THE RELATIONSHIP BETWEEN QUALITY PERFORMANCE AND EMPLOYEE INNOVATION FOR TOTAL QUALITY MANAGEMENT PRACTICES IN ACADEMIC LIBRARIES

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Abstract

The study examined the relationship between quality performance and employee innovation for total quality management in academic libraries. The study focused on academic libraries in Ghana. Relevant literature was reviewed on TQM practices, employee innovation and quality performance. The study adopted a descriptive survey design and quantitative approach. The research protocol was a questionnaire. The study sampled 213 and retrieved 208 responses representing 95.3% of the valid sample size for the study. Partial least squares structural equation model (PLS-SEM) software was used to analyzed the data collected. In terms of the measurement of the model adopted for the study the convergent, discriminant validity was computed. Again, to establish connection between the variables of the study, the hypothetical statements were tested. All the three hypothetical statements tested showed a significant relationship. Study established that employee innovation and quality performance are critical components for TQM practices in academic libraries. The correlation analysis established that employee innovation had significant relationship with total quality management while quality performance also demonstrated a significant positive relationship with total quality management. The study revealed that employee innovation and quality performance are significant components for TQM practices in academic libraries. The study serves as a new source of documented information for academic libraries regarding TQM practices. Also, the study is a pillar for enriching the existing literature on employee innovation and quality performance as critical success factors for TQM implementation in academic libraries.

Keywords: University libraries; Career development; Employee innovation; Library System, Management philosophies

1 Introduction

Globally, service provision centers such as the academic libraries should strive to achieve perfection by continuously improving their services in order to satisfied the user. As a result, there is the need to adopt a managing technique that captures the management and employees on board for continuous improvement of quality services (Sivankalai and Yadav 2012). Generally, academic libraries quest for change has resulted in the need to introduce a new philosophy in the management of academic libraries (Sharma 2013).

Total quality management (TQM) practices embody certain values and approaches such as education of staff, training of staff, employee innovation, employee involvement, institutional culture, human and process management, customer focus as well as top management commitment. These are generally not new concepts to service-oriented institutions including academic libraries (Khan and Kamal 2015). The issue of employee innovation as one of the critical success factors of TQM practices is crucial in academic libraries development. TQM practices thus employee innovation in academic libraries means brining all employees on board for continuous improvement (Khan and Kamal 2015).

TQM has taken shape in a series of international standards in the ISO 9000 Series (Saleh and Mahmoud 2015; Talib et al. 2013). The philosophy is increasingly being applied in the service sector, including academic libraries. In recent times several authors for example (Yazdani et al. 2016; Fatemi et al. 2016; Saleh and Mahmoud 2015; Talib et al. 2013; Mosadeghrad 2013; Mehmood et al. 2014; Baird et al. 2011) in their dissertation have reinforced by stressing that the emergence of TQM practices especially with employee innovation as one of the major developments in service institution oriented is critical (Sivankalai and Yadav 2012).

TQM practice as a management approach of an organisation is centred on quality, based on the participation of all its members and aiming at long term successes. In another instance, TQM is a holistic and ethical approach for organisations to continuously improve their products and services involving all stakeholders to satisfy their customers and to improve sustainability (Karani and Bichanga 2012; Sadikoglu and Hilal 2014).

Linking to the context of academic libraries is a system where every employee is getting involved with the intention of improving the quality of service and performance. Adopting TQM practice in the academic library is seen as an approach for continuously improving the quality of services delivered through the participation of all employees at all levels (Negi and Srivastava 2015; Malik et al. 2010).

TQM is one of the essential aspects of institutional agenda, and this has placed service quality decisively in the plan of national policies on the educational system (Abuosi and Atinga 2013). Yet, in most academic libraries, particularly technical universities, very little seems to have happened with respect to TQM practices and employee innovation. This has probably created a TQM gap in the provision of service to meet the information needs of university community and beyond (Mensah and Adams 2014).

Currently, it appears the management of academic libraries have become increasingly important due to current developments, such as the emergence of Information Communication Technology (ICT). ICT integrating in academic libraries needs to be properly managed in enhancing quality service provision. This integration requires the innovativeness of the employees as part of the implementation TQM practices. Furthermore, as academic libraries are required to account for their survival through quality service the implication is that, the innovations of the staff should be felt in the development of the academic libraries. The demand for quality services has become part of the mandate of academic libraries. Again, the competition from other information service providers has become intense which requires the innovativeness of the staff. Though, the academic libraries are strife with funds but still ensures that quality services are rendered to their clients, who have varied information needs.

Preliminary investigation on the eight technical universities library (TULs) indicated that TQM practices, particularly employee innovation are not well grounded in quality management. It is imperative that academic libraries adopt TQM practices especially employee innovation to improve the performance of the academic libraries in their attempt to meet user's expectations. The purpose of the study was to establish the relationship between quality performance and employee innovation for total quality management in academic libraries and to suggest appropriate

measures to assist the academic libraries to improve in their pursuit to become unique centres of support for research, teaching and learning. The study was mapped out by the hypothesis stated:

a) H_1: There is a relationship between employee innovation and quality performance in academic libraries
b) H_2: There is a relationship between quality performance and total quality management in academic libraries
c) H_3: There is a relationship between employee innovation and total quality management in academic libraries

2 Literature Review

2.1 Quality performance in academic libraries

Alamri et al. (2014), argued that organizational performance measurement has become more crucial for the survival of companies in today's globalization market. Alamri et al. (2014) posited that quality performance has been calibrated with financial measures, operational measures, service performance and customer satisfaction measures by including multiple aspects of performance.

Al-Qahtani et al. (2015), suggested that one of the main elements to achieve an effective organizational management process is the quality performance measurement. The quality performance of one organisation can be directly related to its ability to achieve their strategic and financial objectives. One fact that must be also mentioned is that the organizational quality performance could be measured either depending on operational performance which is referring to the whole quality performance of one organisation that includes financial performance, customer satisfaction and effectiveness of product quality.

In the discourse of Al-Qahtani et al. (2015), measurement of quality performance is considered as an essential element at all managerial approaches. Al-Qahtani et al. (2015), further raised concerns that cost and quality are the two main measurements of organizational quality performance which directly affected by the total quality management practices. Gharakhani et al.

(2013), posited that organizational quality performance especially in financial performance of organizations is critical.

According to Al-Qahtani et al. (2015), the focus is on planning in a strategic way, management of processes and employees, leadership, customer concern, and measuring on both internal and external customers' satisfaction level for the quality of perceived products and services.

According to Ngambi and Nkemkiafu (2015), a strategy that essentially aimed to establish and deliver high quality products and services that cover all customers' demands and achieve a high level of customer satisfaction should be under pined by the determinants of quality. Alsmadi et al. (2014), studied the effect of using TQM practices on the operational performance of an organization, through production, performance improvement, employee morality and customer satisfaction. The results showed a strong correlation with customer focus and, employee relations, but negatively correlated with supplier quality management.

Alsmadi et al. (2014), confirmed in a previous study that there is a positive relation between the operational performance of organization and quality performance. Alamri et al. (2014) argued that the strategy of TQM that concentrates on enhancing the customer satisfaction levels will directly improve the organisational performances and that leadership commitment is considered a key element for guaranteeing a successful implementation of TQM practices in organisation.

Alghamdi (2018), stated that TQM has been identified as a key driver of organizational performance in public and private organizations. Organizational culture, along with TQM, has investigated to understand its contributions to organizational quality performance. Alghamdi (2018), examine the relationship between TQM and organizational performance, taking into account a moderating effect of organizational culture. The relationship between TQM and quality performance has been extensively examined, yet mixed results have been reported. Most of the previous studies concluded a positive relationship between TQM and quality performance (Alghamdi 2018). TQM practices, in general, improve organizational quality performance (Sadikoglu and Hilal 2014).

2.1 Employee innovation in academic libraries

Talib et al. (2013), posited that employee innovation is the most important part of services, implying that it is the looking for never-ending improvements and developing processes to find new or improved methods in the process of converting inputs into useful outputs. Innovation also helps reduce the process of variability, thereby continuously improving the output performance (Sadikoglu and Zehir 2010). Chauhan (2014), accounted that bringing in innovation skills is at the heart of TQM practices. It was confirmed that when the customer is satisfied and can testify it through obtaining a high-quality product and service, then there is a link between product quality and customer satisfaction (Sadikoglu and Zehir, 2010). Malik et al. (2010), equally confirmed that continuous improvement is a critical success factor for TQM practices implementation.

Moghaddam and Moballeghi (2008) put forward that continuous improvement and innovation are also at the heart of TQM practices. Once it is recognized that client satisfaction can only be obtained by providing a high-quality product, continuous improvement of the quality of the product is seen as the only way to maintain a high level of customer satisfaction. The author also confirmed what other writers have advanced that there is a link between product quality and client satisfaction in the literature (Moghaddam and Moballeghi 2008).

2.2 TQM practices in academic libraries

Though some authors argue that the proposal of TQM practices is not an easy task, the benefits cannot be over-estimated, especially in service-oriented organisations such as the academic library. According to Bhatt (2012), TQM is very useful because it provides knowledge, commitment and leadership, encourages teamwork and involvement by all staff and develops a clear purpose for the institution.

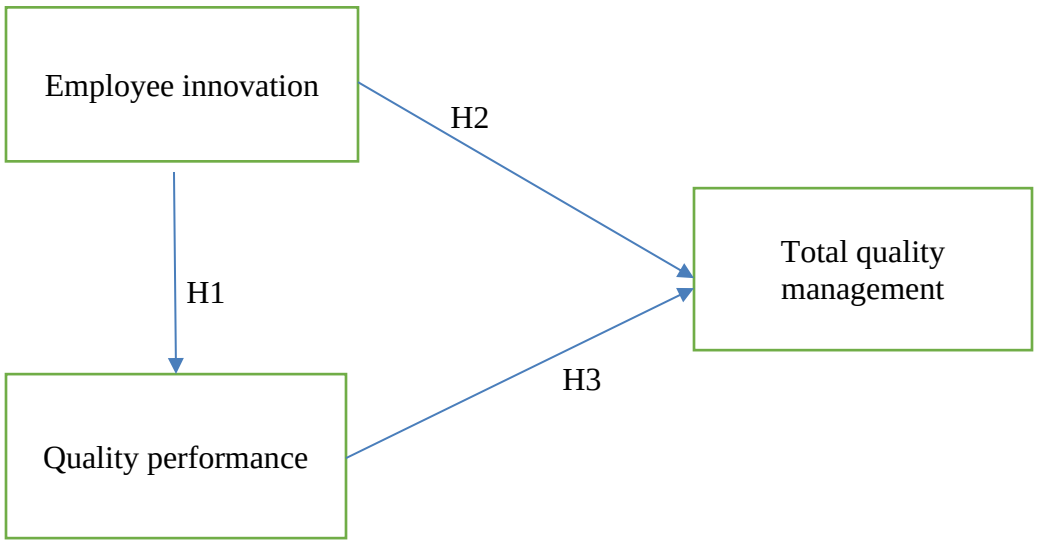
According to Sathe (2015), TQM implementation in academic libraries could result in changes leading to continuous improvement. TQM basically assists library managers and directors to develop leadership skills and encourages staff in the carrying out of their day-to-day activities. This increases the feeling of ownership of decisions and directions among the library staff.

Sharma (2013), found that adopting TQM policies may increase the usefulness of the library and satisfy the higher client expectations. The study was a qualitative approach which

emphasized the adoption of TQM in libraries. From a previous study of Sivankala and Yadav (2012), on TQM in academic libraries, it was ascertained that TQM leads to nonstop improvement of results in all aspects of the working system.

In the view of Negi and Srivastava (2015), TQM leads to a collaboration of benefits. The study found that adopters of TQM practices are better performers than those that did not use it. Negi and Srivastava further indicated that, with the implementation of TQM, libraries have greater customer satisfaction, improved employee relationships and retention as well as improved operating processes. On the other hand, Moballeghi and Moghaddam (2011) concluded that TQM has a significantly positive effect on employee relations and customer satisfaction as well as operational business performances.

Figure 1: Research model



Source: the authors

3. Research Methodology

The study was a descriptive survey using quantitative approach to classify the relationships and linkages between the various constructs to provide further insight and larger perspective of

quality performance and employee innovation for TQM practices in academic libraries environment.

Table 1: Operational definition of constructs and hypothesized relationships

Construct	**Operational definitions**	**Source**	**hypothesized relationship**
Employee Innovation (EI)	This refers to the process of bringing all employees to help in activities in the organisation especially decision-making process and new ideas from the employees	Brito and Vergueiro (2013), Sathe (2015), Fatemi et al. (2016) and Negi and Srivastava (2015)	EI→QP
Quality Performance (QP)	This refers to the strategy essentially aimed to establish and deliver high quality products and services in organizations or institutions	Ngambi and Nkemkiafu (2015), Al-Qahtani et al. (2015)	QP→TQ
Total Quality Management (TQM)	This refers to the continuous improvement as well as reducing waste and errors and saving cost in achieving organisational goals	Negi and Srivastava (2015)	EI→TQ

Source: the authors

3.1 Measurement development

The questionnaire was developed on the basis of the literature review and the adaption of previous items that have demonstrated rigorous and significant validity in the field of employee innovation and quality performance in the context TQM practices (Bhattacherjee 2012).

The variables such as employee innovation, quality performance, total quality performance was measured in the study. The questionnaire consists of two parts. Section A of the questionnaire relate to the demographic characteristics of the respondents such as; gender, age, educational qualification. Section B relates to the research model's endogenous and exogenous variables

questions, which were measured on a five-point Likert Scale ranging from 1= 'strongly disagree' to 5= 'strongly agree'.

The questionnaire was hand delivered to a sample of 213 professional librarians practicing in academic libraries of Ghana. The reason for targeting head librarians, deputies and their staff was because of their expertise and experience in the library profession. After a period of four weeks in administering the questionnaire, out of a total of 213 questionnaires distributed, 208 valid responses were retrieved. This represented a response rate of 95.3% of the sample size.

In testing the research model, partial least squares structural equation (PLS-SEM) technique was used. SmartPLS3 was used to analyze the data. Besides, the bootstrapping method was employed to test the significance level of path coefficients and loadings (Ashill 2011).

4. Results and Discussions

Table 2: Gender distribution of participants

Gender	Frequency	Percentage
Male	126	60.6
Female	82	39.4
Total	**208**	**100**

Source: field survey

Table 2 depicts the gender distribution of the participants. Out of the total valid response of 208, 126 (60.6%) of the participants were male while 82(39.4%) were female. The conclusion is that more males participated in the study than females.

Table 3: Age distribution of participants

Age	Frequency	Percentage
Under 30yrs.	32	15.4
31-40yrs	94	45.2
41-50yrs	71	34.1
50yrs and above	11	5.3
Total	**208**	**100**

Source: field survey

Table 3 shows the age distribution of the participants. Out of the total valid response of 208, 94 (45.2%) were between the age distribution of 31-40 years. Also 71 (34.1%) were between the age group of 41-50 years. The rest were 32 (15.4%) and 11 (5.3%) between the age distribution of 50 years and above and under 30 years respectively. This suggests that most of the participants were mainly within the age distribution of 31-50 years.

Table 4: Number of years of service

Years	Frequency	Percentage
1-5yrs.	51	24.6
6-10yrs.	77	37.0
11-15yrs.	55	26.4
16-20yrs.	18	8.6
Over 20 yrs.	7	3.4
Total	**208**	**100.0**

Source: field survey

From Table 4 the results illustrate the number of years of service of the participants. Almost all the participants have worked in their various institutions over several years. The least among the result was 7 (3.4%) who had worked for over 20 years with 6-10 years as the highest number of years worked in the various institutions of the participants representing 77 (37. 0%). The rest were 51(24.6%) who have worked for 1-5years, 55(26.4%) who have worked for 11-15yeras and 18(8.6%) who had been in the service for 16-20 years. The result gave a picture showing that 77(37.0%) of the staff had been in the institutions between 6-10years.

Table 5: Academic qualification of participants

Qualification	Frequency	Percentage
BA	77	37.0
MA	55	26.4
MPhil	51	24.5
Ph.D.	7	3.4
Others	18	8.6
Total	**208**	**100.0**

The analysis of the academic qualification of participants as in Table 5, indicated that out of 208 valid response, 77(37.0%) of the respondents had Bachelor's degree, 55 (26.4%) had Master of Arts degree and 51 (24.5%) also had Master of Philosophy degree whilst 7(3.4%) were Ph.D. holders. This could be concluded that most of the participants were Bachelor's degree holders. A glance at the result showed at least 3.4% of the respondents had terminal degree in library and information studies.

4.1 Evaluation of measurement model, convergent validity assessment and discriminant validity assessment

4.1.1 Collinearity Assessment

Before the assessment of the structural model, a multicollinearity assessment was done on the entire constructs. As Hair et al. (2014), emphasized collinearity issues arise when two indicators are highly correlated, and in situations when more than two indicators are involved, it is referred to as multicollinearity. In other works, multicollinearity exists when two or more exogenous constructs are highly intercorrelated, which results in the inflation of standard errors and the testing of significance of exogenous unreliable. Accordingly, a standard rule of thumb is that there could be the existence of multicollinearity when the variance inflation factor (VIF) coefficient is higher than 5.0. Thus, there will be no critical levels of collinearity when VIF is less than 0.4, although some researchers utilize a more relatively lenient cut-off point of 5.0 VIF. Hair et al. (2010) maintained that the tolerance level of 0.20 or lower and a VIF value of 5.0 and higher respectively demonstrate a possible collinearity problem. An assessment of the VIF values of the measuring items demonstrated in Table 6 indicate non-existence of multicollinearity, as all variance inflation factors obtained were between 1.777, to 2.727, falling within the conservative threshold of 5.0.

Table 6: Outer VIF values for assessing collinearity

	VIF
EI1	2.727
EI2	2.128
EI3	1.646
EI4	2.438
EI5	2.137
QP1	2.190
QP2	1.813
QP3	1.596
QP4	1.905
QP5	2.463
TQM1	2.352
TQM2	2.504
TQM3	1.777
TQM4	2.012
TQM5	1.246

Source: field survey

4.1.2 Coefficient of Determination (R^2)

The coefficient of determination (R^2), also known as the R square is the first essential criterion which the study conducted in the analysis of the structural model to assess the overall effect size of the structural model. In effect, R^2 evaluates the relationship of a latent variable explained variance to its total variance, as well as a measure of the predictive accuracy of the conceptual model calculated as the squared correlation between a specific dependent or endogenous variable's actual and predicted values. R^2 values fall within 0 and 1, with higher levels implying higher levels of predictive accuracy. However, Hair et al. (2014) argues that it is difficult to provide rules of thumb for an acceptable R^2 value, as this depends on the model complexity and the research discipline.

Meanwhile (Ringle and Rudolf 2009) proposed that R^2 values should be significantly high for the model to obtain a minimum level of explanatory power. Thus, Henseler et al. (2012) proposed that R^2 values of 0.75, 0.50, or 0.25 for endogenous latent variables can be respectively described as substantial, moderate, or weak. As shown in Table **7** the two latent variables are explained in more than half of the variances. Quality Performance has R^2 =0.721, whiles Total

Quality Management R^2 =0.866 and these values can be regarded as substantial. It is realized that Total Quality Management which is the primary outcome measure of the model has a substantial R^2 value that is 0.866.

More importantly, it is realized that Total Quality Management explain 86.6% of the variance in Total Quality Management, and for that matter, Total Quality Management is influenced by Quality Performance and Employee Innovation.

Table 7: Coefficient of determination (R^2) values for endogenous latent variables

	R Square (R^2)	**R Square (R^2) Adjusted**
Quality Performance	0.721	0.718
Total Quality Management	0.866	0.863

Source: field survey

4.1.3 Significance of Path Coefficients

The next step of the structural model evaluation process is the assessment of the path coefficients between the structural model's latent variables, in order words, an evaluation of the path coefficient between the exogenous variables and endogenous variables in the conceptual model. The magnitude of path coefficient shows the degree or level of relationship that exists between two latent variables. In this study, we assessed the path coefficients' algebra, magnitude, and significance, as advocated by (Urbach and Ahlemann 2010). This is because prior studies including Huber et al. (2008) argues that path coefficients should be higher than 0.100 to account for a certain influence in the model. Furthermore, Urbach and Ahlemann (2010) advocates that paths whose signs are averse to the theoretically assumed relationship are indications that it does not support the pre-postulated hypothesis.

The analysis as shown in Figure 2 demonstrates that the path coefficient between predictor variables and their respective outcome variables in the proposed conceptual model exhibited a positive relationship. For instance, for a single increase in Employee Innovation, and Quality performance, Total Quality Management will increase, by 52.9%, 43.9%, respectively.

4.1.3 Effect size (f^2)

In addition to examining the R square (R^2) values of all endogenous latent variables in the conceptual model, an assessment of effect size (f^2), was performed. The effect size (f^2) is a measurement of change in R^2 value when a specific exogenous construct is omitted from the model. In other words, it is used to assess whether the omitted exogenous construct has a significant impact on the endogenous constructs (Hair et al. 2014). Accordingly, Cohen (1988) provides a set of guidelines for assessing f^2, which indicate that values of 0.02, 0.150, and 0.35, respectively, represent small, medium and large effects of the exogenous latent variable on their individual endogenous variables in the structural model. Table 8 provides a demonstration of the f^2 effect size of the structural model. Therefore, the exogenous constructs; Employee Innovation and Quality Performance have an f^2 effect size of 0.581 and 0.400 respectively, in explaining the endogenous construct, Total Quality Management. This is an indication that the effect size of both Employee Innovation and Quality Performance are large. Secondly, the effect size of Employee Innovation on Quality Performance is 2.585, indicating a significant effect.

Table 8: f^2 for evaluating effect size of exogenous variables on endogenous variables.

	Employee Innovation	**Quality Performance**	**Total Quality Management**
Employee Innovation		2.585	0.581
Quality Performance			0.400
Total Quality Management			

Source: field survey

To achieve valid results, the reliability, convergent and discriminant validity of the measurement model was assessed.

Convergent validity is established when all indicator (observed) variables load highly on their assigned factors, for instance, 0.5 or higher. It measures the extent to which items are free from random error, and as such, capable of providing consistent results. As demonstrated in Table 6, all factor loadings are higher than the value of 0.6 (Hair et al. 2010).

In most cases an AVE value of at least 0.5 is an indication that the latent construct is on average and able to explain 50 percent of the variance of its indicators, hence demonstrating

adequate convergent validity (Fornell and Larcker 1981). This precondition is fulfilled in this research, as it is demonstrated that AVE values for all the constructs shown in Table 6 are above the recommended threshold of 0.5. Finally, with regards to composite reliability, all the scores are well above the cutoff value of 0.7 as proposed by (Hair et al. 2010).

The establishment of discriminant validity can be in two ways. The first method is by examining cross-loadings that are obtained by correlating each latent variable component values with all other items (Chin 1998), whiles the second is by comparing the square root of the average variance extracted (AVE) for each construct with the correlations among constructs. If the square root of each AVE is much larger than any correlation among any pair of latent variables, and it is higher than .50 (Fornell and Larcker 1981), then the validity of the measurement model is established. In this study, as demonstrated in Table 7, the correlation values are less than the square root of AVE values, hence, suggestive of acceptable discriminant validity.

Table 9: Results of convergent validity assessment

Model construct	**Measurement Item**	**Loadings**	**Composite Reliability (CR)**	**Average Variance Extracted (AVE)**	**Cronbach's Alpha**
Employee Innovation	EI 1	0.847	0.902	0.648	0.863
	EI 2	0.814			
	EI 3	0.728			
	EI 4	0.822			
	EI 5	0.809			
Quality Performance	QP1	0.804	0.894	0.629	0.852
	QP2	0.785			
	QP3	0.746			
	QP4	0.796			
	QP5	0.832			
Total Quality Management	TQM1	0.820	0.869	0.578	0.810
	TQM2	0.853			
	TQM3	0.753			
	TQM4	0.816			
	TQM5	0.507			

Source: field survey

Table 9: Results of discriminant validity assessment

Variables	Innovation	Quality performance	Total quality management
Employee innovation	0.805		
Quality performance	0.849	0.793	
Total quality management	0.901	0.888	0.760

Source: field survey

4.2 Structural model and hypothesis testing

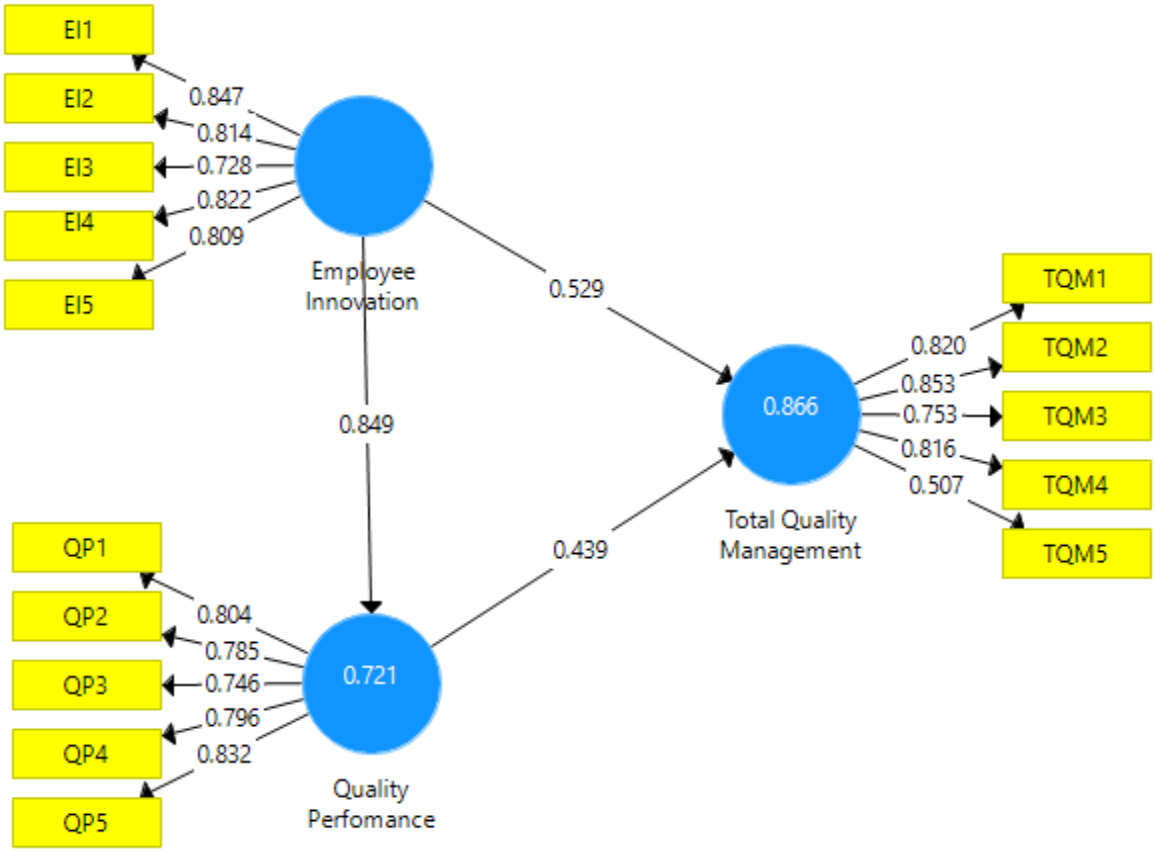
After the construct measures have been proved to be reliable and valid, the next stage was to assess the structural model results, displayed in Figure 2. The model explained 0.866 in the variation in Total Quality Management. This implies that the proposed model explains 86.6% variance of Total Quality Management in the selected academic libraries of Ghana. All the three hypothesized relationships stated in this study are supported. As claimed in H_1, Employee Innovation positively and significantly influence Total Quality Performance with a path coefficient of ($\beta= 0.849^{***}$). This suggests it supports H1. Also, H_2 states that Quality Performance positively affects Total Quality Management. This is confirmed by the path coefficient, ($\beta= 0.439^{***}$). Again, H3 suggest that Employee Innovation positively and significantly influence Total Quality Management by a path by the path coefficient ($\beta= 0.529^{***}$).

Table 10: Results of structural model analysis and hypothesis testing validity assessment

Hypothesis Path	Standard Path Coefficients	Mean	Standard Deviation	T- Statistics	P-Value	Remarks
H1	0.849	0.853	0.030	27.869	0.000	Supported
H2	0.439	0.529	0.087	6.092	0.000	Supported
H3	0.529	0.439	0.087	5.023	0.000	Supported

Source: filed survey

Figure 2: Patth estimation results



Source : the authors

5. Implication to research and practice

The current study is one of the kinds that contributes extremely to existing body of knowledge and literature in the application of TQM practices focusing on employee innovation in academic libraries in Ghana and Sub-Sahara Africa. The study has unearthed the essence of applying a new philosophy in the quality management of academic libraries through the adoption of critical success factors such as employee innovation and quality performance. The novelty of the current study was the application of purely quantitative approach using the structural equation model which helps to determine important descriptive statistics such as AVE, Composite reliability

among others. The study is a strong manifestation and an advocacy for the adoption of TQM practices in academic libraries to achieve quality performance.

6. Conclusion and recommendations

The study investigated the relationship between quality performance and employee innovation for total quality management in academic libraries. The literature review established that the variables such as employee innovation and total quality management has a strong confirmation to the systematic and logical linkage in enhancing quality performance in academic libraries. The relevant gaps in the existing literature identified assisted the outcome which is significant and sufficient to boast the current research. An evaluation on the measurement model was performed on reliability, convergent and discriminant validity. Correction analysis was performed to establish relationship between the independent and dependent variables. The reliability test was acceptable since there was consistency in the loading which were higher than the 0.6. The discriminant validity assessment was also within the acceptable level thus less than the square root of AVE values obtained.

All the hypothesis tested indicated a positive relationship with the independent variables thus quality performance and employee innovation and the dependent variable total quality management at P –value of ($r=0.000$, $p<0.05$). This implies that these variables measured has a significantly positive relationship with total quality management. It also suggests that employee innovation and the application of total quality management is a critical issue that could lead to quality performance with respect to the services and resources of the academic libraries. As a recommendation it is prudent for management of the academic libraries to engage library staff in all kind of innovativeness such as new ideas, new discoveries, new inventions, pro-activeness, among others that stands to enhance the services and resources of the academic libraries. This is because these innovations formed the core elements of total quality management and links to quality performance. There is also the need for the management of the academic libraries to bring on board all employees to contribute effectively and efficiently to the achievement of the goals and mission of the parent institutions and the library as a whole.

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