

Confirmatory Factor Analysis for Testing Validity and Reliability of University Transformation Practices as Perceived by University Staff

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Article history

Accepted: 2020-01-01 Published online: 2020-02-29 Received: 2019-03-01 Received in revised form: 2019-11-02

Abstract

This empirical study was a cross-sectional survey examining the four subdimensions of university transformation among the six universities in the central region of Uganda. Questionnaires were distributed to 820 volunteers randomly chosen from the university staff and the data generated was subjected to a confirmatory factor analysis. The essence was due to the fact that structural equation modelling requires a big number of sample size to measure the validity and reliability of the hypothesized measurement model of university transformation construct. The findings exhibited that the data was fit and appropriate for predicting the four subdimensions of university transformation construct. In addition, the findings reflected a relationship between the four subdimensions of university transformation construct. Implying that when university transformation practices are put into consideration universities would be able to achieve their strategic development and transformation. The study concluded by exhibiting the foundation on which future studies can base to extend the understanding and emphasis on the four subdimensions used in measuring university transformation.

Keywords: University transformation, structure, strategy, system, shared values, effective performance, Confirmatory Factor Analysis

1.0 INTRODUCTION

The term university transformation, is coined from organisation transformation or change, and it means the attainment of institutional vision, mission and strategies through a systematic approach that can satisfy stakeholders needs and at the same time address customer interests (Cummings & Worley, 2010). Like any other organisations experiencing ironic transformational changes in terms of management and administration of their business strategies and plans, universities are also compelled to follow suit so as to compete favourably on the world market. Today universities are subjected to this process of transformation in order to shift from the usual processes and systems of operation to new trends that accommodate customer needs and quality performance (Marshall, 2011). Since university are termed as educational organisations, this study utilises the term transformation to lay the foundation on which universities can change their management style so as to catch up with the global needs. Even though transformation is not something easy to undertake, universities must embrace this process for sustainability consequences and quality outputs (Edwards & Reams, 2011). Meanwhile to achieve this process transformation in an organisation, it should be done in phases to enable its change agents cope with the strategies and plans needed so as to avoid drawbacks and downfall (Edwards & Reams, 2011; Marshall, 2011). Since 1970 many studies have been done on organisational transformation with an aim of arriving at the true meaning of-, conceptual and theoretical frameworks of transformation. These efforts have rendered a great role in generation of different ideas and parameters that govern the meaning of organisational transformation as shown below

1.1 The Nature Of Organisational Transformation Among Universities

Universities today are at crossroads in moments of turbulent world and they must choose between moving forward and downfall. This is because the global pressures exerted on these institutions everyday demand for change in terms of communication, strategies, systems, management of employee trust so as to predict future prosperity and development (Cummings & Worley, 2010; Dawson, 2014; Edwards & Reams, 2011). Since universities play an important role towards the change of societies and communities, there is a need for them to adopt a collaborative effort emanating from both within and outside environment to help them meet the demands of their customers (Voet, 2014). Therefore-, to harness transformation, there is need to invest in technology to improve their operations systems and facilitate flexibility in learning and quality services (Marshall, 2011). Through the use of technology and collaboration within and outside world, the flow of information and sharing values in a structured manner can be attained towards achievement of the intended organisational goals and objectives since the doors of experience and exposure are at the disposal of the staff (Dawson, 2014). Even though organisations transformation may be chaotic and complex in nature university leaderships needs to be strong to forecast the means through which challenges that may exacerbate conflict and resistance towards change and can be addressed without ruining the institutions progressive development (Edwards & Reams, 2011; Marshall, 2011; Miiro, 2016). Meanwhile, to achieve positive transformation of university structures, strategies, systems and enhance shared values, university leadership must endeavour to devote a lot of resources and available means to capacity development, and this should be done by identifying potential change agent and avail them with enough training that can facilitate the skyrocket of institutional programs towards higher horizons (Miiro, 2017). In addition, Abubakr & Danjeka, (2016) state that universities operate in chaotic systems due merging of different components of management systems to meet a particular agent however, they sometimes end up causing conflicting situations. Therefore, to overcome such challenges of conflicting situations, there is a need to involve participatory decision making process to address

the challenges with due attention that may need low speed so as to help leaders be extra careful and vigilant while coping up with both national and international strategies of institutional transformation (Kaweesi & Miiro, 2016). Since university transformation has become imperative in this era of unprecedented dictates of life changes, universities have got to be extra vigilant while soliciting for means and strategies that can help them address the economic pressures that are driven by both political and economic situations of the world (Barnard & Stoll, 2010). While change is priority and complex in nature university leadership and staff should be aware that transformation normally has both negative and positive results depending on the strategies that the institution may decide to adopt. It is therefore worth looking into several conceptual and theoretical meaning of transformation practices so that the process is conducted both efficiently and effectively. Thus, the essence of this paper is to unearth the vast knowledge and experiences from the available literature on organizational transformation and propose a way for university change and transformation.

1.2 University Transformation

As seen before the concept of university transformation is coined from the term organisational transformation or change. Since 1970s to date the concept of organisational transformation has traversed through various generation with several definitions, concepts, parameters and theories. For instance Mohammad & Ravanfar, (2015) state that organisational transformation and restructuring has been in place since the time of industrial revolution and it can be defined as the way duties and responsibilities are allocated among employees with both procedures and structure to follow so as to meet the organizations mission and vision. It can also be referred to as achievement of organizational strategic plan and mission through the use of systematic procedures as set by the stakeholders (Edwards & Reams, 2011). Yet Guilmot & Ehnert, (2015) refer to institutional transformation as a paradoxical situation that brings both managers and employees to work together and closely towards advancement of decisions and solutions that may help the institution to cope up with the demands of change. Furthermore, the concept can refer to the ways through which organization can be capable of absorbing pressures in terms of creativity adaptation and respond to the demands of the time and while at the same time remain relevant, profitably viable, morally and ethically attractive to the global spectrum without under looking the stakeholders interests (Chia, 1999). Mckinsey refers to university transformation as the focus on structure, strategy, systems, shared values, style, skills, staff with an aim of stablishing whether they coordinate towards achievement of organizational goals and objectives (Mohammad & Ravanfar, 2015). Yet it can also mean sticking to morals and organizational culture while absorbing change pressures (Barnard & Stoll, 2010). Conversely, transformation is viewed as a method of evolving strategic plans for adjusting an organization's outlook in terms of business process by emerging of policies, procedures, and processes that can engineer its movement from the current state to a better future (Barnard & Stoll, 2010; Cummings & Worley, 2010; Edwards & Reams, 2011; Ferrer-Balas et al., 2008; Hasan, Komoo, Nazli, & Nor, 2016). Moreover, the process of transformation among university is more of a collaborative effort that requires several units and department to operate together to enhance changes. This is because university units and departments are dependent on one another as a way through which goals can be achieved appropriately without other departments lugging behind (Chia, 1999; Pinheiro, Ouma, & Pillay, 2012; Van Tonder, 2004). Equally, others researchers refer to that terminology as a radical change that is results orientated towards feeding the market with desirable needs and at the same time cater for customer expectations, and this is normally achieved through leadership and employee willingness to learn from the past and present with an aim of changing institutional culture towards a bright future (Guilmot & Ehnert, 2015; Mohammad & Ravanfar, 2015; Pinheiro

et al., 2012; Scott, 2006; Van Tonder, 2004; Viljoen & Klopper, 2001; Voet, 2014). Meanwhile, Sahadath, (2013) opines that organizational transformation can also mean the essential organization's competence to adopt critical issues that may facilitate the business improve in terms of systems, application of technological advancement, innovation and learning. The process and structures, there must be change in management style so as to remain competitive. Besides, that attaining the success story of an organizational transformation is when all the employees are ready to catch up with the speed of change and move towards the same direction. However failure to move may cause an organization to appear blind in the current tempestuous world (Mourfield, 2014; Voet, 2014). Furthermore, Machuki, Aosa, & Leiting, (2012) in their study found out that organizational transformation is determined by internal strategic decision and thus, the successful effectiveness and efficiency of transformation depends on the streamlined strategy through use of structure, systems and their direct effect on strategy implementation. Thus, University transformational is gotten as an essential central management practice that many higher education institutions are working towards in order to sustain their existence and competitiveness on the world market today (Moerdyk, 2015).

It is also important to note that organizational transformation can realised as modification in the way institutional structures, systems, strategies and shared values function and receive the influx of ideas that allow them bring a new face towards institutional performance and image. Consequently, this definition acts a summary for the different definitions cited above and at the same time act as a back bone for shaping the objective of this study of defining university transformation construct.

1.3 1Characteristics of university transformation practices.

Mohammad & Ravanfar, (2015) states that the model was established by Mckinsey consultants Tom Peters, Robert Waterman and Julien Philips in 1980s with the help from Richard Pascale and Anthony G. Athos. Their aim was to exhibit the role of human resource towards that organizational excellent performance rather than the traditional ways of managing an organization interms of production, equipment and infrastructure. Yet Singh, (2013) states that the model came up with (7s) salient components through which an organization can transform itself in terms of communication to achieve effective performance and competitive advantage when the components are aligned together; structure, skills, staff, style, systems and shared values. These areas are interrelated and they influence one another towards a desirable goal or agenda. It means a change one postulates changes in others for organizations change and improved performance.

Ravasan, (2011) opines that the framework has conjoint 7 dimensions that can be use as a basis for university transformation as showed below

- 1) Strategy: Are plans developed by an organization due to external environmental changes in order to sustain a competitive advantage on market.
- 2) Structure: Is a form in which organizational units and divisions are organized. It involves assignment of duties and accountability. In other terms it can be called an organogram of an institution.
- 3) Systems: These are the processes and procedures that facilitate the conduction of daily business in line with decisions made. Systems are the major focus and back bone of an organization where leadership should pay greater attention
- 4) Style: is an organizational management culture that captures beliefs, values and norms and they are the ones used to govern decisions and business strategy. These norms act as a reference

point when certain decision towards transformation are to be made in order to represent stakeholders' interest.

- 5) Staff: Are both the developed and recruited human resources used to facilitate the movement of daily organizational business.
- 6) Skills: Are the experiences and knowledge embedded in organizational staff to perform to the expectations. These skills are acquired through staff development and training programs in order to improve their competences. These skills are key towards achievement of institutional strategy and transformation
- 7) Shared values: These are fundamentals ideas of any organizational performance. They are the values that control worker's actions and behaviours, they are usually in abstract form, simple and have a great meaning inside the institutions daily business.

The current study focused on the three hard and one soft "s" from the Mckinsey's framework as the predictors of university transformation as shown below. Conceptually, these are the fundamentals and engineers of institutional business operation and the rest are dependent on these four. These include;

Strategy; which is a move that an organization takes to learn from the prevailing challenges and pressures mounted by both the environment and market forces and embark on acquiring competent staff to facilitate planning in terms of innovation, redesigning the needed skills and mechanism of survival and endurance (Niazi, 2011). To achieve strategic development and transformation Elizabeth, (2012) states that an organization should embark on development of worker to attain the desirable knowledge and skills to harness the stakeholders dreams.

Structure an organization cannot exist without a firm structure. This is because job distribution, coordination and allocation of duties are all intertwined within structure therefore, to achieve institutional goals and objectives, there should be a well designed and defined structure to ease employee performance (Maduenyi, Oke, Olutunji, Ajagba, 2015). When structures are unfavourable, common values and strategic movement towards institutional change may end up in worst situation (Mohammad & Ravanfar, 2015; Ravasan, 2011; Singh, 2013)

Systems, which equip institutional leadership with requisite and understanding of how to address challenging situations in moment of change and also adopt uncertainties, and consequently pave ways for corporate image change, redesigning institutional operation framework, knowledge management and quality assurance (Amagoh, 2008). Since systems causes interrelationship and coordination of work among units, they are therefore the catalyst for organisational performance improvement and employee moral booster towards achievement of the set goals (Boland & Fowler, 2000; Gavrea, Ilies, & Stegerean, 2011).

Shared values. Today organisations recruit employees with diverse background and experience into their systems and structures to help them move the institutions to a better position as required by market demands. However, institutions also have their own designed style and culture of executing their business (Yogamalar & Samuel, 2016). Thus the role of human resource managers and leadership is to introduce the staff to the common values enshrined with institutional culture to help them operate towards the same direction (Ehtesham, Muhammad, & Muhammad, 2011; Lunenburg, 2011; Shahzad, 2012; Yogamalar & Samuel, 2016). Through briefing and induction of staff to the common interests of the organisation, the efforts of strategic decision making and implementation become easy since there is a collective efforts for ensuring this process, through organisational citizenship, mutual respect and trus.t Every individual is recognised and his

contributions registered thus becoming easy to be part of the organisation and therefore moving together towards the same direction (Abu-Jarad, Yusof, & Nikbin, 2010; Ekwutosi & Moses, 2013; Enz, 1989; Lunenburg, 2011; Paarlberg & Perry, 2007; Uddin, Luva, & Hossian, 2013; Uddin et al., 2013; Yogamalar & Samuel, 2016). Based on the framework founded by Mckinsey (1987) on university transformation, the following were hypothesized:

H1 University transformation as perceived by teachers has four mains interrelated subdimensions which include strategy, structure, systems and shared values

H2 The four-factor university transformation survey tool is psychometrically reasonable to validate the convergent and discriminant validity, and reliability

H3 The hypothesized measurement model of the study is acceptable and fit the data

1.4 Statement of the Problem

In general, organizational transformation has been sufficiently exposed in research. Yet, they do not have distinct ways of defining and measuring the terminology. Secondly there is none or scanty information on the factors that measure university transformation especially in the field of management and administration. Therefore, the current study is focusing on the management aspect of university transformation since the many studies viewed do not touch directly on ways through which universities can lay down and shift in their management practices in order to overcome the challenges of this generation. Conducting a study on university transformation is important since it would help university management and other stakeholders to comprehend the situation in depth, more important levels, and consequently improve on the managerial strategies that universities can help to tackle transformational challenges. Lastly another issue to consider is that there is no of the above studies that closely looked at measuring the dimensions of university transformation especially in Uganda using structural equation modelling. However, Mohammad & Ravanfar, (2015) offers some empirical support for multidimensional measurement of university transformation construct. The study Analyzed Organizational Structure Based on 7s Model of Mckinsey. The research population included managers and experts of Qeshm free zone. The study findings exhibited that organizational structure based on 7-S McKinsey in Qeshm free zone unfriendly, with same value, workers and structure having the unbearable environments. Consequently, the current study is envisaged to expand on the efforts of the construct validity and reliability of the measurement of university transformation

1.5 Purpose of the Study

The study was therefore designed with the idea that the understanding of university transformation is a vital construct in the era of globalization and shift in management practices. Therefore, it acts as an underpinning and an indispensable precursor to the development of knowledge in the area of university management. Given its relevance, ample study should be directed towards discovering and examine the validity and the value of the tool that measures university transformation practices. Conventionally inside this context, the main target of the current study was to authenticate the construct for the factor structure reflected in the survey of measuring the multidimensions of university transformation. In other words, the primary aim of the study was to establish whether university transformation practices self - reported by staff is meaningful and reputable dimension. Furthermore, this study envisaged to establish the appropriateness of the construct in relations to reliability, convergent validity and discriminant validity.

2.0 METHODOLOGY

2.1 Sample

The data for the current study was gotten from 820 staff both administrators and lecturers working in six universities both private and public in the central region of Uganda. Female staff contributed (42.3%) where as males were (58%); 16% were PhD holders, 60% master's degree and the 30% were degree holders. The volunteers were both full time and part time staff with their working experience ranging from above two years while serving the universities. Administrators constituted (32%), lecturers were 51.6% and those who occupied both positions were (16%). Since the technique employed to analyse the data structural equation modelling require a very big sample of the population the researcher used all the 820 to answer the three hypotheses of the study, and the sample of study deemed appropriate enough for the study objective.

To gather the adequate data required for the study, a self-reported questionnaire with 28 items measuring university transformation construct was used. The items for the subconstructs of the survey were derived from the literature review of the previous studies on the same subject. This was done because some of these studies used the same model to test the practices in both academic and business organizations (Mohammad & Ravanfar, 2015; Ravasan, 2011; Singh, 2013), all the twenty eight (28) items were used to represent the four subdimensions of the construct university transformation (strategy, structure, systems and shared values). The randomly chosen volunteers in the study answered the survey using a Likert-scale that ranged from 1- strongly disagree to 5-strongly agree.

3.0 DATA ANALYSIS

This study conducted a Confirmatory Factor Analysis technique for structural equation modelling using the Amos (version 22.) statistical package. this was done to examine the fitness and appropriateness of the hypothesized measurement model. Consequently, the estimations processes met the underlying statistical requirements, hence leading estimates that are appropriate and defensible. With the help of research assistants 2000 questionnaires were randomly distributed across six universities in the central region of Uganda, however only 847 were returned and 820 deemed appropriate for running a confirmatory factor analysis (Awang, 2015; Byrne, 2009).

To prove the validity of a one factor with four subconstructs university transformation, a confirmatory factor analysis (CFA) proved suitable for analyzing the data using a sample population of 820. This was attained after cleaning the data of the returned 847 answered questionnaires from the respondents. Also, the model was examined on the basis of the widely used guidelines for good fitness of CFA and these include, reasonableness of the parameter estimates and consistency of the measurement model with the data. Chi-square ($\chi 2$ /df), RMSEA (root mean square error of approximation), and CFI (comparative fit index) were used in the analysis as fit indices. Meanwhile, CMIN/df with a score value ranging from 2 and 5 was considered reasonable RMSEA, while CFI near to 1 exhibits a good fit and lastly, RMSEA of.06 value or less shows acceptable error estimation as per the recommendation by scholars (Enders & Bandalos, 2001; Enders, 2001, 2001; Fong Chan, Lee, Lee, Kubota, & Allen, 2007).

3.1 Results

Table1 of the study reflects the description of the variables encompassed in the confirmatory analysis. The minimum outcome for respective item did not go below 0.05. The Cronbach's alpha for measuring the inner consistence of the index among the responses connected to the items also proved high and the minimum reliability value index was 0.71 thus exceeding the critical cut score of 0.70 for reliable measurement.

Table 1. University transformation dimensions and item statistics

Code	Dimension	Mean	SD	Alpha
	Structure			.82
S1	My university structures are active and effective	3.47	1.116	
S2	I am empowered by the structures to execute leadership	3.43	1.104	
	roles			
S3	University projects are done as per the strategic plan	3.42	1.099	
S4	University structures give my department autonomy towards achievement of the set agendas	3.38	1.126	
S5	There is democratic decision-making process at all levels	3.39	1.165	
	Systems/process			.89
Sp2	My university has a standardized system for work control	3.54	1.120	
Sp3	The staff recognition systems are known to all staff and	3.44	1.176	
•	students			
Sp4	The policies and performance indicators are available	3.50	1.140	
-	and are followed in all decisions			
Sp5	University staff work systemically as a team to achieve	3.57	1.134	
	their objectives			
Sp6	My university has a standardize system for ensuring	3.49	1.139	
	quality services at all levels			
	Shared values			.84
Sv3	My department's senior managers coach me very well	3.40	1.159	
	about implementing decisions for strategic change.			
Sv4	My department's executives focus too much on current	3.42	1.164	
	problems and too little on their possible remedies			
Sv5	Organization have activities for social responsibilities	3.52	1.124	
Sv6	Employees' feelings about collaboration are related to	3.52	1.089	
	organization effect and business success			
	Strategy			.71
Ss1	My university has an operation strategy and plan	3.65	1.090	
Ss2	The university has an organization strategy for business	3.65	1.089	
	expansion and collaboration			
Ss3	I am often reminded of the university mission and vision	3.55	1.172	
	statement			

The results of the assessed measurement model exhibited that the four-factor construct of university transformation was suitable since it represented the data as expected. This was because the good fitness of the model was sound and reasonable enough, whereby Chi-square = 4.126, CFI =930, RMSEA= .062, Df= 113, P=.000, CMIN = 466.279. In other words, it implied that there were not alterations to prove that the measurement model of university transformation was not correct as per figure 1. below

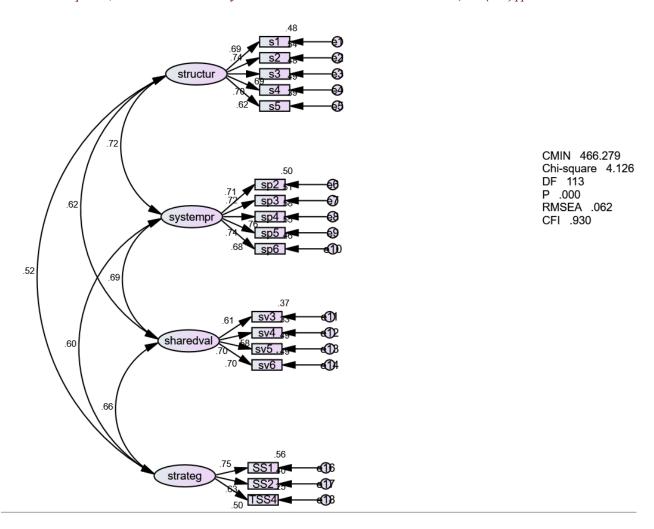


Figure 1. CFA Results Confirming a four-factor Structure of university transformation N.B: structure (structur), system/processes (system/pro), Shared Values (sharedval), strategy(Strateg)

3.2 University Transformation Questionnaire And Its Psychometric Properties

Table 2 delivers additional proof concerning the tolerability of the measurement model in regard validity both the divergent and discriminant validity. The data (along the diagonal) reflected that most of the AVE of each the subconstructs of the construct were above the verge of 0.5. AVE (average variance explained) is an indication of the validity of a section of items constituting the construct. It signifies the normal sum of the variation that the construct is capable to elucidate more of its various indicators and the interconnectedness amongst them. Furthermore, the measurement possessed the component of discriminant validity whereby most of the AVEs were larger than the values of the corresponding shared variance (Values above the diagonal). Also, the interconnection in the subconstructs reflected that university transformation was a unidimensional construct comprised of four distinct but inter-related subdimension.

Table 2 AVE for university transformation measurement model

Dimension/construct	1	2	3	4
Structure	.50	.38	.27	.52
Shared values	.62	.42	.36	.48
System/process	.52	.60	.52	.44
Strategy	.72	.69	.66	.40
Composite Reliability	.82	.74	.85	.70

Note: (i) Revealed slantwise are the average variance extracted (AVEs) for respective construct; below the diagonal is the correlation matrix; above the diagonal is the shared variance matrix; (ii) All AVEs were larger than the shared variances.

Table 3 gives the summary of the results of CFA. The analysis from the data supported the correlation among the subdimensions of university transformation construct. This study specifically established that university transformation as perceived by staff among universities is reliable, valid and fits the data of the study

Table 3. Summary of CFA Hypothesis Testing Results

	Hypothesis	Results
H1	University transformation as perceived by teachers has four main interrelated subdimensions which include strategy, structure, systems and shared values	Supported
Н2	The four-factor university transformation survey is psychometrically comprehensive in terms validity convergent and discriminant validity, and reliability	Supported
Н3	the hypothesized measurement model is acceptable and fit the data	Supported

4.0 DISCUSSION

First of all, the study envisaged to justify that structure, strategy, shared values and systems are the four dimensions that predict university transformation. Thus, justifying that four subdimensions of university transformation construct are valid and reliable, thereby extending the present understanding of the concept. Unlike the previous studies, the current study offers empirical indication that the practice of university transformation among the six universities in the central region of Uganda is only done through the use of structure, systems, shared values and strategies as perceived by the staff, hence supporting the earlier research findings done by (Mohammad & Ravanfar, 2015; Ravasan, 2011; Singh, 2013). Secondly the study exposed that the four subdimensions of university construct are distinct however related. Third the findings of the study exhibited that the instrument used to arrive at the results was made up of twenty-eight (28) items however, only seventeen proved to be practically useful in analytic and appraisal of university transformation practices.

Furthermore, the study aimed at establishing the validity and reliability of the psychometric properties of university transformation construct. The values score from each of the subconstruct showed appropriate degrees of internal consistency. Yet the further examination of the data showed that the dependability indexes fluctuated between $\alpha=0.82$ (structure), $\alpha=0.88$ (system), $\alpha=0.84$ (shared values) and $\alpha=0.71$ (strategy). The study further presented the support exhibited by the data in relations to convergent validity and discriminant validity of the survey tool for university transformation construct. Since AVE are additional support evidence for the technique used to examine the study findings, the scores showed that some of the dimension scores were above the threshold hence, reflecting the interconnection between the subdimensions of the construct university transformation. Moreover, the composite reliability indicated high score values that ranged between 0.70 and 0.85 thus supporting the validity of the instrument. It can therefore be concluded that the seventeen (items) reflected by the study findings are the true measurements of university transformation questionnaire and therefore, explained the sense and variability a four subdimension construct of university transformation among the six universities in Uganda.

5.0 CONCLUSION AND RECOMMENDATION

The most important practical significance of this study to education practitioners is the helpfulness of the concise17 items survey. It is sound and reasonable enough a tool to use while assessing the levels and practices of university transformation in the era of unpredictable forces of change. Education leadership, policy makers, teachers and managers of educational institutions are advised to employ this instrument in evaluating and diagnosing their institutional progress in terms of development and transformation. In specific terms, the self-reported questionnaire of four dimensions namely structure, system, strategy and shared values is of help to managers and leaders of universities and other higher education institutions. The study is also useful since it can to help administrators examine the performance levels of particular units and departments using the mentioned practices so as to catch up their demands of the time. In addition, the survey tool used in this study is auspicious in felicitating future research, and can be used as a scale for rating key performance indicators of universities.

The findings of the study notwithstanding, were limited in several areas. First the study did not use all the 7s as other previous studies did. Secondly it could not cover most of the universities due to scarcity of resources and some strikes that erupted in the projected universities during the time of data collection. The study was cross-sectional in nature so covering the rest of the university was not easy, therefore future studies can base on this aspect to build their research problem and gap. The study employed 28 items in the questionnaire however, only 17 items emerged useful for the construct. Also, the study was only conducted on six universities out of 29 in the central region of Uganda. Therefore, the results cannot be generalized on their universities in the same region and the whole country.

In a nutshell, this study has imparted further understanding about the nature and meaning of university transformation in the aspect of management and administration of university affairs. The data generated from the randomly selected respondents is very useful in forming the efforts and dedications towards improvement of universities' images. Since many business organizations have used this strategy to compete on the world market as early as 1987, universities can as well borrow a leaf and change their operational management and administration.

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