Effect of Leadership Management and Resource Management on Teacher Satisfaction in Higher Education Institutions: An Empirical Investigation

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Abstract

The study assesses the effect of leadership management and resource management practices on teacher’s job satisfaction. This study focused on the core activities of the leadership management and resource management and the characteristic which had a direct relation with the quality of the education and satisfying teachers of the university. Using multistage random sampling method, the sample data of 985 teachers was collected from public and private sector higher education institutions of Khyber Pakhtunkhwa, Pakistan. The researcher has designed the close end questionnaire for data collection. Statistical tool was applied to analyses the data. The descriptive statistics of the study revealed that leadership management and resource management was found to be satisfied among all components. The Pearson correlation revealed that leadership management and resource management have significant relation with faculty satisfaction in HEI.

Keywords: Leadership, Management, Teacher Satisfaction, Higher Education

Introduction

In today highly competitive environment job satisfaction is one of the vital issues in all business enterprise across the world. Job satisfaction of the employees is an influential object of organization performance because it improves the productiveness of the institution. In the current years employee satisfaction and loyalty has been emphasized in the literature related to management. Most of the past researches indicated that faithful worker represent cost to an enterprise and happy and regular worker are more devoted to the continuous improvement to the quality of services (Hart & Thompson, 2007; Jun, Cai & Shin, 2006;). Whereas significant attention has been given inside the past to investigate matters associated with different practices of total quality management, organizational overall recital and customer satisfaction, the previous researches related to understand issues of quality management practices effects on employees job fulfilment and loyalty has emerged very steadily and in additional dispersed way. Inside the similar manner job satisfaction is extremely crucial since it contribute to excessive job dedication and quality of teaching and found proper direction in producing high quality graduates. The knowledge about academic’ job satisfaction will help the institutions to discover the procedure with the goal to maintain the educational abilities, reduce absentees and turnover rate, further to attract new intellectual mind into the educational line (Noraani.M, 2013).

Employee satisfactions effect the institutional overall performance as profusely as the customer pleasure. Employees are the internal customer of organization (Kanji 1999). Teachers are the personnel of education organization, and their happiness and fulfillments with the working environment can improve the quality of teaching and research. For this reason, the requirement of the teacher should be satisfied to improve the working surroundings. Empirical studies which have been worked on employee’s pleasure, much less were address the university teaching staff or overall academic (Ward & Sloane, 1998, Altaf. H, Muhammad. H. K, Muhammad. A. K 2020). The literature on employee pleasure remains immature as compared to that on client satisfaction. Consequently, employee satisfaction surveys, predominantly on employee pleasure in the better education sector, still require examine and survey.

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Objectives of the Research

1. To find the effects of leadership management and resource management on teacher satisfaction level in higher education institutions.
2. To examine the relationship between leadership management and teacher satisfaction level in higher education institutions.
3. To explore the relationship between resource management and teacher satisfaction level in higher education institutions.

Literature Review

Leadership management and resource management have identified as the most essential components. Leadership management commitment stands critical for improving the quality of organization. Good leadership could be very beneficial in implementation procedure and keep the impetus of personnel to customer fulfilment. Earlier research indicated that success of any quality improvement program in organization is mostly depends on top management leadership (Jamali, Ebrahimi & Abbaszadeh, 2010; Sharma & Gadenne, 2008). Tsang & Antony (2001) said that the role of leadership management is to set the vision for future which is clear and convincing, offering strategic leadership producing an administrative environment which empower the personnel (Ugboro & Obeng 2000), emerging a system to fulfil customer expectancy and refining organizational performance (Fuentes, Montes & Farnandas,2006). With full dedication to quality, managers can arrange and synergies public’s doings to accomplish the organizational goal (Sadikoglu & Zehir,2010). Utmost of the researcher through their empirical research recognized and explained the significant outcomes of top management commitment and leadership regarding organizational performance (Sharma & Gadenne, 2008; Fening, Pesakoveka & Amaria, 2008) and perform a crucial role in actual employment of quality management in an organization (Flyn et al 1994). The role of leadership in all organization at all level is central in producing a conducive working environment, which motivate the personnel to achieve the supportable benefits. Employee’s participation is a chief promoter amongst the employee’s Job satisfaction because it creates the environments in organization wherein the employee worried and take part in decision making activities. More involvement of the employee in their jobs assist to increase employee’s commitment and performance (Rodwell et al 1998; Lawler et al. 1998; O’Driscoll & Randall 1999). The view given by different researcher that education, science, and human resource management are basic requirements for financial and social development, quality assurance in tertiary education has risen as a standout amongst the very important requirement of educational organization. Furthermore, the quality management improvement, being at a more create position, can be moved closer as a management modernization see encouraging hierarchical practicability. (Dahlgaard-Park,Chen, Jang, & Dahlgaard, 2013). Resource management (human, physical and financial) is identified as the most essential needs for successful implementation of quality management system. Vouzas (2007), Chandler and McEvoy (2000) also supported and viewed that management of human resources commonly recognized as the utmost central requirements for improving the organization quality system. Human resources management (HRM) is a universal component that cover a variety of developmental practices perform in the organization for example employee involvement and empowerment, teamwork recognition, staff training etc. Motivated, satisfied, committed, and trained HRM perform a significant title role in enhancing organizational performance and customer satisfaction and Tari, Molina and Castejon (2007) also explained that quality results of an organization have greatly affected by human resource management. The empirical study conducted by Yang concluded that practices have a noteworthy, optimistic effect on the implementation of total quality management. Leadership management is linked with the level of continuous quality improvement, strategic planning is concerned with setting of goals and objectives and action for their achievement. Process management make sure the endures energies to plan the stream of work system in effective way which is helpful in removing the inadequacies; human resource management focus on the development of work force capacity and line up the work with high quality objectives, (Molina-Azorin et al., 2009; Holzer et al. 2009).

Table 1.1 Theoretical approach proposed for the present study. Summary of empirical studies

| Parameters                        | Results                                                                 | Supporting literature                  |
|-----------------------------------|-------------------------------------------------------------------------|---------------------------------------|
| Leadership and top management     | leadership and top management have positive relationship with job satisfaction | D. C. K Ho, Duffy, and Shin (2001), Kannan and Tan (2005), Mesut Akdere (2009), |
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C. C. Chang et al (2010), Jing Wen Yue et al. (2011), Safdar Nazeer et al. (2014), Ali Mohammad Mosadeghrad (2014), Raimonda Alonderiene et al. (2016), R.A. M. Majauskaitė (2016), Danica Bakotić (2016), Aimie Nadia Dedy. (2016), Ann Suwarena Ashton (2017)

Resource management

Resource management has positive relationship with job satisfaction

Noorliza Karia, et al. (2006), Ooi Keng Boon et al (2007), Mesut Akdere (2009), Gyaneshwar S. K. and Deepak B. (2010), Aimie Nadia Dedy. (2016)

Table 1.2 Models of job satisfaction

| Resource management | Source Saba, Irun. (2011). | Source Alhawary, F.A. Aborumman, A.H. (2011) | Suji K.B & D.W. Govender 2015 |
|---------------------|-----------------------------|-----------------------------------------------|------------------------------|
| Shun-Hsing et al 2006 | Work environment | Work itself | Work environment |
| Management system | Salary | Promotion |
| Result feedback | Working condition | Supervision |
| Organization vision | Job security | Coworkers |
| Respect | Opportunities for promotion | Pay |
| Pay and benefits | Coworker’s relation | |
| Zainudin Awang & Junaidah Hanim Ahmad (2010). | Management | Promotional opportunities | Management policies |
| Management | Relationship | Working condition | Freedom of Teachers |
| Relationship | Workload | Salary | Teachers Involvement |
| Workload | Potentials | Pay | Relations with co-workers |
| Potentials | Environment | Job security | Employer-Employee Relationships |
| Environment | Remuneration | | |
| Remuneration | | | |

Table 1.2 Models of job satisfaction (Continued)

| Conceptual Framework |
|----------------------|
| **Leadership management** |
| Vision and mission |
| Planning and feedback |
| **Resource management** |
| Physical, human resources, work environment |

Figure 1.1
Proposed Hypothesis
H1 The relationship is significant between leadership management and teacher job satisfaction.
H2 The relationship is significant between resource management and teacher job satisfaction.

Research Methodology
The study was quantitative in nature. The hypotheses of the study are descriptive in nature, therefore the study was descriptive in nature.

Population
All the universities both public and private sector of the Khyber Pakhtunkhwa was constituted as the population of the study. Therefore, all the permanent faculty of the university were constituted the population of the study.

Sampling
Multistage random sampling techniques was applied in the current study. Fifteen universities were selected for the present study ten from public sector and five from private sector were selected as a sample of the study.

Research Tool
The researcher designed a closed end questionnaire of 5-point Liker scale which was based on proposed hypothesis mentioned above these questionnaires was used to collect the data from the Khyber Pakhtunkhwa universities Pakistani. The data was analyzed to test the proposed hypothesis. The required sample size was 1000 for this reason 2000 questionnaires was distributed. Out of 2000 questionnaires 985 filled questionnaire were received back. The results were finally analyzed for conclusion.

Reliability and Validity Analysis
Reliability generally measured by Cronbach’s alpha of the teacher measurement was analyzed by using SPSS a statistical software. the reliability of leadership management was 0.87 and resource management was 0.9, this result shows that the questionnaire administered in this study was highly reliable. Gay.L. R (1992) argued if the coefficient of reliability for any test is above 0.08 was minimum standard. For validity purpose the questionnaires were checked by experts who were well qualified, had adequate experience and information in the field of quality management, teaching and research. Their feedback obtained indicated that the questionnaire was valid for present study.

Analysis of Results
Table 1.3 Descriptive statistics response of faculty (Leadership Management Commitment)

| S.No | Statement | N= 985 | Response Scale (1-5) | Mean | S.D |
|------|-----------|--------|----------------------|------|-----|
|      |           |        | VDS | DS | N | S | VS |                   |
| 1    | The university has written vision and mission statement. | 40 | 101 | 155 | 457 | 232 | 4.423 | .780 |
|      | Frequency | 4 | 10 | 16 | 46 | 24 | 3.751 | 1.052 |
|      | Percentage | 54 | 119 | 194 | 430 | 188 | 3.745 | 1.003 |
| 2    | Vision and mission are widely known by all. | 31 | 88 | 203 | 442 | 221 | 3.348 | 1.088 |
|      | Academic activities are planned according to the vision and mission. | 3 | 9 | 21 | 45 | 22 | 3.551 | 1.088 |
|      | Top management has planning and feedback mechanism to improve academic activities. | 47 | 132 | 225 | 393 | 188 | 3.588 | 1.093 |
|      | Top management conducts student satisfaction surveys regularly. | 5 | 13 | 23 | 40 | 19 | 3.453 | 1.118 |
| 3    | Top management formally assesses the requirements of market and other stakeholders for launching any program. | 58 | 157 | 294 | 336 | 140 | 3.348 | 1.088 |
|      | Top management ensures quality in procuring resources (physical, human and financial resources). | 54 | 141 | 235 | 430 | 125 | 3.438 | 1.056 |
| 4    | Top management resolve issues related to teaching and learning. | 64 | 149 | 201 | 419 | 152 | 3.453 | 1.118 |
|      | Frequency | 6 | 15 | 20 | 43 | 15 | 3.348 | 1.088 |
|      | Percentage | 101 | 155 | 457 | 232 | 4.423 | .780 |

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The university ensures quality in procuring resources (physical, human and financial resources) and resolve issues related to teaching and learning but 19% and 21% were found to be dissatisfied. 44% and 43% of the respondents observed that top management of the university seriously considers the employees suggestions and encourages student feedback in designing academic programme while 17% and 22% were not satisfied. 57% and 58% of respondents viewed that top management of the university has written vision and mission statement and widely known by all. 14% and 17% were found to be dissatisfied. 67% and 59% respondents observed that the university has adequate job security. The university provides attractive salary package. The university offers reasonable. Faculty workload is reasonable. The university has performance-based reward system. The university conducts student satisfaction surveys regularly and properly considers the market needs and other shareholders. The findings created in Table 1.3 revealed that the mean value of all the indicators were found to be range from 3.2 to 4.4 which indicate above average observance. 70% and 63% respondents viewed that the university has written vision and mission statement and widely known by all. 14% and 17% were found to be dissatisfied. 67% and 59% respondents observed that academic activities are planned according to the vision and mission and top management has planning and feedback mechanism to improve academic activities while 12% and 18% were not satisfied. The table also revealed that 63% and 48% of respondents viewed that top management of the university conducts student satisfaction surveys regularly and properly considers the market needs and other shareholders for initiating any program while 17% and 22% were found to be dissatisfied. 57% and 58% respondents also opined that top management of the university ensures quality in procuring resources (physical, human and financial resources) and resolve issues related to teaching and learning but 19% and 21% were found to be dissatisfied 44% and 43% of the respondents observed that university top management seriously considers the employees suggestions and encourages student feedback in designing academic programme while 29% and 27% were observed as dissatisfied.

### Table 1.4 Descriptive statistics response of teachers (Resource Management)

| S.No | Statement                                                                 | N= 985 | Response Scale (1-5) | Mean   | S.D   |
|------|---------------------------------------------------------------------------|--------|-----------------------|--------|-------|
| 1    | Safety and security measures in the campus.                               |        | Frequency             | 3.403  | 1.1752|
|      |                                                                          |        | Percentage            | 3.46   | 1.1846|
| 2    | Adequate parking facilities.                                             |        | Frequency             | 3.82   | 1.0694|
|      |                                                                          |        | Percentage            | 3.35   | 1.194 |
| 3    | Adequate sports facilities with modern equipment’s                       |        | Frequency             | 3.37   | 1.089 |
|      |                                                                          |        | Percentage            | 3.44   | 1.160 |
| 4    | Adequate accommodation and transport facilities with proper security.    |        | Frequency             | 3.36   | 1.207 |
|      |                                                                          |        | Percentage            | 3.339  | 1.203 |
| 5    | The university has Wi-Fi services                                        |        | Frequency             | 3.41   | 1.128 |
|      |                                                                          |        | Percentage            | 3.060  | 1.209 |
| 6    | Sufficient laboratory equipment, ICT facilities                          |        | Frequency             | 3.46   | 1.1846|
|      |                                                                          |        | Percentage            | 3.461  | 1.128 |
| 7    | Furnished and well-equipped classrooms.                                  |        | Frequency             | 3.061  | 1.209 |
|      |                                                                          |        | Percentage            | 3.061  | 1.209 |
| 8    | Faculty has freedom of expression at the university.                    |        | Frequency             | 3.46   | 1.1846|
|      |                                                                          |        | Percentage            | 3.461  | 1.128 |
| 9    | Faculty workload is reasonable.                                          |        | Frequency             | 3.46   | 1.1846|
|      |                                                                          |        | Percentage            | 3.461  | 1.128 |
| 10   | The university offers attractive salary package.                         |        | Frequency             | 3.46   | 1.1846|
|      |                                                                          |        | Percentage            | 3.461  | 1.128 |
| 11   | The university provides adequate job security.                           |        | Frequency             | 3.46   | 1.1846|
|      |                                                                          |        | Percentage            | 3.461  | 1.128 |
| 12   | The university has performance-based reward system.                      |        | Frequency             | 3.46   | 1.1846|
|      |                                                                          |        | Percentage            | 3.461  | 1.128 |
Healthy working relation and cooperation exists among the faculty.

| Statement                                                                 | Frequency | Percentage | VDS | DS | N | S | VS | Mean  | S. D |
|---------------------------------------------------------------------------|-----------|------------|-----|----|---|---|----|-------|------|
| Satisfied with quality of academic programs and curricula offered by the university. | 39        | 122        | 175 | 444 | 205 |
| Satisfied with quality of services providing by the university.          |           |            |     |     |    |    |     | 3.664 | 1.0610 |
| My choice to join this university is a wise one.                         | 37        | 59         | 149 | 442 | 298 |
| Proud to be a part of the university.                                    | 52        | 72         | 167 | 395 | 299 |
| Like to stay at the university.                                          | 49        | 74         | 192 | 402 | 268 |
| Recommend the university to my relatives and friends.                    |           |            |     |     |    |    |     | 3.778 | 1.0803 |

Note. Very Dissatisfied = 1, Disatisfied = 2, Neutral = 3, Satisfied = 4, Very Satisfied = 5. 1-2 = Minimum, 2-3 = Below average, 3 = Average, 3-4 above the average = 4-5 = Sufficiently above the average (based on mean value)

In table 1.4 the result revealed that the mean value of all the indicators was found to be range from 3.0 to 3.8 which indicate above average observance. 68 %, 61%, 54%, 57%, 58% and 71% respondents were found to be satisfied with safety and security measures in the campus, Adequate parking facilities, Adequate sports facilities with modern equipment, Adequate accommodation and transport, facilities with proper security, Wi-Fi services, Sufficient laboratory equipment, ICT facilities and Furnished and well equipped class rooms while 14%, 21%, 24%, 14 and 18% were found to be dissatisfied. The table also showed that 53% and 55% respondents were satisfied with faculty freedom of expression at the university reasonable workload while 23% and 26% were observed as dissatisfied. 53%, 56%, 41% and 61% respondents were opinions about the adequate salary package, adequate job security, performance-based reward system and healthy working relation among their collages but 25% 21%, 32% and 16% were found to be disagree.

Table 1.5 Descriptive statistics response of faculty overall satisfaction

Table 1.6 Correlations analysis of the of teachers’ responses

| N=985 | LM | RM | OS |
|-------|----|----|----|
| LM    | .721** | 1  |    |
| RM    | .000  |    |    |
| OS    | .56** | .69** | 1 |

**. significant correlation at 0.01 level (2 tailed).
The table 1.6 presents the relationship between factors. The results given in the table presented that positive and highly significant correlation was found between all the variables at 0.01 level of significance (P = .000). The correlation was found highly significant between leadership management and resource management (r = 0.721, P = .000). the correlation was also significant between leadership management and overall faculty satisfaction (r = .56, P = .000); the result also revealed that correlation between resource management and faculty satisfaction (r = .69, P = .000) was found significant at the 0.01 level. This indicated that leadership management and resource management were highly correlated with teachers’ satisfaction.

Table 1.7 Hypothesis testing

| Hypothesis                                                                 | Results  |
|---------------------------------------------------------------------------|----------|
| H1 The relationship is significant between leadership management and teacher job satisfaction. | Accepted |
| H2 The relationship is significant between resource management and teacher job satisfaction. | Accepted |

Discussion

The literature and research study revealed that the leadership management in universities is more important element for the improvement of organization and individual performance. The results of the study further revealed that university teacher performance could be improve through institutional vision, mission, planning and feedback mechanism. The results also demonstrated that regular satisfaction surveys in the university and in the light of feedback evaluate the requirements of stakeholders for initiating any program may have positive impact on teacher satisfaction. The study also demonstrated that top management of the university ensures quality in acquiring resources (physical, human, and financial resources) and resolve issues related to teaching and learning could play a significant role in teacher satisfaction. Leadership management seriously considers the employees suggestions and encourages student feedback in designing academic programme could be beneficial for teacher satisfaction in an organization. The role of leadership management is also supported by the view of A hire et al (1996) that leadership management works as a driver of total quality management implementation, creating values, goals and system to fulfil customers’ demands and expectation, which leads to improve organizational performance. The importance of leadership management further associated with view of Anderson et al (1994) that top leadership management leads to create long term vision for the institution, determined by changing customer requirements. The study also supported by Juran and Gryna (1993) that leadership and top management organize institutional policy, establish quality goals, deliver problem-oriented training and improvement and also provide resources. The study also concurs with others quality experts and researchers that excellent leadership management focus on quality, take part in quality improvement efforts, make policies and goals for quality, promote strategic directions for the organization, considering market demands and customer needs, organizing resources to achieve the customer satisfaction and organizational productivity (Crosby, 1979; Deming, 1986; Juran 1988; Black and Porter, 1996; Parejo and Sohal 2003; Saraph et al 1989; Flynn et al 1994; Sila and Ebrahimpour, 2005).

The percentage of the responses showed that resource management was observed above the average about safety and security measures in the campus, adequate parking facilities, adequate accommodation and transport facilities with proper security, Wi-Fi services, sufficient laboratory equipment, ICT facilities, furnished and well equipped class room, adequate sports facilities with modern equipment’s, faculty freedom of expression, reasonable workload, adequate salary package and job security, performance-based reward system and healthy working relation among their collages. The results of the study are concur with Sami Karna, Paivi Julin (2014), Stephen Wilkins and Balakrishman (2013), Gruber et al (2010), Sangeeta et al. (2004), Spanbauer (1995). Bayraktar et al. (2008) empirical study have also supported the present study by concluding that reward and recognition, people involvement, and teamwork lead to customer satisfaction and a culture favourable for developing quality improvement. Many researcher argued that university vision, team work, management support, organization policies, pay and benefits, good working environment, job security and equal workload are significantly related with job satisfaction (Neha.A., Yajulu.M, 2012; Ali.A.B and Matloub.H, 2014; Naseem.I and Salman.M, 2015; Dawit.D.D, Getachew.L.A, Ashenafi.A.M 2017). Resource management is very important key elements for quality management.
system and play critical role in higher education perspective in process improvement and improving customer satisfaction. Kandie, G. & Senaji, (2018) argument that resources required in the university like academic material and conducive working environment perform a significant role in making the customer satisfied with university. When the university gives attention to service supply through the provision of good resources the customer feels more secure and satisfied.

**Conclusion and Recommendation**

The faculty opinion about leadership management and resource management was found to be satisfied among all components. The results of the study explained a strong relation between leadership management and resource management and satisfaction of teachers. The present research disclosed that leadership management and resource management are equally important when employ quality management practices in university. The study also exposed that all the two factors have significant correlation with teacher satisfaction. The study showed significant relation between leadership management and resource management with teacher satisfaction in HEI. Therefore, it is recommended that top management and resource management system should be thoroughly plan, engage the stakeholder, give them feedback and encourage them.

**References**

Aimie Nadia Dedy et al. (2016). An analysis of the impact of total quality management on employee performance with mediating role of process innovation. *IOP Conference Series: Materials Science and Engineering*. doi:10.1088/1757-899X/131/1/012017

Ahire, S. L., Golhar, D. Y., & Waller, M. W. (1996). Development and validation of TQM implementation constructs. *Decision Sciences*, 1(27), 23–56. doi:10.1111/j.1540-5915.1996.tb00842.x.

Ali Ahmad Bodla and Matloub Hussain. (2014). Determinants of Job Satisfaction in Academic Professionals of Pakistan. *Sukkur IBA Journal of Management and Business*, 1(1), 20-39, ISSN 2410-1885.

Ali Mohammad Mosadeghrad (2014). Strategic Collaborative Quality Management and Employee Job Satisfaction. *International Journal of Health Policy Management*, 2 (4), 167–174

Alhawary, F.A. Aborumman, A.H. (2011). Measuring the Effect of Academic Satisfaction on Multi-Dimensional Commitment: A Case Study of Applied Science Private University in Jordan. *International Business Research*, 4(2), 153-160.

Altaf.H, Muhammad.H.K, Muhammad.A.K (2020). Interplay of Organizational Commitment and Job Performance in Academic Sector. *Sir Syed Journal of Education & Social Research*, 3(1), 152-DOI: https://doi.org/10.36902/sjser-vol3-iss1-2020

Ann Suwara Ashton (2017). How human resources management best practice influence employee satisfaction and job retention in the Thai hotel industry, *Journal of Human Resources in Hospitality & Tourism*, 17(2), 175–199. DOI: 10.1080/15332845.2017.1340759.

Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *The Journal of Marketing*, 58(3), 53–66.

Bayraktar, E,Ekrem Tatoglu & Selim Zaim (2008). An instrument for measuring the critical factors of TQM in Turkish higher education, *Total Quality Management & Business Excellence*, 19(6), 551-574, DOI: 10.1080/14783360802023921

Black, S.A., Porter, L.J. (1996): Identification of the critical factors of TQM. *Decision. Science*. 27(1), 1–21

Chang C. C., Chiu C. M. & Chen C. A. (2010). The effect of TQM practices on employee satisfaction and loyalty in government. *Total Quality Management & Business Excellence*, 21(12), 1299-1314: http://dx.doi.org/10.1080/14783363.2010.530796

Chandler,G.N., and McEvoy,G. M (2000). Human Resource Management, TQM, and Firm Performance in Small and Medium-size Enterprises, *Entrepreneurship Theory and Practice* 25 (1), 43–57.

Crosby, P. (1979). Quality is free: The art of making quality certain. New York: McGraw-Hill.

Cua, K.O., McKone, K.E. and Schroeder, R.G. (2001). Relationships between implementation of TQM, JIT, and TPM and manufacturing performance, *Journal of Operations Management*, 19 (2), 675-94.
Dahlgaard-Park, S.M., Chen, C.K., Jang, J.Y., & Dahlgaard, J.J. (2013). Diagnosing and prognosticating the quality movement – A review on the 25 years quality literature (1987–2011). Total Quality Management & Business Excellence, 24(1/2), 1–18.

D. C. K. Ho, V. G. Duffy & H. M. Shih (2001). Total quality management: An empirical test for mediation effect, International Journal of Production Research, 39(3), 529-548, DOI: 10.1080/0020754010005709

Danica Bakotić (2016). Relationship between job satisfaction and organisational performance, Economic Research-Ekonomiska Istraživanja, 29(1), 118-130, DOI: 10.1080/1331677X.2016.1163946

Das, A., Handfield, R., Calantone, R., & Ghosh, S. (2000). A contingency view of quality management – the impact of international competition on quality. Decision Sciences, 31(3), 649–690. doi:10.1111/j.1540-5915.2000.tb00938.x.

Dawit Daniel Dando Getachew Liben Abate, Ashenafi Adugna Mola (2017). Factor Analysis of Academic Staff Satisfaction in Dire Dawa University, Ethiopia. Science Journal of Education. 5(2), 71-81.

Deming, W. E. (1986). Out of the crisis. Cambridge, MA: MIT Press.

Fuentes, F. M., Javier L.M. F. & Luis, M. M. F (2006). Total Quality Management, Strategic Orientation and Organizational Performance: The Case of Spanish Companies. Total Quality Management, 3, 303–323.

Fuentes, M. M., F. J. L. Montes, and L. M. Fernández. (2006). Total Quality Management, Strategic Orientation and Organizational Performance: The Case of Spanish Companies. Total Quality Management & Business Excellence 17 (3): 303–323.

Fening, F. A., G. Pesakovic, and P. Amaria. (2008). Relationship between Quality Management Practices and the Performance of Small and Medium Size Enterprises (SMEs) in Ghana, International Journal of Quality and Reliability Management 25 (7): 694–708

Gay, L.R. (1992), Educational Research Competencies for Analysis and Application, Macmillan, New York, NY.

Flynn, B. B., Schroeder, R. G., and Sakakibara, S. (1994). A framework for quality management research and an associated measurement instrument, Journal of Operations Management, 11, 339-366.

Ghaffar, A. Ameer, B. Arshad, N. and Urooj, F. (2013). Factors Affecting Job Satisfaction level of Academic staff in Pakistan. Journal of Education and Practice,4 (6), 181-203.

Ghulam, M.,Shafiq, R and Nadeem, A (2015). Impact of Work Environment on Teachers’ Job Satisfaction A Case Study of Private Business Universities of Pakistan, European Journal of Business and Management, 7(13), 299-305.

Gruber, T., Fub.S, Voss .R and Glaser-Zikuda,M (2010). Examining student satisfaction with higher education services: Using a new measurement tool, International Journal of Public Sector Management, 23(2), 105-123

Gyaneshwar S. K. and Deepak B (2010). Development of a theoretical framework of supply chain quality management, Serbian Journal of Management 5 (1) 127 - 142

Jamali, G., Ebrahim, M., Abbaszadeh, M. A., (2010). TQM Implementation: An Investigation of Critical Success Factors. International Conference on Education and, Management Technology, 112-116

Jing-Wen Yue, Keng-Boon Ooi and Choong Chee Keong(2011).The relationship between people-related total quality management (TQM) practices, job satisfaction and turnover intention: A literature review and proposed conceptual model. African Journal of Business Management. 5(15), 6632-6639, DOI: 10.5897/AJBM10.435

Jurian, J. M. (1988). Jurian on planning for quality. New York, NY: Free Press.

Jurian, & F.M., Gryna. (1993). Quality Planning and Analysis (3rd ed.). McGraw-Hill Book Company: New York

Jun,M., Cai, S., & Shin, H. (2006). TQM practice in Maquiladoras: Antecedents of employee satisfaction and loyalty. Journal of Operations Management, 24(6), 791–812.

Kannan,V.R. and Tan,K. (2005). Just-In-Time, Total Quality Management, and Supply Chain Management: Understanding Their Linkages and Impact on Business Performance. Omega, 33(2), 153-162.
Lawler III, E.E., Mohrman, S.A., and Ledford, G.E (1998). Strategies for high performance organizations – the CEO report employee involvement, TQM, and reengineering programs in Fortune 1000 corporations. San Fransisco: Jossey-Bass Publishers.

Martinez-Lorente, A., Dewhurst, F. and Dale, B. (1998). Total quality management: origins and evolution of the term, The TQM Magazine, 10 (6), 378-86.

Kandie, H.K., Guyo, W. & Senaji, T.A. (2018). Effect of resource management on students’ satisfaction in ISO 9001: 2008 Certified Universities in Kenya. Archives of Business Research, 6(2), 93-108.

Canjii, G. K e Tambi, M. B. A. (1999). Total quality management in UK higher education institution. Total Quality Management, 10 (1), 129-153.

Mustafa, D., Nizamettin, B.S.Z. and Mehves, T (2005). Critical Factors of Total Quality Management and Its Effect on Performance in Health Care Industry: A Turkish Experience. Problems and Perspectives in Management, 3 (4), 220-235.

Mesut Akdere (2009) A multi-level examination of quality-focused human resource practices and firm performance: evidence from the US healthcare industry, The International Journal of Human Resource Management, 20(9), 1945-1964, DOI:10.1080/09544780610637677.

Rehaman, S., & Bullock, P. (2005). Soft TQM, hard TQM, and organizational performance relationships: An empirical investigation. Omega, 33, 73–83. doi: 10.1016/j.omega.2004.03.008
Sharma, B., and D. Gadenne (2008). An Empirical Investigation of the Relationship between Quality Management Factors and Customer Satisfaction, Improved Competitive Position and Overall Business Performance. *Journal of Strategic Marketing* 16 (4), 301–314.

Sadikoglu, E., and C. Zehir (2010). Investigating the Effects of Innovation and Employee performance on the Relationship between Total Quality Management Practices and Firm Performance: An Empirical Study of Turkish Firms. *International Journal of Production Economics* 127, 13–26.

Safdar Nazeer, M Mohsin Zahid, and Malik Faisal Azeem (2014). Internal Service Quality and Job Performance: Does Job Satisfaction Mediate? *Journal of Human Resources Management and Labor Studies*, 2(1), 41-65

Sami K. P. J (2015). A framework for measuring student and staff satisfaction with university campus facilities. *Quality Assurance in Education*, 23 (1), 47 – 66

Sangeeta, S., Banwet, D. K., Karunes, S. (2004). Customer requirement constructs: the premise for TQM in education: A comparative study of select engineering and management institutions in the Indian context. *International Journal of Productivity and Performance Management*, 53(5/6), 499 –520

Saraph, J.V., Benson, G., Schroeder, R.G (1989). An instrument for measuring the critical factors of quality management. *Decision. Science*. 20(04), 810–829.

Sila, I., & Ebrahimpour, M. (2005). Critical linkages among TQM factors and business results. *International Journal of Operations & Production Management*, 25(11), 1123–1155. doi:10.1108/01443570510626925

Spanbauer, S. J. (1995). Reactivating higher education with total quality management: Using quality and productivity concepts, techniques, and tools to improve higher education, *Total Quality Management*, 6 (5), 519-538, DOI: 10.1080/09544129550035189.

Stashevsky, S., & Elizur, D. (2000). The effect of quality management and participation in decisionmaking on individual performance. *Journal of Quality Management*, 5(1), 53–65. doi:10. 1016/S1084-8568(00)00012-2

Stephen.W.M, & Stephens.B (2013). Assessing student satisfaction in transnational higher education. *International Journal of Educational Management*, 27 (2), 143-156

Sujit Kumar, & Govender, D. (2015). Theoretical Framework of the factors affecting university academics job satisfaction. *International Business & Economics Research Journal (IBER)*, 14(2), 317-326. https://doi.org/10.19030/iber.v14i2.9167

Tam, W. M. & Cheng, Y. C. (1997). Multi-models of quality in education, *Quality Assurance in Education*, 5(1), 22–31

Tari, J. J., J. F. Molina, and J. L. Castejón. 2007.The Relationship between Quality Management Practices and their Effects on Quality Outcomes. *European Journal of Operational Research* 183, 483–501.

Tsang, J. H. Y., and J. Antony. (2001). Total Quality Management in UK Service Organisations: Some Key Findings from a Survey. *Managing Service Quality* 11(2): 132–141.

Ugboro, I. O., and K. Obeng (2000). Top Management Leadership, Employee Empowerment, Job Satisfaction, and Customer Satisfaction in TQM Organizations: An Empirical Study. *Journal of Quality Management* 5, 247–272.

Veeri Arumugam and Keng-Boon Ooi (2008). TQM practices and quality management performance an investigation of their relationship using data from ISO 9001:2000 firms in Malaysia. *The TQM Magazine* 20(6), 636-65

Vouzas, F. 2007. “Investigating the Human Resources Context and Content on TQM, Business Excellence and ISO 9001:2000, *Measuring Business Excellence* 11 (3), 21–29.

Ward, M. and Sloane, P. (1998). Job satisfaction: the case of the Scottish academic profession, *mimeo, University of Aberdeen, Aberdeen.*

Yang, C. C. (2006). The Impact of Human Resource Management Practices on the Implementation of Total Quality Management: An Empirical Study on High-tech Firms. *The TQM Magazine* 18 (2): 162–173.