



Total Quality Management and Administrative Effectiveness in Public Higher Institutions in Rivers State

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ABSTRACT

The study investigated the relationship between total quality management and administrative effectiveness in public higher institutions in Rivers State. Total quality management was conceptualized with training and teamwork as the dimensions of total quality management while administrative effectiveness was measured with productivity. The study answered two research questions and tested 2 null hypotheses in order to establish the hypothetical formulation on the relationship between total quality management and administrative effectiveness of public higher institutions in Rivers State. The study population comprised of the 399 principal officers and administrators of public higher institutions in Rivers State. The study sample comprised 200 Principal Officers and administrators in public higher institutions in Rivers State. The study sample size was determined with the aid of Taro-Yamen's formula. Pearson's Product Moment Correlation was used to test the hypotheses with the aid of the Statistical Packages for Social Science, version 23.0. The p-values were calculated to determine the significance of the hypothesized relationship. Analytical outcomes revealed statistically positive and significant relationships between the dimensions of total quality management and components of administrative effectiveness. Based on the findings, the study concluded that total quality management has significant and positive relationship with administrative effectiveness of public higher institutions in Rivers State. The study therefore, recommended that administrators of public higher institutions should train and retrain their staff as this can guarantee administrative effectiveness; administrators of public higher institutions should engage in teamwork with their employees aimed at creating good working environment.

Keywords: Total Quality Management, Training, Teamwork and Administrative Effectiveness

Introduction

Administration is an important activity because it maintains an organization and directs the activities of staff in their relations towards the accomplishment of the organization's purposes. In the school system, the process is referred to as educational administration or school administration (Peretomode, 2001). Nwankwo as cited in Okoroma (2019) defined educational administration as the process of systematic arrangement of human and material resources and programmes that are available for education and the use of them carefully and systematically within defined guidelines or policies to achieve educational goals

Efficiency is concerned with 'doing things right' while effectiveness is concerned with 'doing the right things'. Effectiveness is associated with strategic management while efficiency is related to operational management.

Administrative effectiveness denotes the ability of the administrator to achieve the goals and objectives of the organization. An organization cannot operate effectively if it does not satisfy its objectives. The more objectives the organization can satisfy the more effective the organization is deemed to be. There should therefore be a mutual reinforcement of objectives whereby individuals and organizational objectives are accomplished together.

The term 'higher' assumes that something of the same kind exists that is lower. The notion of higher education, therefore, presupposes that higher education supplies something better that is provided in other forms of education. Thus, the concept clearly assumes that higher education follows after other educational processes, and adds what they had been offered to its clients. Educational administration and higher educational administration are two related fields of study that focuses on the preparation of individuals for a broad range of leadership position in educational enterprise- public and private schools, colleges and universities, state and federal offices and other educational-related agencies in both public and private sectors. However, while educational administration focuses on preparing individuals for leadership roles both in the public and private primary, secondary levels and education related agencies, higher educational administration is a unique field of specialization committed to preparing higher education administrators and operators. It is also for training individuals for administrative positions in higher education (colleges, universities, etc) and those interested in becoming scholars and researchers in the field of higher education.

Although, there is a diversity of opinion among administrators, faculty members, staff and students about what the unique mission of higher education is, there is general acceptance that what distinguishes higher education institutions and makes them different in relation to other agencies of society is their purpose which Uche and Omorojor (2020) summarized as follows:

- i. The acquisition, development and inculcation of the proper value orientation for the survival of the individual and the society.
- ii. The development of the intellectual capacities of individual to understand and appreciate their environment
- iii. The acquisition of physical and intellectual skills which will enable individuals to develop into useful member of the community
- iv. Research to advance knowledge, wisdom and understanding
- v. Refinement of knowledge through research
- vi. Preservation of knowledge
- vii. Instruction to disseminate or impart existing and new knowledge and information
- viii. To provide service to the community

Total Quality Management (TQM) as a system of management practice that is based on the principle that every member of staff in an organization must be committed to maintaining standards of work performance in every aspect of the organizations operations (Abu, Zamab & Anjain, 2012). This implies that TQM entails organization wide effort which ensures employee's continuous improvement on their competencies to provide on demand, the services that are particularly needed by the customers (Amie-Ogan & Sunday, 2021). In view of the above, TQM could be referred to as a strategy calculated to enhance the school administrator's performance through his/her functions of: programme planning and policy formulation; provisions of funds and facilities maintenance, personnel training/development, improvement of instructional programmes and provision of instructional materials, provision of students' personnel services and creation of a good school community relationship. These functions are meant to promote effective work performance thereby achieving delivery of quality education to students in the public higher institutions in Rivers State.

In recent times however, it is adopted in the educational system of countries of the world to achieve effective school administration and the delivery of quality education. This is as a result of the fact that investment in human capital development is fundamental to the development of every organization as well as nations of the world, as it does not only to ensure steady economy but organizational growth, and better standards of living of a country's citizenry (Sallis, 2012).

Observations show that human capital development cannot be achieved in isolation without governments' intervention at all levels of education to provide quality education for her citizenry for enhanced cognitive development of both pupils and students in the primary, secondary and higher institutions (Amie-Ogan & Sunday, 2021). According to Padhi (2010), ethics, training for continuous quality improvement; quality consistency; participation of academics, students and non-academic staff; satisfaction of the clients; and the existence of management procedures that reinforce quality are a number of quality management programs that nobody would consider irrelevant in the context of higher education. Arcaro (2002) opines that quality can create an ambiance where educationalists, parents, government officials, community representatives, and business leaders work jointly to deliver students with the resources they need to meet current and future academic, business, and societal needs. Effective leadership and team management will really enhance the rapid response of organizations to the demands of today's economy and most of the organizations survive in the increase and rapid change in customers demand by being effective in management of all teams which thereby encourage and motivate workers to boost their productivity which aids and add quality to customers satisfaction (students) leading to the business productivity (Adeleke, 2008). Worthy of note is the importance of effective communication required to achieve organizational goals. This means that at all levels, the vision, mission and goals should be communicated to the staff members and students of the organization as well as the society. Again, there should be free flow of information in the institution especially among the team members, this is to ensure that they have access to information, and in turn they will contribute meaningfully to the institution's activities.

Training strives for continuously improving the quality of products or services in response to continuous feedback (Total Quality Management, 2002). Improvement is indeed equally applicable to each and every field including higher education; continuously better training, better learning, better methods of teaching, improved curricula, better teaching and learning environment, producing better citizens, better intellectual, social and professional development and many more. Formative and continuous assessment can provide feedback for continuous improvement in higher education (Reid & Sanders, 2007). The proponents of TQM are of the opinion that there is always a better way of undertaking organizational procedures. This philosophy always aims at higher and better paths to achieve results. TQM is therefore a change agent that seeks the better way, all the time and requires commitment of all organizational members. Continuous improvement is the building block that establishes a company in a competitive advantageous position in the market and this begins with a commitment to zero defect. This is a philosophy of always aiming higher and finding a better path to achieve results.

Continuous training emphasizes enhanced learning and experimentation which enables organizations to continue to develop new skills and new capabilities. Continuous training therefore ensures that organizations learn from results, improves operations and outputs from what it learns and standardizes what it does well in a documented quality management system which must be done in a planned, systematic and conscientious manner to create an atmosphere that saturates the entire organization.

The Nigerian Educational sector seem to be grappling with a lot of administrative challenges. This situation is succinctly expressed in the work of Odia and Omofonmwan (2007), which stated that the Nigeria educational system today is plagued by decline in standard, deterioration of facilities, examination malpractices, mass promotion syndrome and the like. This sorry situation has not only negatively affected the quality of the products of Nigerian

educational institutions but also the quality of the productive manpower of the country. The situation with the educational sector in Rivers State is a reflection of the national problem. Onyeike and Owuama (2012) pointed out that the effect of the poor administration of the educational system both in the State and the nation are similar as both experience high rate of drop out, mass failure in public exams, and general wastage of human and material resources. Hence, there is widening skills gap that can only be bridged with a drastic improvements in the management of educational institutions. However, this is not yet the case as the educational sector in the State still grappling with a barrage of problems including those associated with poor quality resulting from dysfunctional management systems. The attempts to institute quality control measures have not yielded the desired results and the resultant effect is poor leadership, infrastructure, workforce, poor students' academic performance etc., all of which diminish the chances of effective goal attainment in these educational institutions. As a consequence, staffs' are de-motivated leading to decrease in students' satisfaction.

Purpose of the Study

The general aim of the study was to determine the relationship between total quality management and administrative effectiveness of public higher institutions in Rivers State. Specifically, the objectives of the study were to:

- i. Find out the relationship between training and the administrative effectiveness of public higher institutions in Rivers State.
- ii. Determine the relationship between teamwork and the administrative effectiveness of public high institutions in Rivers State

Research Question

The following research questions guided the study;

- i. What is the relationship between training and the administrative effectiveness of public higher institutions in Rivers State?
- ii. What is the relationship between teamwork and the administrative effectiveness of public higher institutions in Rivers State?

Hypotheses

The following null hypotheses were formulated to guide the study and were tested at 0.05 level of significance:

H₀₁: There is no significant relationship between training and administrative effectiveness of public higher institutions in Rivers State.

H₀₂: There is no significant relationship between teamwork and administrative effectiveness of public higher institutions in Rivers State.

Methodology

This study adopted the correlation research design. According to Tan (2014), a correlation study seeks to ascertain relationships between two or more variables. The population of the study comprised 399-administrators of public higher institutions. This includes 41-Principal Officers, 70-Deans and 288-Heads of Department in the eight public higher institutions in Rivers State. The population represents the total number of Principal Officers, Deans and HOD's. The sample size for this study comprised two hundred (200) Principal Officers and administrators in public higher institutions in Rivers State. The study sample size was determined with the aid of Taro-Yamen's formula. The study employed two questionnaires titled "Total Quality Management Questionnaire (TQM) and Administrative Effectiveness of Higher Education Questionnaire (AEHEQ)." The instrument had two sections A and B. Section A was used to elicit information on the demographic data of the respondents while Section B sought to contain expected responses of administrators regarding the research questions. Section B contains 22 items in all (7 items for each independent construct or variable and 8 for the dependent variable) All items in section B was measured using 4-point Likert Scale as follows: Strongly Agree 4, Agree 3, Disagree 2 and Strongly Disagree 1. The research instrument was validated by experts in Measurement and Evaluation in Faculty of Education, Rivers State University, to scrutinize, analyze both face and content validity in terms of clarity and appropriateness and the reliability calculated using cronbach alpha method of statistics that yielded 0.79, 0.80 and 0.85. The research questioned were answered using pearson product moment correlation (r) while z -ratio was used to test the hypotheses at 0.05 level of significance.

Results

Research Question 1

Table 1: correlation matrix of the Relationship between Training and Administrative Effectiveness of Higher Institutions

		Training	Administrative Effectiveness
Training	Pearson Correlation	1	.805**
	Sig. (2-tailed)		.000
	N	200	200
Administrative Effectiveness	Pearson Correlation	.805**	1
	Sig. (2-tailed)	.000	
	N	200	200

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2023.

The SPSS output on Table 1 reveals a correlation coefficient of 0.805** between training and administrative effectiveness, indicating a very strong significant relationship between training and administrative effectiveness. More so, the probability value (0.000) is less than the critical value (0.05), this shows that there is a very strong significant relationship between training and administrative effectiveness. This further implies that training can be used to achieve administrative effectiveness among public higher institutions in Rivers State. Based on this, we reject the null hypothesis that there is no significant relationship between training and administrative effectiveness of public higher institutions in Rivers State and accept the alternate hypothesis that there is a very strong, significant relationship between training and administrative effectiveness of public higher institutions in Rivers State.

Research Question 2

Table 2: correlation matrix of the Relationship between Teamwork and Administrative Effectiveness of Higher Institutions

		Teamwork	Administrative Effectiveness
Teamwork	Pearson Correlation	1	.833**
	Sig. (2-tailed)		.000
	N	200	200
Administrative Effectiveness	Pearson Correlation	.833**	1
	Sig. (2-tailed)	.000	
	N	200	200

** . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2023.

The SPSS output on Table 2 reveals a correlation coefficient of 0.833** between teamwork and administrative effectiveness, indicating a very strong significant relationship between teamwork and administrative effectiveness. More so, the probability value (0.000) is less than the critical value (0.05), this shows that there is a very strong significant relationship between teamwork and administrative effectiveness. This further implies that teamwork can be used to achieve administrative effectiveness among public higher institutions in Rivers State. Based on this, we reject the null hypothesis that there is no significant relationship between teamwork and administrative effectiveness of public higher institutions in Rivers State and accept the alternate hypothesis that there is a very strong, significant relationship between teamwork and administrative effectiveness of public higher institutions in Rivers State.

Discussion of Findings

Relationship between Training and Administrative Effectiveness of Public Higher Institutions in Rivers State, Nigeria

From results of the correlation analysis, it can be seen that there is a correlation coefficient of 0.805** between training and administrative effectiveness, indicating a very strong significant relationship between training and administrative effectiveness. More so, the probability value (0.000) is less than the critical value (0.05), this shows that there is a very strong significant relationship between training and administrative effectiveness.

The study findings are in line with the findings of several empirical studies. The corroborates with Amie-Ogan and Sunday (2021) as they carried out research on Total Quality Management Strategies and School Administrators' Performance in Public Senior Secondary Schools in Port Harcourt Metropolis of Rivers State. The study findings revealed that employees' involvement and benchmarking have a significant positive relationship with school administrators' performance in public senior secondary schools in Port Harcourt Metropolis of Rivers State. Similarly, the study findings are in tandem with Chuktu (2021) which investigated the influence of Total Quality Management (TQM) practices on institutional effectiveness of secondary schools in Cross River State, Nigeria. The study adopted a survey research design. The result of the analysis revealed that Total Quality Management in fund management practice and facilities/equipment management practice significantly influences institutional effectiveness of secondary schools in terms of organizational innovations, learning environment and learning outcome in Cross River State.

The study findings are in consonance with Adeyemi (2020) which examined the influence of total quality management and university goal achievement in higher institutions in Nigeria. The result of the findings included the following; there is a significant relationship between communication flow and goal achievement of universities in Nigeria. There is a significant relationship between team work and goal achievement of universities, there is a

significant relationship between time management and goal achievement of universities in Nigeria among others. The study findings agree with Ejionueme and Oyoyo (2015) as they investigated the application of Total Quality Management (TQM) in secondary school administration in Umuahia Education Zone. Findings of the study revealed that total commitment and teamwork is applied to a high extent in secondary school administration. The findings further showed that effective communication is applied in secondary school administration in Umuahia Education zone. Findings of the study are validated by LongJohn (2008) which investigated application of total quality management in the improvement of the educational standard in higher institutions in Rivers State. The study findings revealed that staff training of academic and non academic staff leads to improvement of the educational standard in high

Relationship between Teamwork and Administrative Effectiveness of Public Higher Institutions in Rivers State, Nigeria

From results of the correlation analysis, it can be seen that there is a correlation coefficient of 0.833** between teamwork and administrative effectiveness, indicating a very strong significant relationship between teamwork and administrative effectiveness. More so, the probability value (0.000) is less than the critical value (0.05), this shows that there is a very strong significant relationship between teamwork and administrative effectiveness.

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Conclusion

Based on the findings of this study and to the extent of its consistency with results of similar previous studies, this study concludes that total quality management has significant and positive relationship with administrative effectiveness of public higher institutions in Rivers State. Thus, application of TQM is pivotal to effective administration. Adoption of TQM characteristics such as training and teamwork leads to positive administrative effectiveness.

Recommendations

Based on the findings of this study, and to the extent of its consistency with results of similar previous studies, the following recommendations were made:

- i. Administrators of public higher institutions should train their staff as this can guarantee administrative effectiveness.
- ii. Administrators of public higher institutions should engage in teamwork with their employees aimed at creating good working environment and administrative effectiveness.

References

- Abu, S. M., Zaman, S. U. & Anjain, U. (2016). Implementing total quality management in education: Compatibility and Changes. *Journal of Social Science*, 2(4), 34-44
- Adeleke, A.A. (2008). Appraising team management as a strategy to motivate change and business performance. Study of Tower Aluminum (Nig) Plc. Unpublished B.Sc thesis submitted to the Department of Business Administration, University of Ado-Ekiti
- Adeyemi, K.J. (2020). Influence of total quality management and university goal achievement in higher institution in Nigeria. Retrieved from: <https://independent.academia.edu>
- Amie-Ogan, T. O & Sunday, L.H (2021). Total quality management strategies and school administrators' performance in public senior secondary schools in Port Harcourt metropolis of Rivers State. *International Journal of Innovative Research* 9(3), 122-130.

- Arcaro, J. S. (2002). *Quality in Education: An Implementation Handbook*. Florida: St. Lucie Press.
- Chuktu, O. (2021). Total quality management practices and institutional effectiveness of secondary schools in Cross River State Nigeria. *European Journal of Scientific Research* 158 (4)
- Ejionueme, L. K., & Oyoyo, A.O (2015). Application of total quality management (TQM) in secondary school administration in Umuahia education zone. *Journal of Education and Practice* 6 (27)
- Okoroma, N.S. (2019). *Educational management, planning A broad perspective. and policy*: University of Port Harcourt Press.
- Onyeike, V. C. & Owuama, D. O. (2012). Constraints in planning and implementation of higher education programmes in Rivers, Nigeria. *European Scientific Journal*, 8(4), 86-100.
- Padhi, N. (2010). *The Eight Elements of TQM*, Retrieved from: <http://www.isixsigma.com>
- Peretomode, V.F (2001). *Educational administration applied concepts and theoretical perspectives*. Lagos, Joja Educational Research and Publishers Ltd.
- Reid, R.D & Sanders, N.R (2007). *Operations management: An integrated approach*, (3rd Ed.). New York: Pearson Education.
- Sallis, E. (2012). *Total quality management in education*. London, Kogan-Page Publishers.
- Tan, L (2014). Correlational study in W. F. Thompson (Ed.), *Music in the social and behavioral sciences: An encyclopedia* (pp. 269-271)
- Uche, C.M & Omorojor, N.E (2020). Stakeholders' participation for quality university education delivery in Nigeria. In S.O Nwafor & S.O Oluwuo (eds) 2020). *Management of education for sustainable national development in Nigeria. A Book of Readings in Honour of Professor John Okpako Enaowhwo*. Port Harcourt: University of Port Harcourt Press Ltd.