

Management Control System, Institutional Leadership and Institutional Performance of Technical Training Institutions in Kenya

Mbore, Clement Karani¹, Jane Sang², Joyce Komen³

^{1,2,3}School of Business and Economics, Moi University

Abstract: *The purpose of this study was to determine the Moderating Effect of Management Control System (MCS) in the relationship between Institutional Leadership and Institutional Performance of Technical Training Institutions (TTIs) in Kenya. Technical Training Institutions (TTIs) that display high performance levels have an institutional leadership framework for long-term development of quality management. Further, although institutional leadership is important to TTIs, Management Control System (MCS) is key as it determines the success or failure of the institutions. There is little research that has been done to determine if Management Control System (MCS) moderates the relationship between institutional leadership and institutional performance of technical training institutions (TTIs) in Kenya. The study was cross-sectional survey in nature and used explanatory research design with the population being the TTIs that were registered with the Ministry of Education, Science and Technology (MOEST) and Technical and Vocational Education and Training Authority (TVETA) by 2015. The main research instrument was a closed ended questionnaire. The hypotheses in this study were tested using Hierarchical Moderated Multiple Regression (MMR) and the study found that institutional leadership had a significant positive influence on institutional performance of TTIs in Kenya. The study findings indicated that the estimated coefficient was 0.375 with a p-value less than 0.05 indicating that institutional leadership had a significant influence on performance. Further, the study found evidence that MCS moderates the relationship between institutional leadership and institutional performance. The coefficient of the interaction variable $\beta_1 X_1^* Z$ was found to be 0.145 with a p-value less than 0.05 and was significant. The change in R-square due to the moderating effect was found to be 0.039 with a significant F-change of p-value 0.000. This implied that MCS had a moderating effect on the relationship between institutional leadership and institutional performance of technical training institutions (TTIs) in Kenya. Institutional theory was used to anchor this study since it provides authoritative guidelines for social behaviour in TTIs through schemes, rules, norms and routines. This study is important to institutions because it will guide the managers of institutions on need to have good policies, have a suitable leadership style and an acceptable social culture.*

Keywords: Institutional Leadership, Institutional Performance, Management Control System

1. Introduction

According to (Chua, Basti, & Hassan, 2018) "Leadership is generally defined simply as the art of influencing people so that they will strive willingly towards the achievement of group goals". This concept can be enlarged to include not only willingness to work but with zeal and confidence. As management challenges have increased in complexity, institutional leadership has become a strategic tool for institutions of all sizes. In order to be relevant, leadership must remain simple and comprehensive but not too demanding in terms of resources and it must be able to guide employees toward action (Lawrence & Suddaby, 2006). The global movement in general and total quality management in particular have become very popular in most institutions during the recent past. The force that generated this movement is the purposive goal of providing relevant manpower to the global market. Institutional leadership is the "purposive action of individuals and organizations aimed at creating, maintaining and disrupting/changing institutions (Suddaby & Greenwood, 2005). Technical Training Institutes (TTIs) exist within an institutional environment in which external stakeholders determine in part the expectations for organizational behaviour and practices. Such expectations are pegged on sound leadership principles. Institutional theory provides a sound bases on which such principles are created. The precepts of institutional theory as discussed and applied in their study on Compensation and organizational performance: Theory, research, and practice, Gomez-Mejia, Berrone, and Franco-

Santos, (2014). Their study included structures (schemes, rules, norms and routines), policies and leadership styles which are established as authoritative guidelines for social behaviour.

Technical, Vocational Education and Training (TVET) institutions that display high performance levels have policies that comprise of a deliberate system of principles to guide decisions and achieve rational outcomes and a statement of intent designed by the government, and is implemented as a procedure or protocol (Marginson & Rhoades, 2002). Policies can assist the leaders in both subjective and objective decision making and in subjective decision making they usually assist senior management with decisions that must be based on the relative merits of a number of factors, and as a result are often hard to test objectively. A good example is work-life balance policy which requires subjective evaluation. In contrast policies to assist in objective decision making are usually operational in nature and can be objectively tested. One such policy would relate to password policy where the probability of hacking would be considered (Althaus et al. 2007).

1.1 Objective of the Study

The objective of the study was to investigate the moderating effect of management control system (MCS) on the institutional leadership and institutional performance of TTIs in Kenya.

1.2 Specific Objective

- 1) To establish the effect of institutional leadership on institutional performance of TTIs in Kenya
- 2) To establish the moderating effect of MCS on the relationship between institutional leadership and institutional performance of TTIs in Kenya

2. Literature Review

This study analyzed the effect of management control system (MCS) on the institutional leadership and institutional performance of TTIs in Kenya

2.1 Institutional Performance

The major purpose of higher education institutions is to contribute to the growth of the country's economy by providing skilled human capital (Akareem & Hossain, 2016; Fortino, 2013) and not for specific commercial objectives. Existing literature indicates that more than 80 percent of the youth are engaged in the informal sector (Johanson & Adams 2004). King and McGrath (2004) emphasize the important role played by Technical Training Institutions (TTIs) that are normally under the umbrella of Technical Vocational Education and Training (TVET) in producing skilled labour for the industry. King and McGrath (2004) have argued that with TTIs being more diverse because of the changes in the labour market, they should be able to integrate the youth efficiently into the working world. Given the prevailing economic trend, United Nations Educational, Scientific and Cultural Organisation (UNESCO) (2014) has identified the two major objectives of TTIs as the urgent need to train the workforce for self-employment and the necessity to raise the productivity of the private sector. Considering the expensive nature of TTIs as a form of education, it is imperative that an expanded system which may include partnering with stake holders to provide adequate facilities and equipment will be required to create an effective system. Gleeson (2010) illustrates, social partnership agreement between the key stakeholders is an absolute central factor in finding a lasting solution to the quality issues to improve performance of institutions.

Institutional Performance (IP) is the ability of the institution to consistently train well rounded graduates with practical, theoretical and soft skills for the sake of key stakeholders who include students, parents, the community, the Government, employers and industry at large (Hannula, 2018; Glassman & Opengart, 2016). The major purpose of higher education institutions is to contribute to the growth of the country's economy by providing skilled human capital (Akareem & Hossain, 2016; Fortino, 2013) and not for specific commercial objectives. This scenario makes it quite difficult to quantitatively and monetarily evaluate performance of training institutions which do not encompass objective evaluation of organization's products and services and overall financial and market performance (Mose, 2014). Non-financial measures are therefore the performance measurements proposed for training institutions considering that their context is of non-profit generating organisations (Hoque, 2014; Grigoroudis, Orfanoudaki, & Zopounidis,

2012). In this study the Balance Scorecard (Kaplan and Norton 2001) was adopted.

Institutional Performance is about the comparison of achievement against some pre-determined standard (Richard, Devinney, Yip, & Johnson, 2009) set by the institution to evaluate the training model and can be measured at two levels, at a certain period along the way otherwise referred to as monitoring/formative evaluation or at the end-stage also referred to as end stage/summative evaluation (Tessmer, 2013; Black, Harrison, Lee, Marshall, & William, 2003). In TVET institutions, continuous self-examination by institutions focuses on the institution's contribution to students' intellectual and personal development. Furthermore, in order to achieve this new service development, areas such as quality assurance (distribution of grades awarded, exit exam or student competency evaluation), internship program (number of internships available, number of companies available, student evaluation), cost efficiency (faculty-to-student ratio, educational expenses per student and unique or specialized curriculum) are be closely monitored (Amadi, 2014).

2.2 Institutional Leadership

In the recent past, the historical perspective of institutional leadership indicates that leadership is used as an effective management approach to manage large size organizations (Iqbal, Anwar, & Haider, 2015). The gradual replacement of personnel administration with human resource management results to integration of institutional leadership styles into effective employee management and institutional performance. This demands leaders to adapt themselves to various situations when demand arises to ensure that there is effective leadership (Lavy & Yadin, 2013). Different leadership styles were used based on the amount of direction, decision making power and empowerment (Iqbal et al, 2015

The leadership styles practiced by the leaders in institutions play a crucial role in shaping the ultimate performance of the institution. Most institutions today endeavour to embrace transformational leadership which borrows heavily from democratic principles (Rattana 2012) and is most suitable for changing global environment. Its main aim is to create an environment that allows the individual worker or group to excel in their operations not because the boss said so but because it feels right to do so; the followers are leaders by themselves. The worker is able to offer contingency decisions with minimal consultation because today's environment is volatile and fast decisions are needed at all times. Policies and institutional leadership styles generally dictate the kind social structure (institutional culture) expected in the institution. Schein (2004) defines an institutional culture as the proper way to behave within the institution. This culture consists of shared beliefs and values established by institutional leaders and then communicated and reinforced through various methods, ultimately shaping employee perceptions, behaviours and understanding. Institutional culture sets the context for everything an enterprise does. Because industries and situations vary significantly, there is not a one-size-fits-all culture template that meets the needs of all institutions.

A strong culture is a common denominator among the most successful institutions. All have consensus at the top regarding cultural priorities, and those values focus not on individuals but on the institution and its goals. According to Astawa and Sudika, (2015), leaders in successful institutions live their cultures every day and go out of their way to communicate their cultural identities to employees as well as prospective new hires. They are clear about their values and how those values define their institutions and determine how the institutions run. Conversely, an ineffective culture can bring down the institution and its leadership. Disengaged employees, high turnover, poor customer relations and lower profits are examples of how the wrong culture can negatively impact the bottom line. In their study on 'Assessing the Role of Motivation in Organisational Development a Study of National Assembly in Abuja', Anyanwu, Okoroji, Ezewoko, and Nwaobilor, (2016) suggest unmotivated workforce is identified with low morale, frequent absenteeism, conflicts and a bad influence on the rest of the staff. Mergers and acquisitions are fraught with culture issues. Even institutional cultures that have worked well may develop into a dysfunctional culture after a merger. Research has shown that two out of three mergers fail because of cultural problems. Blending and redefining the cultures, and reconciling the differences between them, build a common platform for the future. In recent years, the fast pace of mergers and acquisitions has changed the way businesses now meld. The focus in mergers has shifted away from blending cultures and has moved toward meeting specific business objectives. Some experts believe that if the right business plan and agenda are in place during a merger, a strong corporate culture will develop naturally (Essawi & Tilchin, 2012).

2.3 Management Control System (MCS)

Management Control System (MCS)' mission is to communicate strategic milestones and to give feedback of the performance (Kaplan & Norton 2008) and thus contributes to the creation of value. Management Control System (MCS) means the systematic policy and control process that is used to influence the behavior and activities of management for the purpose of achieving the organization goal (D. E. Marginson, 2002). It has been shown to be effective in informing further initiatives and policy decisions, leading to quality enhancement. Process measures are generally considered by institutions and their staff and students to provide better measures of the quality of teaching and learning, as they are contextualised in the institution. The MCS is conceptualized through the precepts by Charmer et al (2008) of curriculum, benchmarking, budgeting and continuous improvement (kaizen).

According to Simons (2000), MCS is the formal, information-based routine and procedure managers use to maintain or alter patterns in organisational activities. In particular, what is ignored by much of the research is the potential for MCS to be used much more actively as a tool for formulating and implementing changes in strategic direction, or what Simons (2000) refers to as the interactive use of MCS. A good MCS should aim at achieving organisation success in attaining its purpose. This requires that the goals and objectives are well communicated and the employees are confident about performing the tasks as well. It is not possible to attain perfect control since employee behaviour is not stable however an organisation that is future oriented, has clear objectives and maintains minimum control losses is on the path to success. In view of the dynamic nature of the business environment, it is the function of MCS to provide up-to-date information that helps the managers in making proper decisions and to motivate these managers to establish organisational change beneficial to the firm.

Another important role of MCS is signalling, both in the internal and external environment. By electing key performance measurements, the organization signals to employees the importance of these strategic aspects. In the external front, the signal to the stakeholders who are part of the organizational environment, with the disclosure of non-financial information regarding performance, such as innovation, operations, levels of customer satisfaction, timely delivery of service, reliable delivery of service, dependable production activities, quality of service or goods, efficient monitoring of operations and motivation among others (Kuvaas & Dysvik, 2009).

2.4 Conceptual Framework

The key variable in this study were categorized as independent variable, moderator and dependent variable. Mugenda (2008) explains that the independent variables are also called predictor variables because they predict the amount of variable of variation that occurs in another variable while dependent variable, also called criterion variable, is a variable that is influenced or changed by another variable. The dependent variable is the variable that the researcher wishes to explain. A moderator variable is a variable that alters the strength of the causal relationship (Frazier, Tix, & Barron, 2004). In the study, it is hypothesized that management control system moderates in the relationship between institutional leadership and institutional performance.

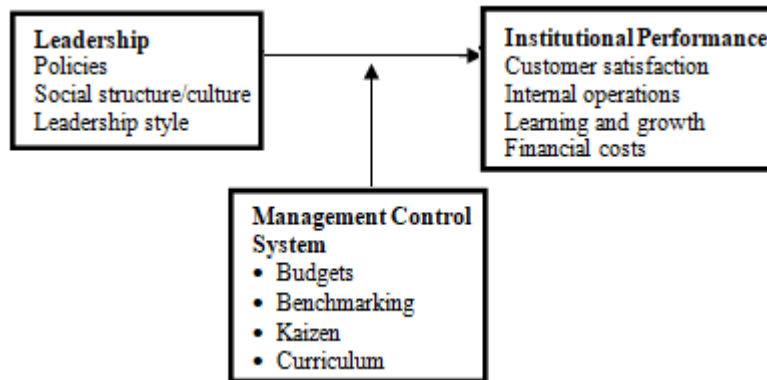


Figure 1: Conceptual Framework

2.5 Theoretical Review

Institutional theory is about the establishment of authoritative guidelines in an institution through the integration of certain structures which include policies (schemes, rules, norms and routines), leadership styles and social structure (Scott, 2004). Institutional leadership according to Scott comprises of culture-cognitive, normative and regulative elements that together with the associated activities and resources provide stability and meaning to life. Institutional leadership plays a critical role in the success of the institutions and hence the need for effective leaders who understand the complexities of the rapidly changing global environment (Rorison, Jamey, Voight, Mamie, 2016). External pressure for conformity drives the range of decisions available for institutions. Effective leaders will influence their followers in a desired manner to achieve desired goals and motivates them to practice attributes such as risk taking, proactiveness and innovativeness and transformational management (O'Leary & Bingham, 2009).

Well performing institutions are said to have a 'strong' culture while those with 'weak' culture continue to use trial and error techniques. Research by Bell, Chan, and Nel, (2014) and Evans, Bridson, and Rentschler, (2012) suggest that Corporate Culture and Performance, lay the groundwork for the study of corporate culture as a field of academic research obviously linking it to literatures on organizational development which demonstrates that organizations that foster strong cultures have exemplary leaders and clear values that give employees a reason to embrace the culture. A strong culture may be especially beneficial to firms operating in the service sector since members of these organizations are responsible for delivering the service such as learning institutions and for evaluations important constituents make about firms. Organizations may derive the following benefits from developing strong and productive cultures: better aligning the company towards achieving its vision, mission, and goals; high employee motivation and loyalty; increased team cohesiveness among the company's various departments and divisions; promoting consistency and encouraging coordination and control within the company, shaping employee behavior at work, enabling the organization to be more efficient.

2.6 Empirical Literature

Huhtala, Kangas, Lämsä, and Feldt, (2013) examined the leadership-culture connection managers and indicated that the orientation of ethic programs is most strongly linked to high level of commitment to ethics rather than to external influences. Further, policy efforts might be more successful if the focus was directed more on the managers' commitment rather than on the programs. The study outlined the following elements of an ethical program: formal ethics codes, ethics committees charged with developing ethics policies, ethics communication systems, ethics officers, ethics training programs and disciplinary processes to address unethical behaviour.

In their study, Odumeru and Ogbonna, (2013) examined the application of transformational leadership theory in 89 schools in Singapore using a split sample technique ($N = 846$ teachers). The study sought to examine the influence of transformational leader behavior by school principals as it related to organizational commitment, organizational citizenship behavior, teacher satisfaction with leader, and student academic performance. Attitudinal and behavioural data were collected from both teachers and principals; student academic performance was collected from school records.

School level analyses showed that transformational leadership had significant add-on effects to transactional leadership in the prediction of organizational commitment, organizational citizenship behavior, and teacher satisfaction. Moreover, transformational leadership was found to have indirect effects on student academic achievement. Transactional leadership was found to have little add-on effect on transformational leadership in predicting outcomes (Antonakis & Robert, 2013).

Orozco (2016) in his research on 'Understanding the impact of Management Control Systems over capabilities and organizational performance, under the influence of perceived environmental uncertainty' avers that Management Control Systems (MCS) helps to deliver value by facilitating strategy implementation and enhancing organizational performance. Orozco (2016) also observed that research into training models effectiveness was limited, both in terms of the types of training interventions and the evaluation methodologies. McBain (2004) noted that consistent training was rare and

many organizations did not know how their training models impacted on performance.

The findings are closely related to the study by Ditillo, (2004) in his research on The Role of MCS as Knowledge Integrated Mechanisms in Knowledge Intensive Firms and found that MCS can only be effective if used to coordinate individuals as a support tool rather than an evaluation for organisation performance. The study recommended further studies on MCS application as an evaluation instrument. Egesi et al (2014) studied the Technical and Vocational Education and Training (TVET) For Sustainable Future in Nigeria and Arfo, (2015) studied 'A Comparative Analysis of Technical and Vocational Education and Training Policy in Selected African Countries' where both studies recommended the need for a review of the evaluation and training tools.

2.7 Research Hypotheses

The study hypotheses that anchored the study include:

H₀₁ There is no significant effect of institutional leadership on institutional performance of TTIs in Kenya

H₀₂ Management control system (MCS) does not moderate on the relationship between institutional leadership and institutional performance of TTIs in Kenya

3. Research Methodology

This study used an explanatory research design. This research design was suitable for this study because it focused on why questions. Similar questions could be raised on the institutional leadership e.g. Why there exists disconnect between the skill levels of TTI graduates and the world of work? This research design involved collecting information that enabled the hunch that MCS moderates the relationship between the institutional leadership and institutional performance to have a causal explanation as suggested by Clark and Creswell (2011). The study adopted the positivism research philosophy which emphasized a value-free (objective) view of science as explained by Bryman and Bell (2015) and it is frequently associated with quantitative methods that rely on the researchers' ability to gather numerical evidence of the phenomena under investigation and analyse it to answer the research questions (Veal 2005).

Table 3.1: Target Population Summary

Number of Institutions	Target Population	Sample Size
59	379	194

Source: Research Study, 2019

The target population was the 379 heads of academic departments (HODs) and it was obtained from the 59 TTIs in Kenya which were registered with both MOEST and Technical and Vocational Education and Training Authority (TVETA) by 2015. Though the institutions have increased in number to date, the others were not considered since they were new and did not exist at the time of study. The 379 HODs were identified from a list of the 59 institutions as shown in table 3.1. The support staff was excluded from the population since some concepts of study were not be familiar to them. The students were also not considered as

they were treated as external customers were recipients of the services generated from TTIs and may therefore display a degree of bias. A sample of 194 was obtained using Yamane statistical technique provided by Amugune, (2014) from the target population of 379 HODs obtained from the 59 institutions. Stratified method of sample selection was used for getting a sample since the target population was heterogeneous (Blumberg & Luke 2010) due to location and challenges in different parts of the country as a result of diversity in geographical, social and economic conditions within the country. Random sampling was used to identify the HODs in each institution under study.

This study relied on primary data because it is widely used in research, straight-forward and produces original and authentic results compared to secondary data which is second hand and may require modification to suit the study (Clark & Creswell 2011). A closed ended research instrument was used to collect data. In essence, the questions the researchers asked were tailored to elicit the data that helped with the study. The heads of academic departments (HODs) from the 59 TTIs provided the requisite data for this study.

The possibility of Type I or type II errors or over and under estimation of significance or effect size(s) regression assumptions are tested and according to Belsley et al., (2005), Pedhazur (1997) and Osborne et al (2001), knowledge and understanding of the situations in violations of assumptions leads to serious biases and though they are of little consequence, are essential to meaningful data analysis. Thus the assumptions of normality, Heteroscedasticity and autocorrelation, Multicollinearity, common method variance (CMV), Non-Response Bias (NRB) and outliers were tested. None of the assumptions had been violated and thus the data was suitable for further analyses.

A Pilot Test was conducted to preliminarily assess the proposed instruments and modify it to suit the context of this present study in areas such as the clarity of the research instruments; items that may have confused respondents and to identify sensitive or annoying items (Cordeiro & Lemonte, 2011). This study uses the academic HODs from TTIs that are registered by MOEST but are not recognized by TVETA. Only 10% of the entire sample size (194 respondents) is used in the pilot study (Mugenda & Mugenda, 2003) which translates to nineteen (19) respondents. The desirability of a pilot study is to ensure that the research instrument as a whole functions well (Bryman, 2004).

Table 3.2: Instrument reliability

Construct	Cronbach alpha	Number of Items
Institutional Leadership (X1)	0.844	6

Source: Research Study, 2019

To ensure reliability, a pre-test of the questionnaire was done to check the clarity of items and consistency in the meaning of items to all respondents. This study also used the internal consistency technique to check on reliability of the questionnaire. The most common internal consistency measure which generates a coefficient value is known as Cronbach's alpha (α) (Waithaka & Ngugi, 2012). Internal

consistency indicates the extent to which a set of items can be treated as measuring a single latent variable. Cronbach alpha value of 0.7 was recommended cut-off point of reliabilities for this study. The study yielded the results shown in table 3.2 where all the study constructs had reliability measures above 0.7 from all the items used to measure them. This further supported the reliability of the hypothesised indicators to measure the constructs.

In this study the questionnaire items were checked for clarity of words and the accuracy of statements in relation to research items through discussions which ensured validity of constructs. Validity of the research instrument is the accuracy and meaningfulness of inferences based on the results. Best and Kahn (2006) suggest that the validity of an instrument is asking the right questions framed from an ambiguous way. A pre-test of the questionnaires was also done to ensure that the items were clearly stated and have adequate content to ensure content validity.

This study tested both construct validity and content validity where Exploratory Factor Analysis (EFA) was used to content validity by assessing the underlying structure of the constructs studied because it is an unrestricted model which considers a simple structure where the latent factors are set to explain as much variance as possible for a set of observed variables/ indicators (Kaplan and Norton 2015). Each section assessed information for a specific objective in relation to the conceptual framework and tested through Exploratory Factor Analysis (EFA). Confirmatory Factor Analysis (CFA) was also carried out to assess unidimensionality of the constructs. CFA is a restricted analysis based on the hypothesised model. The CFA results were used to assess construct validity by assessing convergent and discriminant validity. According to Kline (2014), observed variables (indicators) that measure the same construct show convergent validity if their inter-correlations are at least moderate in magnitude and a set of observed variables measuring different constructs show discriminant validity if their inter-correlations are not too high.

4. Data Analysis and Results

There are no agreed principles of what constitute large amount of missing data. However, researchers suggested that less 10% of missing data on a particular variable or response is not large and does not constitutes a large amount of missing data (Cohen & Cohen, West & Aiken, 2013). Those respondents that had more than 10% missing responses in any of the whole questions asked were candidates for deletion. Tabachnick, Fidell, and Ullman(2007) suggests that cases that have less than 10% missing responses could be allowed for further analysis subject to dealing with missing responses empirically. The study examined the missing responses and concluded that they were less than 10%, independent and missing completely at random. The study did impute for the missing values by replacing it using median as one element of measures of central tendency.

Table 4.1: KMO and Bartlett’s test of sampling adequacy

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.890
Bartlett's Test of Sphericity	Approx. Chi-Square	1714.317
	df	300
	Sig.	.000

Source: Research Study, 2019

The results of the Exploratory Factor Analysis (EFA) also include KMO and Bartlett’s tests which were carried out to explore sampling adequacy and that the data is suitable for factor analysis (Burton & Mazerolle, 2011). From table 4.1, the results showed a KMO of 0.89 which is adequate for analysing factor analysis outputs. Tabachnick and Fidell, (2001) considered a KMO value of 0.5 suitable for factor analysis while Bearden et al., (2004) considered the adequate KMO measure to be above 0.60 - 0.70 which are all lower than the 0.89 result from this study. The adequacy is also examined by a Bartlett’s test which is meant to have a significant chi-square statistic (Tabachnick &Fidell, 2001). The results from this study show a Bartlett’s statistic of 1714.317 with a p-value of 0.000 which is less than 0.05 implying that the item correlation matrix is not an identity matrix and thus the data is adequate and suitable for factor analysis.

Table 4.2: Exploratory factor analysis (Variance Explained)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative%	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.282	37.127	37.127	9.282	37.127	37.127	4.203	15.032	16.811
2	1.762	7.047	44.174	1.762	7.047	44.174	3.437	13.745	30.556
3	1.399	5.594	49.769	1.399	5.594	49.769	3.113	12.449	43.004
4	1.302	5.207	54.975	1.302	5.207	54.975	2.993	11.970	54.974
5	0.976	3.895	58.870						
6	0.943	3.763	62.633						
7	0.92	3.679	66.852						
8	0.85	3.398	70.25						
9	0.765	3.061	73.312						
10	0.835	2.928	76.239						
11	0.656	2.625	78.864						
12	0.61	2.44	81.305						
13	0.589	2.356	83.661						
14	0.503	2.012	85.673						
15	0.479	1.914	87.587						
16	0.439	1.756	89.343						

17	0.504	1.683	91.026						
18	0.387	1.547	92.573						
19	0.35	1.401	93.974						
20	0.315	1.258	95.232						
21	0.288	1.152	96.385						
22	0.264	1.056	97.441						
23	0.243	0.973	98.414						
24	0.229	0.916	99.33						
25	0.168	0.67	100						

Extraction Method: Principal Component Analysis.

The factor loadings matrix from the EFA is shown in table 4.2. The results show that all the indicators considered at least load a construct by a loading more than 0.4 and thus none of them was expunged. An observed variable is said to belong to the construct if it loads highest and above 0.4. The factor loading matrix shows that the results of the EFA echo the conceptual model where the indicators tend to measure similar constructs as in the hypothesised model. Indicators hypothesised to belong to the same construct are highly correlated to each other. This is also reflected by the Confirmatory Factor Analysis (CFA) carried out to assess uni-dimensionality of the constructs.

CFA is a restricted analysis based on the hypothesised model. The CFA results were used to assess construct validity by assessing convergent and discriminant validity. According to Kline (2014), observed variables (indicators) that measure the same construct show convergent validity if their inter-correlations are at least moderate in magnitude and a set of observed variables measuring different

constructs show discriminant validity if their inter-correlations are not too high. This study used the Criterion by Fornell and Larcker, (1981) to assess convergent validity where the average shared variances are extracted (AVEs) for the constructs following a CFA. The AVEs are measures of the level of variance captured by a construct against the level due to the measurement error and are said to be very good if above 0.7 and acceptable if above 0.5. All the AVEs for the study constructs were all above 0.5 with some above 0.7 implying acceptable convergent validity. For discriminant validity, this study explored the squared multiple correlations in comparison to the extracted AVEs as also proposed by the Fornell-Larcker testing system (1981). The squared multiple correlations reflect the variance that the indicators belonging to a construct share with other constructs which should be low. All the AVEs are larger than the relative squared multiple correlation implying that the data and thus the instrument exhibit discriminant validity. Since both convergent and discriminant validity were found to be exhibited, it was concluded that the instrument exhibited construct validity and that the study constructs exhibited uni-dimensionality.

Table 4.1: Institutional Leadership

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard deviation
Institutional policies and programs are effectively communicated	7.4%	17.4%	14.1%	47.0%	14.1%	3.43	1.148
Duties are clearly spelt out for each employee	4.7%	13.4%	15.4%	32.9%	33.6%	3.77	1.182
Leadership roles are availed for staff at every level	4.7%	17.4%	17.4%	38.3%	22.1%	3.56	1.149
Sanctions for undisciplined staff are fairly applied and communicated	4.7%	19.5%	21.5%	30.2%	24.2%	3.5	1.185
Participative leadership is encouraged	6.7%	16.8%	16.1%	31.5%	28.9%	3.59	1.247
There is collaboration with stakeholders	4.7%	15.4%	15.4%	34.2%	30.2%	3.7	1.185

a. Dependent Variable: Y_ Institutional Performance

In descriptive statistics, the construct Institutional leadership measured using 6 indicators was analysed as presented in table 4.3. The study sought to establish the level at which respondents agreed or disagreed with the above statements relating to leadership in Technical Training Institutes in Kenya. Respondents indicated the extent to which they agree that their institutional policies and programs were effectively communicated. From the results Majority (47%) agreed that institutional policies and programs being effectively communicated while 14.1% strongly agreed. The respondents in disagreement and strong disagreement were 17.4% and 7.4% respectively. There are also 14.1% of the respondents who were neutral to the question as to whether institutional policies and programs being effectively communicated in their institutions. The mean score is 3.43 which is larger than 3 implying on average the respondents agree that institutional policies and programs being effectively communicated in their institutions. Majority of the respondents, that is 33.6%, showed a strong agreement to

the statement that duties were clearly spelt out for each employee whereas 32.9% of them agreed. Respondents who strongly disagreed were 4.7% while those who disagreed were 13.4%. 15.4% of the respondents, on the other hand, were neutral to the question whether duties were clearly spelt out for each employee. The mean of 3.77 indicates that respondents were in agreement that duties were clearly spelt out for each employee.

The question of whether leadership roles were availed for staff at every level was agreed by most of the respondents with a percentage of 38.3% while 22.1% of them strongly agreed. Respondents, on the contrary, showed strong disagreement and disagreement were 4.7% and 17.4% respectively. There were 17.4% of the respondents who showed neutrality to the question whether leadership roles were availed for staff at every level. The overall mean of 3.56 which is above 3 indicates that the respondents agreed to the statement that leadership roles were availed for staff at

every level. Respondents showed their level of agreement to the question whether Sanctions for undisciplined staff were fairly applied and communicated. Majority of the respondents (30.2%) agreed whereas 24.2% strongly agreed to the statement. Respondents who showed strong disagreement and disagreement were 4.7% and 19.5% in that order whereas those who were neutral to the question were 21.5%. The mean was 3.5 which is above 3, meaning the respondents agreed that Sanctions for undisciplined staff were fairly applied and communicated.

Most of the respondents (31.5%) agreed that participative leadership was encouraged while 28.9% strongly agreed. On the other hand, 6.7% and 16.8% of the respondents strongly disagreed and disagreed respectively. There were 16.1% of

the respondents who were neutral to the question whether participative leadership was encouraged. The mean of 3.59 indicated that the respondents were in agreement that participative leadership is encouraged. Respondents indicated the level at which they agreed to the statement that there were collaborations with stakeholders. Here majority (34.2%) showed agreement while 30.2% of the respondents strongly agreed to the statement. Respondents who strongly disagreed and disagreed were 4.7% and 15.4%. There were 15.4% of respondents who were neutral to the question. The mean of 3.7 clearly indicated that the respondents agreed that there were collaborations with stakeholders the respondents agreed that there was collaboration between the institutions and stakeholders.

Table 4.2: Model Summary; MMR model on Institutional Leadership

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.625a	0.391	0.387	0.783	0.391	94.395	1	147	0.000
2	.764b	0.583	0.578	0.650	0.192	67.395	1	146	0.000
3	.789c	0.623	0.615	0.621	0.039	15.059	1	145	0.000

a. Dependent Variable: Y_ Institutional Performance

The model summary statistics presented in table 4.4 show that the R and the R-square for this model were, 0.625 and 0.391 respectively. The R-square which is the coefficient of determination reflects the variance in institutional performance explained by the variation of leadership out of

the total variation in performance. This Statistics imply that 39.1% of the variation in performance is explained by varying institutional leadership while the remaining 60.9% is explained by other factors that are not included in this one predictor model.

Table 4.5: Model coefficients; Institutional Leadership and Performance model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.107E-017	.064		.000	1.000
	X1_Leadership	.625	.064	.625	9.716	.000

a. Dependent Variable: Y_ Institutional Performance

Table 4.5 shows that the constant to this model is insignificant at 0.05 level of significance based on the p-value of 1.00 which was greater than 0.05. The coefficient estimate of institutional leadership was however significant with a p-value less than 0.05. The model had an implication that improving the levels of institutional leadership as perceived by the heads of departments in the institutions would increase institutional performance by 0.625. The equation generated from the model is thus one that passes through the origin given below:

$$Y = .625X_1 + \epsilon$$

Where, Y was the institutional performance of TTIs, X₁ was institutional leadership and ε was the error term component. Further to the bivariate regression model between organisation processes and institutional performance, a hierarchical regression model was fitted with steps 2 and 3 to assess objective 2. In model 2, management control systems MCS was added to the model and in the third model, the interaction terms between institutional leadership and MCS was added to the model.

Table 4.6: Model Summary; MMR model on Institutional Leadership

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.625a	0.391	0.387	0.783	0.391	94.395	1	147	0.000
2	.764b	0.583	0.578	0.650	0.192	67.395	1	146	0.000
3	.789c	0.623	0.615	0.621	0.039	15.059	1	145	0.000

a. Dependent Variable: Y_ Institutional Performance

Table 4.6 shows the effect of every addition to the model. In both models 2 and 3, the addition of MCS and the interaction terms to the models as predictors respectively were found to have significant changes to the R-square. This is shown by the p-value of the change in R-square which is

0.000 in both models. The significant change in R-square is an implication of a significant moderating effect.

Table 4.3: Model coefficients; MMR model on Institutional Leadership

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.107E-017	.064		.000	1.000
	X1_Leadership	.625	.064	.625	9.716	.000
2	(Constant)	5.442E-017	.053		.000	1.000
	X1_Leadership	.169	.077	.169	2.197	.030
	Z_Management Control System	.633	.077	.633	8.209	.000
3	(Constant)	.066	.054		1.225	.223
	X1_Leadership	.050	.025	.050	1.990	.048
	Z_Management Control System	.477	.084	.477	5.699	.000
	X1 interaction Z	.145	.037	.323	3.881	.000

a. Dependent Variable: Y_ Institutional Performance

Table 4.7 is the coefficient table of the hierarchical model for assessing the moderating effect of MCS on the relationship between institutional leadership and institutional performance. Model 2 shows that the added predictor MCS has a significant coefficient estimate ($\beta=0.633$, t -statistic=8.209, p -value=0.000). The added coefficient of the interaction term between MCS and leadership was also found to have a significant coefficient estimate ($\beta=0.145$, t -statistic=3.881, p -value=0.000). The p -value of the change in R-square from this regression model is less than the 0.05 level of significance implying the inclusion of the interaction terms between the institutional leadership and MCS has a significant change in the model thus a significant moderating effect. The null hypothesis was thus rejected and a

conclusion drawn that MCS has a significant moderating effect on the relationship between the Institutional Leadership and institutional performance of TTIs in Kenya.

The equation generated from the model is given by;

$$Y = 0.050X_1 + 0.477X_1 + Z + 0.145Z * X_1 + \epsilon$$

Where, Y was the institutional performance of TTIs, X_1 was institutional leadership, Z observed scores and the interaction equations between the independent variables (X) and moderator variable (Z) with an intersection ($X_1 * Z$). The ϵ was the error term component.

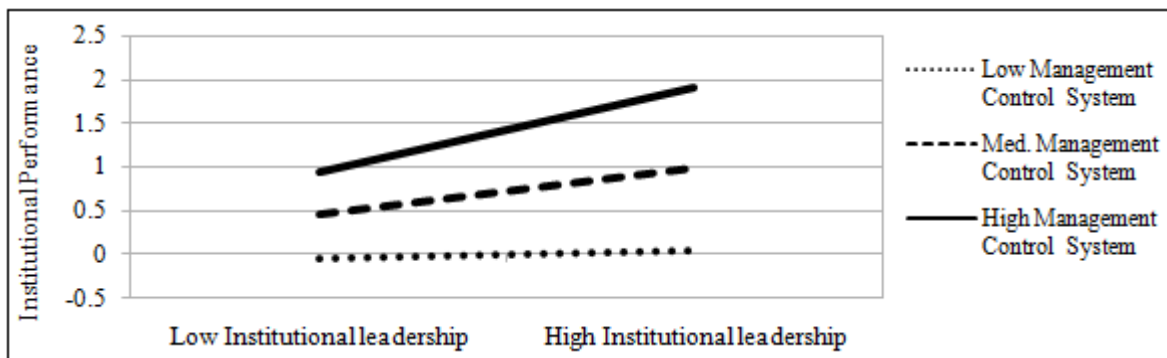


Figure 4.1: MMR slopes; inatitutional Leadership and Institutional Performance

Figure 4.1 shows a graphical presentation of the significant positive moderating effect. The lines showing the influence of leadership on performance are all increasing functions though with varying slopes at different levels of MCS. At low MCS, the leadership has a very low influence on institutional leadership reflected by an almost horizontal line. Increasing the levels of MCS increases the slopes of the line implying that higher levels of MCS increases the level of influence that leadership has on performance

5. Discussion and Conclusion

Institutional leadership has been recognised as an important concern and has generated substantial amount of interest both at management and functional levels (Amadi 2014). Further improving levels of institutional leadership as perceived by the (Armstrong-Stassen, 2008) in the institutions would increase institutional performance significantly. Institutional leadership holds the key to high levels of performance in TTIs in Kenya. The leadership style of the manager is said to be able to interpret and propagate

the correct attitudes to the followers by creating a suitable social structure with the correct environment and culture to implement policy decisions. A combination of the institutional leadership and MCS further enhanced institutional performance whose outcomes should be visible in the performance of graduates in the job market.

These results are similar to those obtained by Murad and Gill (2016) in their study on Impact of Leadership on Organisational Performance in Pakistan Public Sector where the study indicated that there was a positive relationship between leadership and performance in the public university of Punjab. In their research, Zhu, Chew, and Spangler(2005) investigated the connection between the transformational leadership style and organizational performance and found that within 170 companies from Singapore, there was a positive relationship between the transformational leadership and organizational performance. This suggests that transformational leadership would also be ideal for the TTIs since it encourages employees to make acceptable decisions on their own without waiting to consult their

superiors. Transformational leadership is also about practicing participative leadership and succession leadership.

When institutional leadership is infused in MCS, the combination influences the way resources are focused to convert distinct competences into outcomes. Performance of the institution is significantly impacted by the leader and if the functions are appropriately established for the system, it attracts customers and helps in maximizing the institution's funds, reinforcing its pillars and this will result in the expected increase in performance. In other words, effective leadership protects against probable financial challenges and facilitates remarkable growth and therefore; plays a key role in the growth of the institutional performance (Ehikioya 2009). Leadership in TTIs would be significantly enhanced if the management considered different leadership styles at different times. Today's institutional environment is situational as a result of the dynamism witnessed in all sectors ranging from digital, mergers, competition and ever changing technology and innovation. Further, McColl-Kennedy and Anderson, (2002) found out that as certain variables change, so do the leadership styles. Jowi (2018) corroborates these observations in his study on 'Leadership Styles and Their Impact on Staff Commitment' and concluded that leadership affects significant organizational change and improvement in higher education institutions. Even in the challenging contexts in which higher institutions operate, the people-manager style had the best outcomes on the commitment of staff in the faculties.

Therefore, the study proposes a good linkage between policies, the leadership styles and social structure and that duties should be clearly spelt out for each employee and instructions and orders clearly communicated within the institutions. This was meant to ensure efficiency in every aspect of teaching and learning. Discipline procedures and sanctions for undisciplined staff should be fairly applied and communicated, as applied by the institutions. Finally the degree of collaboration with stakeholders which was meant to enhance sharing of innovations and general information on governance and management needed improvement for the sake of institutional performance. The study also recommends that for greater generalization of results, the targeted sample should exemplify a reasonable mix of those institutions registered with both TVETA and MOEST and those that are not registered with TVETA but only with MOEST.

References

- [1] Akareem, H. S., & Hossain, S. S. (2016). Determinants of education quality: What makes students' perception different? *Open Review of Educational Research*, 3(1), 52–67.
- [2] Althaus, C., Bridgman, P., & Davis, G. (2007). *The Australian policy handbook*. Allen & Unwin Sydney.
- [3] Amadi. (2014). *The effect of training and development on employees Performance. A case of Safaricom Limited*. University of Nairobi, Kenya.
- [4] Amugune, B. K. (2014). Sample size determination and sampling techniques. *Mental Health Workshop, Maanzoni*.
- [5] Antonakis, J., & Robert, J. (2013). *House (2013). 'The Full-Range Leadership Theory: The Way Forward', Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition (Monographs in Leadership and Management, Volume 5)*. Emerald Group Publishing Limited.
- [6] Anyanwu, J. O., Okoroji, L. I., Ezewoko, O. F., & Nwaobilor, C. A. (2016). The impact of training and development on workers performance in Imo state. *Global Journal of Social Sciences Studies*, 2(2), 51–71.
- [7] Arfo, E. B. (2015). *A Comparative Analysis of Technical and Vocational Education and Training Policy in Selected African Countries* (PhD Thesis). University of KwaZulu-Natal, Edgewood.
- [8] Armstrong-Stassen, M. (2008). Organisational practices and the post-retirement employment experience of older workers. *Human Resource Management Journal*, 18(1), 36–53.
- [9] Astawa, I. P., & Sudika, P. (2015). The impact of local culture on financial performance in property firms in Bali. *Asia-Pacific Management and Business Application*, 3(2), 106–115.
- [10] Bearden, C. E., Jawad, A. F., Lynch, D. R., Sokol, S., Kanen, S. J., McDonald-McGinn, D. M., ... Wang, P. P. (2004). Effects of a functional COMT polymorphism on prefrontal cognitive function in patients with 22q11. 2 deletion syndrome. *American Journal of Psychiatry*, 161(9), 1700–1702.
- [11] Bell, C., Chan, M., & Nel, P. (2014). The impact of participative and directive leadership on organisational culture: An organisational development perspective. *Mediterranean Journal of Social Sciences*, 5(23), 1970.
- [12] Belsley, D. A., Kuh, E., & Welsch, R. E. (2005). *Regression diagnostics: Identifying influential data and sources of collinearity* (Vol. 571). John Wiley & Sons.
- [13] Best, J.W. & Kahn, J. (2006). *Research in Education: New Delhi: Prentice Hall of ...*
- [14] Black, P., Harrison, C., Lee, C., Marshall, B., & William, D. (2003). Formative and summative assessment: Can they serve learning together. *AERA Chicago*, 23.
- [15] Blumberg, S. J., & Luke, J. V. (2010). Wireless substitution: Early release of estimates from the National Health Interview Survey, January–June 2011. *National Center for Health Statistics*, 201(3).
- [16] Bryman, A. (2004). Qualitative research on leadership: A critical but appreciative review. *The Leadership Quarterly*, 15(6), 729–769.
- [17] Bryman, A., & Bell, E. (2015). *Business research methods*. Oxford University Press, USA.
- [18] Burton, L. J., & Mazerolle, S. M. (2011). Survey instrument validity part I: Principles of survey instrument development and validation in athletic training education research. *Athletic Training Education Journal*, 6(1), 27–35.
- [19] Chua, J., Basti, A., & Hassan, Z. (2018). Leadership style and its impact on employee performance. *International Journal of Accounting and Business Management*, 6(1), 80–94.

- [20] Clark, V. P., & Creswell, J. W. (2011). Designing and conducting mixed methods research. Retrieved on July, 25, 2014.
- [21] Cordeiro, G. M., & Lemonte, A. J. (2011). The β -Birnbaum-Saunders distribution: An improved distribution for fatigue life modeling. *Computational Statistics & Data Analysis*, 55(3), 1445–1461.
- [22] Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334.
- [23] Ditillo, A. (2004). Dealing with uncertainty in knowledge-intensive firms: The role of management control systems as knowledge integration mechanisms. *Accounting, Organizations and Society*, 29(3–4), 401–421.
- [24] Egesi, O. K., Okoro, N. S., & Ndidi, A. (2014). Technical and Vocational Education and Training (TVET) For Sustainable Future in Nigeria. *Journal of Resourcefulness and Distinction*, 8(1).
- [25] Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: Evidence from Nigeria. *Corporate Governance: The International Journal of Business in Society*, 9(3), 231–243.
- [26] Essawi, M., & Tilchin, O. (2012). Structural approach to changing organizational cultural values. *International Journal of Business and Social Science*, 3(20), 175–178.
- [27] Evans, J., Bridson, K., & Rentschler, R. (2012). Drivers, impediments and manifestations of brand orientation: An international museum study. *European Journal of Marketing*, 46(11/12), 1457–1475.
- [28] Fornell, C., & Larcker, D. F. (1981). *Structural equation models with unobservable variables and measurement error: Algebra and statistics*. SAGE Publications Sage CA: Los Angeles, CA.
- [29] Fortino, A. (2013). *The Purpose of Higher Education: To Create Prepared Minds.* evollution. com. June 6.
- [30] Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 115.
- [31] Glassman, A. M., & Opengart, R. (2016). Teaching Innovation and Creativity: Turning Theory into Practice. *Journal of International Business Education*, 11, 113.
- [32] Gleeson, J. (2010). *Curriculum in context: Partnership, power and praxis in Ireland*. Peter Lang.
- [33] Gomez-Mejia, L. R., Berrone, P., & Franco-Santos, M. (2014). *Compensation and organizational performance: Theory, research, and practice*. Routledge.
- [34] Grigoroudis, E., Orfanoudaki, E., & Zopounidis, C. (2012). Strategic performance measurement in a healthcare organisation: A multiple criteria approach based on balanced scorecard. *Omega*, 40(1), 104–119.
- [35] Hannula, L. (2018). *Graduate employment in the era of globalisation: Challenges, opportunities, and what finnish tertiary education could learn from the UK*.
- [36] Hoque, Z. (2014). 20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research. *The British Accounting Review*, 46(1), 33–59.
- [37] Huhtala, M., Kangas, M., Lämsä, A.-M., & Feldt, T. (2013). Ethical managers in ethical organisations? The leadership-culture connection among Finnish managers. *Leadership & Organization Development Journal*, 34(3), 250–270.
- [38] Iqbal, N., Anwar, S., & Haider, N. (2015). Effect of leadership style on employee performance. *Arabian Journal of Business and Management Review*, 5(5), 1–6.
- [39] Johanson, R. K., & Adams, A. V. (2004). *Skills development in sub-Saharan Africa*. The World Bank.
- [40] Jowi, J. O. (2018). *Deans in Kenyan Universities: Their leadership styles and impacts on staff commitment*.
- [41] Kaplan, R. S., & Norton, D. P. (2008). *The execution premium: Linking strategy to operations for competitive advantage*. Harvard Business Press.
- [42] King, K., & McGrath, S. (2004). Knowledge for development. *Comparing British, Japanese, Swedish and World Bank Aid*. Human Sciences Research Council Press, Cape Town, South Africa.
- [43] Kline, P. (2014). *An easy guide to factor analysis*. Routledge.
- [44] Kuvaas, B. ard, & Dysvik, A. (2009). Perceived investment in employee development, intrinsic motivation and work performance. *Human Resource Management Journal*, 19(3), 217–236.
- [45] Lavy, I., & Yadin, A. (2013). Soft skills-An important key for employability in the " shift to a service driven economy" era. *International Journal of E-Education, e-Business, e-Management and e-Learning*, 3(5), 416.
- [46] Lawrence, T. B., & Suddaby, R. (2006). Institutions and Institutional Work. SR Clegg, C. Hardy, TB Lawrence & WR Nord (eds.) Handbook of Organization Studies. 215-254. Sage. March, JG (1991) *Exploration and Exploitation in Organizational Learning*. *Organization Science*, 2(1), 71–87.
- [47] Marginson, D. E. (2002). Management control systems and their effects on strategy formation at middle-management levels: Evidence from a UK organization. *Strategic Management Journal*, 23(11), 1019–1031.
- [48] Marginson, S., & Rhoades, G. (2002). Beyond national states, markets, and systems of higher education: A glonacal agency heuristic. *Higher Education*, 43(3), 281–309.
- [49] McColl-Kennedy, J. R., & Anderson, R. D. (2002). Impact of leadership style and emotions on subordinate performance. *The Leadership Quarterly*, 13(5), 545–559.
- [50] Mose, J. M. (2014). *Effect of corporate governance on financial performance of telecommunication firms in Kenya* (PhD Thesis). SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI.
- [51] Mugenda, A. (2008). Social science research: Conception, methodology and analysis. *Nairobi: Kenya Applied Research and Training Services*.
- [52] Mugenda, O. M., & Mugenda, A. G. (2003). Qualitative and quantitative approaches. *Research Methods Africa Center for Technology Studies (Acts) Press. Nairobi Kenya*.
- [53] Murad, M., & Gill, S. A. (2016). Impact of Leadership on Institutional Performance: Evidence from Public

- Sector Universities of Faisalabad, Pakistan. *Studies*, 5(4).
- [54] Odumeru, J. A., & Ogbonna, I. G. (2013). Transformational vs. transactional leadership theories: Evidence in literature. *International Review of Management and Business Research*, 2(2), 355.
- [55] O'Leary, R., & Bingham, L. B. (2009). *The collaborative public manager: New ideas for the twenty-first century*. Georgetown University Press.
- [56] Orozco D. (2016). *Understanding the impact of Management Control Systems over capabilities and organizational performance, under the influence of perceived environmental uncertainty*. University of Barcelona.
- [57] Osborne, Christensen, W. R., & Gunter, J. (2001). Educational psychology from a statistician's perspective: A review of the power and goodness of educational psychology research. *National Meeting of the American Education Research Association (AERA)*, Seattle, WA.
- [58] Pedhazur, E. J. (1997). *Multiple Regression in Behavioral Research* (3rd ed). Orlando, FL: Harcourt Brace.
- [59] Rattana S. (2012). *Moderating Role of Business Strategies on the Relationship between Best Business Practices and Firm Performance*, Valaya Alongkorn Rajabhat University.
- [60] Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), 718–804.
- [61] Rorison, Jamey; Voight, Mamie. (2016). Leading with Data: How Senior Institution and System Leaders Use Postsecondary Data to Promote Student Success. *Institute for Higher Education Policy*. 1825 K Street Suite 720, Washington, DC 20006.
- [62] Schein, E. H. (2004). *Organizational culture and leadership (Jossey-Bass business & management series)*. Jossey Bass Incorporated.
- [63] Scott, W. R. (2004). Institutional theory. *Encyclopedia of Social Theory*, 11, 408–14.
- [64] Simons R. (1994). How new top managers use control systems as levers of strategic renewal. *Strategic Management Journal*.
- [65] Simons, R. (1995). Control in an age of empowerment. *Harvard Business Review*, 73(2). Retrieved from http://pascal.iseg.utl.pt/~rinovieira/ape/materiais/control_in_an_age_of_empowerment.pdf
- [66] Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50(1), 35–67.
- [67] Tabachnick, B. G., & Fidell, L. S. (2001). Principal components and factor analysis. *Using Multivariate Statistics*, 4, 582–633.
- [68] Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5). Pearson Boston, MA.
- [69] Tessmer, M. (2013). *Planning and conducting formative evaluations*. Routledge.
- [70] UNESCO. (2014). *Research in early childhood education for sustainability: International perspectives and provocations*. Routledge.
- [71] Veal, A. J. (2005). *Business research methods: A managerial approach*. Pearson Education Australia/Addison Wesley.
- [72] Waithaka, S. M., & Ngugi, K. (2012). *Analysis of factors that influence implementation of performance contracts in state corporations (A Case of Kenya Civil Aviation Authority)*.
- [73] Zhu, W., Chew, I. K., & Spangler, W. D. (2005). CEO transformational leadership and organizational outcomes: The mediating role of human–capital-enhancing human resource management. *The Leadership Quarterly*, 16(1), 39–52.