It is because the quality and a meaningfulness outcome of the analysis depends on the data screening and editing (Pallant, 2010). Hence, missing data and outliers were thoroughly checked and treated accordingly.

4.2 Reliability Test
It is expected that a reliable instrument reduces measurement errors to a large extent. The most common test of inter-item consistency reliability is the Cronbach’s alpha coefficient. Hence, the Cronbach’s alpha coefficient was used to measure the internal consistency of the instrument in this study. After running the data, it was found that all the measures possessed a high reliability standard ranging from 0.681 to 0.864. This is in accordance with the standard that an instrument with a coefficient of 0.60 is regarded to have an average reliability; whereas a coefficient of 0.70 and above shows that the instruments have a high level of reliability (Sekaran & Bougie, 2010). Table 1 indicates the reliability result of the latent constructs.

Table 1
Reliability Test of the Constructs

<table>
<thead>
<tr>
<th>Latent variable</th>
<th>Items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management Commitment (TC)</td>
<td>11</td>
<td>0.857</td>
</tr>
<tr>
<td>Customer Focus (CF)</td>
<td>4</td>
<td>0.864</td>
</tr>
<tr>
<td>Training and Education (TE)</td>
<td>4</td>
<td>0.787</td>
</tr>
<tr>
<td>Staffs Involvement (NS)</td>
<td>4</td>
<td>0.773</td>
</tr>
<tr>
<td>Continuous Improvement (CN)</td>
<td>4</td>
<td>0.681</td>
</tr>
<tr>
<td>School Climate (SC)</td>
<td>5</td>
<td>0.759</td>
</tr>
</tbody>
</table>

4.3 Mean and Standard Deviation of the Variables
The mean refers to the average value of the data set, and it is the most common measure of central tendency (Sekaran & Bougie, 2010). Standard deviation is a measure of dispersion, which provides an index of variability in the data set. It is the square root of the variance. Mean, and the standard deviation is also basic descriptive statistics for interval and ratio scales.

This study adopts a five point Likert scale, and the level of the score used the interpretation of Nik, Jantan, and Taib (2010). They recommended that scores of less than 2.33 are below level, 2.33 to 3.67 are moderate level, and 3.67 and above are regarded as high level. Table 5.4 presents the mean and standard deviation of the entire variables used in this study. Customer focus has the highest mean (M = 6.28, SD = 0.820) while top management commitment recorded the lowest mean (M = 4.983, SD = 0.892). As reported in Table 2, all the means of the variables are in the range of high level.

Table 2
Mean and Standard Deviation of Variables

<table>
<thead>
<tr>
<th>Latent variable</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management Commitment (TC)</td>
<td>1</td>
<td>7</td>
<td>4.983</td>
<td>0.892</td>
</tr>
<tr>
<td>Customer Focus (CF)</td>
<td>1</td>
<td>7</td>
<td>6.276</td>
<td>0.820</td>
</tr>
<tr>
<td>Training and Education (TE)</td>
<td>1</td>
<td>7</td>
<td>5.974</td>
<td>0.582</td>
</tr>
<tr>
<td>Staffs Involvement (NS)</td>
<td>1</td>
<td>7</td>
<td>5.811</td>
<td>0.640</td>
</tr>
<tr>
<td>Continuous Improvement (CN)</td>
<td>1</td>
<td>7</td>
<td>5.206</td>
<td>1.005</td>
</tr>
<tr>
<td>School Climate (SC)</td>
<td>1</td>
<td>7</td>
<td>4.988</td>
<td>0.844</td>
</tr>
</tbody>
</table>

4.4 Normality Test
Hair, Sarstedt, Ringle, and Mena (2012) suggested that researchers should perform a normality test on the data. Highly skewed or kurtosis data can inflate the standard error estimates which can underestimate the statistical significance of the path coefficients (Ringle, Sarstedt, & Straub, 2012). The present study used the skewness and kurtosis method to check for the normality of data collected (Tabachnick & Fidell, 2007). Field (2009) suggested that a large sample decreases the standard errors, which in turn inflates the value of the skewness and kurtosis statistics. Therefore, this study has justified the reason for using the statistical methods for the normality test. As recommended by Hair et al. (2010), variables should be seen as having violated normality if their respective values are higher than ±2.58. This study achieves normality because all the variables as presented in the Table 3 are free from the problem of normality.

### Table 3

*Normality Test for the Latent Variables*

<table>
<thead>
<tr>
<th>Latent variable</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Management Commitment (TC)</td>
<td>-0.016</td>
<td>-0.812</td>
</tr>
<tr>
<td>Customer Focus (CF)</td>
<td>-2.842</td>
<td>1.383</td>
</tr>
<tr>
<td>Training and Education (TE)</td>
<td>-0.782</td>
<td>0.629</td>
</tr>
<tr>
<td>Staffs Involvement (NS)</td>
<td>-1.074</td>
<td>1.017</td>
</tr>
<tr>
<td>Continuous Improvement (CN)</td>
<td>-0.360</td>
<td>-0.679</td>
</tr>
<tr>
<td>School Climate (SC)</td>
<td>-0.227</td>
<td>1.108</td>
</tr>
</tbody>
</table>

#### 4.5 Multicollinearity Test

Multicollinearity is a situation in which more exogenous latent constructs become highly correlated. The presence of multicollinearity among the exogenous latent constructs can substantially distort the estimates of regression coefficients and their statistical significance tests (Hair, Black, Babin, Anderson, & Tatham, 2006). In particular, it increases the standard errors of the coefficients, which in turn renders the coefficients statistically non-significant (Tabachnick & Fidell, 2007). As discussed by Peng and Lai (2012), two methods were used in the present study. First, variance inflated factor (VIF), tolerance value and condition index were examined to detect a multicollinearity problem. Hair et al. (2011) recommended that multicollinearity is a concern if the VIF value is higher than 5 and tolerance value is less than .20. Table 4 shows the VIF values and tolerance values for the exogenous latent constructs.

### Table 4

*Correlation Matrix of the Latent Variables*

<table>
<thead>
<tr>
<th>Latent variable</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Focus (CF)</td>
<td>0.948</td>
<td>1.055</td>
</tr>
<tr>
<td>Training and Education (TE)</td>
<td>0.892</td>
<td>1.121</td>
</tr>
<tr>
<td>Staffs Involvement (NS)</td>
<td>0.816</td>
<td>1.225</td>
</tr>
<tr>
<td>Continuous Improvement (CN)</td>
<td>0.621</td>
<td>1.609</td>
</tr>
<tr>
<td>School Climate (SC)</td>
<td>0.691</td>
<td>1.447</td>
</tr>
</tbody>
</table>

Table 4 indicates that multicollinearity did not exist among the exogenous latent constructs as all VIF values were less than 5 and tolerance values exceeded .20, as suggested by Hair et al. (2011). Thus, multicollinearity is not an issue in the present study.

#### 4.6 Correlation of the Latent Constructs

The following are the examination of the correlation matrix for the exogenous latent constructs. According to Hair et al. (2010), a correlation coefficient of 0.90 and above indicates multicollinearity between exogenous latent constructs. Table 5 shows the correlation matrix of all latent variables.

### Table 5

*Correlation Matrix of the Latent Variables*

<table>
<thead>
<tr>
<th>Latent variable</th>
<th>CF</th>
<th>TE</th>
<th>NS</th>
<th>CN</th>
<th>SC</th>
<th>TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Focus (CF)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training and Education (TE)</td>
<td>0.104**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staffs Involvement (NS)</td>
<td>0.403**</td>
<td>0.266**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous Improvement (CN)</td>
<td>0.275**</td>
<td>0.514**</td>
<td>0.321**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Climate (SC)</td>
<td>0.448**</td>
<td>0.116**</td>
<td>0.103**</td>
<td>0.540**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Top Management Commitment (TC)</td>
<td>0.780**</td>
<td>0.425**</td>
<td>0.107**</td>
<td>0.520**</td>
<td>0.570**</td>
<td>1</td>
</tr>
</tbody>
</table>
As shown in Table 5, the correlations between the exogenous latent constructs were sufficiently below the suggested threshold values of 0.90, which suggests that the exogenous latent constructs were independent and not highly correlated.

4.7 Regressions and Hypotheses Test

Multiple regression analysis provides an avenue for neutrally assessing the degree and character of the relationship between independent variables and the dependent variable (Sekararan & Bougie, 2012; Field, 2009). The regression coefficient is used to show the relative importance of each of the independent variable in the prediction of the dependent variable. When independent variables are jointly regressed against the dependent variable in an attempt to explain the variance in it, the size of each (individual) regression coefficient will show how much an increase of one unit in the individual variable would affect the dependent variable, taking into cognizance all other individual variables and dependent variable cave in to multiple correlation coefficients (Sekaran & Bougie, 2010). A regression analysis was employed to test the hypothesis in this study; it is intended to investigate the relationship between predicting as well as the criterion variables respectively.

4.7.1 Regression Analysis and Hypotheses Test between Total Quality Management and Student’s Academic Commitment (Performance)

A multiple regression analysis was conducted to determine the relationship between Top Quality Management (i.e., customer focus, training and education, staff involvement, continuous improvement, and social climate) and Student’s Academic Commitment.

Table 6: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. The error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.628a</td>
<td>.395</td>
<td>.381</td>
<td>.70177</td>
<td>1.823</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), School_Climate, Customer_Focus, Staff_Involvement, Training_Education, Continuous_Improvement
b. Dependent Variable: Mgt_Commitment

Table 7 summarises the results of an analysis of variation in the dependent variable with a large value of regression sum of squares (70.285) in comparison to the residual sum of squares with a value of 107.854. This value indicates that the model does not fail to explain a lot of the variations in the dependent variables. However, the estimated F-value (28.543) as given in the table above is with a significance value of 0.000; which is less than 0.05 (p < 0.05) which means that the explanatory variable elements as a whole can jointly influence change in the dependent variable (Top Management Commitment).
Table 8: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.237</td>
<td>.741</td>
<td></td>
<td>3.019</td>
</tr>
<tr>
<td>Customer_Focus</td>
<td>-.001</td>
<td>.059</td>
<td>-.001</td>
<td>-.020</td>
</tr>
<tr>
<td>Training_Education</td>
<td>.193</td>
<td>.085</td>
<td>.171</td>
<td>2.269</td>
</tr>
<tr>
<td>Staff_Involvement</td>
<td>-.021</td>
<td>.081</td>
<td>-.015</td>
<td>-.255</td>
</tr>
<tr>
<td>Continuous_Improvement</td>
<td>.275</td>
<td>.059</td>
<td>.310</td>
<td>4.652</td>
</tr>
<tr>
<td>School_Climate</td>
<td>.418</td>
<td>.067</td>
<td>.396</td>
<td>6.259</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Mgt_Commitment

The dependent variable as shown in Table 8 explains the influence of organisational process and organisational structure on Employee’s Commitment. This was used as a yardstick to examine the influence between the five variables (i.e., customer focus, training and education, staff involvement, continuous improvement, and social climate). According to the result in the table above training and education t-test coefficient is 2.269 and the p-value is 0.006 which is less than 0.05 (i.e., \( p < 0.05 \)). In the same vein, the continuous improvement test coefficient is 4.652 and p-value is 0.000. Furthermore, the result in the table above for the school climate t-test coefficient is 6.259, and the p-value is 0.000 which is less than 0.05 (i.e., \( p < 0.05 \)). This means that these variables are statistically significant at the 5% significance level.

On the other hand, both customer focus and staff involvement test coefficient are \( t = -0.020; \ p = .984 \) & \( t = -0.255; \ p = .799 \). The overall summary of this regression outcome in relation to the coefficient of top management commitment has a significant influence on top management commitment. Therefore, hypothesis \( H_2; H_4; \) and \( H_5 \) are supported while hypothesis \( H_1 \) and \( H_3 \) are not.

4.7.2 Mediation Results for School Climate on the Top Management Commitment and Student Academic Performance.

Using the same SPSS process (Table 10), this section demonstrates the results of the mediating effect of school climate on the top management commitment and student academic performance. The results are statistically and moderately significant, indicating a mediating effect of organisational culture, \( (\beta = 0.3003; \ t = 2.940, p<0.0037) \) The assessment of mediation is in line with Zhao et al. (2010) as this result reveals a complimentary mediation, meaning that mediation exists significantly in both direct and indirect effects.

Mediating Effect

********************* DIRECT AND INDIRECT EFFECTS *********************

The indirect effect of X on Y

<table>
<thead>
<tr>
<th>Effect</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>.3003</td>
<td>.1548</td>
<td>2.9395</td>
<td>.0037</td>
<td>-.0048</td>
<td>.6055</td>
</tr>
</tbody>
</table>

Indirect effect of X on Y

<table>
<thead>
<tr>
<th>Effect</th>
<th>Boot SE</th>
<th>BootLLCI</th>
<th>BootULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>School_C</td>
<td>.6708</td>
<td>.1018</td>
<td>.4927</td>
</tr>
</tbody>
</table>

********************* ANALYSIS NOTES AND WARNINGS *********************

This means that the total effect of TQM on student academic performance is explained by the indirect effect of the school climate.

5 Conclusion

School climate was found to be in line with two factors such as staff attitudes and student disruptions presenting the school environment comprising of two separate dimensions that operate independently. Staff training and attitudes were revealed to have positive influences on student performance. Teachers’
transformation through training, workshop, seminars, etc. were found to improve students’ academic performance and teachers’ confidence in classroom activities. This paper, therefore, focused mainly on the effect of school climate and TQM in the internal organizational practices of schools in Pakistan which have the activities of an organization in workforce relationships and tasks between teacher and learner (Rich et al., 2012). Some of the organizational practices of schools comprise of recruitment, performance management, selection, and organizational support to their employees, as well as quality systems improvement and internal communication mechanisms (Trussa et al., 2013). The schools that improve organizational practices through training are found to be very successful while the ones that do not train and strengthen internal organizational practices fall behind (Patapas & Smalskys, 2013).

In order to achieve of TQM, a school needs to employ strategy, efficient communication and information to enhance the quality the teachers’ teaching and discipline into the existing culture as well as the activities of a school (Trussa et al., 2013). TQM is regarded as the best tool for the development of schools, teachers, and students. Therefore, school climate and TQM have mediating effects on the quality of teaching services, and students’ performance.

References


a. Asian International Schools dissertation Concordia University - Portland


x. Gulnaz, Z. (2014). Direct and Indirect Impact of Perceived School Climate upon Student


a. http://dx.doi.org/10.3102/0034654313483907


http://www.iijmsbr.com


Muraina and Muraina (2014). Class size and school climate as correlates of secondary school students scholastic achievement in itesiwaju local government area of Oyo State, Nigeria, Global Journal of Human Social Science Research, 14 (3)


secondary school’s students in relation to habitat. International Journal For Technological Research In Engineering 1(6) 403-406


Yukl, G. & Van Fleet, D. D. (1992). Theory and research on leadership in organisations. In M. D. Dunnette and L. M. Hough (Eds.), Handbook of Industrial and...