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Editorial

A well-recognised view in discourse on higher education as an industry and the higher education institution (HEI) as an organization is that managing in higher education is dealing with *organized anarchy*. In Africa, as in many parts of the less developed world, over the last four decades, *forcing* elitist higher education systems and institutions to accept ever-increasing numbers of students and expecting them to assure quality despite huge backdrops in their funding aggravated this anarchy. Thus, individually and collectively, students, professors and managers in these systems/ institutions are doing many things to defy enormous obstacles in their pursuit of the objectives of higher education. These stakeholders' efforts could benefit from the sharing of experiences. They could also benefit from relevant theoretical and philosophical discussions. The East African School of Higher Education Studies and Development (EASHESD) is happy to continue offering Makerere Journal of Higher Education (MAJOHE) as an outlet for this sharing of experiences and discussion.

Issue 7.2 of the Journal discusses issues touching on human resource management (HRM) in higher education, curriculum, quality assurance, physical facilities management and research. Under HRM, Kiiza and Picho report the findings of a study that investigated the link between the delegation and commitment of human resources, taking the case of the School of Finance and Banking, Kigali, Rwanda. Mugizi, Bakkabulindi and Bisaso develop a framework within whose perspective the commitment of people working in HEIs may be conceptualised. On the other hand, Ozurumba and Amasuomo discuss the link between the development and productivity of academic staff, making specific reference to state universities in Nigeria. Addressing the subject of commitment from various conceptual, geographical and institutional viewpoints, these contributions highlight changes in the profiling and motivation of people working in HEIs before discussing the things the managers of the institutions are doing to respond to these changes. The articles on curricula aspects of higher education have been contributed from the Federal University of Education, Zaria, Makerere University, Kampala, Afe Babalola University and University of Jos, Nigeria, by Sani, Najjuma and Mulumba, Gbenga and Katrina et al. respectively. These present an interdisciplinary discussion on attributes of curriculum design, implementation and evaluation.

From Kenyatta University, Itegi discusses the expansion of access to university education in Kenya. Making specific reference to the proliferation of off-campus study centres, this article highlights the contribution and consequences of expanding access to higher education in the country. Finally, Uche and Okata report the findings of a study that scrutinised the ergonomics of learning environments of HEIs in Rivers State, Nigeria, while Kyaligonza, Kimoga and Nabayego discuss the funding of academic staff's research in public universities in Uganda.

It is our hope that you will find this publication a useful resource. We urge you to mirror the discussions herein on your professional, institutional and/ or regional experiences, critique their merit and extend the discussion on the aforementioned and related issues. Indeed, you are invited to submit your writing for possible publication in subsequent issues of the journal.

Publication of this and past issues of the journal has benefited enormously from the contribution of a team of anonymous reviewers; editorial and secretarial assistants; the dean and staff of the EASHESD; and the principal and staff of the College of Education and External Studies, Makerere University. The management board of the journal wishes to thank them for their indispensable support. The board also gratefully acknowledges African Journals Online (AJOL) for hosting the journal on its database.

Editor



Delegation and Staff Commitment in the School of Finance and Banking, Kigali, Rwanda

Pascal Kiiza ¹, Epiphany Odubuker Picho ^{1,*}

¹ Muni University [* Corresponding author: epipicho@gmail.com]

Abstract. The purpose of the study was to investigate the relationship between Delegation of Authority and Staff Commitment in the School of Finance and Banking in Kigali Rwanda. A cross-sectional survey design was used with the target sample size of 97 out of 130 parent population. The total number of questionnaires that were filled and returned was 78, giving a high response rate of 80.5 percent. Due to the heterogeneous nature of the population, the researchers used stratified sampling and random sampling. Descriptive analysis involving frequencies, percentages and Pearson Product Moment Correlation Coefficient for inferential statistics were carried out. The correlation between the two variables was weak at .287, and significant at .011 value. The results were linearly correlated and this implies that staff commitment is positively correlated with Delegation of Authority; whenever employees are delegated authority, they are likely to be more committed and vice versa.

Keywords: Delegation; Authority; Staff Commitment

1 Introduction

The Government of Rwanda has various objectives that act as the point of focus in its policy formulation and implementation. Among these is that of devising and implanting policies that promote the welfare of its citizenry. It was in pursuit of this objective that the School of Finance and Banking (SFB), a public institution of higher learning, was established in June 2002 and took up its training mandate in 2004, offering Masters in Business Administration (MBA) with specializations in Banking, Finance, Project Management and Association of Chartered Certified Accountants (ACCA) programme, a professional course in accountancy. In addition, tailor-made short-courses and professional programmes were designed in various management disciplines to meet the changing needs of business leaders and managers. In 2005, a Cabinet meeting

decided that the Management Faculty that was part of Kigali Institute of Technology (KIST) be transferred to the School of Finance and Banking (SFB) effective January 2006. Consequently, in addition to Master of Business Administration (MBA), SFB started offering Bachelor of Business Administration (BBA) programme in Accounting, Finance, Human Resources Management and Marketing specializations. Today, various undergraduate programmes and short- courses are being implemented to cater for the needs of Rwandan and regional labour market, transforming the SFB into an international business school.

According to National Council for Higher Education of Rwanda report on public higher institutions (NCHE, 2010), School of Finance and Banking was among the leading institutions where staff commitment was reported; this situation was worse during 2008 & 2009 academic years. No study, however, was conducted to determine the extent to which delegation practices has obstructed staff commitment in the SFB, a gap this study attempts to fill.

Conceptually, the term delegation was conceptualized as the actions by which a leader assigns part of his or her authority commensurate with the assigned task to a subordinate. While ultimate responsibility cannot be relinquished, delegation of authority carries with it the imposition of a measure of responsibility and the extent of the authority delegated must be clearly stated. Yukl (2002) discourses, delegation involves assignment of new responsibilities to employees and additional to carry them.

With regard to commitment, Pfeffer (1998) looks at this concept as the social and psychological processes whereby members of an organization develop and maintain an attachment to the organization. In other words, commitment occurs when the interests of an individual merge with the interests of an organization, resulting in the creation of identifications based on those interests. This study, however, adopted Meyer and Allen's (1991) conceptualization of commitment as a form of psychological attachment to an employing organization. While it is imperative that efforts are made to elicit staff commitment, it is equally imperative that the leaders of education institutions demonstrate the practices necessary to be successful leaders.

Contextually, many institutions claim, their employees are their greatest asset and agents of their success; the notion of staff commitment is often overlooked yet it is of great importance to organizational functioning. Given the fact that institutional leaders usually work in unpredictable situations where they often experience stress and frustrations, the question is: what factors prevent their employees from being committed to the goals and values of their organizations. In many developing countries, Rwanda inclusive, initiatives for improving education systems have often been short-lived. Individuals implementing such initiatives seem to lack an understanding of effective leadership practices, ultimately resulting into lack of satisfactory loyalty from subordinates.

According to NCHE for Rwanda (2010) report on public higher institutions, School of Finance and Banking was among the leading institutions where staff commitment reported to be low. A study by Public Service Commission (2010) of Rwanda found that 68 percent of public sector employee had changed institutions more than once between 2008 & 2009. One of the main causes of low staff commitment was poor management of human resources, according to this report. But as Snowden & Gorton (2002) affirm, for improvement efforts to be realized, a leader is key to providing the leadership necessary for such efforts to be met with success.

It is believed that leaders must, among other things, put in place adequate mechanisms to empower their subordinates for organizational commitment to occur. Various strategies are used to induce employees to embrace the values and goals of the organization; With particular reference to the School of Financing and Banking, hardly had there been a single study conducted to find out whether leadership practices have had an influence on staff commitment; hence, this study aimed at determining the extent to which delegation of authority, as one of the leadership practices mechanism, affect staff commitment in the School of Financing and Banking - Rwanda.

1.1 Statement of the Problem

Like other organizations, educational institutions have long recognized human capital as a competitive advantage for their effectiveness. The School of Finance and Banking – Kigali as a creature of the Rwandan Government was intended to create and build human capital to spur growth and development of the country and boost up the labour market in the region through provision of a highly trained, skilled and committed work force. The NCHE (2010) report on public higher institutions, revealed that School of Finance and Banking was among the leading institutions where staff commitment was low; this situation was worse during 2008 and 2009 academic years. To date, no empirical study has been conducted to establish the explaining variables for the above predicament but the researchers hunched leadership practices to be exerting a significant influence on staff commitment. Accordingly, this study was glinted to inquire about the relationship between delegation of authority as a leadership practice and employee commitment in the School of Finance and Banking, Kigali - Rwanda.

1.2 Scope

Geographically, the study was carried out in the School of Finance and Banking–Kigali, which is one of the higher public institutions in Rwanda. It was legally established under School of Finance and Banking statute law No.

21/2002. It is located at Mburabuturo in central Kigali City in Kicukiro District. The content scope of the study focused on delegation of authority as a leadership practice and staff commitment.

1.3 Conceptual Framework

The independent variable (delegation of authority) is a leadership practice while the dependent variable is staff commitment. The researchers postulates that in organizations where there is effective delegation of authority, the level of commitment of staff to their jobs is likely to be high. The extraneous variables, which inter alia, include finances that are likely to compete with the independent variable to explain the dependent variable are held constant to control their influence in explaining the variability in the dependent variable.

2 Methodology

This section highlights the research design, target population, sample and sampling techniques that were used in data collection. It also presents the instruments used in data collection, quality control techniques, research procedure and analysis of data.

The research used a cross sectional survey design. This enabled the researchers to collect a lot of information from a number of respondents at one point in time and its results can be generalized to a larger population within defined boundaries (Amin, 2005). The study employed both quantitative and qualitative research paradigms. The institution had a total of 130 employees of which 70 comprised the teaching staff while 60 were the non-teaching staff.

From a parent population of 130 a sample of size of 97 was determined by the use of Krejcie & Morgan (1970) as cited by Amin (2005). The total number of questionnaires that were completely filled and returned was 78 respondents; this gave a high response rate of 80.5 percent. Due to the heterogeneous nature of the population, the researcher used stratified sampling; proportionate sample from each sub-group was obtained in order to ensure that all groups were fairly represented in the study. Random sampling was then used because of the advantage it has in avoiding bias in that each member in the target population had an equal opportunity of being chosen (Amin, 2005).

In this study, the researcher used both primary and secondary methods of data collection. For the case of primary methods of data collection, field data was collected with the help of a self-administered questionnaire and an interview guide as explained below.

A questionnaire was used in collecting data pertaining to the objectives of the study. The literature review revealed that most of organization commitment

researches have used questionnaires as an instrumental of data collection. For this study, the questionnaire survey was selected because it was specifically developed to reach several respondents at the same time. This made it ideal to explore the correlation between leadership practices and staff commitment in an academic setting. The questionnaire included statements that elicited information under the three attributes of leadership practices namely: delegation of authority, effective communication and participation in decision making. In the same way, items on the dependent variable (staff commitment) were also formulated. Specifically, this research used a closed-ended questionnaire based on a five point Likert scale responses that ranged from strongly disagree to strongly agree with codes ranging from 1 to 5. Subsequently, overall scores for each respondent were computed from the results of the raw data by obtaining the average of all valid responses intended to obtain each respondent's opinion in relation to each of the three independent variables and the dependent variable ranging from 1.0 to 5.0. The closed-ended questionnaire was particularly preferred because they are easy to quantify and analyse (Amin, 2005).

The researcher carried out interviews with some administrators of the SFB. According to Trochim (1996) interviews are useful in data collection because they contain probing questions that allow flexibility in asking and obtaining in-depth information from respondents. This allowed the researcher to triangulate the quantitative findings of the staff with the qualitative data from the administrators.

In case of secondary data, the study begun with a review of relevant literature sources that had been published in the same field such as research reports, journals and other relevant library materials.

Data quality was ensured by checking the validity and reliability of the questionnaire.

Critical validation of the instrument was done by the supervisors who rated the degree to which the instrument actually measures the traits for which it was designed to measure (Amin, 2005) as per the study objectives. The researcher then computed the validity coefficient using the Content Validity Index (CVI). This was established by the proportion of number of items declared valid over the total number of items. The CVI of 0.7 indicated that the instrument was valid since it was above the minimum recommended value of 0.7 (Amin 2005).

The reliability coefficient was computed using Cronbach's alpha formula coefficient. This was done in order to assess the reliability of the questionnaire. This method was deemed appropriate because most of the items in the questionnaire were closed ended and since Cronbach's alpha coefficient gives the average correlation of all items in the questionnaire, the researcher considered it more suitable to compute the overall reliability of the instrument. The average correlation between the items in the questionnaire was .894 which

was above 0.7 the normal degree for accepting reliability of instruments (Nunnally & Bernstein, 1994) implying that the questionnaire was reliable.

Data was coded and entered into computer using the Statistical Package for Social Sciences (SPSS) for analysis. Descriptive analysis was done involving the presentation of findings in form of frequency tables and graphs with their respective percentages. Statistical analysis involved the use of the Pearson product moment correlation coefficient for inferential statistics. As for qualitative data, the researcher used a critical assessment of each response, examining it using thematic interpretation in accordance with the study objectives. These were presented qualitatively in form of quotations.

3 Findings

The study aimed at establishing the relationship between delegation of authority and staff commitment. In the questionnaire six statements that translated this objective into specific items were formulated to elicit the responses of the staff on how they perceived the way delegation of authority was practiced in the institution. For each respondent, the responses on these items were summed up to generate an overall score of staff perceptions on delegation of authority. This index was later correlated with staff commitment to determine whether relationship exists between the two variables. The findings are shown in Table 1.

Table 1: Delegation of authority

Item	SD	D	N	A	SA
I feel free to open my heart to my boss	7 (9%)	18 (23.1%)	15 (19.2%)	29 (37.2%)	9 (11.5%)
My supervisor allows me do some work on his behalf	8 (10.3%)	15 (19.2%)	20 (25.6%)	27 (34.6%)	8 (10.3%)
I decide on how best to do my work	1 (1.3%)	8 (10.3%)	10 (12.8%)	34 (43.6%)	25 (32.1%)
I feel personally responsible for the outcomes of my work	1 (1.3%)	3 (3.9%)	10 (13.2%)	38 (50.0%)	24 (31.6%)
My boss does not interfere with my work	5 (6.4%)	20 (25.6%)	19 (24.4%)	25 (32.1%)	9 (11.5%)
I have control of the activities in this institution	7 (9.1%)	27 (35.1%)	23 (29.9%)	15 (19.5%)	5 (6.5%)

In Table 1, apart from the sixth statement where most of the respondents either expressed negative sentiments 35 (44.2%) or taking a neutral position 23

(29.9%) on whether they had control over the activities in their institution, the rest of the statements received a positive rating. In particular, according to the pattern of the responses, most of the staff asserted that they always felt free to open their hearts to their bosses. This in one way helps in creating a cordial relationship and a two way communication between the subordinates and their bosses. This collegial relationship is not only important for the supervisors to develop trust in their subordinates but it also avails the bosses the opportunity to entrust some of their duties to their subordinates. Indeed, in support this contention it was indicated by a considerable number of the participants in the study that their supervisors allowed them to do some work on behalf of their bosses. Similarly, the qualitative responses indicated that subordinates were always given chances to make decision on behalf of their supervisor. Some of the examples where subordinate represented their immediate supervisors included: Senate meetings, executive and education meetings. In this regard, Interviewee 2 from the finance unit reported:

I assign them some duties to perform on my behalf like attending meetings, responding students' queries etc.

In the same vein, whenever a member of staff was allowed to do some work on behalf of his/her boss, in carrying out duties, most of them maintained that they always had the liberty to decide on how best to do their work implying that they were always independent. As a result of this independence, well knowing that they were accountable for their actions, employees mentioned that they always tried their level best to diligently perform their duties to the expectations of their bosses because at the end of the day, a person to whom authority was delegated was solely responsible for the outcomes of his/her action as indicated by 62 (81.6%) respondents. Interview respondents were asked to give examples where their subordinate represented them and one of the striking finding from interviewee 5 from the Human Resource and Administration indicated that they always asked the former to represent them particularly in those areas where the supervisors had less expertise than the subordinates.

To demonstrate that once authority was delegated to them they became independent, a fairly large number of the interviewed staff 34 (43.6%) reported that their bosses hardly interfered with their work. This implies that the role of the bosses was to supervise, counsel and guide the subordinates as to what would be the best way to execute their duties in case of any deviation from the established procedures. The different circumstances under which supervisors gave chances to their subordinates to make decision on their behalf included situations in which the former was absent and a decision had to be taken there and then. Under such circumstances delegation of authority was seen as very important as seen in the following narrative excerpts.

I allow my subordinates to participate in different meetings and trainings on my behalf. Interviewee 5 (from the Research and Consultancy Unit)

“I allow my subordinate to represent me in training and meetings and when I am on my annual leave, when am sick or when am attending to some other official duties. In such cases, I assign my subordinate to act on my behalf”. Interviewee 6(from the Finance Unit)

I normally call my staff for a departmental meeting from which they are given the opportunity to freely express their views and opinions. I subsequently forward their proposals in executive meetings. Interviewee 6 (from the Finance Unit)

Having obtained the responses from both questionnaires and interviews, it was important to establish whether the ratings on delegation of authority had any association with the responses on staff commitment. This hypothesis was tested using a Pearson correlation efficient and the results are given in Table 2.

Table 2: Correlation between delegation of authority and staff commitment

		Delegation of authority	Staff Commitment
Delegation of authority	Pearson Correlation	1	.287(*)
	Sig. (2-tailed)		.011
	N	78	78
Staff Commitment	Pearson Correlation	.287(*)	1
	Sig. (2-tailed)	.011	
	N	78	78

** Correlation is significant at the 0.05 level (2-tailed).

The summary statistics of the correlation in Table 2 show the computed value of the relationship between the two variables equal to 0.287 and significant at 0.05 ($P < 0.05$). The findings therefore led the researcher to reject the null hypothesis in favour of the research alternative or research hypothesis that delegation of authority significantly relates to staff commitment. In other words, when leaders in the School of Finance and Banking in Kigali relinquish some of their powers to their subordinates, this will significantly raise the latter’s level of commitment to the institution.

4 Discussion, Conclusions and Recommendations

This section entails the discussion of the findings in relation to the research objectives that guided this study. Following the discussion are the conclusions, recommendations and areas for further research.

In the third and final objective, the results revealed that in addition to effective communication and participation in decision making, delegation was related to staff commitment. This was given by the value of the correlation equal to .287 with a sig-value of 0.011. This indicates that in the SFB, staff commitment of individuals was positively enhanced by delegation. The results further align with Darjan & Milan (2004) whose results revealed that delegation of authority to staff contributes to employees' allegiance to organizational goals and values. Similarly, the findings render credence to one of the earlier studies such as Brewer (1996) who demonstrated that delegation of authority as one of the important factors in shaping organizational commitment. Also, Jermies & Berkes (1979; as cited in Mathieu & Zajac, 1990) report similar findings that delegation of authority to subordinates increases the level of commitment among staff. It is in this regard that Knouse and Strutton (1996) points out that management should delegate to sales people the authority needed to make local decisions about pricing, delivery, and service. This is because effective delegation helps supervisors to pay close attention to employees to strengthen them (Muir, 1995).

In light of the findings, future research may need to examine the relative utility of the self-concept and the job characteristics as mechanisms through which delegation influences employee work outcomes. Because delegation motivates employees to behave in ways and/or hold attitudes that are consistent with their positive self-image within the SFB. From a managerial perspective, administrators in the SFB cannot be experts in all fields. In such situations, the decision maker delegates full or partial responsibility of decision making for a particular area of concern, to the expert on the team for best management outcomes. Advantages of this type of decision making process makes the group members feel engaged in the process, more motivated and creative.

Delegation of authority motivates a subordinate to perform the tasks with dedication and commitment. When authority is delegated, the subordinate knows that his superior has placed faith and trust in him. Managers who delegate effectively also receive several personal benefits; most importantly, they have more time to do their own jobs when they assign tasks to others. Given the hectic nature of managerial work, time is a precious commodity. Effective delegation frees the manager to focus on managerial tasks such as planning and control. Managers also benefit from the development of subordinates' skills. With a more highly skilled workforce, they have more

flexibility in making assignments and are more efficient decision makers. Managers who develop their workforce are also likely to have high personal power with their staff and to be highly valued by their organization.

With delegation, every member of staff expected to show increased commitment to the organization and in this context the SFB. To achieve this, the behaviour of the staff is very important. Their behaviour is influenced by the environment in which they find themselves. If they are not given opportunities to utilize all of their skills, then the employer may never have the benefit of their total performance. However, improper delegation can cause a host of problems, primary of which is an incorrectly completed task, which may hurt the overall productivity of the organization. Thus, the process of delegation is as critical as the planning, because a poor process can reduce the effectiveness of the delegation in several ways. First, it can lower the worker's motivation to perform the task. A qualified worker who is not motivated to complete the assignment is not likely to produce the desired results. Second, lack of proper communication of standards for the task may lead to less than desirable outcomes. Finally, the delegation process may create some artificial barriers or fail to eliminate others barriers to performance. The failure to share information and discuss real or perceived problems can reduce efficiency and may lead to failure.

Effective leadership practices are those approaches that bring about quality awareness in all organizational processes. In this study, it was envisaged that for staff commitment to occur, the leadership of the SFB should among other factors improve their leadership. Specifically, the findings necessitated the rejection of the null hypotheses. Consequently, the rejection of the null hypotheses implied that there was reasonable proof to believe there was a significant relationship between the three basic leadership practices and staff commitment. Therefore, following the research findings and subsequent discussion, the following conclusions were made. There is a positive relationship between delegation of authority and staff commitment in the School of Finance and Banking in Kigali

From the results of the investigation, it was evident that leaders in the SFB should lay much emphasis is on their leadership practices in order to elicit their staff commitment. As far as the findings of this study are concerned, the following are the suggested recommendations to achieve the loyalty and devotion of the staff to their work and the entire institution as a whole.

It is also important for managers in the SFB to delegate some of their authority to their subordinates. This will not only free managers from focusing on managerial tasks such as planning and control but will also go a long way in benefiting from the development of subordinates' skills. But while delegating decision making to their staff, administrators in the SFB should provide the necessary support to the staff in form of coaching, guiding and advising them.

In all, the school must become a learning organisation in which the staff are assisted to persevere and eventually succeed.

References

- Amin, M. E. (2005). *Social Science Research: Conception, Methodology and Analysis*. Kampala. Makerere University Printery.
- Brewer, A.M. (1996). Developing commitment between managers and employees. *Journal of Managerial Psychology*, 11(4), 24-34.
- Darjan, GC and Milan, P (2004). *Organizational Commitment in the Slovenian Police Force*. <http://www.ncjrs.gov/pdffiles1/nij/Mesko/207996.pdf>
- Jermies, J. and Berkes, L. (1979). Leader behaviour in a police command bureaucracy: A closer look at the quasi-military model. *Administrative Science Quarterly*, 24:1-23.
- Knouse, S and Strutton, D. (2006). Sales force through managing empowerment, evaluation, reward and recognition processes. *Journal of marketing*. Pp. 24-36.
- Krejcie, R.V. & Morgan, D.W. (1970) Determining sample size for research activities. *Educational and Psychological Measurements*, 30, 607-610.
- Meyer, J. P. and Allen, N. J. (1991). A three-component conceptualization of organizational commitment", *Human Resource Management Review*, 1 (1):61-89.
- Muir, J. (1995), *Effective management through delegation* .Work Study, Volume 44, No.7, pp. 6-7.
- National Council for Higher Education, (2010). *Statistical Information on Higher Learning Institutions in Rwanda*.
- Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric Theory* (3rded.). New York: NY: McGraw- Hill Series in Psychology, McGraw-Hill, Inc., 264-265.
- Pfeffer, J. (1998). Seven practices of successful organizations. *California Management Review*, 40 (2):96-123.
- Public Service Commission, (2010). *Baseline Survey on Causes of work conflicts Causes of Labour Mobility, Skills and Competencies*. Kigali: Government of Rwanda.
- Snowden, P. E., & Gorton, R. A. (2002). *School leadership and administration: Important concepts, case studies, & simulations*. Boston: McGraw Hill.
- Trochim, D. (1996). *The survey research: The research methods knowledge base*. www.trochim.human.cornell.edu/kb/survey.htm
- Yukl, G. (2002). *Leadership in organizations* (5th Ed.). NY: Prentice-Hall.



Framework for the Study of Employee Commitment

Wilson Mugizi¹, Fred E. K. Bakkabulindi¹ *, Ronald Bisaso¹

¹ Makerere University [* Corresponding author: febakkabulindi@cees.mak.ac.ug]

Abstract. This paper is a conceptual discussion of the construct of employee commitment identifying its antecedents in an organisational context. While the paper is of general interest to human resource management (HRM), it arose as part of a study on the commitment of academic staff in universities in Uganda. The paper suggests a framework for studying employee commitment, and proposes 21 hypotheses for future research basing on a review of recent literature. Each hypothesis suggests an antecedent. The antecedents are grouped into three categories, namely; HRM practices, organisational and personal characteristics. In terms of HRM practices, it is hypothesised that recruitment, selection, performance appraisal, promotion, participation, remuneration, job design, job security and grievances handling are antecedents of employee commitment. In regard to organisational characteristics, it is hypothesised that organisational structure, leadership styles, employee relationships and organisational support are antecedents of employ commitment. With personal characteristics, it is hypothesised that age, gender, educational level, marital status, job experience, job position and self-efficacy are antecedents of employee commitment. Gaps in the studies reviewed are identified.

Keywords: Employee Commitment; HRM Practices.

1 Introduction

Several attempts have been made to define “employee commitment.” Perhaps the most comprehensive of those definitions is that of Meyer, Stanley and Parfyonova (2012) who define commitment using a multidimensional approach and consider it to have affective, continuance and normative perspectives. The affective dimension of commitment refers to an emotional attachment to and involvement with an organisation; continuance commitment denotes the perceived costs of leaving an organisation; and normative commitment refers to the felt responsibility to support and remain a member of an organisation. Thus it can be discerned from definitions such as the one above, that employee

commitment is a bond between the employee and the organisation such that he/she (the employee) wants to continue serving the organisation and to help it achieve its objectives.

The importance of “employee commitment” is well captured by different authors. Yilmaz and Çokluk-Bökeoğlu (2008) expound that employees with high organisational commitment feelings affect organisational performance in positive ways because they lessen the frequency of performing negative behaviour and improve quality of service. A committed employee is a more compatible and productive individual who has higher levels of satisfaction, loyalty and responsibility. They continue to observe that organisational commitment not only increases the success in a certain role, but also encourages the individual to achieve many voluntary actions necessary for organisational life and high standard system success.

Park, Christie and Sype (2014) advance that committed employees may be more likely to engage in organisational citizenship behaviours (OCBs), that is, extra-role behaviours, such as creativity or innovation which are often what keep organisations competitive. Creativity according to Bosiok and Sad (2013) is the ability to think in ways and forms that are new, different and not seen in other individuals. Other authors (e.g. Lambert & Hogan, 2009) propose that employee commitment reduces employee turnover. Lambert and Hogan define employee turnover as the situation by which employees either voluntarily quit or are involuntarily terminated from their jobs. Allen, Bryant and Vardaman (2010) explain that with voluntary turnover, the employee initiates the quitting of the job; for example, quitting and taking another job while involuntary turnover is initiated by the organisation; for instance, when a company dismisses an employee due to poor performance or when there is organisational restructuring. Lambert and Hogan (2009) state that committed employees are loyal to the organisation, share its values, and identify with the goals of the organisation. Thus, they have little reason to want to leave.

On their part, Visagie and Steyn (2011) related employee commitment to acceptance of organisational change. Parnini (2011) define organisational change as an empirical observation in an organisational entity of variations in shape, quality or state over time, after the deliberate introduction of new ways of thinking, acting and operating. Visagie and Steyn explain that employee commitment to the organisation is critical when an organisation engages in change initiatives, as committed employees will provide many benefits to the organisation undergoing change. These benefits include putting in extra effort to ensure that the change succeeds, serving as public relations representatives during the change and going above and beyond the norm to assist the organisation to function effectively.

On the other hand, Demirel and Goc (2013) suggest that organisational commitment enhances knowledge sharing between employees. They define

knowledge sharing as a process whereby an individual exchanges the knowledge he/ she possesses with other individuals for them to understand, appropriate and utilise that knowledge. Accordingly, with knowledge sharing, information, skill or expertise are reciprocally exchanged among people, friends, and members of family, community or organisation. They indicate that knowledge sharing is important in creation of new ideas among the employees and presenting new business ideas fundamental to a living organisation. Thus, modern organisations struggle to have workforce with sufficient knowledge and ability and survive in this struggle by creating efficient learning opportunities with efficient management. In summary, the various scholars above are unanimous to the effect that employee commitment is important in so far as enhancing employee job performance is concerned. This is because it lessens the frequency of employees performing negative behaviour; promotes employee's OCB, reduces employee turnover; makes the employees more ready to accept organisational change; and enhances knowledge sharing among the employees.

Given the importance of employee commitment (EC), one goal of research on EC is to identify its antecedents, which may in turn be manipulated to positively influence EC. In deriving the antecedents of EC, several theories can be considered. Of these theories, this paper was intended to review three of them, namely the Social Exchange Theory (SET), Leader-Member Exchange (LMX) Theory, and Social Identity Theory (SIT). The second objective of the paper was hence to build a conceptual framework relating EC to its antecedents, whereby the antecedents are classified as per the suggestions of the three theories. Third and lastly, the paper was intended to derive hypotheses from the framework to guide future research on the antecedents of EC.

2 Theoretical Review

Three theories are the basis for this paper, namely; the Social Exchange Theory, Leader–Member Exchange Theory and Social Identity Theory.

2.1 Social Exchange Theory

The Social Exchange Theory (SET) was developed by scholars such as Homans (1958) and Blau (1964) to explain what influenced social behaviour. Homans in an essay entitled “social behaviour” was interested in the psychological conditions that induce individuals to engage in exchange. Homans stated that social behaviour is an exchange of both material goods and non-material ones. Homans explained that persons that give much to others try to get much from them, and persons that get much from others are under pressure to give much to

them. This process of influence tends to work out at equilibrium to balance the exchanges. In an exchange, what one gives may be a cost, just as what one gets may be a reward. Blau was interested in exchange as the elementary particle of social life, in which social structures are rooted. Blau analysed exchange processes as the micro-foundation of macro-sociological phenomena. Blau stated that mutual bonds emerge in social interaction as persons who incur obligations reciprocate. Marescaux, Winne and Sels (2013) explains that SET proposes that HRM practices initiate a positive exchange relationship to which employees reciprocate with positive attitudes and behaviour towards the organisation and/ or job.

Geetha and Mampilly (2012) argue that the basic principle with SET is that employees view satisfying HRM practices as an organisation's commitment towards them. Employees thus reciprocate this through positive behaviours like employee commitment. They are thus more likely to exchange their commitment for resources and benefits provided by their organisation. For example, when individuals receive economic and socio-emotional resources from their organisation they feel obliged to respond in kind and repay the organisation. SET argues that obligations generate through a series of interactions between parties who are in a state of reciprocal interdependence. The core belief in SET is that relationships evolve over time into trusting, loyal, and mutual commitments as long as the parties abide by certain "rules" of exchange. The rules of exchange usually involve reciprocity or repayment rules such that the actions of one party lead to a response or actions by the other party. Studies such as the study by Chew and Chan (2008) have SET as their theoretical basis. In summary, the propositions of SET indicate that social exchanges employees obtain from organisations such as HRM practices may lead to employee commitment.

2.2 Leader–Member Exchange Theory

The Leader–Member Exchange (LMX) theory was developed by Dansereau, Graen and Haga (1975) to describe the dyadic process by which roles and expectations are developed for a leader with each subordinate. They explained that approaching leadership as an exchange relationship which develops within the vertical dyad over time during role making activities leads to high exchange relationships. Accordingly, in the relationship, the degree of latitude a superior granted to a member to negotiate his/ her role is predictive of subsequent behaviour on the part of both superior and member. They expounded that in LMX, superiors employ both leadership and supervision techniques within their units. With a select subset of their members, superiors develop leadership exchanges (influence without authority), and with others, superiors develop only supervision relationships (influence based primarily upon authority). Yukl,

O'Donnell and Taber (2009) indicate that The Leader–Member Exchange (LMX) propounds that high-exchange relationships characterise high-level of trust, liking, and respect (employer-employee relationships) and involve expectations of mutual exchange.

The leader provides outcomes desired by subordinates, such as interesting tasks, additional responsibilities, and larger rewards and the subordinates reciprocate with commitment to work and loyalty to the leader. In low-quality exchange relationships, subordinates only perform the formal requirements of their jobs, and the leader does not provide extra benefits. Exchange relationships develop gradually over time and reinforced by the behaviour of the leader and the subordinates. Studies such as the study by Eisenberger, Karagonlar, Stinglhamber, Neves, Becker, Gonzalez-Morales and Steiger-Mueller (2010) have used LMX as their theoretical basis. Overall, LMX proposes that organisational characteristics relate to employee commitment. In this paper, LMX is the basis for appraising organisational characteristics that relate to employee commitment.

2.3 Social Identity Theory

The Social Identity Theory (SIT) was advanced by Tajfel (1978) and Tajfel and Turner (1979) to explain the psychological basis for intergroup discrimination. Tajfel propounded that individuals assign emotional values to themselves based on their knowledge of themselves within groups and they compare their groups with other groups. On their part, Tajfel and Turner proposed that individuals concerned define themselves and are defined by others as members of a group. Accordingly, a collection of individuals who perceive themselves to be members of the same social category, share some emotional involvement in this common definition of themselves, and achieve some degree of social consensus about the evaluation of their group and of their membership of it. Boroş (2008) indicates that social identity was explained as that part of an individual's self-concept which derives from one's knowledge of his/ her membership of a social group (or groups) together with the value and emotional significance attached to that membership.

According to Haslam, Jetten, Postmes and Haslam (2009), SIT proposes that our sense of who we are is enhanced by knowing not only that we belong to certain groups, but also that we are different from members of other groups. Jones and Volpe (2010) suggests that according to SIT individuals classify themselves and others into various social categories such as organisational membership, gender, race, age cohort, or religious affiliation and view their membership in particular groups based on social roles and role relationships. Previous studies such as Todd and Kent (2009) examined determinants of employee behaviour basing on SIT. Generally, SIT postulates that in

organisations people classify themselves in social categories such as personal characteristics and this gives them identity leading to positives implications such as commitment. In this paper, this theory was the basis for relating personal characteristics on employee commitment.

3 Conceptual Framework

The review of the Social Exchange Theory (SET) brought out the fact that HRM practices initiate a positive exchange relationship to which employees reciprocate with positive attitudes and behaviour towards the organisation and/or job (Marescaux et al, 2013). According to Geetha and Mampilly (2012), the basic principle with SET is that employees view satisfying HRM practices as an organisation's commitment towards them. Employees thus reciprocate this through positive behaviours like employee commitment. They are thus more likely to exchange their commitment for resources and benefits provided by their organisation. Hence, Figure 1 provides a framework of constructs as the first independent variable (IV1), namely; HRM practices that cause exchange relationship between employees and organisations leading to the dependent variable (DV) employee commitment. The HRM practices identified as the independent variables are namely recruitment, selection, job design, participation, performance appraisal, training, promotion and rewards (Burchielli, 2008), job security (Vlachos, 2009) and grievances handling (Zulkiflee, Faizal, Shakizah & Durrishah, 2010).

On its part, the Leader–Member Exchange (LMX) propounds that high-exchange relationships characterise high-level of trust, liking, and respect (employer-employee relationships) and involve expectations of mutual exchange. The leader provides outcomes desired by subordinates, such as interesting tasks, additional responsibilities, and larger rewards and the subordinates reciprocate with commitment to work and loyalty to the leader. Exchange relationships develop gradually over time and reinforced by the behaviour of the leader and the subordinates. This means that an organisation whose structure leads to assigning of employees different tasks and different responsibilities, a leadership style that offers rewards, creates good leadership and support employees will be reciprocated with commitment. Thus, Figure 1 contains a framework of constructs IV2, namely; organisational characteristics to which subordinates reciprocate with commitment which is the DV. Organisational characteristics pointed out are namely organisational structure, leadership styles, organisational relationships and organisational support (Nguyen, 2011).

Regarding the Social Identity Theory (SIT), it suggests that our sense of who we are is enhanced by knowing not only that we belong to certain groups, but also that we are different from members of other groups. According to

Jones and Volpe (2010), SIT proposes that individuals classify themselves and others into various social categories and view their membership in particular groups based on social roles and relationships. This means that individuals categorise themselves according to individual characteristics, IV3 which gives them identity leading to positives implications such as commitment (IV3). Personal characteristics identified are namely, age, gender, educational level, marital status, job experience, job position and self-efficacy (Suman & Srivastava, 2012). The following sections present a derivation of 21 hypotheses based on the conceptual framework (Figure 1).

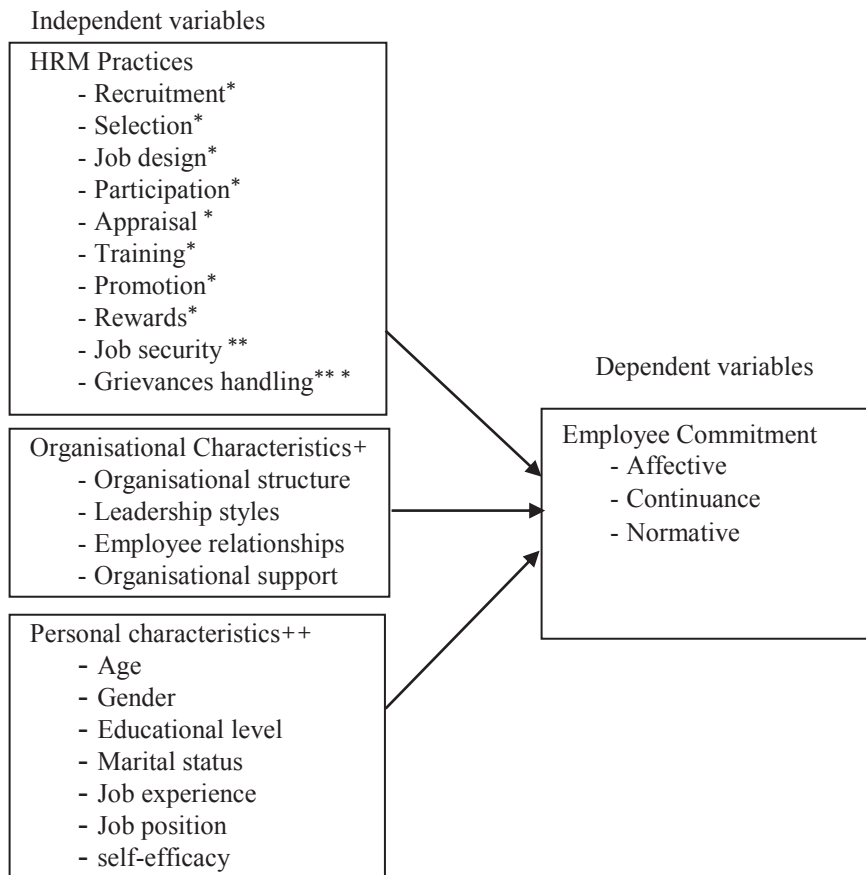


Figure 1: Conceptual Framework.

Sources: Adapted from *Burchielli (2008); ** Vlachos (2009); ***Zulkiflee et al. (2010); + Nguyen (2011); ++Suman and Srivastava (2012); ‡ Meyer et al. (2012).

4 HRM Practices as Antecedents of Employee Commitment

4.1 Recruitment as an Antecedent of Employee Commitment

Georgia, George and Labros (2013) define recruitment as the searching for and obtaining potential job candidates in sufficient numbers and quality so that the organisation can select the most appropriate people to fill its job needs. Hassink and Russo (2008) explain that employees' relationship with the organisation commences with the recruitment process. The initial schemas that employees have when they begin the recruitment process will influence their job attitude on being hired. Accordingly, the recruitment process may be partly responsible for job fit or mismatch. When expectations and contributions of each party (employees and the organisation) match what each of them had expected, stronger employment relationships follow. On the other hand, unmet expectations are associated with lower employment relationships (Aggarwal & Bhargava, 2009). In his submission, Campbell (2010) posits that literature on organisational referrals as a hiring source shows the significance of recruitment in promoting employee behaviour. Job candidates referred by an organisation's current workers tend to have better post-hire career outcomes.

The reason for this is that the referrer effectively screens the applicant based on superior information to that which the organisation would not have in the absence of referral, thus providing a more appropriate match for the organisation. Consequently, the selected employee will be a committed one because of proper job match fit. Several recent studies (e.g. Chew & Chan, 2008; Edwards & Billsberry, 2010; Gutierrez, Candela & Carver, 2012) positively related recruitment to employee commitment. However, as the above studies suggest, many earlier studies have been carried out in the context of the western world such as the Australia (e.g. Chew & Chan, 2008) and the United States of America (e.g. Edwards & Billsberry, 2010; Gutierrez et al., 2012). This contextual gap calls for further research on the relationship between the HRM practice of recruitment and employee commitment in other contexts such as the developing countries.

4.2 Employee Selection as an Antecedent of Employee Commitment

Selection is the process of assessing the suitability of candidates by predicting the extent to which they will be able to carry out a role successfully (Armstrong, 2010). Armstrong explains that this involves deciding on the degree to which the characteristics of applicants in terms of their competencies, experience, qualifications, education and training match the person specification. Georgia et al. (2013) suggest that the initial step in selection is

to categorise candidates as probable, possible or unsuitable. Apparently, this is done by comparing the information provided in the application form or curriculum vitae against pre-determined selection criteria. Potentially suitable candidates will only proceed with the selection process. Accordingly, once the number of shortlisted applicants have been identified and invited, the process of in-depth assessment can begin with an extensive range of assessment methods such as interviews, psychological tests and assessment centres to identify competent candidates that meet the employer's candidate profile and fit the organisation culture.

Scheible and Bastos (2012) posit that personnel selection may contribute to the affective and normative commitments to the organisation because by selecting the best available candidates, pride is built in them stimulating them to keep their promises to the organisation. There are recent researches (e.g. De Cooman, Gieter, Pepermans, Hermans, Du Bois, Caers & Jegers, 2009; Harold & Shiju, 2012; Obeidat, Masa'deh & Abdallah, 2014) demonstrating that selection positively related to employee commitment. However, contextual gaps emerge from those studies, in that many of the studies were done on the Western World (De Cooman et al. 2009) and Asia (Harold & Shiju, 2012; Obeidat et al., 2014). Further research should be carried out on the relationship between selection and employee commitment in other contexts such as Africa.

4.3 Job design as an Antecedent of Employee Commitment

Job design, sometimes also referred to as job redesign, refers to any set of activities that involve the alteration of specific jobs or interdependent systems of jobs with the intent of improving the quality of employee job experience and their on-the-job productivity (Maxwell, 2008). Three common approaches to job design are namely; job rotation, enrichment and enlargement (Maxwell, 2008). Job rotation is the performing of a variety of production tasks on different job assignments on a scheduled basis (Angelis, Conti, Cooper & Gill, 2010). Angelis et al. posit that job rotation increases the scope of production duties, thus it can be seen as trust in the ability of workers to multi-task. Job enrichment, according to Maxwell (2008), involves an increase in the level of responsibility for planning and coordinating tasks, sometimes referred to as vertical loading. This changes the employee's day-to-day job or increases the individual's participation in decisions affecting his or her work. Job enrichment allows vertical expansion, which increases the depth of the organisation and gives employees greater responsibility. The added responsibility increases the independence and the self-assessment leading to benefits for the organisation such as less absenteeism and less turnover which are indicators of commitment. Job enlargement, Maxwell (2008) expounds, is the putting of more variety into

a worker's job by combining specialised tasks of comparable difficulty, a process also known as horizontal loading.

This makes the job more appealing and rewarding allowing employees to identify their contributions to the overall production of products and goods. According to Truss et al. (2013), people whose jobs are varied are more likely to experience a sense of energy in relation to their work because monotonous work can lead to psychological distress. Multi-tasked work makes people autonomous making them experience a feeling of responsibility and are more likely to invest effort into their work, even in the face of obstacles. A person who is responsible for a whole piece of meaningful work (identity) and perceives his/ her work as significant is more likely to invest his/ her whole self into their work and experience a sense of pride. There are recent studies (e.g. Angelis et al., 2010; Boselie, 2010; Wang, Indridason & Saunders, 2010) that positively related job design to employee commitment. However the cited studies suggest a skew of the studies towards the developed world such as the United Kingdom (e.g. Angelis et al., 2010; Wang et al., 2010) and the Netherlands (e.g. Boselie, 2010). Therefore, future research relating the two variables should be on other geographical contexts.

4.4 Employee Participation as an Antecedent of Employee Commitment

Employee participation means the entrance of employees into the authority and operations of management. It involves employees having the opportunity to influence of decision-making throughout the organisation (Busck, Knudsen & Lind, 2010). Busck et al. explain that with employee participation, the employer, voluntarily or by compulsion, yields power of decision to the employees or to their representatives. This may occur in the form of joint decisions (e.g. pay and working hours agreed in collective bargaining), decision-making based on consultation with employees (e.g. in works councils or at workshop level), or decision making left by the employer to the employees themselves (delegation of decision authority, autonomous teams or self-management).

Busck et al. (2010) indicate that participation in addition to increased productivity through commitment, leads to greater responsibility and avoidance of conflicts in connection with changes, and contributes to a higher degree of well-being at work through motivation and empowerment. Recent studies (e.g. Angelis et al., 2010; Appelbaum, Louis, Makarenko, Saluja, Meleshko & Kulbashian, 2013; Elele and Fields, 2010; Henkin & Holliman, 2008) positively correlating participation and employee commitment are available. However those studies suggest a bias of earlier studies towards the developed world such as Canada (Appelbaum et al., 2013); the United Kingdom (e.g.

Angelis et al, 2010) and the United States (e.g. Henkin & Holliman, 2008). Hence the need for future studies to deal with other contexts also.

4.5 Training as an Antecedent of Employee Commitment

Training refers to a systematic approach to learning and development to improve individual, team and organisational effectiveness (Aguinis & Kraiger, 2009). Training involves the application of formal processes to impart knowledge and help people to acquire the skills necessary for them to perform their jobs satisfactorily (Armstrong, 2010). Employee training serves a variety of purposes, including, but not limited to, leadership development, learning new work skills, socialisation encompassed in orienting new employees to the culture of an organisation, understanding job responsibilities and educating employees in regard to business ethics (Schraeder, 2009).

Gellatly, Hunter, Currie and Irving (2009) indicate that HRM practices aimed at building employee capabilities (e.g., skill training) increase feelings of internal control (autonomy) and competence, which, in turn, increase one's identification, involvement, and emotional connection with the work and the organisation as an individual and the organisation as a whole. Recent empirical studies positively relating training and employee commitment include Mohyin, Dainty and Carrillo (2012); Savaneviciene and Stankeviciute (2011) and Truitt (2011). All the above studies however, were carried out in the context of the Western World, namely the UK (Mohyin et al., 2012), the USA (Truitt, 2011) and Lithuania (Savaneviciene & Stankeviciute, 2011). This contextual gap leaves the question of whether training influences employee commitment in other contexts such as in sub Saharan Africa.

4.6 Performance Appraisal as an Antecedent of Employee Commitment

Performance appraisal (PA) is the systematic evaluation of an employee with regard to his or her performance on the job and his potential for development (Toppo & Prusty, 2012). Armstrong (2010) states that appraisal is an opportunity to take an overall view of work content, loads and volumes, to look back at what has been achieved during the reporting period and agree on objectives for the next period. Manoharan, Muralidharan and Deshmukh (2012) indicate that in general, PA is concerned with the assessment of three areas, namely results, behaviours, and personal characteristics. Prowse and Prowse (2009) contend that performance appraisal provides a major potential for employee feedback that links strongly to increasing motivation, an opportunity to clarify goals and achieve long-term individual performance and career development.

Trivellas (2009) argue that appraisal provides feedback guidance in the context of an effective and more complete system of performance management which fosters employee motivation contributing to increased commitment. Recent studies offering insight on the relationship between performance appraisal and employee commitment (e.g. Farndale, Hope-Hailey & Kelliher, 2011; Kuvaas, 2010; Morrow, 2011) can be pointed out. However, some gaps still emerge at contextual and methodological levels. At contextual level, the studies by Kuvaas (2010) and Farndale et al. (2011) were carried out in Norway and UK respectively, and at methodological level, the study by Morrow (2011) was a review of previous studies. Therefore, there is need for further empirical studies to be carried out and in other contexts such as those of developing countries of Africa particularly.

4.7 Promotion as an Antecedent of Employee Commitment

Promotion refers to an increase in job responsibility, scope, authority, or level within or outside the organisation (Singh, Ragins & Tharenou, 2009). Pfeifer, Janssen, Yang and Backes-Gellner (2011) indicate that promotions are important from the point of view of both employer and employee because the employees benefit from promotions by monetary gains and higher reputation, whereas employers can use promotions to make efficient job assignments. Several recent studies (e.g. Gunlu, Aksarayli & Percin, 2010; McCabe & Garavan, 2008; Scheible & Bastos, 2013) have positively related promotion to employee commitment. However, most of the studies above were carried out in the context of the Western World (e.g. Gunlu et al., 2010; McCabe & Garavan, 2008) and the Caribbean (Scheible & Bastos, 2013). Besides they were carried out in the context of an information technology company (Scheible & Bastos, 2013), health service (McCabe & Garavan, 2008) and hotel industry (Gunlu et al., 2010). Future research can be carried out in the developing world of Africa and in other contexts such as universities.

4.8 Rewards as an Antecedent of Employee Commitment

Rewards are benefits that arise from performing a task, rendering a service or discharging a responsibility (Agwu, 2013). Nujjoo and Meyer (2012) indicate that classic categorisation of rewards distinguishes them as intrinsic and extrinsic. They define intrinsic rewards to denote satisfaction that a person derives from doing the job. Stumpf, Tymon Jr, Favorito and Smith (2013) expound that intrinsic rewards are based on employees getting a positively valued experience from doing their work such as experience of work as meaningful, the ability to exercise some degree of choice, the experience of progress and the development of a greater sense of competence. Ganzach and

Fried (2012) consider extrinsic rewards to refer to valuable goals which are external to the job itself that provide satisfaction to individuals (i.e., the extrinsic rewards provide the means to support the goals of the self and family members, such as living in a nice neighbourhood, providing the children with a good education, etc.). Extrinsic rewards include pay, job security, supervisor and peers support among others.

Pratheepkanth (2011) indicates that an intrinsically motivated individual will be committed to his/ her work to the extent to which the job inherently contains tasks that are rewarding to him/her and an extrinsically motivated person will be committed to the extent that he/ she can gain or receive external rewards for his or her job. In all, for an individual to be motivated in a work situation there must be a need, which the individual would have to perceive a possibility of satisfying through some reward. Recent studies (e.g. Gellatly, Hunter, Currie & Irving, 2009; Mohyin et al., 2012; Tornikoski, 2011) revealed the importance of rewards in promoting employee commitment, although they raise contextual gaps. That is, all the above studies were carried out in the Western World with the study by Tornikoski (2011) carried out in Finland, while the study by Gellatly et al. (2009) was carried out in Canada and Mohyin et al. (2012) in the UK. Future research can thus be carried out in other contexts such as those of the developing countries.

4.9 Job Security as an Antecedent of Employee Commitment

Job security can be conceptualised at two levels: job security in terms of keeping the job and safety in terms of employee well-being. Stander and Rothmann (2010) define job security as the perceived stability and continuance of one's job. On the other hand, Armstrong (2010) indicates that safety deals with the prevention of accidents and minimising the resulting loss and damage to persons and property. Noble (2008) explains that within the classic Maslow's hierarchy of needs, the notions of safety, security and protection occupy the second tier of the model, suggesting that they are even more sophisticated needs than the fundamental physiological concerns. He argues that job security fears can lead to several negative consequences, including decreased satisfaction and a greater propensity to leave one's job. By perceiving insecurity about the job on the part of the employee, the psychological contract, that is, the agreement between the organisation and an employee about their beliefs regarding the terms of employment (Peene, 2009).

In other words, the perceived mutual obligations between employer and employee may be perceived as violated by the organisation; employees depend on the organisation so they lose faith in the dependability of the organisation. As a result, the commitment of an employee towards the organisation may decrease. Previous studies in the recent past (e.g. Bayona-Sáez, Goñi-Legaz &

Madorrán-García, 2009; Chen, Myrtle, Liu & Fahey, 2011; Ünsal-Akbıyık, Çakmak-Otluoğlu & De Witte, 2012) relate job security to employee commitment. However, controversies emerge from the above studies which present a research gap. Whereas, studies by Chen et al. (2011) and Ünsal-Akbıyık et al., (2012) indicated positive significant association between job security and employee commitment, Bayona-Sáez et al. (2009) found insignificant association. Future researchers can therefore, further appraise the relationship between job security and employee commitment.

4.10 Grievance handling as an Antecedent of Employee Commitment

Grievance handling or management is all about how well problems between employees and management are addressed in organisations. Grievances of employees relate contracts, work rules or regulations, policies or procedures, health and safety regulations, past practices, changing the cultural norms unilaterally, individual victimisation and wages and bonuses among others (Gomathi, 2014). When a conflict is not dealt with effectively, it may lead to a breakdown in team interaction, causing errors and poor performance. Chronic unresolved conflicts increase the rate of employee turnover in organisations and affect people and relationships other than those initially affected such as external stakeholders (customers) and investors (Zuwena, 2014). Thus effective grievance handling is an essential part of cultivating good employee relations and running a fair, successful and productive workplace (Gomathi, 2014).

Several recent researchers (e.g. Harney & Jordan, 2008; Harold & Shiju, 2012; Polster, 2011) have related grievance handling and employee commitment. Whereas, the above empirical studies made effort to link grievances handling and employee commitment, controversial results that lead to a gap for further research emerge. For instance, whereas the studies by Harney and Jordan (2008) and Harold and Shiju (2012) found out that grievance handling significantly related to employee commitment, Polster (2011) indicated that formal grievance procedures had the unintended consequence of increasing employees' commitment to their complaints and exacerbating workplace conflicts. Therefore, this controversy calls for further research on the relationship between grievances handling and employee commitment.

5 Organisational Characteristics as Antecedents of Employee Commitment

5.1 Organisational Structure as an Antecedent of Employee Commitment

Organisational structure refers to both the communication lines and the reporting responsibilities in an institution (Holtzhausen & Fourie, 2011). Ashworth, Boyne and Delbridge (2009) define organisational structure as the set of rules and roles that shape the relationships between parts of an organization. Lunenburg (2012) explains that the term organisational structure covers the formal configuration between individuals and groups regarding the allocation of tasks, responsibilities and authority within the organisation. Suman and Srivastava (2012) indicate that aspects of an organisational structure are size, work rules and policy (formalisation), roles, number of levels in the organisational hierarchy and the extent of flatness or centralisation. They explain that with centralisation there is an increase of decision making at the higher hierarchical levels within an organisation and a decrease of participation of employees in the decision making process. Flatness is the degree to which an organisation has minimal levels of management hierarchy. However, specialised structures have departments with employees that are functionally specialised or integrated. Low levels of horizontal integration reflect an organisation in which the departments and employees are functionally specialised, whereas high levels of horizontal integration reflect an organisation in which departments and employees are integrated in their work, skills, and training.

They contend that a decision-making organisational structure that encourages member participation or a communication process which keeps the individual informed with respect to valued aspects of the organisation may affect felt responsibility and role involvement and therefore, commitment. Recent studies on organisational structure and employee commitment include the studies by Harney and Jordan (2008); Sahoo, Behera and Tripathy (2010) and Suman and Srivastava (2012). However, from the above studies some gaps emerge. For example, whereas, Harney and Jordan (2008) established that flat structures did not motivate employee commitment, Suman and Srivastava (2012) in a study in India and Sahoo et al. (2010) in systematic review of the previous research works established a positive relationship between organisational structure and employee commitment. Besides, Harney and Jordan (2008) carried out their study in the UK and Suman and Srivastava (2012) carried out their study in India. The controversy in the findings of the studies above and contextual gaps call for further research on organisational structure as an antecedent of

employee commitment in other contexts such as the developing countries of Africa.

5.2 Leadership Styles as Antecedent an of Employee Commitment

Leadership is the process by which an individual influences a group of individuals to achieve a common goal (Cummings, MacGregor, Davey, Lee, Wong, Lo, Muise & Stafford, 2009). Cheok and O'Higgins (2012) contend that a leadership style that encourages employee involvement can help to satisfy employees' desire for empowerment and demand for a commitment to organisational goals. They explain that a more flexible and participatory leadership style can strongly and positively enhance organisational commitment. On the other hand, Wong (2012) states that leadership styles that are relational in nature are associated with organisational commitment and a leadership that provides hope, trust, positive emotions and optimism influences employees' commitment.

There are recent studies that related leadership styles with employee commitment (e.g. Bambacas & Patrickson, 2008; Dunn, Dastoor & Sim, 2012; Mendelson, Turner & Barling, 2011). However, although the studies above attempted to relate leadership styles and employee commitment, gaps still emerge at contextual and empirical level. At the contextual level at the above studies were carried out in the Western World. At the empirical level, the study by Dunn et al. (2012) raises controversy as its findings ascertained that for employees from the US the transformational leadership practice of inspiring the vision correlated with employee commitment, but this was not so in Israel. This thus calls for further study on the constructs in other contexts such as the developing countries of Africa.

5.3 Employee Relationships as Antecedents of Employee Commitment

Employee relations refer to connection between employees with the organisation and with each other and include the processes of developing, implementing, administering and analysing the employer – employee relationship, managing employee performance and resolving work place conflicts/ disputes (Sundaray, Sahoo & Tripathy, 2010). Leat (2008) summarises that employee good relations are responsible for the notion of psychological contract that is an implicit contractual relationship which is derived from a series of assumptions on the part of employer and employee about the nature of their relationship. These assumptions may not be legally enforceable but they constitute a set of reciprocal arrangements and form the basis for a series of expectations that may have a considerable degree of moral force. The main assumptions are that: employees will be treated fairly and

honestly; the relationship will be characterised by a concern for equity and justice and this will require the communication of sufficient information about changes and developments.

Employee loyalty to the employer will be reciprocated with a degree of employment and job security; and employees' input will be recognised and valued by the employer. Studies relating relationships and employee commitment can be found (e.g. Caykoylu, Egri, Havlovic & Bradley, 2011; Brunetto, Farr-Wharton & Shacklock, 2010; Martín, 2008). The studies above attempted to relate relationships and employee commitment although some gaps remain at contextual level. The contexts of the above studies was the Western World and in the medical sector (Brunetto et al., 2010; Caykoylu et al., 2011) and business enterprises (Martín, 2008). This calls for future research on the relationship between employee-employer relations in the context of the developing countries and in other sectors such as education.

5.4 Organisational support as an Antecedent of Employee Commitment

Lew (2011) notes that organisational support concerns discretionary practices which the organisation is not obligated to offer that imply organisational caring and commitment towards the wellbeing of the employees but not made compulsory by company policy, union contract or laws of the country (for example, career development opportunities and work/family support) and second, organisational recognition for the employee's contribution (e.g. pay satisfaction). Accordingly, employees interpret organisational support as indicative of commitment to them by the organisation's high level of caring and concern. In return, employees will reciprocate this kind deed by increasing their own commitment to the organisation by being highly involved in the organisation and showing their willingness to work hard to accomplish the organisation's goals (Lew, 2011).

Recent empirical studies (e.g. Colakoglu, Culha & Atay, 2010; Maurer & Lippstreu, 2008; Wang et al., 2010) can be cited. However, whereas some studies (e.g. Colakoglu et al., 2010; Wang et al., 2010) established a significant relationship between support and employee commitment, other studies (e.g. Maurer & Lippstreu, 2008) established that support for employee development had less impact on commitment if the employees were focused on trying to prove their current skills and competence to others. Therefore, future research should grapple with establishing how organisational support affects various categories of employees in organisations differently.

6 Personal Characteristics as Antecedents of Employee Commitment

6.1 Age as an Antecedent of Employee Commitment

Age refers to an individuals' number of years. For purposes of a given study, age can be categorised for identification, in which case people may belong to different age group, such as young, middle-aged and old. On average, people generally stop being described as young at approximately 40 years of age (Abrams, Vauclair & Swift, 2011). Age represents the evolutions taking place in people's life over time, in terms of biological, psychological and social functioning (Innocenti, Profili & Sammarra, 2013). Thus, age is related with affective and normative occupational commitment because the age of an individual in terms of affective commitment is an indicator of them getting a better position in the organisation or profession and gaining tenure (Benligiray & Sonmez, 2013). As for the normative commitment, age is an indicator of the investments an individual has made in his/ her organisation or profession.

In the recent past several scholars (e.g. Angelis et al., 2010; Dick, 2011; Innocenti et al, 2013) have related age to employee commitment. However, in the studies above there are some contextual and empirical gaps that call for further studies. At contextual level, the studies were carried out in the Western World and in assembling industries (Angelis et al., 2010), Police (Dick, 2011) and industrial and service sectors (Innocenti et al., 2013). At empirical level, whereas Dick (2011) found out that age had a small influence on organisational commitment, Angelis et al. (2010) and Innocenti et al (2013) suggested that age was positively related to employee commitment. This thus calls for further empirical research and in other contexts such as the developing world of Africa.

6.2 Gender as an Antecedent of Employee Commitment

Gender can be defined from the cultural or role perspectives. Defined from the cultural perspective, gender refers to the social classification of an individual as either masculine or feminine (Snowdon, 2009). In terms of roles, gender is a variable distinguishing women and men as individuals or as defining relationships located within the context of the family (Ferre, 2010). In research, gender-sensitive data are those compiled and analysed while recognising that gender-based factors influence women's and men's different social conditions, relations and access to resources (Sanga, 2008). Khalili and Asmawi (2012) indicate that gender has been considered in organisational commitment literature from two aspects: the job model and the gender model.

The job model approach indicates that there are no differences in the work attitudes of males and females; and work attitudes of men and women extended

in similar ways. On the contrary, the gender model in the study of organisational commitment and females indicates that women accept family roles as a chief source of their identity and fulfilment leading to a different orientation to work from that of men for whom work is paramount. Studies in the recent past (e.g. Bayona-Sáez et al., 2009; Dick, 2011; Giffords, 2009) examined gender and employee commitment. All the above studies were unanimous that gender had a weak correlation with employee commitment. However, all the above studies were carried out in the context of the Western World. Future research should explore the relationship between gender and employee commitment in the context of developing countries.

6.3 Educational Level and Employee Commitment

Education is the measure of knowledge and skills (Barton, Armstrong, Preheim, Gelmon & Andrus, 2009). Thomas and Feldman (2009) indicate that education level which is also known as qualifications refers to the academic credentials an individual obtains. According to Sutherland (2012), qualifications constitute a measure of educational attainment and academic competence. Thomas and Feldman (2009) state that most organisations use education level as an indicator of a person's skill levels or productivity and that it is frequently employed as a prerequisite in hiring decisions. They explain that individuals with more education are likely to have greater in-depth, analytical knowledge (crystallised intelligence) as well. Khan, Khan, Khan, Nawaz and Yar (2013) suggest that qualifications play a leading role in the development of organisational commitment because as the qualifications of individuals get better, their sense of belongingness is improved. They add that when institutions employ a qualified workforce then their performance and productivity will be marvellous in direct proportion.

However, Jafri (2011) states that educational qualification is a negative predictor of commitment because people with higher qualifications want to grow professionally and economically, they expect more and in search of the fulfilment of this need, they keep on moving or they want to move where they find opportunities better. He indicates that the other reason may be that many options are available for qualified and skilled persons and that is why they keep on moving to get diverse exposure and better opportunities. Prior studies in the recent past (e.g. Bayona-Sáez et al., 2009; Benligiray & Sonmez, 2013; Innocenti et al., 2013) related education levels to employee commitment. However, from the studies above, some gaps emerge. For instance, the studies by Benligiray and Sonmez (2013) related education to continuance commitment, the studies Innocenti et al. (2013) and Bayona-Sáez et al. (2009) related it to affective commitment. Besides, all the above studies used a quantitative approach and were carried out in western world. Therefore, future

research should further investigate the relationship between education and all the three aspects of commitment, namely; affective, continuance and normative using a qualitative and in other the contexts such as the developing countries of Africa.

6.4 Marital Status as an Antecedent of Employee Commitment

Marital status is the state of being married or unmarried, and involves being married/ cohabitating, never married/ living alone, divorced/ living alone, and widow/ widower/ living alone. Regarding the relationship between marital status and employee commitment, Benligiray and Sonmez (2013) assert that marital status negatively affects occupational and career commitments because the time and energy needed to keep a marriage stable has a negative effect on work life and occupational commitment. They explain that working couples have difficulties in making arrangements for their children and career responsibilities. However, Bayona-Sáez et al. (2009) suggest otherwise indicating that marital status enhances employee commitment.

This is because marital status increases workers' family responsibilities which make employees with family responsibilities more reliant (continuance commitment) on the organisation to fulfil their financial needs. Recent past studies (e.g. Bayona-Sáez et al., 2009) that empirically found marital status and employee commitment to be related can be found. But so are others (Cohen & Veled-Hecht, 2010; Gurses & Demiray, 2009) that did not. Further, many of the studies (e.g. Bayona-Sáez et al., 2009; Cohen & Veled-Hecht, 2010; Gurses & Demiray, 2009) based only on quantitative surveys and were carried out in the Western World. Therefore, there is need for more empirical studies using other approaches such as the qualitative approach for in-depth analysis especially in the context of developing countries.

6.5 Job Experience as an Antecedent of Employee Commitment

Job experience also known as employee tenure means the length of time an individual employee has worked for an organisation and represents the accumulation of specialised organisationally relevant knowledge and information (Gilson, Lim, Luciano & Choi, 2013). Bhopatkar (2013) indicates that during this period the employee learns as well as relearns working, evinces many things, faces different aspects of work, earns seniority and proceeds to maturity that reflects the mental enhancement of a person amassed by endeavouring different actions in life. Accordingly, the different situations or occurrences broaden the mind-set of the employee that aids his/ her decision-making. Experiences offer different phases of learning process which are narrow initially, but with the passing of time, the learning process enhances the

mental power and reaches the stage where an emotionally stable and logical individual develops. Bayona-Sáez et al. (2009) argue that older employees may have received more rewards from the organisations and besides they may justify their long service to the organisation by deciding they like it (affective commitment). Shore, Bommer and Shore (2009) contend that employees with long organisational tenure may be tied to their organisation because of the high costs of leaving (e.g. pension benefits and seniority) and non-portable training.

The accumulation of these investments over time is believed to make living difficult and to increase continuance commitment. Employees with greater sunk costs such as long tenure will remain with their organisation due to high continuance commitment. A number of recent studies have related experience and employee commitment (e.g. Benligiray & Sonmez, 2013; Dick, 2011; Karakus & Aslan, 2009). However, the studies above which were carried out in Europe leave some unanswered gaps. Whereas Dick (2011) found that Police constables with more than 20 years' service demonstrated higher levels commitment, Karakus and Aslan (2009) established that teachers who had served for more than 21 years were the least affectively committed. Thus the issue of age as a correlate of employee commitment is controversial. Still, Benligiray and Sonmez (2013) found a negative correlation between tenure and occupational commitment. These controversies besides differences in sectors from which samples were drawn, that were police (Dick, 2011), teachers (Karakus & Aslan, 2009) and nurses (Benligiray & Sonmez, 2013) call for further research on experience in other sectors.

6.6 Job status as an Antecedent of Employee Commitment

Job status refers to the position that an employee occupies in the workplace. They indicate that in every organisation, there is a hierarchy among the employees that is based on position, title, role, and function and job positions can be categorised as top, middle and bottom. Olapegba and Onuoha (2013) contend that job position influences job commitment with those in senior position being more committed than those in subordinate positions because of benefits and perks of office enjoyed by those in senior positions. Higher ranking personnel receive higher pay, have better opportunities and benefits (such as overseas trips, housing allowance), less job risks and occupational hazards. The leadership role increases the feeling of having a higher stake in the organisation which in turn increases the level of job commitment of those in senior positions. The importance of job status in relation to employee commitment can be understood from the context of the Side-Bet Theory propounded by Becker in 1960. Wood and Rowe (2011) indicate that side-bets are investments accumulated that are valued by the individual which would be lost if he or she were to leave the organisation.

The Side-Bet Theory postulates that individuals often do not base decisions, such as job or career changes purely on economic conditions but rather they are influenced or constrained by investments made in the organisation which make them committed to stay. Therefore, an individual considering a new job opportunity may be deterred because the move may cost the person their seniority, job status implied. Several recent studies demonstrate that job status positively correlate with employee commitment (Dick, 2011; Shore et al., 2008; Turunen, 2011). However, the studies above were carried out in the context of the Western World and with Police Officers (Dick, 2011) and employees in manufacturing industries (Shore et al., 2008) as units of analysis. Future research should be carried out in the context of the developing countries and in other sectors.

6.7 Self-Efficacy as an Antecedent of Employee Commitment

Self-efficacy is the people's judgment of their capabilities to organise and execute courses of action required to attain designated types of performances (Van Vuuren, de Jong & Seydel, 2008). Zulkosky (2009) describes self-efficacy as the difference in how people feel, think, behave, and are motivated. In terms of feeling, a low sense of self-efficacy is associated with stress, depression, anxiety, and helplessness. Individuals with a low sense of self efficacy have low self-esteem and are pessimistic about their accomplishments and personal development. In terms of thinking, a strong sense of efficacy facilitates cognitive processes and performance in a variety of settings, including quality of decision making and academic achievement. People with high self-efficacy approach difficult tasks as challenges and do not try to avoid them. People's self-efficacy beliefs determine their level of motivation, as reflected in how much effort they will exert in an endeavour and how long they will persevere in the face of obstacles. Van Vuuren et al. (2008) contend that unless people believe that their actions can produce the outcomes they desire, they have little incentive to act or to persevere in the face of difficulties. Thus, self-efficacy beliefs affect virtually every aspect of People's lives including organisational commitment.

Zulkosky (2009) state that people with high levels of self-efficacy are more likely to set higher goals, commit to challenges that are more difficult, and strive to meet those goals because human behaviour is regulated by forethought embodying cognised goals, and personal goal setting is influenced by self-appraisal of capabilities. Individuals with high self-efficacy achieve their goals by visualising successful outcomes instead of dwelling on the potential negative consequences. A major function of thought is to enable people to predict the occurrence of events and to create the means for exercising control over those that affect their daily lives. This leads to their commitment to organisations.

Recent studies pertaining self-efficacy and employee commitment (e.g. Bayona-Sáez et al., 2009; Canrinus, Helms-Lorenz, Beijaard, Buitink & Hofman, 2012; Suman & Srivastava, 2012) reported the existence of a positive relationship. However, the context of the studies above was the Western World (Bayona-Sáez et al., 2009; Canrinus et al., 2012) and Asia (Suman & Srivastava, 2012). This contextual gap calls for further research in the context of African countries.

7 Conclusion

This paper reviewed literature on employee commitment at conceptual, theoretical and empirical levels. The paper was divided into seven sections. In section 1, the definition of employee commitment is given, stressing its nature as a multi-dimensional construct made up of the three perspectives of affective, continuance and normative commitment. In the same section, the importance of employee commitment is discussed, pointing out its capacity to enhance employee job performance. This is because it lessens the frequency of employees performing negative behaviour; promotes employee's OCB, reduces employee turnover; makes the employees more ready to accept organisational change; and enhances knowledge sharing among the employees.

In section 2, three theories (Socio Exchange, Leader-Member Exchange and Socio identity) relating employee commitment to its antecedents were reviewed. In the third section a framework relating employee commitment to three categories of antecedents was suggested. In sections 4 through 6, hypotheses for future research relating individual antecedents to employee commitment are derived via a literature review, before a conclusion is given in this section. In the empirical literature reviewed, it was identified that most studies relating to employee commitment have been done in the western world and a few others in Asia. Thus other developing countries especially Africa has been left unexplored as far as the variable is concerned. This is food for thought for future researchers.

References

- Abrams, D., Vauclair, M., & Swift, H. S. (2011). *Predictors of attitudes to age across Europe*. Department for Work and Pensions Research Report No 735. Retrieved from: <http://research.dwp.gov.uk/asd/asd5/rrs-index.asp>.
- Aggarwal, U., & Bhargava, S. (2009). Reviewing the relationship between human resource practices and psychological contract and their impact on

- employee attitude and behaviours. *Journal of European Industrial Training*, 33(1), 4-31. doi: 10.1108/0309059 0910924351
- Aguinis, M., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organisations, and society. *Annual Review of Psychology*, 60, 45-474. doi: 10.1 146/annurev.psych.60.110707.163505
- Agwu, M. O. (2013). Impact of fair reward system on employees' job performance in Nigerian Agip Oil Company Limited Port-Harcourt. *British Journal of Education, Society & Behavioural Science*, 3(1), 47-64
- Allen, D. G., Bryant, P. C., & Vardaman, J. M. (2010). Retaining talent: Replacing misconceptions with evidence-based strategies. *The Academy of Management Perspectives*, 24(2), 48-64.
- Angelis, J., Conti, R., Cooper, C., & Gill, C. (2010). Building a high-commitment lean culture. *Journal of Manufacturing Technology Management*, 22(5), 569-586. doi: 10.1108/17410381111134446
- Appelbaum, S. H., Louis, D., Makarenko, D., Saluja, J., Meleshko, O., & Kulbashian, S. (2013). Participation in decision making: A case study of job satisfaction and commitment. *Industrial and Commercial Training*, 45(4), 222-229. doi: 10.1108/00197851311323510
- Armstrong, M. (2010). *Armstrong's essential human resource management practice: A guide to people management*. London, UK: Kogan Page Limited.
- Ashworth, R., Boyne, G., & Delbridge, R. (2009). Escape from the iron cage? Organisational change and isomorphic pressures in the public sector. *Journal of Public Administration Research and Theory*, 19(1), 165-187. doi: 10.1093/jopart/mum038
- Bambacas, M., & Patrickson, M. (2008). Interpersonal communication skills that enhance organisational commitment. *Journal of Communication Management*, 12(1), 51-72. doi: 10.1108/13632540810854235
- Barton, A. J., Armstrong, G., Preheim, G., Gelmon, S. B., & Andrus, L. C. (2009). A national delphi to determine developmental progression of quality and safety competencies in nursing education. *Nursing Outlook*, 57(6), 313-322. doi: 10.1016/j.outlook.2009.08.003
- Bayona-Sáez, C., Goñi-Legaz, S., & Madorrán-García, C. (2009). How to raise commitment in public university lecturers. *International Review of Administrative Sciences*, 75(2), 333-347. doi: 10.1177/0020852309104179
- Benligiray, S., & Sonmez, H. (2013). The analysis of demographic and work life variables which affect the occupational commitment of nurses. *Journal of Management Development*, 32(4), 419-434. doi: 10.1108/02621711311326392
- Bhopatkar, N. (2013). Effect of emotional intelligence and job tenure on employee effectiveness. *MERCGlobal's International Journal of Management*, 1(2), 86-102.
- Blau, P. M. (1964). *Exchange and power in social life*. New York, USA: Wiley.

- Boroş, S. (2008). Organisational identification: Theoretical and empirical analyses of competing conceptualisations. *Cognition, Brain, Behaviour*, 12(1), 1-27.
- Boselie, P. (2010). High performance work practices in the health care sector: A Dutch case study. *International Journal of Manpower*, 31(1), 42 – 58. doi: 10.1108/01437721011031685
- Bosiok, D., & Sad, N. (2013). Leadership styles and creativity. *Online Journal of Applied Knowledge Management*, 1(2), 64 – 77.
- Brunetto, Y., Farr-Wharton, R., & Shacklock, K. (2010). The impact of supervisor–subordinate relationships on morale: Implications for public and private sector nurses' commitment. *Human Resource Management Journal*, 20(2), 206-225. doi: org/10.1111/j.1748-8583.2009.00117.x.
- Burchielli, R. (2008). Human resource management practices in trade unions: Implications for strategy. *Asia Pacific Journal of Human Resources*, 46(1), 56-67. doi: 10.1177/1038411107082279.
- Busck, O., Knudsen, H., & Lind, J. (2010). The transformation of employee participation: Consequences for the work environment. *Economic and Industrial Democracy*, 31(3), 285–305. doi: 10.1177/0143831X0935121
- Campbell, D. (2010, August). *Employee selection as a control system*. Harvard Business School Working Paper 11-021.
- Canrinus, E. T., Helms-Lorenz, M., Beijaard, D., Buitink, J., & Hofman, A. (2012). Self-efficacy, job satisfaction, motivation and commitment: Exploring the relationships between indicators of teachers' professional identity. *European Journal Psychology Education*, 27, 115–132. doi 10.1007/s10212-011-0069-2.
- Caykoğlu, S., Egri, P., Havlovic, S., & Bradley, C. (2011). Key organisational commitment antecedents for nurses, paramedical professionals and non-clinical staff. *Journal of Health Organisation and Management*, 25(1), 7-33.
- Chen, D., Myrtle, R., Liu, C., & Fahey, D. (2011). Job and career influences on the career commitment of health care executives: The mediating effect of job satisfaction. *Journal of Health Organisation and Management*, 25(6), 693-710.
- Cheok, S. L., & O'Higgins, E. R. E. (2012). Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style. *Leadership and Organisation Development Journal*, 33(2), 149-174. doi: 10.1108/01437731211203465
- Chew, J., & Chan, C. C. A. (2008). Human resource practices, organisational commitment and intention to stay. *International Journal of Manpower*, 29(6), 503-522.
- Cohen, A., & Veled-Hecht, A. (2010). The relationship between organisational socialisation and commitment in the workplace among employees in long-

- term nursing care facilities. *Personnel Review*, 39(5), 537-556. doi: 10.1108/00483481011064136
- Colakoglu, U., Culha, O., & Atay, H. (2010). The effects of perceived organisational support on employees' affective outcomes: Evidence from the hotel industry. *Tourism and Hospitality Management*, 16(2), 125-150.
- Cummings, G. G., MacGregor, T., Davey, M., Wong, C. A., Lo, E., Muise, M., & Stafford, E. (2009). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47(3), 363-385. doi: 10.1016/j.ijnurstu.2009.08.006
- Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organisations: A longitudinal investigation of the role making process. *Organisational Behaviour and Human Performance*, 13(1), 46-78. doi: org/10.1016/0030-5073(75)90005-7
- De Cooman, R., Gieter, S. D., Pepermans, R., Hermans, S., Du Bois, C, Caers, R., & Jegers, M. (2009). Person-organisation fit: Testing socialisation and attraction-selection-attrition hypotheses. *Journal of Vocational Behaviour*, 74(1), 102-107. doi: 10.1016/j.jvb.2008.10.010
- Demirel, Y., & Goc, K. (2013). The impact of organisational commitment on knowledge sharing. *European Scientific Journal*, 9(19), 945-963.
- Dick, G. P. (2011). The influence of managerial and job variables on organisational commitment in the Police. *Public Administration*, 89(2), 557-576. doi: 10.1111/j.1467-9299.2010.01874.x
- Dunn, M. W., Dastoor, B., & Sim, R. L. (2012). Transformational leadership and organisational commitment: A cross-cultural perspective. *Journal of Multi-Disciplinary Research*, 4(1), 45-59
- Edwards, J. A., & Billsberry, J. (2010). Testing a multidimensional theory of person-environment fit. *Journal of Managerial Issues*, 22(4), 476-493.
- Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T. E., Gonzalez-Morales, M. G., & Steiger-Mueller, M. (2010). Leader-member exchange and affective organisational commitment: The contribution of supervisor's organisational embodiment. *Journal of Applied Psychology*. doi: 10.1037/a0020858
- Elele, J., & Fields, D. (2010). Participative decision making and organisational commitment comparing Nigerian and American employees. *Cross Cultural Management: An International Journal*, 17(4), 368-392. doi: 10.1108/13527601011086586
- Farndale, E., Hope-Hailey, V., & Kelliher, C. (2010). High commitment performance management: The role of justice and trust. *Personnel Review*, 40(1), 5-23.

- Ferree, M. M. (2010). Filling the glass: Gender perspectives on families. *Journal of Marriage and Family*, 72, 420-439: doi 10.1111/j.1741-3737.2010.00711.x
- Ganzach, Y., & Fried, I. (2012). The role of intelligence in the formation of well-being: From job rewards to job satisfaction. *Intelligence*, 40(4), 333-342. doi:10.1016/j.intell.2012.03.004
- Geetha, J., & Mampilly, S. R. (2012). Satisfaction with HR practices and employee engagement: A social exchange perspective. *Journal of Economics and Behavioural Studies*, 4 (7), 423-430.
- Gellatly, I. R., Hunter, K. H., Currie, L. G., & Irving, P. G. (2009). HRM practices and organisational commitment profiles. *The International Journal of Human Resource Management*, 20(4), 869-884. doi: 10.1080/09585190902770794
- Georgia, A., George, A., & Labros, S. (2013). Employee recruitment and selection in the insurance sector: The case of the Greek insurance group. *European Journal of Management Sciences*, 1(1), 1-20.
- Giffords, E. D. (2009). An examination of organisational commitment and professional commitment and the relationship to work environment, demographic and organisational factors. *Journal of Social Work*, 9(4), 386-404. doi: 10.1177/1468017309346232
- Gilson, L. L., Lim, H. S., Luciano, M. M., & Choi, J. N. (2013). Unpacking the cross-level effects of tenure diversity, explicit knowledge, and knowledge sharing on individual creativity. *Journal of Occupational and Organisational Psychology*, 86(2), 203-222. doi: 10.1111/joop.12011
- Gomathi, S. (2014). A study on grievance management in improving employee performance in a private enterprise. *Mediterranean Journal of Social Sciences*, 5(20), 20-29. doi: 10.5901/mjss.2014.v5n20p20
- Gunlu, E., Aksarayli, M., & Percin, N. S. (2010). Job satisfaction and organisational commitment of hotel managers in Turkey. *International Journal of Contemporary Hospitality Management*, 22(5), 693-717.
- Gurses, N & Demiray, E. (2009). Organisational commitment of employees of a TV production centre (Educational Television ETV) for open education facility, Anadolu University. *The Turkish Online Journal of Educational Technology* 8(1). Retrieved from: files.eric.ed.gov/fulltext/ED503902.pdf.
- Gutierrez A. P., Candela L. L., & Carver, L. (2012). The structural relationships between organisational commitment, global job satisfaction, developmental experiences, work values, organisational support, and person-organisation fit among nursing faculty. *Journal of Advanced Nursing* 68(7), 1601–1614. doi: 10.1111/j.1365-2648.2012.05990.x
- Harney, B., & Jordan, C. (2008). Unlocking the black box: Line managers and HRM-Performance in a call centre context. *International Journal of Productivity and Performance Management*, 57(4), 275-296.

- Harold, A. P., & Shiju, S. (2012). Human resources management practices' influence on faculty commitment in higher educational institutions. *Asian Journal of Management Research*, 3(1), 125-138.
- Haslam, A., Jetten, J., Postmes, P., & Haslam, C. (2009). Social identity, health and well-being: An emerging agenda for applied psychology. *Applied Psychology: An International Review*, 58(1), 1-23.
- Hassink, W., & Russo, G. (2008). Wage differences between internal and external candidates. *International Journal of Manpower*, 29(8), 715 -730. doi: 10.1108/01437720810919314
- Henkin, A. B., & Holliman, S. L. (2008). Urban teacher commitment exploring associations with organisational conflict, support for innovation, and participation. *Urban Education*, 44(2), 160-18. doi: 10.1177/0042085907312548
- Holtzhausen, L., & Fourie, L. (2011). Employees' perceptions of institutional values and employer-employee relationships at the North-West University. *Journal of Public Affairs*, 11(4), 243-254. doi: 10.1002/pa.417
- Homans, G. C. (1958). Social behaviour as exchange. *American Journal of Sociology*, 63(6), 597-606.
- Innocenti, L., Profili, S., & Sammarra, A. (2013). Age as moderator in the relationship between HR development practices and employees' positive attitudes. *Personnel Review*, 42(6), 724-744. doi: 10.1108/PR-Jan-2012-0009
- Jafri, M.H. (2011, June). *A study on relationship of personal attributes organisational commitment and work performance*. Paper presented in 1st International Conference on Business Strategy & Management in Kolkatta.
- Jones, C., & Volpe, E. H. (2011). Organisational identification: Extending our understanding of social identities through social networks. *Journal of Organisational Behaviour*, 32(3), 413-434.
- Karakus, M., & Aslan, B. (2009). Teachers' commitment focuses: A three-dimensional view. *Journal of Management Development*, 28(5), 425-438. doi 10.1108/02621710910955967
- Khalili, A & Asmawi, A. (2012). Appraising the impact of gender differences on organisational commitment: Empirical evidence from a private SME in Iran. *International Journal of Business and Management*, 7(5), 100-110. doi: org/10.5539/ijbm.v7n5p100
- Khan, I., Khan, F., Khan, H., Nawaz, A., & Yar, N. B. (2013). Determining the demographic impacts on the organisational commitment of academicians in the HEIs of DCs like Pakistan. *European Journal of Sustainable Development*, 2(4), 117-30.
- Kuvaas, B. (2010). The interactive role of performance appraisal reactions and regular feedback. *Journal of Managerial Psychology*, 26(2), 123-137. doi: 10.1108/02683941111102164

- Lambert, E., & Hogan, N. (2009). The importance of job satisfaction and organisational commitment in shaping turnover intent a test of a causal model. *Criminal Justice Review*, 34(1), 96-118.
- Leat, M. (2008). *Employee relations*. Edinburgh, UK: Edinburgh Business School.
- Lew, T. Y. (2011). *Affective organisational commitment and turnover intention of academics in Malaysia*. 2010 International Conference on Business and Economics Research, IACSIT Press, Kuala Lumpur, Malaysia.
- Lunenburg, F. C. (2012). Organisational Structure: Mintzberg's framework. *International Journal of Scholarly, Academic, Intellectual Diversity*, 14(1), 1-8.
- Manoharan, T. R., Muralidharan, C., & Deshmukh, S. G. (2012). A composite model for employees' performance appraisal and improvement. *European Journal of Training and Development*, 36(4), 448-480. doi: 10.1108/03090591211220366
- Marescaux, E., De Winne, S., & Sels, L. (2013). HR practices and HRM outcomes: The role of basic need satisfaction. *Personnel Review*, 42(1), 4-27. doi: 10.1108/00483481311285 200
- Martín, S. S. (2008). Relational and economic antecedents of organisational commitment. *Personnel Review*, 37(6), 589-608. doi: 10.1108/00483480810906856
- Maurer, T. J., & Lippstreu, M. (2008). Who will be committed to an organisation that provides support for employee development? *Journal of Management Development*, 27(3), 328-347. doi: 10.1108/02621710810858632
- Maxwell, J. R. (2008). Work system design to improve the economic performance of the firm. *Business Process Management Journal*, 14(3), 432-446. doi: 10.1108/1463715081087 6715.
- McCabe, T. J & Garavan, T. N. (2008). A study of the drivers of commitment amongst nurses; The salience of training, development and career issues. *Journal of European Industrial Training*, 32(7), 528-568. doi: 10.1108/03090590810899829.
- Mendelson, M. B., Turner, N., & Barling, G. (2011). Perceptions of the presence and effectiveness of high involvement work systems and their relationship to employee attitudes: A test of competing models. *Personnel Review*, 40(1), 45-69. doi: 10.1108/00483481111095519
- Meyer, J. P., Stanley, L. J., & Parfyonova, N. M. (2012). Employee commitment in context: The nature and implication of commitment profiles. *Journal of Vocational Behaviour*, 80(1), 1-16. doi: 10.1016/j.jvb.2011.07.002.
- Mohyin, N.A., Dainty, A. R. J., & Carrillo, P. M. (2012, July). *HRM strategies for managing employee commitment: A case study of small construction*

- professional services firms*. Working paper proceedings engineering project organisations conference Rheden, The Netherlands.
- Morrow, P. C. (2011). Managing organisational commitment: Insights from longitudinal research. *Journal of Vocational Behaviour*, 79(1), 18-35. doi: 10.1016/j.jvb.2010.12.008.
- Nguyen, L. D. (2011). Organisational characteristics and employee overall satisfaction: A comparison of state-owned and non-state owned enterprises in Vietnam. *The South East Asian Journal of Management*, 5(2), 135-153.
- Noble, C. H. (2008). The influence of job security on field sales manager satisfaction: Exploring frontline tensions. *Journal of Personal Selling & Sales Management*, 28(3), 247-261. doi: 10.2753/PSS0885-3134280303.
- Nujjoo, A., & Meyer, I. (2012). The relative importance of different types of rewards for employee motivation and commitment in South Africa. *South African Journal of Human Resource Management*, 10(2), 1-10. doi: org/10.4102/sajhrm.v10i2.442.
- Obeidat, B. Y., Masa'deh, R., & Abdallah, A. B. (2014). The relationships among human resource management practices, organisational commitment and knowledge management processes: A structural equation modelling approach. *International Journal of Business and Management*, 9(3), 9-26. doi: org/10.5539/ijbm.v9n3p9.
- Olapegba, P. O., & Onuoha, U. C. (2013). Personality attributes and personal characteristics affecting job commitment of officers and men of Nigeria Police Force. *European Scientific Journal*, 9(32), 1857-7881
- Park, H. Y., Christie, R. L., & Sype, G. E. (2014). Organisational commitment and turnover intention in union and non union firms. *Sage Open*. doi: 10.1177/2158244013518928.
- Parnini, S. N. (2011). The role of government in economic development: A comparative study between Bangladesh and South Korea. *Journal of Public Administration and Governance*, 1(1), 197-341. doi: 10.5296/jpag.v1i1.742.
- Peene, N. (2009). *Occupational commitment as a moderating variable insecure times: Job insecurity and its consequences on organisational commitment*. Tilburg University Human Resource Studies. Retrieved from: arno.uvt.nl/show.cgi?fid=97367.
- Pfeifer, C., Janssen, S., Yang, P., & Backes-Gellner, U. (2011). *Effects of training on employee suggestions and promotions in an internal labour market*. IZA Discussion Paper No. 5671.
- Polster, J. C. (2011). Workplace grievance procedures: Signalling fairness but escalating commitment. *The New York Urban League Review*, 86, 638-672.
- Pratheepkanth, P. (2011). Reward system and its impact on employee motivation in commercial bank of Sri Lanka Plc, in Jaffna District. *Global Journal of Management and Business Research*, 11(4), 84-94.

- Prowse, P., & Prowse, J. (2009). The dilemma of performance appraisal. *Measuring Business Excellence*, 13(4), 69-77. doi: 10.1108/13683040911006800.
- Sahoo, C. K., Behera, N & Tripathy, S. K. (2010). Employee empowerment and individual commitment: An analysis from integrative review of research. *Employment Relations Record*, 10(1), 40-55.
- Sanga, D. (2008). Addressing gender issues through the production and use of gender-sensitive information. *The African Statistical Journal*, 7, 101-124.
- Savaneviciene, A., & Stankeviciute, Z. (2011). Human resource management practices linkage with organisational commitment and job satisfaction. *Economics and Management*, 17(1), 390-396.
- Scheible, A. C. F., & Bastos, A. V. B. (2013). An examination of human resource management practices' influence on organisational commitment and entrenchment. *BAR, Rio de Janeiro*, 10(1), 57-76.
- Schraeder, M. (2009). Leveraging potential benefits of augmentation in employee training. *Industrial and Commercial Training*, 41(3), 133-138. doi: 10.1108/00197850910950916.
- Singh, R., Ragins, B. R., & Tharenou, P. (2009). Who gets a mentor? A longitudinal assessment of the rising star hypothesis. *Journal of Vocational Behaviour*, 74(1), 11-17. doi: 10.1016/j.jvb.2008.09.009.
- Shore, T. H., Bommer, W. H., & Shore, L. M. (2008). An integrative model of managerial perceptions of employee commitment: Antecedents and influences on employee treatment. *Journal of Organisational Behaviour*, 29(5), 635-655. doi: 10.1002/job.516.
- Snowdon, R. (2009). Gender trouble: Coming to terms with postmodern feminist approaches. *The School of Historical Studies Postgraduate Forum E-Journal*, Edition 7. Retrieved from: Dostupné z: <http://www.societies.ncl.ac.uk/shspgf/ed_6.htm>.
- Stander, M. W., & Rothmann, S. (2010). Psychological empowerment, job insecurity and employee engagement. *Southern Africa Journal of Industrial Psychology*, 36(1), 1-8. doi: 10.4102/sajip.v36i1.849.
- Stumpf, S. A., Tymon Jr, W. G., Favorito, N., & Smith, R. R. (2013). Employees and change initiatives: Intrinsic rewards and feeling valued. *Journal of Business Strategy*, 34(2), 21-29. doi: 10.1108/02756661311310422.
- Suman, S., & Srivastava, A. K. (2012). Antecedents of organisational commitment across hierarchical levels. *Psychology and Developing Societies*, 24(1), 61– 83. doi: 10.1177/097133361102400103.
- Sundaray, B. K., Sahoo, C. K., & Tripathy, S. K. (2010, December). *Employee relations initiatives and quality of work life: A study in power sector units*. In

- 52nd Annual Conference of the Indian Society of Labour Economics, Karnataka University, Dharwad.
- Sutherland, J. (2012). Qualifications mismatch and skills mismatch. *Education and Training*, 54(7), 619-632. doi: 10.1108/00400911211265666.
- Tajfel, H. (1978). Social categorisation, social identity, and social comparison. In H. Tajfel (Ed.). *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 61-76). London, UK: Academic Press.
- Tajfel, H., & Turner, J. (1979). An Integrative Theory of Intergroup Conflict. In S. Worchel, & W. Austin (Eds.), *The social psychology of intergroup relations*. Monterey, CA, USA: Brooks/ Cole.
- Thomas, W. H., & Feldman, D. C. (2009). How broadly does education contribute to job performance? *Personnel Psychology*, 62, 89–134.
- Todd, S., & Kent, A. (2009). A social identity perspective on the job attitudes of employees in sport. *Management Decision*, 47(1), 173 – 190.
- Toppo, L., & Prusty, T. (2012). From performance appraisal to performance management. *IOSR Journal of Business and Management (IOSRJBM)*, 3(5), 1-6.
- Tornikoski, C. (2011). Fostering expatriate affective commitment: A total reward perspective. *Cross Cultural Management: An International Journal*, 18(2), 214-235. doi: 10.1108/ 13527601111126030.
- Trivellas, P. (2009, May). *Impact of strategic human resource management on organisational commitment and employee satisfaction in ISO 9001 certified firms: An empirical study in Central Greece*. 6th International Conference on Enterprise Systems, Accounting and Logistics (6th ICESAL '09), Thessaloniki, Greece.
- Truitt, D. L. (2011). The effect of training and development on employee attitude as it relates to training and work proficiency. *SAGE Open*. doi: 10.1177/2158244011433338.
- Truss, K., Baron, A., Crawford, D., Debenham, T., Emmott, M., Harding, S. Totterdill, P. (2013). *Job design and employee engagement*. An 'Engage for Success' white paper. Retrieved from: www.engageforsuccess.org/.../Job-Design-and-Employee-Engagement.
- Turunen, T. (2011). Commitment to employment and organisation: Finland in a European Comparison. *Research on Finnish Society*, 4, 55–66.
- Ünsal-Akbıyık, B. S., Çakmak-Otluoğlu, K. O and De Witte, H. (2012). Job insecurity and affective commitment in seasonal versus permanent workers. *International Journal of Humanities and Social Science*, 2(24), 14-20.
- Van Vuuren, M., de Jong, M. D. T., & Seydel, E. R. (2008). Contributions of self and organisational efficacy expectations to commitment: A fourfold typology. *Employee Relations*, 30(2), 142-155. doi: 10.1108/01425450810843339.

- Visagie, C. M., & Steyn, C. (2011). Organisational commitment and responses to planned organisational change: An exploratory study. *Southern African Business Review*, 15(3), 98-121.
- Vlachos, I. P. (2009). The effects of human resource practices on firm growth. *International Journal of Business Science and Applied Management*, 4(2), 17-34.
- Wang, C. L., Indridason, T., & Saunders, N. K. (2010). Affective and continuance commitment in public private partnership. *Employee Relations*, 32(4), 396-417. doi: 10.1108/01425 451011051613.
- Wong, C. A. (2012). Advancing a positive leadership orientation: From problem to possibility. *Nursing Leadership*, 25(2), 51-55. doi: 10.12927/cjnl.2012.22961.
- Wood, M. S., & Rowe, J. D. (2011). Entrapment as an unintended consequence of entrepreneurial success. *Frontiers of Entrepreneurship Research*, 31(6), 240-254.
- Yilmaz, K., & Çokluk-Bökeoğlu, Ö. (2008). Organisational citizenship behaviours and organisational commitment in Turkish primary schools. *World Applied Sciences Journal*, 3(5), 775-780.
- Yukl, G., O'Donnell, M., & Taber, T. (2009). Influence of leader behaviours on the leader-member exchange relationship. *Journal of Managerial Psychology*, 24(4), 289-299.
- Zulkiflee, D., Faizal, B. M. I., Shakizah, W. M. N., & Durrishah, B. I. (2010). *Grievance handling style among heads of department at a telecommunication company in Malaysia*. International Conference on Business and Economic Research. Retrieved from: www.internationalconference.com.my/.../PAPER_211_GrievanceHandli.
- Zulkosky, K. (2009). Self-efficacy: A concept analysis. *Nursing Forum*, 44(2) 93-102.
- Zuwena, P. (2014). Best practice grievance handling: Exploring its importance to the internal/external customer satisfaction equation at a Caribbean University. *Journalism and Mass Communication*, 4(2), 101-124.



Academic Staff Development and Output in State Universities in South-South Nigeria

Chukwuma N. Ozurumba^{1,*}, Japo Oweikeye Amasuomo¹

¹ Niger Delta University [* Corresponding author: ozujumba@gmail.com]

Abstract. This study examines staff development and the output of academic staff in the state universities in South-South Nigeria. An ex-post-facto survey design was used to conduct the research in three state universities in the area. Three research hypotheses were formulated to guide the study. Data were collected from a sample of 402 academic staff. This was done using a questionnaire entitled “Academic Staff Development and Academic Staff Output Questionnaire”. One way Analysis of Variance (ANOVA) was used to analyse the data. The findings were that significant relationship exists between staff development and the productivity of academic staff in terms of research, teaching and community service. Therefore, the study concluded that in-service training and attendance of conferences and workshops influence the output of academic staff. Accordingly, it is recommended that adequate funding towards staff development and policies that support staff development are imperative for improved performance.

Keywords: Academic staff development; Performance management; Nigeria

1 Introduction

Education is the key to the development of people and society. It is through education that individuals’, groups’ and the nations’ worth and potentials are realized. This explains why the governments of developing countries provide education for their citizens. Staff are one of the most important components of any educational system, they contribute to the attitudes of the society, thereby shaping the nation (Nkpodia, 2001). The quality of any education system depends on the way the skills of the staff in the system are developed. However, the importance and quality of staff can only be noticed when they are involved in staff development programmes. This is so because staff development focuses on professional growth, bringing about change in individuals’ knowledge, understanding, behaviour, attitudes, skills, values and

beliefs. The purpose of staff development is to further improve job performance, enhance the quality of work environment and foster personal growth and development. Through staff development activities staff acquire knowledge about educational issues and problems, develop and utilize new or improved skills or work ethics and methods, clarify work-related attitudes and values, derive greater satisfaction from work with students, and develop more stimulation and supportive relationships with their colleagues (Boyel, 2004).

On the contrary, it has been observed that most state-owned universities are not adequately productive due to inadequate staff development programmes (Agah, 2002). Academic staff have not lived up to their expectations due to inability of the state government and university administration to expose them to in-service training, conferences, research, community service and current practices in their fields. This has resulted in reduction of quality manpower. Thus, qualified manpower which would have emanated from staff development has decreased tremendously (Okebukola, 2005).

When people talk about increase in productivity, they generally mean increase in output per person. Babalola (2009) explains that to the farmers, increase in productivity might imply a boost in the farming yields, which may be as a result of better and/ or more education and training of farmers. Similarly, increase in productivity of those who are in the construction sector of the economy might be measured in terms of more and/ or better construction of structures. To manufacturers, increase in productivity might imply better or efficient production process and highly-demanded products.

In the service sector like institutions of learning, increase in productivity might be interpreted to mean more and better school leavers and graduates who are morally, spiritually, physically and mentally able to fit into the society and the labour market. Staff development provides growth in staff academic career and improved university organization. In other words, it assists in the promotion of academic staff from one level to another and encourages hard work amongst them. During the period of staff development, academic staff are privileged to be trained and retained. These outputs measure the extent to which university organizations achieve their goals, which is dependent on the acquisition of new skills, knowledge and experiences attributable to staff development programmes. One of the major problems confronting employers worldwide is the issue of poor productivity (Etudor, 2001). It is against this backdrop that this study was undertaken.

1.1 Statement of the Problem

One of the major problems confronting employers worldwide is the issue of low productivity (Etudor, 2001). This has been attributed to lack of the skills required to increase productivity. Most of the people employed are either

unskilled, semi-skilled or non-professional workers. It takes time for these categories of people to acquire the necessary skills for increased output. In most universities in south-south of Nigeria, academic staff are not adequately productive due to inadequate or non-availability of staff development programmes. Academic staff cannot live up to expectation particularly in preparation of lessons, teaching their students, evaluating their performance and conducting research.

This problem has been of concern to stakeholders in the university system. Moreover, some graduates that are turned out from these universities can hardly write memo or communicate effectively and meaningfully. They cannot defend their qualifications or degrees. On the part of teachers (Staff) they have very low morale, poor attitudes particularly towards embracing opportunities such as in-service training, ICT training, conferences, seminars and workshops. They lack academic staff sponsorship towards enhancing academic staff output. Many researchers like Nwiyi and Dominic, 2008, Collins, 2005 and Agah, 2002 have made frantic effort to address the problem of low output in state universities but their efforts have not yielded better results. It is against this backdrop that the researchers are investigating the extent to which staff development influences academic staff output in the state universities.

1.2 Hypotheses

1. In-service training does not significantly influence the output of academic staff in terms of research, teaching and community service.
2. Academic staff attendance of conferences does not significantly influence their output in terms of research, teaching and community service.
3. Academic staff attendance of workshops does not significantly influence their output in terms of research, teaching and community service.

2 Methodology

The population of the study comprised the 2,894 academic staff of the three state universities under study. The universities are Rivers State University of Science and Technology Port Harcourt, Cross River State University of Technology, Calabar and Delta State University, Abraka. The study area was South-South of Nigeria which covered Rivers State, Akwa Ibom State, Cross River State, Bayelsa State, Delta State and Edo State. Three assistant researchers were appointed to collect data from the respondents.

The ex-post facto survey design was adopted for the study. Simple random sampling was used to select the required sample for the study. The sample of the study was 409 academic staff. Data was collected using a questionnaires

entitled, “Academic Staff Development and Academic Staff Output Questionnaire” (ASDASOQ).

The ASDASOQ comprised of 60 items split into two parts, A and B. Part A was design to elicit information on the gender, age, occupation and working experience of the respondents while part B elicited information on staff development and productivity. A second instrument was used to elicit information from students concerning academic staff output in the areas of research, teaching and community service. The validity of the instruments was ascertained by two experts in measurement and evaluation who confirmed the appropriateness of the items in the instrument. The reliability of the instruments was determined through a trial test using Cronbach alpha method. This yielded a reliability coefficient of 0.70 and 0.92 for the staff and student questionnaires respectively.

3 Findings

3.1 Hypothesis 1

To assess the level of in-service training in the area of research, the data obtained from respondents were categorized into low, average and high based on the mean. Those who scored below the mean were categorized as low, those who scored within the mean region were scored average, while those who scored above the mean were categorized as high. Based on this categorization, 209 perceived in-service training as low, 43 respondents perceived in-service training as average, while 150 respondents perceived it as high. The means and standard deviation of these categories were first computed and compared using the one way analysis of variance (Table 1).

Table 1: Influence of in-service training on research, teaching and community service

Variables	Level of output	n		SD
Research	Low	209	22.43	3.70
	Average	43	22.12	3.37
	High	150	23.19	4.44
	Total	402	22.79	3.97
Teaching	Low	209	15.80	3.76
	Average	43	17.17	3.74
	High	150	17.87	3.31
	Total	402	15.42	3.72
Community Service	Low	209	22.19	3.72
	Average	43	23.67	3.22
	High	150	23.50	5.02
	Total	402	22.84	4.63

The result presented in Table 1, shows that respondents who perceived staff in-service training as being high had higher mean output in terms of research ($x_1 = 22.43$, $x_2 = 22.12$, $x_3 = 23.19$). Teaching ($\bar{x}_1 = 15.80$, $\bar{x}_2 = 17.17$, $\bar{x}_3 = 17.87$). Community service ($\bar{x}_1 = 22.19$, $\bar{x}_2 = 23.67$, $\bar{x}_3 = 23.50$).

Table 2: ANOVA in influence of staff in-service training on the level of output in research, teaching and community service

Variables	sources of Variance	sum of square	Degree of freedom	Mean	F	Sig
Research	between group	1207.827	2	603.914	28.741	0.000
	within group	8383.984	399	21.012		
	Total	9591.811	401			
Teaching	between group	384.289	2	192.44	14.846	0.000
	within group	5164.062	399	12.943		
	Total	5548.3551	401			
Community service	between group	489.218	2	244.609	23.053	0.000
	within group	4233.660	399	10.611		
	Total	4722.878	401			

$P < 0.05$, $F_{2, 399} = 3.02$

Analysis of the results presented in Table 2, shows that there is a significant influence of in-service training on output in terms of research, ($f = 1.688$, $P < 0.05$), teaching ($f = 14.846$; $P < 0.05$) and community service (23.053 , $P < 0.05$). The null hypothesis was rejected for these variables because the calculated f-ratios of 28.741, 14.846 and 23.053 were found to be greater than the critical f-ratio of 3.02 at the .05 level of significance respective degrees of freedom. This finding means that staff development in terms of in-service training significantly influences output in terms of research, teaching and community service.

3.2 Hypothesis 2

Academic staff attendance of conferences does not significantly influence their output in terms of research, teaching and community services. The findings on this hypothesis are shown in Tables 3 and 4.

Table 3: Influence of academic staff attendance of conference on their level of output in terms of research, teaching and community service

Variables	Level of output	n	Mean	SD
Research	Low	226	20.65	5.10
	Average	31	22.61	4.27
	High	145	24.42	3.66
	Total	402	22.6	4.89
Teaching	Low	226	22.61	3.74
	Average	31	17.10	3.42
	High	145	24.45	3.21
	Total	402	16.72	3.72
Community Service	Low	22.6	24.42	4.53
	Average	31	18.24	4.53
	High	145	23.60	4.91
	Total	402	22.84	4.63

Observation of the result in Table 3, shows that those respondents who perceived staff attendance of academic conferences as high had high mean of output in terms of research ($x_1 = 20.65$, $x_2 = 15.70$, $x_3 = 22.13$). Teaching ($x_1 = 22.61$, $x_2 = 17.10$, $x_3 = 24.45$). Community service ($x_1 = 24.42$, $x_2 = 18.24$, $x_3 = 23.60$).

Table 4: ANOVA in influence of academic staff conference attendance on the level of output in terms of research, teaching and community service

Variables	sources of Variance	sum of square	Degree of freedom	Mean	F	Sig
Research	between group	44.533	2	632.718	30.320	0.000
	within group	6279.330	399	20.868		
	Total	0323.863	401			
Teaching	between group	575.550	2	287.775	23.090	0.000
	within group	4972.801	399	12.463		
	Total	5548.351	401			
Community service	between group	27.7234	2	139.367	6.671	0.000
	within group	8335.756	399	20.892		
	Total	8614.490	401			

$P < 0.05$, $F_{2, 399} = 3.02$

Analysis of the result presented in Table 4, shows that there is a significant influence of academic staff conference attendance on the level of output in terms of research, ($F = 30.320, P < 0.005$), Teaching ($F = 23.090, P < 0.05$) and community service ($F = 6.671, P < 0.05$).

The null hypothesis was rejected because the calculated f-ratio of 30.320:23.090 and 6.671 were found to be greater than the critical f-ratio of 3.02 given .05 level of significance and respective degrees of freedom. This finding implies that staff development in terms of conference attendance significantly influences output in terms of research, teaching and community service.

3.3 Hypothesis 3

Academic staff attendance of workshops does not significantly influence their output in terms of research, teaching and community service. The findings on this hypothesis are shown in Tables 5 and 6.

Table 5: Influence of staff attendance of workshops and the level of output in terms of research, teaching and community service

Variables	level of output	n	\bar{x}	SD
Research	Low	206	21.73	3.75
	Average	98	22.43	3.06
	High	98	25.39	4.10
	Total	402	22.79	3.97
Teaching	Low	206	15.45	3.79
	Average	98	17.39	3.26
	High	98	18.54	3.08
	Total	402	16.72	3.73
Community Service	Low	206	21.55	4.48
	Average	98	22.74	4.07
	High	98	25.64	4.28
	Total	402	22.84	4.63

Analysis of the result in Table 5, shows that those respondents who perceived staff attendance of workshops had higher mean attainment of output in terms of research, ($x_1 = 25.39, x_2 = 22.43, \bar{x} = 21.73$) teaching ($\bar{x} = 18.54, x_2 = 17.39, \bar{x} = 15.45$) and community service ($\bar{x} = 25.64, \bar{x} = 22.74, \bar{x} = 21.55$) than those who perceived staff attendance of workshops as low or average.

Table 6: ANOVA in influence of academic staff academic attendance of workshops on the level of output in terms of research, teaching and community service

Variables	sources of Variance	sum of square	Degree of freedom	Mean	F	Sig
Research	between group	940.282	2	452.141	33.288	0.000
	within group	5419.581	399	13583		
	Total	6323.863	401			
Teaching	between group	653.642	2	326.821	26.641	0.000
	within group	4894.709	399	12.267		
	Total	5548.351	401			
Community service	between group	1114.35	2	557.177	29.641	0.000
	within group	7500.173	399	18.797		
	Total	8614.490	401			

$P < 0.05$, F_2 , $399 = 3.02$

Observations of the result presented in table 6 shows that there is a significant influence of academic staff attendance of workshops on the level of output in terms of research ($F=33.288$; $P < .05$) Teaching ($F = 26.641$; $P < .05$), community service ($F = 29.641$; $P < .05$) The null hypothesis was rejected because the calculated f-ratio of 33.288, 26.641; 29.641 were found to be greater than the critical F-ratio of 3.02 given .05 level of significance and with 2 and 399 degree of freedom. This findings implies that staff development in terms of attendance of workshops significantly influences output in terms of research, teaching and community.

4 Discussion, Conclusion and Recommendations

The findings of this study revealed that there exists a significant influence of in-service training on academic staff output in universities. This implies that the output of those who are enrolled on in-service training is more impressive in the areas of research, teaching and rendering of services to the community. This result is in agreement with the studies of Etudor (2001), Huang (2001) and Collins (2003) whose research results on the influence of in-service training on workers output was found to be significant. In other words in-service training has a significant influence on staff output. The study is also in agreement with

Inyang and Akpama (2002) who affirmed that in-service training is a necessary pre-requisite for organizational staff to achieve the goal of high output.

The findings from the test of the second hypothesis showed that there exists a significant influence of staff output through conference attendance on their development in the areas of research, teaching and community service. The result of this study is in consonance with the findings of the research work of Monahan (1996), Bateman and Organ (2003) and Locke (2004) whose studies on staff attendance at conferences and their output found a significant relationship between conference attendance and academic staffs' productivity.

In addition, the findings of this study corroborates with Okeke (2000) who stated clearly that the environment of staff development through conferences is very imperative and has become noticeably with the challenging development in the society with the rapid rate of technological changes, training received by workers a few years ago is inadequate to meet the challenges of today's school system. Hence, according to him, academic staff need to attend conferences and seminars regularly to update their knowledge, expand their capacity to develop the skills and knowledge need for the new challenges. Above all, nonattendance of conferences often resulted in high rate of staff attrition, mediocrity, stagnation of staff growth and development.

The findings from the test of hypothesis three indicate that there exists a significant influence of staff attendance of workshops on their development through output from research, teaching and community service. Attendance of workshops has an impact on staff output in that it is an indicator for staff promotion, growth and development in the university system. In support of this contention, Sergiovanni and Elliott (2000), Watton (2005) and Kpela (2005) affirmed that workshop organization and attendance has a significant influence on staff output. According to them workshops are an important indices for staff development and they are used as an aspect of staff development programmes. They further maintained that the use of workshops is for the professional growth and development of staff.

Based on the findings of this study, the researchers concluded that in-service training given to academic staff influence and enhanced their output. This output is seen in the areas of research, teaching and community service. Similarly, when staff are exposed to the opportunity of attending conferences and workshops it will enhance their output and contribute tremendously to their professional growth and development. They are likely to acquire more knowledge and skills and the capacity to face challenges as the need arises. Therefore, based on the foregoing discussion, the following recommendations are made: 1) Government, in collaboration with educational stakeholders, should provide adequate staff development policies and programmes for academic staff in the educational management process; and 2) There is need for

adequate provision of funds for staff development programmes so as to motivate them to put in their best for increased output in the university system.

References

- Agah, I. E. (2002). Principal's managerial techniques and work performance of staff in Ahoada-East Senatorial district. Port Harcourt: *Unpublished master's thesis. University Port Harcourt.*
- Babalola, J.B. (2009). Education that can raise Productivity in Nigeria. Being a Faculty Lecture delivered in the Faculty of Education, University of Ilorin, Nigeria.
- Bateman, T. S & Organ, O. W. (2003). Job satisfaction and the good soldier: The relationship between employee and citizenship. *Academic of Management Journal*, 26, 587- 595.
- Boyel, V. (2004). School Context: Bridge or Barrier for Change. Austin: South West Educational Development Laboratory.
- Collins, C. (2003). Enhancing SMTE business performance through the interest of e-learning platforms. *Education and Training*, 45, (8/9), 483-494.
- Collins, U. (2005). *ICT Training and Teachers*. Port Harcourt: Immaculate Publishers.
- Etudor, E. E. (2001) Human Resources Management Skill and Teachers Job Effectiveness in Akwa Ibom State unpublished Med Thesis, University of Calabar.
- Huang T. C. (2001) The Relation of Training Practices and Organizational Performance in Small and Medium Size Enterprises *Education and Training* 43 (819), 437-444.
- Inyang, B. J. & Akpama, A. M. (2002) *Personnel Management Practice in Nigeria*. Calabar: Merb Business publisher.
- Kpela, M. H. (2005) *Undergraduate Teacher Trainees' Learning Style Performance: Implications for the 6-3-3-4 System*. Port Harcourt: University Press.
- Locke, E. A. (2004). The Nature and Causes of Job Satisfaction. In: D. D. Marvin (Ed) *Handbook of Industrial and Organizational Psychology*. Chicago: Rai McNally.
- Monahan, T. C. (1996). Do Contemporary Incentives and Rewards Perpetuate Outdated Forms of Professional Development? *Journal of Staff Development*, 7 (1) 44-47.
- Nkpodia, E. D. (2001). The of Educational Administration in Promotion of In-Service Teachers Education in Nigeria. *Current Issues in Educational Management in Nigeria*. Benin City: Ambic press.

- Nwiyi, G. Dominic, I. (2008) *Contemporary Human Development*. Port Harcourt: Nee Era press.
- Okebukola, P. (2005) Quality Assurance in the Nigeria University System a key note address presented at the 2005 Fellowship Seminar Award of the Curriculum Organization of Nigeria held at Bauchi Road campus, university of Jos, Nigeria.
- Okeke, B. S. (2000). *A Handbook on Educational Administration*. Owerri: New African Publishers.
- Sergiovanni, T. J. & Elliot, D. Z. (2000). *Education and Organizational Leadership in Elementary Schools*. New Jersey: Prince Hall.
- Walton, D. (2005) *Effective Secondary Classroom Practice*. Washington D. C: Government Printing Press.



Changing Needs of Business Education Students with Specific Reference to Secretarial Studies

Amina Sani ¹

¹ Department of Business Education, Federal College of Education, Zaria [E-mail: aminailo@yahoo.com]

Abstract. The need to face emerging challenges squarely should not be disregarded in today's world. Higher education is at the centre of preparing future business professionals and equipping them with the knowledge, skills and attitudes they will need address the emerging challenges of this century. Making specific reference to the Secretarial Component of Business Education, this paper demonstrates that contemporary needs are changing rapidly. Therefore, the paper argues, education and training should change. Recommendations towards achieving these suggestions are made.

Keywords: Business education; Secretarial studies; Educational reform

1 Introduction

To live and survive satisfactory entails a challenge. Experts connote this to mean survival of the fittest. The struggle for relevance continues from one generation within a century to another. The secretary is not left behind in the quest for relevance and survival in his chosen career. It is this clarion call for existence that stimulate him to learn, to struggle and to professionalize.

Challenges ranging from simple telephone handling, to computer literacy as well as internet browsing calls for relevant educational training. The world is ever progressing. What is relevant yesterday could not be so today and so will when it reaches tomorrow.

Social scientists posit that there is nothing permanent except change. So it is the duty of today's secretary to equally ascribe to the challenges being posed by the changing circumstances of today in order to be relevant tomorrow. It is a known fact that a secondary school leaver with the simple skill of typewriting and knowledge of office practice could be employed as an office secretary in

the 60s. Later, challenges brought about the need for shorthand, secretarial duties, and English language along the line. In the early 70s, such things like electric typewriter, telephone handling, conference meeting arrangement, reprographic work, petty imprest handling were evolved to further invigorate and professionalize the career.

Here we are today; in the era of complex and sophisticated office automation that could better be seen than being imagined. The secretary is here as a co-partner to the puzzle. Adebayo (2002) referred to education as systematic instruction, development of character or mental powers. The national policy on education (1989) referred to it as a dynamic instrument of change.

It is view of Agomu (2002) that training provides skills, knowledge and attitudes necessary to undertake required job efficiently. In the words of Aliyu (2001) the word 'need' implies that something is lacking while 'training' implies that lack can be supplied by systematic training. He concluded that training need exists when the application of systematic training will serve to overcome a particular weakness.

The word secretary, according to Aliyu (2001) is derived from a Latin word *seretarius* meaning 'something known only to one of few and kept secret or hidden from the view and knowledge of others'. This means, a secretary is a keeper of secrets.

The justification of training needs is the first in the educational process. Just like in every systematic process; its success or failure will correspondingly affect subsequent educational developmental stages. The secretary needs to undergo educational training in the following areas in order to meet up with today's challenges in the world of work; information and communication technology, office skills, computer and word processing, internet, public relation, management and administrative skills, machine technological skills etc.

Having recognized the need for keeping secretaries up-to-date on the latest educational developments in office technology, several business educators and industrial leaders have dramatically put this in perspective as a result of the decline in value of secretarial personnel, Ibigbami (2001) posited that unless a secretary of n ten years ago spend ten percent t of his time developing his knowledge beyond the level of his collegiate training, he cannot compete in value with the new graduates. The analysis further assumes that the secretary retains all his previous training.

He also asserted that if an estimate of decay from neglect or disguise is also ten percent per year, a secretary is faced with task of growing in new knowledge at the rate of about twenty percent per years to remain of equal value to his employer and society, hence the urgent need in retraining in education, he deduced.

Ibigbami (2001) opined that 'if education is to take new and dynamic significance, it must be aimed at training the child for some specific skills' so as to fit in to the age of industrial era that requires youths to be exposed to varieties of skills and competencies. This is more so as the modern office is becoming a rapidly changing place while its demands are also becoming diversified in this age of office automation.

Ibigbami (2001) remarked, 'enterprises and organizations have grown in size as technology has created a new kind of world. Industry and the office have been computerized and managed scientifically. Office work has become specialized, sub-divided and standardized and it is now composed of repetitive operations interchangeable activities and non-discretionary assignments.

The challenges then to teachers in preparing secretarial students/workers for entry in to modern offices are to stress the educational development desirable for work habit and attitude as well as high operative skills. While contributing on the relevance and educational challenges ahead of the practicing secretary, Otoba (2002) posited that secretary is very relevant in the business world. There is no gainsaying that he is an indispensable figure in every aspect of an organization.

Faced with current managerial challenges and responsibilities, he may not be adequately prepared with his current educational training in the Nigeria setting for him to cope with the changes and challenges going on in today's office. The use of relevant curriculum with the appropriate modern tools and equipment to face the challenges has become a paramount topic for discussion by all those in charge of education

Several writers have commented on the current state of secretarial educational training, stressing the need for change. Otoba (2002) stated that the work of the professional secretary has changed from the traditional office routine of handling mails manually to the application of modern office techniques and the use of sophisticated office equipment in the processing of information. Otoba (2002) elaborated more specifically on the functions of today's secretary by saying that, today the secretary can be expected to create text and tables of figures, edit, file, retrieve, calculate and (electronically) all with same office system and probably more.

Agomuo (2002) pointed out that the role of secretaries in modern offices has begun to splinter. They now include:

1. The word processing secretary who keyboards.
2. Correspondence and other business papers.
3. The correspondence secretary who originates.
4. The secretary who issues out materials.
5. The financial secretary using microcomputers. Handles payments and petty cash funds.

6. The data processing secretary who handles inventory of office equipment and attendant repair services and contract.

It, therefore, becomes clear from the view of Agomuo (2002) that advice in office technology (from the shole's first typewriter in 1868to the word processor in 1964), new procedures which have evolved from the traditional office systems and operations in to the ever –widening horizons of modern information technologies and the concept of work specialization, have added new dimensions to the role of the secretary.

Agomuo (2002) stated that the modern business office has gone through great metamorphosis, and that automation and the changes it brought to the business office are greatly altering the skills required by employers.

Idih (1998) in Agomuo (2002) noted that Nigeria is fast moving in to the 21 century with its constantly changing technology .youths would be able to face the challenges of the electronics era and the future demands of employers are highly needed.

2 Contemporary Challenges Facing Business Education Students

Knowing fully well that the educational quest of the secretary cannot be met in the solitary, hence it must be conjoined with other institutional-cum-personality stakeholder associated with imparting, financial, utilizing and perfecting the theory and practice of knowledge. These educational stakeholders include among other things.

1. The student himself.
2. The secretarial teacher.
3. The institution providing knowledge.
4. The utilizers of knowledge-employers
5. The financier of the knowledge –industry i.e. Government etc.

They will be looked in to extensively with the view to finding out the extent of their preparation for the tasks ahead.

2.1 The Secretary

In the past, the need for modern office machines and equipment did not arise. this was mainly because, the secretaries than could make do with the manual typewriters, manually operated photocopying and duplicating machines and other office equipment operated manually to do their work irrespective of the length of time and energy they exert. The in accuracies, inefficiencies and non-standardization it on the manual typewriter, they would be satisfied that they

have done their work. But now, the role of the secretary in today's office has risen beyond that role. According to Oguoma (2002), secretary possesses mastery of skills and ability to assume responsibility; he displays initiative, exercises judgment and makes decision in today's office. The secretarial profession has become vast and highly demanding than it used to be in the past, hence, the need to change from the use of archaic and slow manual office equipment and machines to highly sophisticated ones. This will enable them to imbibe modern office automation as new business and job opportunities are generated every day, there comes a need for secretaries to match the challenges by acquiring new skills and competencies for the operation of those new technologies. Secretaries who are not well equipped in terms of new skills and competencies, knowledge and abilities for today and tomorrow's office are sure to be embarrassed as their inadequate skills will render them redundant or even thrown out of job, hence consulting a challenge to their educational attainment and aptitude.

2.2 The Secretarial Teacher

Adebayo (2002) asserted that qualities are substance that cannot be seen nor touched, but rather are bunch of attributes that are required as an ingredient to furnish a professional teacher's enroot the actualization of his schedule duties. Hence forth, he is expected to acquire such charismatic and charming intrinsic/extrinsic elements that would enable him to practice efficiently the ethics of his chosen m profession he is expected to have sound reason in whatever things he does. He should be fluent in speech, logical in thought, systematic in deed and articulate in approach to things. The secretarial teacher should always be optimistic, forward looking and making the most out of unfavourable and unfortunate situations. The teacher as certain role to play for the educational and national development of Nigeria. As Aliyu (2001) posted, he should develop an industrial plan serve as a resource person for students, analyse their performance, counsel them and motivate them toward effective tasks performance. as an educational consult, he should help to formulate relevant statement of philosophy and objectives in business, help plan, evaluate and modify curriculum content to reflect on changing and challenging trends on education like the one we are in now. The educational attainment of the teacher also is concern for the secretarial student. That he should be professionally trained to the core could never be said to be too much. to this end, the secretarial teacher should endeavour to keep attuned to further training and retraining by possessing the minimum qualification of NCE(business), or bachelors, master degree or even Ph.D. as the case might be. To buttress further on the quest for quality in teaching as a pivot for quality education and national development, the national policy on education (1989), section 9, sub-section 57 through 59

have this to say: teacher education will continue to be given a major emphasis in all our educational planning because no education system can rise above the quality of its teachers. Also that the purpose of teacher education should be:

1. To produce highly motivated, conscientious and efficient classroom teachers for all levels of our education systems.
2. To encourage further the spirit of enquiry and creativity in teachers:
3. To help teachers to fit in to the social life of the community and society at large and enhance their commitment to national objectives.
4. To provide teachers with the intellectual and professional background adequate for their assignment and to make them adaptable to any changing situation not only in the life of their country, but in the wider world.
5. To enhance teacher's commitment to our educational institutions, from per-
-primary to university, will be professionally trained. Teacher education programmes will be structured to equip theme for the effective performance of their duties.

2.3 The Institutional Setting

The curriculum of secretarial studies as formulated by the national board for technical education (NBTE) had the objective of producing the type of man power required by the nation at the secretarial level. The curriculum as it applies to the various programme of secretarial studies seem to be comprehensive when evaluated on their individual merits, but something seems to be lacking, Oguoma (2002) asserted that this is the inability of the formulators (NBTE) and the implementers (higher institutions) to periodically review the content in line with environmental changes that tend to affect the work place where the recipients of this education are expected to function.

He further posited that result has been that lack of adequate and proper link between industry requirement (attitude skill and knowledge) on the part of graduates and means of inculcation while in the school.

This is more of a national problem since graduates of secretarial studies tend to find it difficult competing with others for the limited employment opportunities available. at the same time, employers tend to believe they spend money retraining secretarial graduates on skill, knowledge and attitude required when employed. Aminu, (2006), stated that the secretarial studies designed curriculum only emphasized the acquisition of such traditional skills of shorthand writing, effectively typewriting on manual /electric typewriters, and arrangement of meetings, file management, information storage and provision. those required skills however, tends to lack touch with the realities of practical industrial practice of the profession, since it seems to lose sight of the innovation of information technology as made possible by the merger between

computers and satellite system via wave signals and its effect on the modern work environment, Oguoma added.

The secretary has the mandate for the managing of information system as it relate to the organisation. He added that, information management, has become complex given the increasing volume of information that came in and the increasing demand by user of such information. These implies that storage; processing and retrievals of it are becoming a challenge to secretaries. Technological innovation has change the face of the industrial activities and that trainer of prospective secretaries must be mindful of it in other to produce graduate who have the skill. Knowledge and the attitude to face the challenges of the industrials system that is information technology driven.

2.4 The Employers

The needs to overhaul business education programme to accommodate the modernization trend in the job market remains a big challenge to the stakeholders in the education for job seeking and job creation. In the opinion of Nwosu (1999) in Oyeduso (2003), since curriculum should be adaptive and relevant, developers of curriculum in office education or in any of the business areas have a responsibility to monitor technological advancements in office and constantly re-viewing the curriculum to meet the demands of the office.

Selden (1981) and Nwosu (1999) in Ayeduso (2003) opined that occupational preparation must be redesigned to stimulate the working environments that are actually found in the offices. They believe that, for the student to prepare for the world of work, the needs and desired of employers of labour be incorporated in to the curriculum and the trainers must possess the skills they develop.

All hands must therefore be on deck by all that are involved in provision of education for students desiring careers in business and/or for developing consumer and economic understanding and competencies.

The demand of employers of labour have completely from what it was a decade ago. The change has become imperative as a result of monumental improvement in technology that is the integrations of the computer with sophisticated communication system, which revolutionize business activities in industries and the world of work generally

Ayeduso (2003) pointed out that the world is characterised by fraudulent business practices.so those to work in it should be trained specially to be able to demonstrate a high level of business ethics, honesty, transparency, trustworthiness, etc. Business education curriculum should be designed in such a way that these could be made possible.

2.5 The Government

On the administration and planning of education NPE (1989) section 11 subsection 85 through 86 had it that: The success of any system of education is hinged on proper efficient administration and adequate financing also that, school system and consequently their management and day to day administration should grow out of the life and social ethos of the community which they serve. Knowing fully well that nothing can go down well without financial where withal section 12 sub-section 105 through 107 had it that: Education is an expensive social service and requires adequate financial provision from all tiers of government. The ultimate objective is to make education at all level jointly financed by three tiers of government vis-à-vis the participation of local communities, individuals and other organisation. Equally, government recognised the importance of technical and commercial education with the needs to relate its programme to requirements of commerce and industry.

3 Recommendations

Secretaries should realized the need for them to keep abreast with the modern information technology challenges and subscribe to acquiring educational training in order to remain relevant. Teachers should always endeavour to possess the highest educational and professionals qualification relevant to their specification as well as to browse the technological innovation of modernity for them to be relevant. The curriculum regulating body should in earnest constitute a committee of experts to review its contents in line with the twenty-first century education-cum business challenges in technology higher institution of learning should--as a matter of urgency attempt to inculcate the right skills, knowledge and attitude required of the wider business-cum-labour market. They should equally be able to produce and stock their pools with the relevant modern information equipment to facilitate this and related processes. The government should live up to its policy statement in planning and administration of quality education in particular and education institutions in general across the nation. In the same vein, government should, as a matter of necessity release funds sufficient enough to cater for all demands relating to the educational sub-sector across the nation. Communities, individuals and corporate organisations should complement government efforts in financing education to boost national development in consonance with the development world. Henceforth, employers should not relent in their effort to complement government's role by retraining graduates to suit information technology

requirement. They should, as a matter of nationalism, set a separate fund to further invigorate educational training and development.

References

- Adebayo, (2002). Principle and practice of education (Revised Edition). Ado Ekiti: Omalayo Standard Press and Bookshops (Nig) Ltd, pp. 80-82.
- Agomu, O. E., Christy O. Isu (2002). Secretary Job-Tasks. Required in modern Business offices in Abia State implications for improved secretarial Education. Business Education Journal. 3 (5), p.6.
- Aliyu, M.M (2001). Business Education in Nigeria (Trend and Issues). Zaria: ABU Press Ltd.
- Ayeduso, O. (2003). modern secretary and entrepreneurial development. Business Education journal (book of reading). 1 (3), p 29.
- Ibigbami, D. (2001). designing national training and retraining programme in Business Education Journal. 3 (4), p. 12.
- Federal Republic of Nigeria (1989) national policy on education Yaba Lagos: Government press.
- Oguoma, D. D. (2002). Training for the world of work-a missing link. Business Education Journal. 3 (5), p.58.
- Otoba, J. and G. I. Makeri Yahaya (2002). Educational needs for the Secretary in the 21 century. Business Education Journal. 3 (5), p.16.
- Aminu (2006) Secretarial Education as tool for National Development. Being paper presented at national conference of Vocational and Technical Education F.C.E Zuba.



Using Activity Theory as a Base for Investigating Language Teacher Education through Digital Technology

Rovincer Najjuma ^{1,*}, Mathias Bwanika Mulumba ¹

¹ Makerere University [* Corresponding author: rovincern@gmail.com]

Abstract. In this article, the authors explore the features of the Makerere University Electronic Learning Environment (MUELE) platform and how it is used by language teacher educators to facilitate pre-service teachers' development of Pedagogical Content Knowledge, Content Knowledge and Digital Competences. The article is drawn out of data collected using platform user and activity analysis tools to yield data on the platform features, their usage and activity types. The Activity Theory principle of contradictions is used to provide an interpretive framework to explain how the platform has created tensions, contradictions and transformations. Findings indicate that the platform has features that can lever transformation of teaching and learning practices that facilitate the development of pre-service teachers' competences. However, use of the platform is constrained by tensions and contradictions at system and individual levels.

Keywords: Learning management platforms; language education; activity theory

1 Introduction

Pedagogical Content Knowledge-(PCK), Content Knowledge-(CK), and Digital Competences-(DC) are key competences of the teacher preparation programme (Kleickmann et al, 2013; UNESCO, 2011). Given the importance of these competences for teachers of the 21st century, providers of quality teacher preparation programmes are urged to provide effective learning environments and opportunities to facilitate the development of these competences by pre-service teachers (Darling-Hammond, 2006). Moreover, the notion of a learning environment extends beyond physical infrastructure, to include technologies that support learning in class and virtually (AACTA, 2010).

Despite the importance attributed to teachers' development of PCK and CK, understanding of how learning opportunities and technologies available during teacher preparation are actually used and implemented is limited (Kleickmann et al, 2013; Cochrane-Smith and Zeichner, 2005). Moreover, there have been limited studies that apply the principle of contradictions and educational technology use contexts in African universities, such studies have included (Barab et al., 2002; Dippe, 2006; Hardman, 2005, Peruski, 2003, Rusell and Schneiderheinze, 2005). This paper contributes to this body of knowledge by highlighting the contradictions, tensions, transformations that are brought about by the use of MUELE-platform for supporting pre-service language education teachers' development of PCK, CK and DC at Makerere University.

In this paper the activity theory-(AT) principle of contradictions is used as a lens to analyse how teacher educators use the MUELE-platform to facilitate the development of pre-service language teachers' PCK, CK and DC.

Content knowledge-CK, represents teachers' understanding of the subject matter taught. According to Shulman (1986, p. 9) "the teacher needs not only to understand that something is so, the teacher must further understand why something is so". Thus the emphasis is on a deep understanding of subject matter taught at school (Kleickmann et al, 2013). The knowledge-base in language education is categorized under four dimensions and include; lecture activities, the language teaching resource centre and library activities the language teaching laboratory activities, and the internship of language student teachers (Mulumba 2011). For student teachers to tap into this knowledge-base, they have to utilize a variety of opportunities provided by the institution. The traditional support structures such as the library, resource centres and book banks are the major portals outside the lecture room, that develop learners' knowledge base. However, online provisions such as the computer laboratories and other electronic learning platforms are steadily becoming essential deposits for knowledge consumption. The knowledge-base of language education includes academic and professional knowledge; which encompasses pedagogical, curriculum and content (subject matter) knowledge (Holden & Hicks 2007; Grossman and Richert 1988). Pedagogical Content Knowledge-PCK, is the knowledge needed to make subject matter accessible to the students (Shulman, 1986). Literature on PCK identified two core facets of that knowledge namely; knowledge of subject specific conceptions and misconceptions as well as knowledge of subject specific strategies and representations (Ball et al, 2008; Park and Oliver, 2008; Borko and Putnam, 2008).

While there are various definitions of digital competence, in this paper digital competency is defined using (Cartelli, 2008) definition as, being able to explore and face new technological situations in a flexible way, to analyse, select and critically evaluate data and information, to exploit technological

potentials in order to represent and solve problems and build shared and collaborative knowledge, while fostering awareness of one's own personal responsibilities and the respect of reciprocal rights/obligations.

1.1 Potential of Electronic Learning Platforms in Supporting Teaching and Learning

Electronic learning platforms are sometimes called learning management systems, these are applications used for delivery of learning content and facilitation of learning processes. These are developed for administration and teaching for tertiary education (Passey, 2011; Passey & Higgins, 2011). The platform allows administrators and lecturers to manage and use enrolment data electronically, offer electronic access to course materials and carry out assessments (OECD, 2005). The activities managed by learning platforms vary from instructor-led classroom training, educational seminars, to web-based online trainings, in addition to managing the administrative functions of online learning, some systems help to create, reuse, locate, deliver, manage, and improve learning content.

Across higher education institutions, a wide range of learning platforms exist,

“with each one offering certain features and the use of certain applications that enable the teachers and students to both handle information in the form of news and alert items, access to resources in different formats and links to pertinent materials, or websites and to communicate through discussion forums, chat rooms and linked email” (Passey, 2011, p. 2).

Learning platforms have the potential to facilitate students' engagement for independent and collaborative learning, enhance student–teacher interactions, and develop students' technological skills. Learning from technology leans more towards the didactic and behaviouristic theories whereas learning with technology has its origin from the constructivism and social constructivism paradigms. In addition, both the didactic and constructivist pedagogical approaches are applicable for online learning as they could be used to achieve different outcomes depending on the learning objectives (Passey & Higgins, 2011). Therefore, how a learning platform is used depends on the theoretical approach taken on by the educational institution and the actual users of the technology.

1.2 Rationale for Use of Activity Theory

Activity theory-(AT) investigates human activity, understood as activity in a specific social setting (Parks, 2001) such as work or learning. The main unit of

analysis in AT is the activity system defined as “object oriented, collective and culturally mediated human activity” (Engestrom & Miettinen, 1999, p. 19) which includes the interacting components of subject, object, tools (instruments or artefacts), division of labour, community, rules, and outcomes.

The subject of an activity system is the individual or group whose view point is adopted in this case the teacher educators. The object refers to the ‘raw material’ or ‘problem space’ at which the activity is directed and which is moulded or transformed into outcomes with the help of physical and symbolic “external tools” (Engestrom, 1993 p. 67). In this case the objects are the pre-service teachers. Tools mediate the object of activity, they can be external, material (e.g., a text book, a computer or a learning platform) or internal symbolic (e.g., language). Tools take part in the transformation of the object into an outcome which can be desired or unexpected. They can enable or constrain activity. In this paper, the MUELE-platform and its features are the tools which are to be used to facilitate the development of pre-service teachers’ competences. Some of the instruments and artefacts of this tool are the teaching/learning resources, course content, activity types and related information.

The mediators of the activity include the rules and conventions underpinning the university’s teaching/learning activities (e.g., academic structures, marks, standards and learning environment), the established division of labour, tools and artefacts available to the community, such as pedagogical philosophies and approaches, subject matter knowledge, and learning objects that have been developed and uploaded on the MUELE-platform (such learning objects include (language education lecture notes, exercises, reading lists, audio, video, power point presentations , and external online resources).

The division of labour involves the division of tasks and roles among members of the community, and the division of power and status in this case the community includes teacher educators, pre-service teachers and how they structure their tasks and roles on the platform. Rules are explicit and implicit norms that regulate actions and interactions within the system (Engestrom, 1993, Kuutti, 1996).

Outcomes, the outcomes of the use of the tool (MUELE–platform) are pre-service teachers’ development of PCK, CK and DC competences.

While Engestrom (2001) formulated five principles of the activity theory, for example: the unit of analysis, multi-voiceness, historicity, and expansive learning. This paper will use the principle of contradictions as the main interpretive framework to explain how MUELE- platform has created tensions, contradictions and transformations that can either constrain or lever transformation of teaching/learning practices that support the development of pre-service teacher competences in terms of developing their PCK, CK and DC.

Activity theory can facilitate understanding of how technological advances influence change (Bellamy, 1996). Moreover, Gay, Rieger and Bennington, (2001) also explain that activity theory draws attention to the dialectical process by which consciousness, learning and development, simultaneously shape and are shaped by technology. An activity theory perspective on the study of integration of technologies in education shifts from a focus on tools themselves to tools use (Benson et al, 2008). Activity theory also considers the roles of those involved in the system not just the most obvious user (Dobson, Leblanc and Burgoyne (2004), but active users who create resources for use on the technology tool.

1.3 Activity Theory Principle of Contradiction

Contradictions constitute a key principle in AT (Engestrom, 2001) and are characteristic of activity systems (Engestrom, 1987; Il'enkov, 1982). Contradictions have been described as a “misfit within elements, between them, between different activities, or between different developmental phases of a single activity” (Kuutti, 1996, p.4). They have also been characterised as conflicts or problems (Dippe, 2006), as tensions (Basharina, 2007; Berge and Fjuk, 2006), and as “historically accumulating structural tensions within and between activity systems” (Engstrom, 2001, p.137). Contradictions not only generate disturbances and conflicts, but also innovative attempts to change the activity (Engestrom, 2001).

Barab, Barnett, Yamagata-Lynch, Squire and Keating (2002) conceptualised tensions as system dualities and used the term systemic tensions instead of contradictions. Activity systems are constantly working through contradictions, and in that sense are virtual disturbances and innovation-producing machine(s) (Centre for Activity Theory and Development Work Research-CATDWR, 2003-2004, p.12). As Cole and Engestrom (1993) explain, in activity systems, “equilibrium is an exception, tensions, disturbances and local innovations are the rule and the engine of change” (p.8).

Contradictions emerge as disturbances, which are visible manifestations of contradictions (Capper and Williams, 2004) or “unintentional deviations from the script which cause ‘discordinations’ in interaction “and deviations from the observable flow of interaction” (Engestrom, Brown, Christopher and Gregory, 1991, p.91). They result in double binds in everyday practices when an individual receives “two messages or commands which deny each other” (Engestrom, 1987, p.174).

Contradictions are important, not in and of themselves, but because they can result in change and development (Engestrom, 2001). Engestrom and Miettinen (1999, p. 9) emphasise a view of contradictions “as a motive force of change and development”. Despite the potential of contradictions to result in

transformation of an activity system, this transformation does not always occur. In fact contradictions can either enable learning to progress or they can actually “disable” it, depending on “whether or not they are acknowledged and resolved” (Nelson, 2002, p.34). Additionally, in order for systemic contradictions to lead to innovation, their resolution cannot occur at the individual level, because contradictions are in social/material relations among groups of people and the tools they use.

Contradictions may not lead readily to transformations because they may not be easily identifiable or they may not be easily acknowledged, visible, obvious or even openly discussed by those experiencing them (Capper and Williams, 2004; Engestrom, 1993). Capper and Williams conceive of invisible and ‘undiscussible’ contradictions as “the most difficultto use as springboards for growth” (p.12) in relation to the context of work teams. From their perspective, “an invisible contradiction is taken for granted.....members of the group or community do not even recognise it as a difficulty and it includes cultural assumptions about how things are done and how relationships are managed” (p.12). On the other hand, ‘undiscussible’ contradictions are those that are not talked about because they are “embarrassing, uncomfortable, or even culturally difficult to confront” such as gender..... issues or offensive personal habits of politically powerful programme stakeholders” (p.12).

By focusing on the emergence of contradictions and on the way these are (un) resolved, activity theory thus allows us to gain some explanatory insights in the phenomena of resistance to educational innovation and barriers to pedagogical transformations resulting from the introduction of technology (Blin and Munro, 2008).

2 Methodology

A mixed methods research approach was used to undertake a MUELE-platform usage and activity analysis. Platform usage and activity analysis tools were used to collect data on the platform features, usage and activity types. Ten knowledge and skills building activity types that represent the development of PCK, CK and DC for pre-service teachers were adapted from (Harris, Mishra & Koehler, 2009) teachers’ technological pedagogical content knowledge and learning activity types and matched with MUELE-platform features. In addition, a questionnaire was administered to 80 teacher educators at the school of education. Observation and recording of MUELE-platform rules, conventions, and objects created and used by teacher educators was also undertaken to reveal tool and subject contradictions.

Understanding the formation and resolution of contradictions is central to our understanding of transformations that can lead to teacher educator practices that constrain or enable the development of pre-service teacher competences using

the MUELE-platform, therefore, data was analysed and interpreted within an activity theory framework of contradictions, tensions and transformation.

3 Findings

The activity theory concept of contradictions is used in this paper to illustrate how teacher educators changed/transformed their teaching practices and restructured their activity types (teaching/learning practices) using the MUELE-platform to supplement the traditional face to face lectures used in pre-service teacher training. The study was guided by the following research questions:

1. What features of the MUELE-platform are used by language teacher educators to facilitate pre-service teachers' development of PCK, CK and DC?
2. What MUELE- platform knowledge and skills development activity types are used by language teacher educators for developing PCK, CK and DC?
3. How do MUELE-platform user rules and conventions facilitate the development of PCK, CK and DC?

3.1 Features of MUELE-platform

Descriptive data on the MUELE-platform features analysis reveals the following interface features that can be used by teacher educators and pre-service teachers to facilitate the development of preservice teachers' competences. The MUELE-platform features include: course management guide for lecturers, Moodle community, and social network sites such as Facebook, twitter, Google, staff blogs and student chat. Specifically, the MUELE-platform features and activity analysis was undertaken to establish the platform features, and their usage in activity types that develop PCK, CK and DC among preservice teachers.

Table 1: Use of features of the MUELE-platform (%)

MUELE-platform features	Documentation	Post notes	Not a user
Course management guide for lecturers	20	47	33
Moodle community	17	10	73
Social network sites	20	52	28
Staff blogs	20	31	49
Facebook	16	26	58
Student chat	6	18	76
Google	28	48	24

Table 1 above shows that the course management guide for lecturers is the key MUELE- platform feature used by language education lecturers, the feature is mostly used for posting notes and content by 47% of lectures. However, 33% of the teacher educators are not users of this feature. On the use of other features of the platform, 73% are not using the Moodle community, 17% use it for documentation, and 10% for posting content. In terms of social network sites such as twitter, 52% use it to post notes, 20% use it for documentation and 28% are not users. Staff blogs are used by 20% for documentation, 31% for posting notes/content and 49% are not active users. On face book, 16% use it for documentation, 26% for posting notes/content and 58% are not users. Student chat, 6% use it for documentation, 18% for posting notes/content, and 76% are not users. Google 28% use it for documentation, 48% for posting notes/content and 24% are not users.

This data on the MUELE-platform features reveals tensions and contradictions underlying the use of the features in terms of subject and tool contradictions. While majority of the teacher educators (subjects) are passive users, the usage of the platform features is mostly for documentation and posting notes or content. The above platform features suggest a collaborative and constructivist approach to social learning, yet the subjects are using the tools (MUELE-platform features) majorly for instructive purposes of documentation and posting notes. Additionally, teacher educators prefer to use the course management feature of the MUELE-platform than using the collaborative social learning spaces which offer pedagogical affordances of social networking sites such as face book, twitter, blogs and Moodle community.

Table: 2. MUELE-platform Knowledge and Skills Development Activity Types Used by Teacher Educators

Activity	Activity Description	MUELE platform feature	%
1.Create text and course management information	Teacher educators post course outlines, course notes, and course related information. Post course management information from textbooks, teacher education documents, national syllabus, teaching subjects content	Course management guide for lecturers Web browsers, links to documents	39%
2.Create and post presentations	Teacher educators create and post presentations, resources for language education preservice teachers to access teaching subject content and pedagogical knowledge from lecturers, resource persons and peers	Presentation software, audio/video, podcasts and vod casts, slide share	26%
3.Create and post images	Create and post images for students to access both still and moving videos, animated images to develop preservice teachers content knowledge and methods of teaching	Image animation, video and display software	9%
4.Create and share audio resources	Create, share audio resources and recordings of lectures and speeches of key persons	Websites, mp3 players and podcasts	2%
5.Create and facilitate group	Create small and large group discussion forums for preservice teachers to	Discussion forums, blogs, wikis, chat	10%

discussion forums	engage in dialogue with peers	rooms	
6.Create and manage virtual field trips	Create and manage virtual sites connected with the teacher training curriculum	Videos, virtual reality systems, online museums, galleries and exhibitions	2%
7.Engage preservice teachers in inquiry	Engage pre-service teachers in generating questions related to content, pedagogy and concepts	Word processing, wikis, web quests, Google docs	3%
8.Engage preservice teachers in making presentations	Engage preservice teachers in making oral and multi-media format presentations to share their understanding of concepts, pedagogies, theories, processes and experiments	Presentation software, multimedia authoring tools, video, audio editing suites, voice threads	2%
9.Build and share models	Create and guide pre-service teachers to build representations of course concepts and processes and experiments	Modelling, graphic, simulation software, Multimedia production tools	3%
10. Simulation	Engage students in digital experiences of teaching and learning using classroom videos of lessons conducted	Video, virtual reality websites, simulation software and animations	4%

Data from Table 2, showing MUELE-platform activity types for developing PCK, CK and DC created by teacher educators indicates that, 39% of teacher educators create text and course management information, 26% create and post presentations, 10% create and facilitate online group forums, 9% create and post images, only 4% create simulations and engage students in digital experiences of teaching and learning, 3% engage language preservice teachers in inquiry in related teacher education content, pedagogy and concepts using MUELE-platform features, 2% create and share audio resources, 2% create and manage virtual field trips and 2% engage language education preservice teachers in making multimedia presentations.

This data on activity types reveals tensions and contradictions on activity types which should be created by teacher educators for the development of PCK, CK and DC among preservice teachers, leading to limited transformations in terms of adoption of learning with technology (MUELE-platform features). Engestrom (2001) referred to these activity types as tools for transformation. Since activity types are the tools which should be used to transform learning, the existing limited creation and use of activity types that make use of MUELE-platform features constrains the development of PCK, CK and DC among preservice teachers.

In relation to observed activity types created on the MUELE-platform, the primary activity types are discussion forums on general university community issues. The use of the MUELE-platform for pre-service teacher assignments, quizzes or collaborative/reflective activities such as wikis, reflective journals remains very marginal. This illuminates the notion of ‘discoordinations’ in interaction “and deviations from the observable flow of interaction” (Engestrom, Brown, Christopher and Gregory, 1991, p.91).

While activity types are the tools which should be used to transform learning, the existing limited creation and use of collaborative activity types that make use of MUELE-platform features by engaging pre-service teachers and teacher educators in collaborative learning spaces constrains the development of PCK, CK and DC among preservice teachers.

The activity theory concept of contradictions outlined above can be illustrated through the modelling and representation of the activities relating to the design, implementation and use of course units for teacher preparation created on the MUELE-platform. In Makerere university, a number activities/actions are undertaken in planning and delivering a course namely: communication among staff to plan a course; course planning meetings; planning and organising content and learning activities, writing up, producing learning materials, planning and developing resources for course evaluation and assessment; scheduling the course units; uploading course notes and resources on the MUELE-platform and producing/ printing course readers, hand outs, organising and implementing face to face sessions. These activities are

undertaken by the subjects of the design activity (i.e., individual lecturers or departmental teams, with support teams in the Electronic Learning Unit- (ELU) who are part of the wider university academic community.

3.2 Observed Tools and Subject Contradictions on the MUELE-Platform

Data from the MUELE-platform features analysis revealed that the course units represented on the MUELE-platform are individual lecturer's course notes, not departmental teams notes, although this reflects the commitment on the part of individual members of the academic community to enrich the students' learning experience, however, it is also an example of tensions, as well as subject/object/community contradictions as lecturers have not come up in course/departmental teams to develop course units to be uploaded on the MUELE-platform, illuminating the existence of tensions and contradictions within the subjects and tools.

Overall usage of the MUELE-platform as of July, 2014, taking statistics on the number of users and hits displayed on the platform as of 5/07/2014, indicates that academic staff, and very few students use the MUELE-platform in some way that is the application of learning technology in training pre-service teachers has not shifted from periphery to main stream. While the university policy recommends that the MUELE-platform should be used to facilitate a student-centred course delivery approach for supporting teaching and learning purposes, the MUELE-platform features and activity types analysis indicates that it is used by course lecturers for disseminating course related information, communicating with pre-service teachers and less on enabling student and staff collaboration. These illuminate contradictions in tools and subject, rules and subject, and division of labour and subject.

A further activity analysis of the objects created by teacher educators on MUELE-platform illuminates the practices of the academic community involved in the campus delivery of programmes of studies during the semester up to July, 2014. In the majority, there are limited course outlines, course notes, resources and activities for supporting learning. The bulk of resources created are in-house text-based content, such as word processing and pdf files. Very limited files exist in presentation software such as power point files, html pages, vodcasts and podcasts of past, current and prospective lectures and sessions.

This constrained creation of multi-media objects illuminates that the move away from traditional teaching methods towards self-directed learning on MUELE-platform or with learning technologies seems to contradict teacher educator's understanding of the division of labour within education settings earlier noted by (Scanlon & Issroff, 2005). This creates tensions, conflicts and

may not lead to transformations as preservice teachers have few tools in form of multimedia teaching learning objects and activity types to support self-directed learning.

3.3 Observed User-rules and Conventions of the MUELE-platform and the Development of PCK, CK and DC

The use and creation of activity types in form of teaching/learning objects by teacher educators is supported and motivated by the university information technology and communications policy, where all courses should have an online presence on the MUELE-platform. While this is the policy, a few course units course outlines are accessible on the platform highlighting tool/object/subject contradictions. The MUELE-platform version 2.5 is supported by Moodle, the platform address is www.muele.ac.ug. Social constructivism and ‘connectivism’ are the pedagogical approaches underpinning MUELE-platform, these approaches are also in line with the Makerere university teaching and learning philosophy.

Responsibility for the MUELE-platform administration and management resides jointly with the Directorate of Information Communication Technology Systems–(DICTS) and ELU department within the university. DICTS are responsible for hosting the platform and for technical support. The ELU are responsible for dealing with day-to-day technical and pedagogical inquiries and for provision of training in both technical and pedagogical aspects of the platform and software.

Formal training for staff and students for the whole university focuses on the practical aspects of using the system through weekly face-to-face sessions. Online tutorial training are also offered during semester time for staff and students for accessing and using MUELE-platform. Questions still remain unanswered on whether the trainings have equipped teacher educators with the necessary MUELE-platform tool related competences (i.e., knowledge about the functionality of a tool as well as skills necessary to operate it, and task-related competences (i.e., knowledge about the higher level goals attainable with the use of a tool, and skills of translating into the tools functionality (Kaptelinin & Nardi, 2006).

In order to create and use MUELE-platform features efficiently both the teacher educators and pre-service teachers also need what Kaptelinin and Nardi (2006) call *meta-functional* competences, which “enable the [subjects] understanding of how to use functional organs of a tool, recognise their limitations and knowing how to maintain and trouble shoot them” (Kaptelinin & Nardi, 2006, p.218). These competences will allow teacher educators to resolve the contradictions and tensions in ways that enable transformative motive of contradictions leading to creation of teaching learning activities,

spaces, objects and opportunities that can enable the development of language education preservice teachers' competence development.

The MUELE-platform allows specific roles and an associated set of permissions to be assigned to each user of the platform. The user roles include: administrator; course lecturer; and student. The administrator has universal access, that is, they can make global changes that affect the configuration of the platform and have access to user details. Administrative access is limited to staff in DICTs and the ELU. Course lecturers have limited administrative permissions only limited to creating new courses and resources on the platform, connecting with the Moodle community, interact, collaborate and communicate with language education preservice teachers and colleagues. Preservice teachers can access the course content, course related information, resources and collaboratively interact with lecturers and fellow students' community registered within the same course. Course lecturers are encouraged to participate on the MUELE-platform Moodle community through a dedicated Moodle community facilitated by the Moodle community support section.

As noted by Blin and Munro (2008) "the decisions to implement electronic learning environments in majority of higher education institutions is often a response to the often conflicting impact of market driven influences and a deep institutional or individual commitment to enhance students' learning experiences and outcomes" (p.479). However, the successful implementation of MUELE-platform depends on the quality of the learning activities and objects designed for the platform and their integration into the curriculum.

Taking on Blin and Munro's (2008) interpretation of tensions, obstacles to successful implementation of technology in education, teacher educators cited the following as challenges that constrain their use of the MUELE-Platform:

'Limited broadband width to support access to MUELE-platform resources, for example, the platform cannot play videos, audio, animations during semester time.'

'Few computers limiting access to computers by all preservice teachers while at the university.'

'Limited MUELE-platform features/tool and task related competences by both teacher educators and pre-service teachers'

These challenges can be seen as "manifestations of deeper systemic tensions within or between elements of activity systems as well as between interacting activity systems" (Kirkup and Kirkwood, 2005, p. 195), and need to be resolved to enable MUELE-platform to transform the pedagogical practices of teacher educators, which can subsequently lead to development of pre-service teachers' PCK, CK and DC.

4 Discussion, Conclusion and Recommendations

Taken together, although preservice teachers are given additional opportunities to engage with course related topics through the created course notes on the platform, teacher educators generally appear to prefer the online documentation and distribution of course-related documents which is instructive, rather than the creation of interactive and collaborative learning objects, spaces, resources and opportunities that can potentially lead to online construction and manipulation of course content by preservice teachers, limiting the potential of the MUELE-platform to facilitate the development of competences, illuminating tools, rules and subject contradictions.

On the other hand, while teacher educators are using the MUELE-platform to electronically disseminate materials previously distributed in print, such as course outlines, lecture notes, and course related information to preservice teachers, is a replication of face to face delivery online, and this seems to be what the teacher educators interpret as integration and use of technology. This finding is in agreement with, Unrwin (2008) earlier finding that the “majority of institutions in Africa claiming to be using e-learning are not using an integrated formal learning management system at all, but are rather using basic digital technologies...more often than not interpreting e-learning simply as accessing information from the web” (Unwin, 2008, p.4-5). This suggests that little transformation has taken place, tensions and contradictions still exist that limit the transformation of teaching/learning practices with the use of technology.

The MUELE-platform features and activity analysis also reveals a low uptake of more advanced features and functionalities of the platform, this is exemplified by the activity types and usage of the MUELE-platform features for documentation and uploading of course related information and do not use MUELE-platform course management system for creation and use of collaborative activities. This suggests either a lack of familiarity with the MUELE-platform functionalities and features or lack of perceived need for the use of the features/ functionality to change ones’ teaching practice. This alludes to Capper and Williams, 2004; Engestrom, 1993) notions of invisible and ‘undiscussible’ contradictions in relation to the context of work teams, wherein, the non-use of advanced MUELE-platform features is an invisible contradiction and is taken for granted by the teacher educators, or even do not recognise it as a difficulty. This contradiction is not transformative and therefore might not lead to development of preservice teachers’ competences.

The MUELE-platform features, usage and activity analysis reveals that there are contradictions and tensions between and among tools, subjects and rules, and that these are exacerbated by limited teacher educators’ and language

education preservice teachers' meta-functional competences and systemic challenges such as broadband width and access to computers, but that there are, at the same time, important learning (as well as management and teaching) benefits that can be gained that can facilitate pre-service teachers' development of PCK, CK and DC if the existing contradictions are collaboratively and systematically addressed and resolved.

Implicit in the findings is the need for high broad band width and technical support for teacher educators in the creation of activity types, digital teaching/learning objects and use of the MUELE-platform features for facilitating the development of PCK, CK and DC among preservice teachers. This paper shows that the MUELE-platform has the potential to provide an architecture that will allow language education preservice teachers not only to have more access to content and collaborative e-tivities from their subject areas and professional courses but also to develop technological pedagogical competences. More interview and questionnaire data needs to be collected to develop a comprehensive understanding of teacher educators and preservice teacher perspectives on how the use and creation of digital resources on the MUELE-platform can be facilitated and developed.

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References

- American Association of Colleges of Teacher Education and Partnerships for 21st Century Skills-(AACTEP) (2010). 21st Century knowledge and skills in educator preparation.
- Barab, S., A., Barnett, M., Yamagata-Lynch, L., Squire, K., Keating, T. (2002). Developing an empirical account of a community of practice: Characterising the essential tensions. *The Journal of Learning Sciences*, 11(4), 489-542.
- Ball, D.L., Thames, M.H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? *Journal of Teacher Education*. 59,389-409.
- Basharina, O. K. (2007). An activity theory perspective on student-related contradictions in international telecollaboration. *Language Learning and Technology*, 11 (2) 82-103.

- Bellamy, R. (1996). Designing educational technology: Computer mediated change. In B. Nardi (Ed.), *Context and consciousness: Activity theory and human-computer interaction* (pp. 123-145). Cambridge: The MIT Press.
- Benson, A., Lawler, C., & Whitworth, A. (2008). Rules, roles & tools: Activity theory & the comparative study of e-learning. *British Journal of Educational Technology*, 39 (3) 456-467.
- Berge, O. & Fjuk, A. (2006). Understanding the roles of online meetings in a net-based course. *Journal of Computer Assisted Learning*, 22 (1) 13-23.
- Blin, F., & Munro, M. (2008). Why hasn't technology disrupted academics' teaching practices? Understanding resistance to change through the lens of activity theory. *Computers and Education*, 50(475-490).
- Borko, H., & Putnam, R. T. (1996) *Learning to teach*. In D.C. Berliner & R. C. Calfee (Eds.) *Handbook of Educational Psychology* (pp. 673-708). Washington, DC: Macmillan.
- Cartelli, A. (2008). Digital competence assessment: Frameworks for instruments and processes to be used by students and teachers. University of Casino, Italy.
- Capper, P., & Williams, B. (2004). Enhancing evaluation using systems concepts. American Evaluation Association. <http://users.actrix.co.nz/bobwill/activity.doc> [viewed 2 July, 2014]
- Centre for Activity Theory and Development Work Research (2003-2004) [viewed 5 July 2014, <http://www.edu.helsinki.fi/activity/pages/chatanddwr/activitysystem/>
- Cole, M., & Engestrom, Y. (1993). A cultural historical approach to distributed cognition. In G. Salomon (Ed.), *Distributed cognitions, psychological & educational considerations* (pp. 1-46). Cambridge: Cambridge University.
- Cochrane-Smith, M., & Zeichner, K.M. (2005). *Teacher education: The report of the AERA panel on research and teacher education*. Mahwah: NJ, Lawrence Erlbaum.
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3), 300-314.
- Dippe, G. (2006). The missing teacher: Contradictions and conflicts in the experience of online learners. Proceedings of the fifth international conference on networked learning 2006. Lancaster: Lancaster University. [<http://www.networkedlearningconference.org.uk/past/nlc2006/abstracts/pdfs/p38%20Dippe.PDF>. accessed, 6 July, 2014].
- Dobson, M., Le Blanc, D., & Burgoyne, D. (2004). Transforming tensions in learning technology design: operationalising activity theory. *Canadian Journal of Learning and Technology*, 30(1).
- Engestrom, Y., Brown, C., Christopher, L. C., & Gregory, J. (1991). Coordination, cooperation & communication in courts: Expansive transitions

- in legal work. *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition*, 13 (4), 88-97.
- Engestrom, Y (1987). Learning by expanding. An activity-theoretical approach to developmental research. Helsinki: Orienta-Konslit.
- Engestrom, Y. (2001) Expansive learning at work: Towards an activity-theoretical reconceptualization. *Journal of Education and Work*, 14 (1) 133-156.
- Engestrom, Y. (1999). Activity theory and transformation. In Y. Engestrom, R. Miettinen, & R. L. Putnamaki (Eds.), *Perspectives on activity theory* (pp.19-38). Cambridge: Cambridge University Press.
- Engestrom, Y., & Miettinen, R. (1999) Introduction. In Y. Engestrom, R. Miettinen & R. L. Punamali (Eds.), *Perspectives on activity theory* (Pp. 1-8). Cambridge: Cambridge University.
- Engestrom, Y. (1993). Developmental studies of work as a test-bench of activity theory: The case of primary care medical practice. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: perspectives on activity and context* (pp. 64-103). Cambridge: Cambridge University Press.
- Gay, G., Rieger, R. & Bennington, T. (2001).Using mobile computing to enhance field study. In T. Koschman, R. Hall, & N. Miyake (Eds.) *CSCL2: Carrying forward the conversation*. Mahwah, NJ: Lawrence Erlbaum.
- Grossman, P.L. & Richert, A.E. (1988). Unacknowledged knowledge growth: a re-examination of the effects of teacher education. In *Teaching and Teacher Education: An International Journal*, 4: 53-62
- Hardman, J. (2005). An exploratory study of computer use in a primary school mathematics classroom: New technology, new pedagogy? *Perspectives in Education*, 23 (4) 1-13.
- Harris, J., Mishra, P., & Koehler, P. (2009) Teachers' technological pedagogical content knowledge and learning activity types. *Journal of Research on Technology in Education*, 41 (4) 393-419.
- Holden, C. & Hicks, D. (2007). Making global connections: The knowledge, understanding and motivation of trainee teachers. In *Teaching and Teacher Education: An International Journal*, 23: 13-23.
- Kaptelinin, V., & Nardi, B. (2006). *Acting with technology: Activity theory and interaction design*. Cambridge, MA: The MIT Press.
- Kirkup, G., & Kirkwood, A. (2005).Information and communication technologies (ICT) in higher education teaching- a tale of gradualism rather than revolution. *Learning, Media and Technology*, 30(2), 185-199
- Kleickmann, T., Richter, D., Kunter, M., Elsner, J., Besser, M., Krauss, S., & Baumert, J. (2013). Teachers' content knowledge and pedagogical content knowledge: The role of structural differences in teacher education. *Journal of Teacher Education*, (64) 1, 90-106.

- Kuutti, K. (1996). Activity theory as a potential framework for human-computer interaction research. In B. Nardi (Ed.), *Context and consciousness: Activity theory and human computer- interaction* (pp. 17-44). Cambridge, MA: The MIT Press.
- Mulumba, B.M. (2011). Management of language education programmes and training of language teachers in public universities in Uganda. Unpublished PhD thesis, Makerere University.
- Nelson, C. (2002). Contradictions in learning to write in a second language classroom: Insights from radical constructivism, activity theory, and complexity theory. Unpublished doctoral dissertation. The University of Texas at Austin. Accessed 8 July, 2014 from: <http://www.kean.edu/~cnelson/contradictions.pdf>.
- Park, S., & Oliver, S. (2008). Revising the conceptualisation of pedagogical content knowledge (PCK): PCK as a conceptual tool to understand teachers as professionals. *Research in Science Education*, 38, 261-284.
- Passey, D. (2011). Implementing learning platforms into schools: An architecture for wider involvement in learning. *Learning, Media and Technology*, 36 (4) 361-397.
- Passey, D & Higgins, S. (2011). Learning platforms and learning outcomes- insights from research. *Learning, Media and Technology*, 36(4) 329-333.
- Peruski, L. (2003). Contradictions, disturbances, and transformations: An activity theoretical analysis of three faculty members' experience with designing and teaching online courses. Unpublished doctoral dissertation, Michigan University.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15(2), 4-14.
- UNESCO (2011). Information communication technology competency framework for teachers. Paris, UNESCO.
- Unwin, T. (2008). Survey of e-learning in Africa based on a questionnaire survey of people on the e-learning database in 2007. Retrieved June, 2014 from <http://www.gg.rhul.ac.uk/ict4d/working papers>.



Reliability and Validity Testing of Modified Structured Wellness Questionnaire for Monitoring the Wellness Perception of University Students

Jaiyesimi Boluwaji Gbenga ¹

¹ Afe Babalola University [E-mail: dredeemed4christ@gmail.com]

Abstract. Wellness on a general scale is a major global concern as it is perpendicular to achieving monumental success in a drive towards global health challenges. The health status and wellbeing of university students should be major concern as they constitute young adolescent population and are prone to risky lifestyle. The objective of this study is to carry out exploratory factor analysis of modified structured wellness questionnaire used by university students in pursuit of healthy living. The study explored the orientation, health perspective and practices of the university students to assess the factor loading of the modified structures questionnaire for extraction, reduction and compression into variables. A 20-item questionnaire was administered to 1030 students from four different colleges of Afe Babalola University. Analyses were performed using SPSS. Principal axis component was conducted on the data and Cronbach Alpha was used to test the internal consistency of the data. The results of factor analysis showed five factors and eliminate five items that loaded below the cut-off points. The factors were drug and alcohol pattern; health belief and finance; self-expression and social integration; exercise, sleep and food; strength of social circle.

Keywords: Principal axis factoring; Wellness; Healthy living

1 Introduction

The development of comprehensive theoretical model on wellness requires a working elaboration of the concept of well-being. Diener (1984) suggested that any of such elaboration must include at least three components; It should be subjective, reflecting a concern for how the individual views him- or herself; it should include; positive indices of an individual's sentiments toward life as

opposed to negative ones; and it should be global to encompass all areas of an individual's life. The World Health Organization (WHO) as early as 1947 defined health in terms of wellness as "physical, mental, and social well-being, not merely the absence of disease" (WHO, 1958) and later provided a definition of optimal health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (WHO, 1964). Dunn (1961), who is widely credited as being the "architect" of the modern wellness movement, defined wellness as "an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable". Hettler (1984), a public health physician and medical educator, proposed a hexagon model that specifies six dimensions of healthy functioning, including physical, emotional, social, intellectual, occupational, and spiritual.

Two paper-and-pencil assessment instruments, the Lifestyle Assessment Questionnaire (National Wellness Institute, 1983) and Testwell (National Wellness Institute, 1983), were developed based on the hexagon model. Hinds (1983), also a university-based health educator, developed the Lifestyle Coping Inventory to help individuals deal with stress management and health promotion. Ragheb (1993) noted that there is a "strong and growing demand for a wellness measure, valid and reliable, to assist practitioners and scientists". Kulbok and Baldwin (1992), following a concept analysis of preventive health behaviour and a review of the goals of Healthy People 2000 (U.S. Department of Health and Human Services, 1990), also concluded that "reliable and valid measures of the many dimensions of health behaviour in general, and of health promoting behaviour specifically" are clearly needed. Because wellness is "an observable and measurable behaviour" (Palombi, 1992), the development of such measures is indeed possible.

University students represent the future of families, communities, and countries. The period of university education is a highly sensitive transformative period where behavioural modification and life choices are significantly made. Eisenberg, Gollust, Golberstein, and Hefner (2007), also stressed that university is a period of responsibility for choices and lifestyle practices, where students are exposed to the challenges of young adulthood and also tackle the mental and social issues of students' life. Several factors have been identified to be responsible for the moral decadence and unhealthy lifestyle practices among the students in higher institution of learning ranging from peer group influence, internet vices to parental neglect.

Walid et al (2013) in their study stressed that many college students live far from home, escalating their susceptibility to initiating smoking and/or excessive alcohol consumption. Furthermore, university students have more health complaints than their working counterparts, but do not seek help for these problems. Therefore these characteristics underscore the importance of physical and psychological/mental well-being of university students, particularly that

their health/well-being might be 'worse off' than that of the general population (Stock et al, 2003). This study seek develop standardized instrument concise enough to meet the need of assessing the health and wellness status of university at a glance or in no time.

2 Methodology

2.1 Population, sample and sampling techniques

Afe Babalola University undergraduate students solely formed the population for the study. The sample was drawn from five existing colleges of the university (Social and Management Sciences, Law, Engineering, Sciences, Medical and Health Sciences). The sample size for the study comprises 591 male (57.3%) and 440 female (42.7%) in total of 1031 students. The sampling techniques used for the study were stratified and simple random sampling techniques. Stratified sampling technique was used to select 20% of the total population from each college: Social and Management Sciences had 263 students (25.5%); Law had 180 students (17.5%); Engineering had 219 students (21.2%); Sciences had 142 students (13.8%) and Medical and Health Sciences had 227 students (22.0%). Simple random sampling technique was used to randomly select students in each college.

2.2 Instrument and procedures

The instrument is intended to monitor the wellness perception of university students (Wellness Perception Questionnaire, WPQ). Primary data was gathered using a modified 20-item structured wellness questionnaire. The instrument comprised five different subscales, as follows; (a) drug and alcohol pattern (Q1, Q2, Q3) (b) health, belief and finance (Q4, Q5, Q6, Q7, Q8) (c) public speaking and social integration (Q10, Q11, Q12) (d) sleep and meal pattern (Q14, Q15) (e) strength of social circle (Q18, Q19). Q9, Q13, Q16, Q17 and Q20 were extracted from the scale due to low factor loading (>.40 cut off point). The five subscales are the results of the exploratory factor analysis. The questionnaire assessed the respondents on a 5-point scale with 1=Almost Always and 5= Never. Questionnaires were administered to the respondents with the aid of research assistants who are well tutored on the significance of the research. Respondents were assured of anonymity and confidentiality of the provided personal details and that their participation in the research is voluntary.

2.3 Data analysis

The returned questionnaire were subjected to editing and coding for input into the Statistical Programme for the Social Sciences (SPSS – version 17). Descriptive statistics were calculated to present the basic characteristics of the demographic data. In addition, exploratory factor analysis was performed on the 20-items. Prior to this, the appropriateness of factorability on the data set was established using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (MSA) and the Bartlett’s Test Sphericity. The Bartlett’s Test of Sphericity was 3654.53 (DF=190) at an observed significance level of 0.0000 thus rejecting the hypotheses that the population correlation matrix is an identity matrix, i.e. with zero correlations. The KMO measure of sampling adequacy provides an index between 0 and 1 of the proportion of variance among the items that might be indicative of latent common factors. Kaiser (1974) considered 0.796 (approx. 0.80) as good KMO for factor analysis. The criterion of eigenvalue or characteristic root (Eigenvalue) ≥ 1 was used for defining the number of the factors that were kept (Kaiser, 1960, Sharma, 1996, Hair et al., 1995).

2.4 Reliability

Table 1 on reliability statistics showed the value of the coefficient of Cronbach for the research scale (0.781=78.1%). This is very close to the 80% which is an extra good value for the internal consequence of the conceptual construction of the investigated scale (Anastasiadou, 2010; Nouris, 2006). The questionnaire reliability (internal consistency) was possible by Cronbach’s α (Cronbach, 1984), which is considered to be the most important reliability index and is based on the number of the variables/items of the questionnaire, as well as on the correlations between the variables (Nunnally and Jun, 1978).

Table 1: Reliability of Wellness Perception Questionnaire

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.771	.781	20

Table 2 on Scale Statistics revealed the scores that are related to the scale’s entirety, which presents a mean of the class of 45.32 and a standard deviation of the class of 10.960 units.

Table 2: Scale Statistics of Wellness Perception Questionnaire (WPQ)

Mean	Variance	Std. Deviation	N of Items
45.32	120.130	10.960	20

Table 3: Item-Total Statistics

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Do you drink fewer than 5 alcoholic drinks a week?	43.26	109.212	.384	.758
2. Do you smoke less than half a pack of cigarettes a day?	42.74	108.857	.370	.759
3. Do you drink fewer than 3 caffeine drinks a day?	43.06	109.997	.392	.758
4. Are you in good health	43.28	109.407	.380	.758
5. Do you get strength from your religious or spiritual beliefs?	42.56	108.007	.368	.759
6. Are you able to organize your time effectively?	42.78	106.793	.283	.768
7. Do you get allowance adequate to meet your basic needs?	42.89	106.715	.287	.767
8. Do you take quiet time for yourself during the day?	43.28	113.132	.248	.767
9. Are you the appropriate weigh for your height?	43.37	111.384	.319	.762
10. Are you able to speak openly about your feelings when angry?	43.46	114.706	.181	.770
11. Do you have regular conversation with your housemates about domestic problems?	42.56	111.332	.248	.767
12. Do you do something fun at least once a week?	43.20	108.426	.425	.756
13. Do you regularly attend club or social activities?	43.16	107.619	.423	.755
14. Do you get 7-8 hours of sleep, at least 4 nights a week?	43.44	112.332	.295	.764
15. Do you at least one hot, balanced meal a day?	42.96	109.221	.380	.758
16. Do you exercise to the point of perspiration at least twice a week?	43.21	109.292	.389	.758
17. Do you give and receive affection regularly?	43.02	108.712	.385	.758
18. Do you have at least 1 friend in the school or at home on whom you can rely?	43.12	110.919	.371	.760
19. Do you have at least 1 friend in whom you confide about personal matters?	42.64	108.660	.287	.766
20. Do you have a network of friends and acquaintances?	43.07	109.800	.347	.760

Table 3 on Item-Total Statistics of WPQ, the scale mean of item deleted are as follows 43.26, 42.74, 43.06, 43.28, 42.56, 42.78, 42.89, 43.28, 43.37, 43.46, 42.56, 43.2, 43.16, 43.44, 42.96, 43.21, 43.02, 43.12, 42.64, 43.07 units. In the fourth column the number 0.384, 0.37, 0.392, 0.38, 0.368, 0.283, 0.287, 0.248, 0.319, 0.181, 0.248, 0.425, 0.423, 0.295, 0.38, 0.389, 0.385, 0.371, 0.287, 0.347 means that the item 1-20 have Pearson coefficient of correlation of the class 38.4%, 37%, 39.2%, 38%, 36.8%, 28.3%, 28.7%, 24.8%, 31.9%, 18.1%, 24.8%, 42.5%, 29.5%, 38%, 38.9%, 38.5%, 37.1%, 28.7% and 34.7%.

2.5 Sample Sufficiency Test and Sphericity Test

Table 4 revealed the sample sufficiency index KMO by Kaiser-Meyer-Olkin, which compares the sizes of the observed correlation coefficients to the sizes of the partial correlation coefficients for the sum of analysis variables. The test of sphericity by the Bartlett test is rejected on a level of statistical significance $p < 0.005$ (Chi-Square=3654.525, $p=0.000$). Consequently, the coefficients are not all zero, so that the second acceptance of factor analysis is satisfied. As a result, both acceptances for the conduct of factor analysis are satisfied.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.796
Bartlett's Test of Sphericity	Approx. Chi-Square	3654.525
	df	190
	Sig.	.000

2.6 The Scree Plot Graph

The scree test (Figure 1) produces the following graph, which proceeded to a graphic representation of eigenvalues and showed the determination of the number of the essential factorial axis.

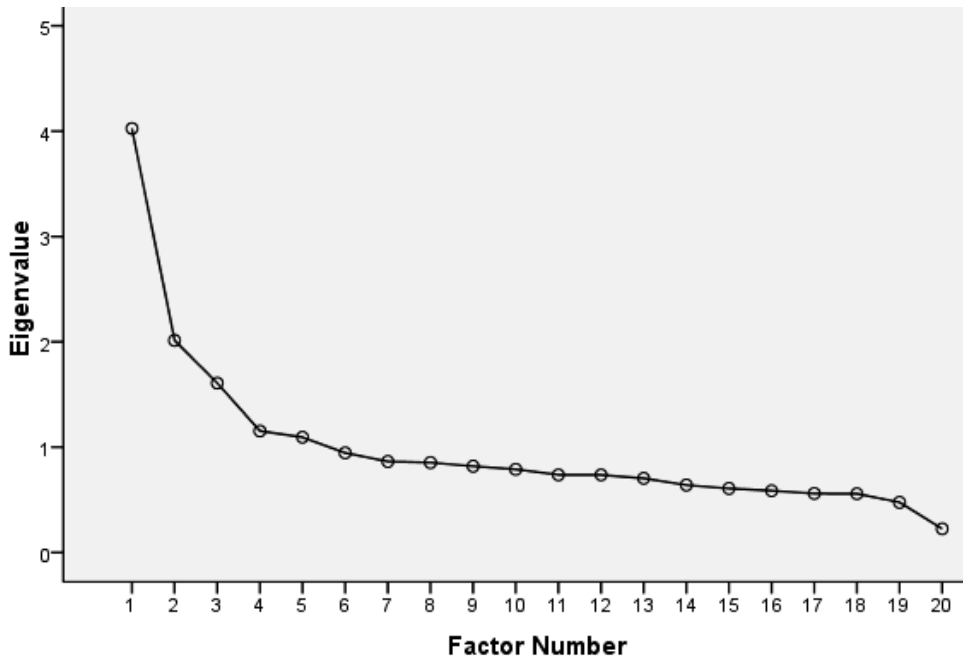


Figure 1: Scree Plot

The above graph shows a distinct break up to the fifth factor, whereas, after the fourth one, it follows a linear part of the eigenvalue curve. So, taking into consideration eigenvalues, which are higher than 1 for the five factors (4.026, 2.014, 1.609, 1.153, and 1. for the 1st, 2nd, 3rd, 4th and 5th respectively), the data can be said to interpret satisfactorily.

2.7 Principal Axis Factoring

Principal axis factoring showed five components, which jointly attributed to the 49.479% of the total variance, and which are separately described afterwards. The internal reliability coefficient Cronbach's α is significantly high and equal to 78.1% for the whole questions, and that's why the 20-question scale was considered significantly reliable in the sense of internal consistency. The reliability coefficient (Cronbach's α) is statistically significant and equal to 74.3%, 56.4%, 55.7%, 55.2%, 61.3% for the 1st, 2nd, 3rd 4th and 5th factorial axis respectively.

Table 5: Principal Axis Factoring on Health and Wellness Questionnaire

	Factor					Means	SD
	1	2	3	4	5		
1. Do you drink fewer than 5 alcoholic drinks a week?	0.938					2.06	1.186
2. Do you smoke less than half a pack of cigarettes a day?	0.841					2.58	1.255
3. Do you drink fewer than 3 caffeine drinks a day?	0.405					2.26	1.089
4. Are you in good health?		0.548				2.04	1.176
5. Do you get strength from your religious or spiritual beliefs?		0.452				2.76	1.348
6. Are you able to organize your time effectively?		0.451				2.54	1.753
7. Do you get allowance adequate to meet your basic needs?		0.406				2.43	1.746
8. Do you take quiet time for yourself during the day?		0.405				2.04	1.097
9. Are you the appropriate weigh for your height?							
10. Are you able to speak openly about your feelings when angry or worried?			0.496			1.85	1.092
11. Do you have regular conversation with your house mates about domestic problems?			0.470			2.76	1.340
12. Do you do something fun at least once a week?			0.446			2.12	1.167
13. Do you regularly attend club or social activities?							
14. Do you get 7-8 hours of sleep, at least 4 nights a week?					-0.794	1.88	1.066
15. Do you at least one hot, balanced meal a day?					-0.477	2.36	1.194
16. Do you exercise to the point of perspiration at least twice a week?							
17. Do you give and receive affection regularly?							

18. Do you have at least 1 friend in the school or at home on whom you can rely? -0.619 2.20 1.040

19. Do you have at least 1 friend in whom you confide about personal matters? -0.467 2.68 1.529

20. Do you have a network of friends and acquaintances?

% of variance explained	20.129	10.069	8.044	5.767	5.471
Cumulative %	20.129	30.197	38.242	44.008	49.479
Eigenvalues	4.026	2.014	1.609	1.153	1.094
Cronbach Alpha	0	0.564	0.557	0	0.613
	.743			.552	
Total Cronbach Alpha	0.781				

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .796

Bartlett's Test of Sphericity: $X^2=3654.525$, $df=190$, $p=0.000$

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 23 iterations.

Table 5 presents the components and the factor loadings produced after Principal axis factoring. More specifically, based on wellness perception as presented by the factor analysis, Q1, Q2 and 3 particularly with high loadings (0.938, 0.841, 0.405) load mainly on the first axis-factor F1, with eigenvalue 4.026, which explains, following Oblimin rotation, 20.129% of the total dispersion. Factor (F1) represents drug and alcohol pattern of the university student in relation to their wellness status and perception. Reliability of the first factor is $\alpha=0.743$, which is particularly satisfactory.

Q4, Q5, Q6, Q7 and Q8 particularly with high loadings (0.548, 0.452, 0.451, 0.406, 0.405) on the second factor (F2), with eigenvalue 2.014, which explains 10.069% of the total dispersion. The second factor consists of the statements on the health belief and finance of the students in relation to their wellness status and perception. The reliability of the second factor is $\alpha=0.564$, which is satisfactory.

Q10, Q11 and Q12 particularly with high loadings (0.496, 0.470, 0.446) on the third factor (F3) with eigenvalue 1.609, which explains 8.044% of the total dispersion. The third factor (F3) consists of the statements on self-expression and social integration. The reliability of the third factor is $\alpha=0.557$, which is satisfactory.

Q14 and Q15 particularly with high loadings (-0.794, -0.477) are on the fourth factor (F4) with eigenvalue 1.153, which explains 5.767% of the total dispersion. The fourth factor (F4), consists of the statements on the sleep and meal pattern. The reliability of the third factor is $\alpha=0.552$, which is satisfactory.

The fifth and final factor (F5) with eigenvalue 1.094, with quite high loadings (-0.619, -0.467) which explains 5.471% of the total data inactivity, is constructed and interpreted by questions Q18 and Q19. The fifth factor consists of variables on the strength of social circle. The reliability of the fourth factor is $\alpha=0.613$, which is satisfactory.

Q9 on “are you the appropriate weight for your height”, Q13 on “do you regularly attend club or social activities”, Q16 on “do you exercise to the point of perspiration at least twice a week”, Q17 on “do you give and receive affection regularly” and Q20 on do you have a network of friends and acquaintances were extracted from the instrument due to low factor loading (cut off point $>.40$).

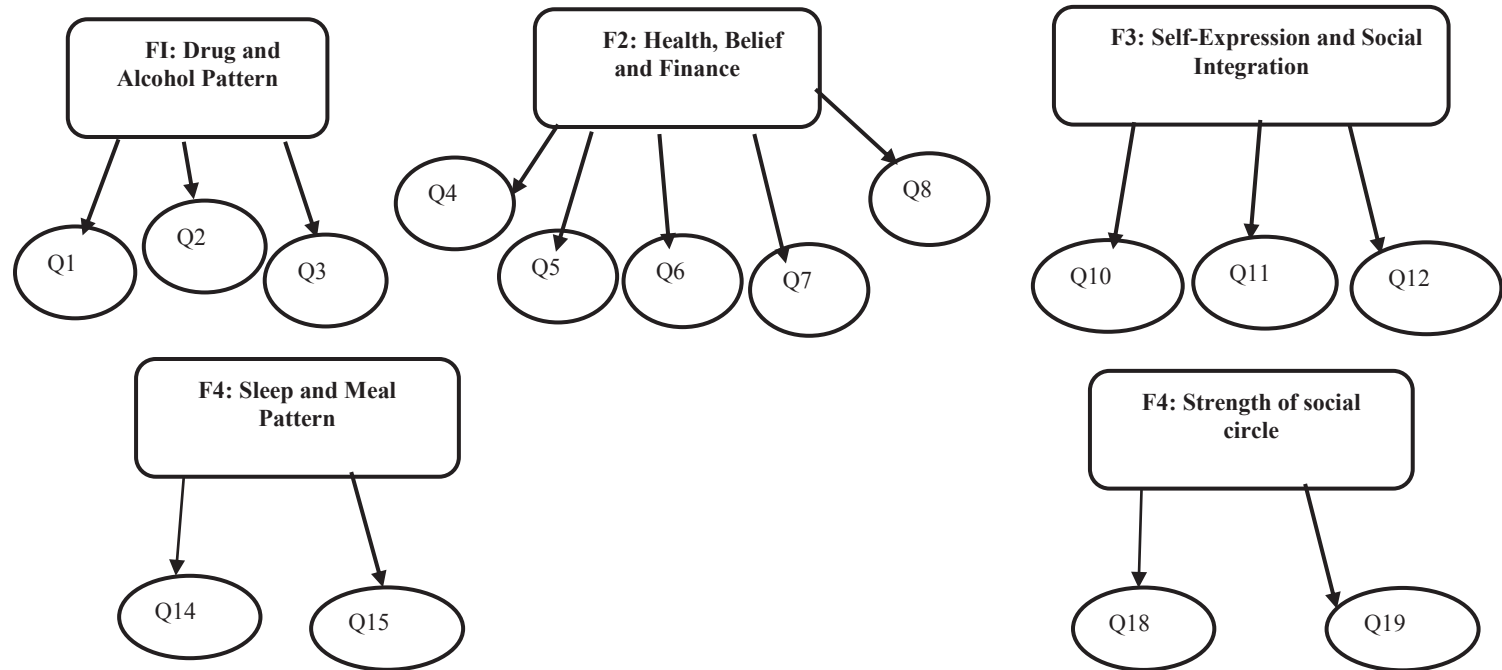


Figure 2: Schematic Diagram on the Summary of Exploratory Factor Analysis Variables

3 Wellness Perception Questionnaire (WPQ) variables and items after extraction

F1: Drug and Alcohol Pattern

Q1: Do you drink fewer than 5 alcoholic drinks a week?

Q2: Do you smoke less than half a pack of cigarettes a day?

Q3: Do you drink fewer than 3 caffeine drinks a day?

F2: Health, Belief and Finance

Q4: Are you in good health?

Q5: Do you get strength from your religious or spiritual belief?

Q6: Are you able to organize your time effectively?

Q7: Do you get allowance adequate to meet your basic needs?

Q8: Do you take quiet time for yourself during the day?

F3: Self-Expression and Social Integration

Q10: Are you able to speak openly about your feelings when angry or worried?

Q11: Do you have regular conversation with your house mates about domestic problems?

Q12: Do you do something fun at least once a week?

F4: Sleep and Meal Pattern

Q14: Do you get 7-8 hours of sleep, at least 4 nights a week?

Q15: Do you at least one hot, balanced meal a day?

F5: Strength of Social Circle

Q18: Do you have at least 1 friend in the school or at home on whom you can rely?

Q19: Do you have at least 1 friend in whom you confide about personal matters?

4 Conclusion and Recommendation

Therefore, a model of five factors has been created after the examination of the validity and reliability of the wellness perception of the university students on the Wellness Perception Questionnaire (WPQ). The WPQ is a 15 item questionnaire that can be adopted to monitor the wellness status and perception of university students or young adolescents in pursuit of healthy living. Principal axis factoring made it possible to have five subscale/variables of WPQ namely: Drug and Alcohol Pattern (DAP), Health, Belief and Finance (HBF), Public Speaking and Social Integration (PSSI), Sleep and Meal Pattern (SMP) and Strength of Social Circle (SSC). A total of five items were deleted from the health and wellness questionnaire due to very low factor loading, to

produce the Wellness Perception Scale (WPQ). It appears to hold considerable promise as a research instrument for identifying unexplored dimension of wellness as the concept is growing beyond the scope of current research studies as result of emerging wellness related issues. A qualitative research can complement and enrich this quantitative research study to further enrich and enliven the effort invested into this research work.

As a result of the study, the following are therefore recommended:

1. There is need for the educational stakeholders and policy makers for higher institution of learning to pay more clinical attention to the health and wellness needs of the students and other staff members of the academic community;
2. There is need to monitor and regulate the business and consumption rate of drug and alcohol in the academic community and increase the awareness level of health implication of drug and alcohol use and abuse;
3. There is need for enhanced financial support for the outstanding and less-privileged students in the academic communities in form of bursaries, financial loan scheme. Scholarship, cumulative grade point awards, entrepreneurial awards and so on, as the study has revealed that health, belief and finance could play a significant role in the wellness perception of university students;
4. The academic community should also play supportive role to the student in the area of public speaking and social integration in the right direction in such a way that wrong ideas are suppressed for right ideas to emerge. Students should not be silenced but guided in the mode of expression of their ideas and/or grievances.
5. There is need for academic community to employ every means of health promotion and awareness to foster healthy eating practices among the staff and students.

References

- Anastasiadou, S. (2006).). Factorial validity evaluation of a measurement through principal components analysis and implicative statistical analysis. In D.X.Xatzidimou, K. Mpikos, P.A. Stravakou, & K.D. Xatzidimou (eds), *5th Hellenic Conference of Pedagogy* (pp. 341-348). Thessalonika: Conference of Pedagogy Company.
- Cronbach, L. J. (1984). *Essentials of psychological testing (4th Ed.)*. New York: Harper & Row.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95,542–575.
- Dunn, H. L. (1961). *High-level wellness*. Arlington, VA: Beatty.

- Eisenberg D, Gollust SE, Golberstein E, Hefner JL. (2007) Prevalence and correlates of depression, anxiety, and suicidality among university students. *Am J Orthopsychiatry*. (77) 534–542.
- Hair, J. A. (1995). . *Multivariate Data Analysis with Readings*, p.373. . USA: Prentice-Hall International, Inc.
- Hettler, W. (1984). Wellness: Encouraging a lifetime pursuit of excellence. . *Health Values: Achieving High Level Wellness*, 8, 13–17.
- Hinds, W. C. (1983). *Personal paradigm shift: A lifestyle intervention approach to health care management*. East Lansing: Michigan State University.
- Institute, N. W. (1983). *Testwell*. . Stevens Point, WI: Author.
- Kaiser, H. ((1974). An index of factorial simplicity. *Psychometrika*, 39, 31-36.
- Kaiser, H. F. ((1960).). The application of electronic computers to factors analysis. *Educational and Psychological Measurement*, 20, 141-151.
- Kulbok, P. A. (1992). From preventive health behaviour to health promotion: *Advanced Nursing Science*, 14, 50–64.
- Nunnally, C. J. ((1978). *Psychometric Theory*. . New York: McGraw Hill Book Co.
- Organization, W. H. (1958). *Constitution of the World Health Organization*. Annex, Geneva, Switzerland: Author.
- Organization, W. H. (1964). *Basic documents (15th Ed.)*. Geneva, Switzerland: Author.
- Palombi, B. J. (1992). Psychometric properties of wellness instruments. , . *Journal of Counselling & Development*, 71, 221–225.
- Ragheb, M. G. (1993). Leisure and perceived wellness: *A field investigation*. *Leisure Sciences*, 15, 13–24.
- Services, U. D. (1990). *Healthy people 2000: National health promotion and disease prevention objectives*. Washington, DC: U.S. Government Printing Office: Author.
- Sharma, S. (1996). *Applied Multivariate Techniques*. USA: John Willey & Sons, Inc.
- Stock C, Küçük N, Miseviciene I, Guillén-Grima F, Petkeviciene J, Aguinaga-Ontoso I, et al. (2013). Differences in health complaints between university students from three European countries. *Prev Med*. (37)535–543.
- Walid El Ansari, Shokria Labeeb, Lawrence Moseley, Safaa Kotb, and Amira El-Houfy (2013). Physical and Psychological Well-being of University Students: Survey of Eleven Faculties in Egypt. *Int J Prev Med*. 4(3): 293–310.



Effect of Instructional Medium on Students' Performance: A Comparison of Reading and Oral Instruction in Nigeria

Katrina A. Korb ^{1,*}, Binfa Kelvin Gono ¹, Samuel Adekunle Jinadu ¹, Abangom Ruth John ¹, Gabriel N. Mwoltu ¹, Rimdan Nanle Oona ¹

¹ University of Jos [* Corresponding author: katrina.korb@gmail.com]

Abstract. Nigeria has a rich oral tradition. In the pre-literate Nigerian culture, knowledge and wisdom were shared through the oral methods of proverbs and storytelling. However, in modern formal education, knowledge is communicated largely through text. The purpose of this paper was to compare students' performance based on these instructional mediums. Two studies using a between-subjects experimental design were conducted among Nigerian university students. Both studies included two conditions: lecture (oral) and reading (text). In both conditions, the same content was presented. In the reading condition, students read the content as an article whereas in the lecture condition, students listened to the content as a lecture. Post-test examination performance was then compared. Both experiments found that reading resulted in considerably higher academic performance than lecturing.

Keywords: Instructional medium; Curriculum innovation; Teaching and learning

1 Introduction

In the modern world, most knowledge is communicated through text. Students, particularly in tertiary institutions, are required to learn primarily by reading textbooks and reviewing notes from class (McKeachie & Svinicki, 2006). In many tertiary classrooms, lectures are designed to clarify and supplement what students read in their textbooks, meaning that reading is the primary teaching method. However, learning primarily from a text requires a high level of reading comprehension because students do not just read the text, but also must learn new information from what was read.

In contrast to modern tertiary education, Nigeria's educational practices are historically rooted a rich oral tradition (Abubakar, 2011). In the pre-literate culture, knowledge and wisdom were passed down through the oral methods of

proverbs and storytelling (Kiarie, 2010; Omolewa, 2007). Oral tradition was used to teach history, culture, religion, philosophy, and character values. For example, the proverb, "If you refuse to be made straight when you are green, you will not be made straight when you are dry" is commonly used to emphasize the importance of early education. Folk stories, such as those about how things came into being, provided lessons in character and critical thinking (see *Why Mosquitoes Buzz in Peoples' Ears*, Aardema, 1975). Therefore, much of learning in Nigeria traditionally occurred through oral teaching methods.

Furthermore, Nigeria has frequently been criticized for having a poor reading culture (Griswold, McDonnell, & McDonnell, 2006). Most Nigerians rarely read, except to pass examinations in school (Fayose, 2004). Furthermore, literacy rates are low in Nigeria. In 2010, the global average adult literacy rate was 84%, whereas Nigeria's adult literacy rate was 61% (UNESCO Institute for Statistics, 2012a, 2012b). Nigeria even ranks below average in adult literacy rates compared to other countries within sub-Saharan Africa, which have an average adult literacy rate of 63%. Even amongst individuals who have completed schooling, reading comprehension is very low (Oyetunde, 2002). In other words, students may be able to read a text, but not gain much new knowledge from what they read. Indeed, students who do little independent reading outside of school typically have difficulties profiting from technical texts designed to teach content knowledge in school (Snow, 2002). Accordingly, it could be expected that Nigerian students may not learn well through reading.

The combination of traditional oral teaching methods, poor reading culture, and a low level of reading comprehension amongst Nigerian students may mean that Nigerian students learn more effectively through oral instructional methods, not reading as is expected by tertiary institutions. Therefore, the purpose of this study was to compare Nigerian students' academic performance when comparing reading (text) and lecture (oral) instructional methods. Academic performance was conceptualized in terms of two variables: recognition and retention. Recognition was measured by forced-choice items where students only had to recognize the answer. Retention was measured by open-ended items where students had to retain what was taught, and then recall it from memory. Furthermore, two affective variables of interest in the topic and valuing of the topic were also included as dependent variables.

1.1 Research Hypotheses

1. There is no significant difference between lecture and reading instructional medium on students' recognition (forced-choice items).
2. There is no significant difference between lecture and reading instructional medium on students' retention (open-ended items).

3. There is no significant difference between lecture and reading instructional medium on students' interest in the topic.
4. There is no significant difference between lecture and reading instructional medium on students' valuing of the topic.

This article reports the results of two different studies that test these same four hypotheses, but under different experimental conditions. The first study used a more controlled research design where the only difference between the two groups was whether the course content was communicated via lecture or reading. Based on the findings of the first study, a second study was conducted that had stronger ecological validity. The second study allowed students in the lecture condition to take notes as is typically done in lectures. In the second study, the lecture and reading conditions were controlled by the amount of time that students were allowed to study. The Methodology, Findings, and Discussion of these two studies are reported separately.

2 Study 1

2.1 Methodology

2.1.1 Research Design

The research design was a between-subjects experimental design with two conditions: lecture (oral) and reading (text). The exact same course content was given in two instructional mediums. In the reading (text) condition, students read the content in an article. In the lecture (oral) condition, students heard the content in a lecture, which was communicated orally to students verbatim from the text that was read in the previous condition. Since the content was identical in the two conditions, a comparison of student performance at the end of the study determined whether Nigerian students learn better by reading a text, listening to an oral lecture, or there was no difference in academic performance between the two.

The content of the course was positive psychology, which was used because it was a topic that was not covered in any of the participants' typical courses. This means that performance on the post-test would only be a result of what they had learned in the course of the experiment. Participants were randomly assigned into the two conditions using the hat and draw method. The four dependent variables included recognition, retention, interest, and valuing of the content.

2.1.2 Participants

The participants for this research were 140 psychology students enrolled in the 200-level experimental research methods course at the University of Jos, Nigeria. The University of Jos is a federal university in the middle belt of Nigeria, which draws students from all geo-political zones across Nigeria. The convenience sampling technique was used. A majority of the students were male (male=84, female=49, 7 missing) with an average age of 24.41 years.

2.1.3 Instrument

Academic performance was operationalized as the variables of recognition and retention. The first variable, recognition, was measured by ten forced-choice items measuring participants' understanding of the course content. Each item had four options apiece. The correct answer for each item attracted one point.

The second variable, retention, was measured by three open-ended examination questions based on the lecture. The marking scheme for these questions resulted in ten total points. Total scores were summed for both academic performance variables.

The affective variables, interest and valuing, were measured by seven items apiece from the Intrinsic Motivation Inventory (Ryan, 1982). For both sets of items, participants indicated how they felt about the subject matter (positive psychology) on a Likert Scale from 1 (not at all true) to 7 (very true). The seven interest items that measured participants' interest were designed to measure interest or enjoyment in a particular activity which, in this context, was positive psychology.

The valuing items assessed how relevant or useful a particular activity is to oneself which, again, in this context was positive psychology. Validity evidence for the Intrinsic Motivation Inventory has been gathered by McAuley, Duncan, and Tammen (1987).

2.1.4 Data Collection Procedure

A three-page article about positive psychology was developed that overviewed the history of positive psychology, operationally defined happiness, and outlined five strategies for improving happiness based on empirical research. This was used as the subject of the text that participants in the reading condition read and participants in the lecture condition heard orally.

The study took place in one class session. First, the hat-and-draw method was used to randomly assign all students to either the lecture or reading conditions. This resulted in a total of 70 students in each condition. The students assigned to the reading condition stayed in the classroom whereas the students assigned to the lecture condition were moved to a different, but similar classroom.

Once the participants in the two conditions were settled into different classrooms, a research assistant described the study procedures following a standardized script. Students were told a cover story that the purpose of the experiment was to determine how classroom atmosphere influences students' academic performance. Students were also falsely informed that their performance on the exam would affect their course grades to ensure that students were focused and paying attention throughout the course of the study.

Reading condition. In the reading condition, students were given ample time, about twenty minutes, to read the article on positive psychology independently. Research assistants monitored the room to ensure that the students were focused on the reading and did not take notes. Once students finished reading the article, they were asked to raise their hands. Then the research assistants collected the articles. This was done to ensure that the students in the reading condition did not use extra time to re-read the material as this would have biased the outcome of the study because these students would have been exposed to the content multiple times.

Lecture condition. In the lecture condition, a lecturer read the exact same article to the students. While the lecturer did not deviate from the text, he used voice inflection and eye contact to ensure that the students' attention was engaged. The lecture lasted for about twenty minutes.

Administration of Post-Test. Immediately after both conditions were finished, the instrument to measure the dependent variables was administered to students in both conditions. Research assistants monitored the classrooms to ensure students completed the instrument independently. The post-test took about twenty minutes.

After the examination, the two conditions were re-joined and a debriefing was done by the researcher. Students were informed of the real purpose of the study and assured that there would be no course credit given for their performance on the examination. The entire experiment took about forty-five minutes.

To protect the participants in the study, students voluntarily participated in the study. Anonymity was ensured by not allowing students to write their name on the instrument. Though a benign cover story was given for the purpose of the study, a complete debriefing was conducted with all participants.

2.1.5 Data Analysis

Independent samples t-test was used to compare performance between the two conditions. The t-test is used whenever two groups are compared on a continuous variable. The text and oral groups were statistically independent groups, which is why the independent samples t-test was selected.

2.2 Findings

A *t*-test was used to compare the lecture and reading conditions for all dependent variables. Cohen's *d* was used to calculate the effect sizes for significant results by dividing the difference between the means by the pooled standard deviation (Cohen, 1988). Large, medium, and small effect sizes for Cohen's *d* are greater than .80, .50, and .20 respectively (Cohen, 1992). The results are shown in Table 1.

Table 1: *t*-test Comparing Lecture and Reading Conditions on Dependent Variables

	Lecture		Reading		<i>t</i>	df	p	<i>d</i>
	Mean	SD	Mean	SD				
Recognition	4.67	1.66	6.14	1.94	4.81	137	<.001*	0.81
Retention	3.36	2.91	6.61	2.52	7.05	137	<.001*	1.19
Interest	5.29	1.41	6.04	1.02	3.57	137	<.001*	0.61
Value	6.25	0.83	6.45	0.79	1.41	136	.161	

**p* < .05.

The first hypothesis stated that there is no significant difference between lecture and reading instructional medium on students' recognition (forced-choice items). As can be seen in Table 1, the first null hypothesis was rejected, suggest that there is a statistically significant difference in recognition between students in the lecture condition and those in the reading condition, with the reading condition performing significantly better than the lecture condition. The effect size between the two conditions is large. The grading scale commonly used in Nigeria includes the following ranges: A (70-100%), B (60-69%), C (50-59%), D (45-50%), E (40-44%), and F (39% and below). The average test score on the recognition test for participants in the lecture condition reflect a "D" whereas the average test score for the participants in the reading condition was a "B".

The second null hypothesis stated that there is no significant difference between lecture and reading instructional medium on students' retention (open-ended items). From Table 1, this null hypothesis was also rejected, with a very large effect size. There is a statistically significant difference between lecture and reading as instructional medium on retention, with students in the reading condition demonstrating better retention compared to students in the lecture condition. The difference between the two conditions was larger than recognition. Students in the reading condition had an average retention score of a "B" on the Nigerian grading scale whereas students in the lecture condition had an average retention score of an "F".

The third hypothesis stated that there is no significant difference between lecture and reading instructional medium on students' interest in the topic. Results from Table 1 show that the null hypothesis was rejected. Therefore, the

difference in students' interest between the lecture condition and reading condition was statistically significant with a medium effect size. Students in the reading condition demonstrated greater interest in the topic compared to students in the lecture condition.

The final null hypothesis stated that there is no significant difference between lecture and reading instructional medium on students' valuing of the topic. The null hypothesis was accepted, so there was no significant difference between lecture and reading instructional medium on students' valuing of the topic.

2.3 Discussion

Results from the first experiment showed that reading as an instructional medium led to significantly better academic performance than lecture. In both recognition and recall examination questions, students who read the article had an average performance of a B, whereas students who received the information as lecture had an average performance of a D and F, respectively. Furthermore, students in the reading condition also showed greater interest in the topic of positive psychology than students in the lecture condition.

The outcome of this study was quite compelling. However, the experimental procedures led to a rather artificial learning situation. Students in the lecture condition were not allowed to take notes. Some research has shown that simply taking notes can improve learning (Kobayashi, 2005). Therefore, students may learn more from lecture when they are allowed to take notes, which is standard practice in tertiary classrooms.

To further test the effect of instructional medium on student performance, a second experiment was conducted to reflect a more realistic learning environment in order to improve the ecological validity of the findings. In the second experiment, time was controlled between the two conditions in that participants in both conditions were given 40 minutes to study, either through reading or lecture. The second experiment was conducted in the next academic year with students who were freshly admitted into the department and thus would not have been exposed to the study procedures.

3 Study 2

3.1 Methodology

3.1.1 Research Design

The same between-subjects experimental research design with two conditions of lecture and reading was used as Experiment 1.

3.1.2 Participants

The participants for Experiment 2 were 66 new psychology students enrolled in the 100-level history of psychology course at the University of Jos. The demographic characteristics were similar to Experiment 1 though students were approximately one year younger. A majority of the students were male (male=41, female=20, 5 missing) and an average age of 23.71 years. There were 31 students in the lecture condition and 35 students in the reading condition.

3.1.3 Instrument

The same instrument was used as Experiment 1 to measure the four dependent variables of recognition, retention, interest, and valuing.

3.1.4 Procedure for Data Collection

The procedures were similar to Experiment 1 with only slight modifications. Both conditions were given 40 minutes exactly to study. Students in the lecture condition were allowed to take notes during the lecture. After the lecture concluded, students were allowed to use the remaining time to review their notes (about 15 minutes). Students in the reading condition were also allowed to take notes on the article, and allowed to review the material as often as they liked within the allotted timeframe. At the end of 40 minutes, all students cleared their desks and the post-test was administered.

3.1.5 Data Analysis

The same method of data analysis was followed as in Experiment 1.

3.2 Findings

The results for Study 2 are presented in Table 2. Hypothesis 1 stated that there is no significant difference between lecture and reading instructional medium on students' recognition. The results were significant with a large effect size. This result provides further support that reading as an instructional medium enhances student recognition more than lecture. On the typical Nigerian grading scale, students in the reading condition scored an average of a B, whereas students in the lecture condition scored an average of a D.

Hypothesis 2 stated that there is no significant difference between lecture and reading instructional medium on students' retention. The results were significant with a medium effect size, also indicating that reading rather than lecture aids students' retention. Students in the reading condition scored an

average of an “A” whereas students in the lecture condition scored an average of a “B”.

Table 2: t-test Comparing Lecture and Reading Conditions on Dependent Variables

	Lecture		Reading		t	df	p	d
	Mean	SD	Mean	SD				
Recognition	4.68	1.70	6.63	2.39	3.78	64	<.001*	0.93
Retention	6.00	2.74	7.26	2.02	2.14	64	0.036*	0.53
Interest	5.90	0.96	6.12	0.99	0.91	63	0.366	
Value	6.50	0.66	6.46	0.99	-0.22	63	0.827	

* $p < .05$.

Hypothesis 3 stated that there is no significant difference between lecture and reading instructional medium on students' interest in the topic. This result was not significant. Therefore, the null hypothesis was retained. Hypothesis 4 stated that there is no significant difference between lecture and reading instructional medium on students' valuing of the topic. This result is also not significant. Thus, the null hypothesis is retained. There was no significant effect of instructional medium on either of the affective dependent variables.

3.3 Discussion

The purpose of Experiment 2 was to replicate Experiment 1 in a more realistic learning environment in order to improve the ecological validity of the findings, allowing students in the lecture condition to take notes and review their notes. To this end, time was the controlled factor between the two conditions of lecture and reading. The results of Study 2 largely replicate the findings of Study 1. In both studies, students who read the subject matter of positive psychology performed significantly better than students who listened to the material. Overall, the difference in academic performance between the lecture and reading conditions were smaller in the second experiment, when students in the lecture condition were allowed to take notes and study their notes. However, students in the reading condition still considerably out-performed students in the lecture condition even in the more realistic setting.

Though the research findings are mixed (see Bligh, 1998) there is evidence that in the West, students learn better when reading than through lecture (Hartman, 1961). Thus, the finding of this study that Nigerian students performed better when reading material than when listening to lecture is consistent with findings amongst other students around the world. However, this finding contradicted the original premise that motivated this study: that the combination of traditional oral teaching methods, poor reading culture, and a

low level of reading comprehension amongst Nigerian students may mean that Nigerian students learn more effectively through oral instructional methods. This study clearly refuted this premise: Nigerian students do not learn more effectively through oral instructional methods.

However, Study 2 did not replicate the significant difference between the lecture and reading conditions on the affective dependent variable of interest in the topic. In Experiment 1, students in the reading condition had higher interest in the topic of positive psychology than the students in the lecture condition. This finding is in line with Blight's (1998) conclusion that lecture is ineffective for inspiring interest in a topic. Whereas the formal instrument measuring interest showed no significant difference between the lecture and reading conditions in Experiment 2, casual observation of the engagement of students provided evidence that most students in the reading condition were actively engaged in the topic for most of the 40 minute period, whereas many students in the lecture period appeared disengaged from the topic, particularly toward the end of the 40 minute period. Further research should be conducted to determine whether instructional medium impacts students' engagement in learning.

Therefore, the findings of this study reveal that reading as an instructional medium is superior to lecture amongst Nigerian students. However, this does not negate the importance of lectures for Nigerian students. Indeed, there are a number of advantages of lecture as an instructional medium in tertiary education when compared to reading. Lectures allow students to ask questions when they do not understand the material, and lectures also provides a local context for information, neither of which can be done when reading is used as the exclusive instructional medium.

Thus, the combination of lecture and assigned reading for each lecture that is common in most Western tertiary institutions is likely the most effective model for maximizing learning. However, due to the paucity of reading materials available to both students and lecturers in Nigeria, many Nigerian classes draw primarily, and sometimes exclusively, on lecture as an instructional medium. The findings of this study provide evidence that lecture as the only instructional medium will likely have a negative impact on student learning, and perhaps even interest in the topic.

4 Conclusion and Recommendation

The purpose of this study was to compare Nigerian students' academic performance when comparing reading (text) and lecture (oral) instructional methods. Both experiments found that reading resulted in considerably higher academic performance than lecturing, with large effect sizes. There was also

tentative evidence that reading results in greater interest in the topic. Therefore, lecturers must ensure that reading assignments are incorporated in the course development to ensure that learning is maximized in tertiary education.

Since reading as an instructional medium was found to result in higher academic performance, lecturers should ensure that each lecture is supplemented by reading assignments to help students develop in-depth understanding of the topic. Due to the paucity of reading materials in Nigeria, lecturers must write high-quality textbooks that can supplement their lectures. Furthermore, the Government must make efforts to reduce the cost of importing textbooks.

Additional research should be conducted to expand the findings of this study. The population for the study consisted of university students, who are only the top minority of students throughout Nigeria. Perhaps the results would be different amongst a different population of students, including secondary school students or students at other types of tertiary students such as polytechnics. Because secondary school students are more representative of students throughout Nigeria, the original premise of this study may hold true.

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References

- Aardema, V. (1975). *Why mosquitoes buzz in people's ears: A West African Tale*. New York: Puffin Books.
- Abubakar, A. A. (2011). Proverbs as sources of philosophical ideas about African education. In A. B. Nsamenang & T. M. S. Tchombe (Eds.), *Handbook of African educational theories and practices: A generative teacher education curriculum* (pp. 67-76). Bamenda, Cameroon: Human Development Resource Centre.
- Bligh, D. A. (1998). *What's the use of lectures?* Exeter, UK: Intellect.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
- Fayose, P. O. (2004). *Not only books for Africa but a reading culture too*. Keynote address presented at the 29th International Board on Books for Young people (IBBY) Congress. Cape Town, South Africa.

- Griswold, W., McDonnell, E. M., & McDonnell, T. E. (2006). Glamour and honour: Going online and reading in West African culture. *Information Technologies and International Development*, 3, 37-52.
- Hartman, F. K. (1961). Recognition learning under multiple channel presentation and testing conditions. *Audio Visual Communication Review*, 9, 24-43.
- Kiarie, D. (2010). Reclaiming Africa's traditions in the arts and culture of words. Retrieved on August 16, 2010 from <http://artsociety.suite101.com/article.cfm/reclaiming-africas-traditional-culture-of-words>
- Kobayashi, K. (2005). What limits the encoding effect of note-taking? A meta-analytic examination. *Contemporary Educational Psychology*, 30, 242-262.
- McAuley, E., Duncan, T., & Tammen, V. V. (1989). Psychometric properties of the Intrinsic Motivation Inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, 60(1), 48-58.
- McKeachie, W. J., & Svinicki, M. (2006). *McKeachie's teaching tips: Strategies, research, and theory for college and university teachers*. Boston: Houghton Mifflin Company.
- Omolewa, M. (2007). Traditional African modes of education: Their relevance in the modern world. *International Review of Education*, 53, 593-612.
- Oyetunde, T. O. (2002). Second language reading: Insights from Nigerian primary schools. *The Reading Teacher*, 55, 748-755.
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43(3), 450-461.
- Snow, (2002). *Reading for understanding: Toward an R&D program in reading comprehension*. Santa Monica, CA: RAND.
- UNESCO Institute for Statistics. (2012a). *Adult and youth literacy*. Retrieved from: <http://www.uis.unesco.org/literacy/Documents/fs20-literacy-day-2012-en-v3.pdf>.
- UNESCO Institute for Statistics (2012b). *National literacy rates for youths (15-24) and adults (15+)*. Retrieved from: <http://unstats.un.org/unsd/demographic/products/socind/Dec.%202012/4a.xls>



Implications of Enhancing Access to Higher Education for Quality Assurance: the Phenomenon of Study Centres of Kenyan Universities

Florence M. Itegi ¹

¹ Kenyatta University [*E-mail: muitegi.ku.ac@gmail.com]

Abstract. This study sought to accomplish three objectives: to examine the expansion of access to university education in Kenya; to examine the implications of expansion of access for the quality of university education; and to develop a model showing interrelationships between the expansion of access and quality assurance, based on lessons learnt from study centres established by both public and private universities in the country. The study was based on literature review, which was augmented by key informant interviews, focus group discussions and observation. It revealed that the study centres marked a great stride in opening access to higher education, especially for the working class, and in increasing the number of graduates from secondary schools, provided facilities for face to face tuition and a range of benefits to their host communities. However, the centres also face difficulties in relation to physical structures, learning resources, staffing and retention of students.

Keywords: Massification; Study centres; Quality assurance.

1 Introduction

The world Tertiary Gross Enrolment was about 24% in 2005. However, participation substantially varied from region to region, ranging from 5% in sub-Saharan Africa to 75% in North America and Europe. Bahemuka and Brockington (2001) noted that approximately 30,000 Kenyan students were studying abroad with 60% in North America while 24% were in India, the remaining were mostly in Britain and other countries of which 90% were privately sponsored, while 10% received government scholarships. Total amount of money spent annually by Kenyans on university education abroad was noted to be a colossal amount. Despite the continuing expansion of tertiary

education world wide a relatively small share of the relevant age group has access to this level of education in developing countries. In Kenya the problem of access to higher education was compounded by the Free Primary Education in 2003 and the Free Day Secondary in with subsidized tuition programme that saw more candidates seeking higher education than ever before.

To enhance access to higher education universities in Kenya opened up centres to co-ordinate open and distance learning in various parts of the country in the 1990s but the response was not significant in helping to ease congestion in the main campuses, this was due to the fact that most learners in developing countries still believed in traditional methods of education where face- to- face mode is prevalent. This led to accelerated opening of study centres as satellite campuses in main urban centres in colleges, schools, church buildings or other establishments whenever concentration of students in those areas justify. However, the number of students in Open and Distance learning centres kept dwindling as student took long to complete their courses while others completely dropped out. This was followed by opening of satellite campuses by various universities in Kenya where face to face mode was initiated. With the rapid establishment of learning centres off campuses, the concern about the quality of higher education has been on the rise among various stakeholders yet no study has been carried out on the status and scope of activities in these centres. This notwithstanding it is not clear what respective universities are doing to regulate and improve quality of higher education in their off campus centres.

According to a case study of British Open University the university sets up study centres for open and distance learning programmes that were based in local colleges, schools or other educational establishments. These centres are opened on weekdays, evenings and sometimes on Saturdays as well. They provide facilities for students to meet with one another for discussions and mutual help for individuals and group discussions with a tutor counsellors and course tutors.

In those centres most students preferred to take part in their learning together to avoid the sense of isolation associated with correspondence students. Later this centres started to serve as a base for face to face tuition and were upgraded to provide a range of resources, most commonly a television, radio tapes of foundation courses, broadcasts and replaying facilities, reference materials, a common room and refreshments for teaching staff, a notice board on Open University events, internal advertisements and messages.

In Kenya both public and private universities that were initially established in main urban centres have expanded their operations to rural areas a phenomenon that needs to be investigated.

Higher education is no longer a luxury it is essential to national social and economic development. In the 1990s funding of post-secondary education in

Kenya became a problem and until then the funding of tertiary education in general and that of university in particular does not seem to be areas of priority for governments and donor funding. The students who for one reason or another may not be able to raise the fees should seek bursary or loans from the Higher Education Loans Board while institutions are expected to sustain their operations. Most universities have resulted to augmenting their financial base by generating the needed income locally. Many universities do so by offering extension studies through off campus centres which often boost their enrolments. However, the sudden increase in number of universities and their satellite campuses, proliferation of programmes and the unprecedented increase in student enrolments in these centres have not matched the infrastructure and human resource base needed to support the ever increasing demand for higher education. In addition there are concerns about their operations at a time when calls for enhancing quality of higher education in many African countries are evident.

This study describes the phenomenon of expansion of university education in Kenya in relation to demand, examines the implications of expansion of access in higher education to quality of university education and propose a model that can guide higher education development.

2 Methodology

The study adopted ex post facto design. Two public universities and one private university were purposively sampled. These are among the pioneers in establishing off campus study centres, especially in rural set up far from the capital city. A purposive sample of administrative and teaching staff and students from these universities was obtained. Data were collected using in-depth interviews, focus group discussion and an observation schedule which were designed to collect information on various aspects of the study centres. The in-depth interviews provided opportunity to collect detailed data that were validated to cover the study objectives and compare the respondents' opinions about study centres. Focused group discussion with students provided insights into some aspects that staff underrated but had significant impact on students' operations. The observation schedule helped to provide information especially on physical infrastructure to validate responses from the interviews. Secondary information provided vital information on relevant themes in comparing universities in Kenya regionally and international.

3 Phenomenal Growth of University Education

In Kenya with virtual achievement of universal primary education and expansion of secondary education the higher education sub-sector equally requires expansion. In any case sustained economic growth is very much dependent on generation of middle and high level manpower. In the past, access to education in Kenya has been wider at primary, medium at secondary and narrow at the tertiary level portraying an open cone shape against the demand for highly trained human resource for sustainable social and economic development. Hence, public private partnership is being encouraged in provision of higher education through variety of incentives including tax breaks on educational materials and bursary support for private and public universities. In contrast with previous practice, universities are permitted to expand enrolments or open up new campuses after it is evident they have capacity to accommodate increased student numbers (Mwiria et al., 2007).

More importantly future expansion of higher education will be expected to take into consideration regional representation and variety of Kenya's natural resource base in relation to variety of courses to tap the potential of such diversity. Mwiria et al. noted that day universities will also be promoted so that socially and economically disadvantaged groups will have greater opportunities to enrol. The Republic of Kenya Report on Totally Integrated Quality Education (2000) observed that private universities have come to play a critical role in taking a large number of students who qualify to attend public universities but are unable to do so because of the limited number of vacancies available in public universities.

Recently the Kenya government promised changes in higher education and appointed a team of experts to review the required changes. The team reported six areas for reforms including: governance and management structures, quality and relevance, expansion and integration, access and equity, finance and financial management, community service and engagement with society. The target was integrating the increasing number of private institutions with more established public ones and putting in place appropriate mechanisms to support private-sector participation.

Access to university education has also been enhanced by the introduction of bridging courses. These programmes provide remedial instructions in Mathematics, Science, Languages and other critical subjects to help these students gain access to mainstream university system. Many colleges and universities in Kenya offer certificates and diploma courses especially to professionals in various fields enabling them to enrol for degree courses. According to Schuller (1991) increased access entails making education available to a greater number of students from a range of social economic

backgrounds, through admission criteria, course organization and credit transfers.

In Kenya universities have enhanced access to higher education by locating campuses near the target populations. For instance JKUAT runs its course through various tertiary institutions under supervision of the main campus. University of Nairobi's college of Extra-Mural Studies has campuses in Mombasa, Kisumu, Kakamega, Nyeri, Meru, Nakuru, Garrissa, and Kisii. Kenyatta University had regional centres in all former provincial headquarters to manage its distance programmes in some of which have been upgraded to regional campuses that are fully operational in main urban centres like Nairobi city centre, Mombasa, Nakuru, Nyeri, Kitui and Kericho. Similarly universities located far from urban centres like Egerton University and Moi University have been compelled to set up campuses in main towns including Nairobi, Nakuru, Eldoret, Nyeri and Mombasa. Among the private universities Catholic University of East Africa with the main campus in Nairobi has established campuses in Mombasa Eldoret and Kakamega, while Mt Kenya University has campuses at Nairobi, Nakuru, and Mombasa among others.

In Britain a case study of British Open University centres revealed that limitations of rooms and the actual physical conditions varied enormously and made the establishment of a welcoming atmosphere difficult. Condition of rooms was not conducive especially to the learners with special needs and the elderly, distractions from external noise was evident and location of the building whether in sparsely or densely populated area determined the potential attendance. Also availability and pattern of public transport as those with frequent service to major catchment areas had better chance of success. When students develop a sense of identity regarding the centre as theirs, it becomes a social as well as academic meeting place. It was observed that extra-curricular activities played a critical role in the most active and sufficiently attended centres. In addition a great deal of success depends on local tutor counsellors' ability to organize activities and resolve problems as they arise in collaboration with the part-time lecturers the students meet in the course of their study. In Nigeria in a span of ten years the extension undergraduate programmes increased from 35 to 900 and post graduate from zero to 35. The increased enrolment posed a challenge for the respective institutions resulting to limited monitoring and the consequent insufficient or decrepit human and physical resources raising the issue of quality where most of such programmes are viewed as money spinning entrepreneurial initiatives (Ali, 1996).

In the Democratic Republic of Congo, like many developing countries higher education faces the challenge of responding to increasing demand while attempting to provide a quality education "The current situation is extremely difficult. Most universities, public and private, lack the necessary funds to provide basic educational infrastructure sufficiently spacious classrooms,

laboratories, equipped teaching hospitals, libraries, computers, and Internet access (World Bank (2000,18)”. In Kenya the case may be slightly better. However, most of the researches concentrates on the short comings and fails to highlight the achievements as evident in the move from centralized higher education towards decentralised provision of higher education in detached remote areas.

4 Findings

The study findings are organized in terms of expanding access; covering the main input indicators of universities. These include programmes, number of institutions, enrolment at various levels, faculty in terms of staff and resources available. Constraints mainly focused on overstretched staff and facilities and their implications on output while prospects focused on the benefits that have accrued from the study centres to various stakeholders and the pivotal role of ICT in their success.

4.1 Expansion of Access to University Education

Universities have increased in number. In the 1990s the number of both public and private universities increased from 10 to 50 in 2013. Most universities had witnessed growth by way of expanding their size to accommodate more students as well as opening new premises to enable them reach out to students in urban and remote areas nationally and in neighbouring countries. According to the Commission for University Education (2014) Chartered public universities in Kenya were 22 with 9 constituent colleges some of which have been upgraded to fully fledged universities, 17 private universities with 5 constituent colleges and 13 with letters of interim authority. The commission further encouraged foreign universities to apply for authority to collaborate with local universities.

All the universities in the study had opened multiple campuses in Nairobi and other main urban centres in Kenya with some operating campuses in neighbouring countries. However, the effort to enhance access has been experiencing challenges in form of teaching facilities and physical infrastructure which have been noted to be wanting. Some centres have only lecture halls with no libraries or laboratories. Also the opening of campuses has not eased congestion in main campuses. In a related study by World Bank (2000), expansion of higher education had produced many consequences. Many institutions had grown in size transforming themselves into mega universities; new types of institutions had been born with new providers entering the higher

education sector and a range of vocational professional institutions to complement the traditional universities.

The study found that the centres established by various universities were offering undergraduate and postgraduate programmes. Undergraduate courses cover Diploma and Bachelor courses while postgraduate courses cover postgraduate diploma, masters and PhD programmes in public universities. The administrators were quick to report that the undergraduate programmes had high enrolments as compared to post graduate programmes. In view of one of the administrators in extension studies; Increased enrolment in undergraduate level can be attributed to “ the demand for higher education in the country especially because higher education is a major component in acquiring a good job in this country” In addition majority of the students are straight from secondary schools where increasing numbers have been witnessed in the recent years especially with the launch of Free Primary Education followed by the Free Tuition Secondary Education and the next obvious level for them is university education especially if they are qualified. Even with the established campuses it was observed that output in research still remained low. Very few Doctoral students have been enrolled in these campuses, an indication that universities still have low output in research which is a key ingredient for social economic development of the region. Cleote, Bailey and Maassen (2011) established that research output in African universities is low owing to the number of publications and few graduates with Doctoral degrees.

On the same note an increasing number of working class students were observed. According to one of the academic staff:

Among the working class there seems to be a major trend for acquiring education – at whatever level – and many Kenyans especially adults are going back to school even if they begin from Certificate or diploma level to ensure they have higher education especially those who missed the opportunity earlier due to limited access. Since majority of Kenyans had left education after the secondary cycle in the 8-4-4 system or A- level for those in the former system. Consequently undergraduate education programmes seem to pick quite first at the centres in rural set ups.

Majority of students were enrolled in diploma and first degree courses as opposed to post graduate studies. Levy (2015) established that many countries are struggling to guarantee access to predominantly younger population.

The courses are offered on a flexible mode of delivery: Saturday only, evening, one day a week, two days a week, school based which runs during the regular school holidays targeting teachers, The e-learning programmes are in process to reach out for learners who are not able to access the study centres but can participate in interactive sessions through various forms of media. It is

notable that mature learners who are working are the majority especially in the evening and Saturdays' only courses.

In view of student enrolments it emerged that enrolments had significantly increased in extension as compared to full time courses in the main campus especially in private universities. For public universities centres started with low numbers and experienced gradual growth with time as students still valued admission to main campuses as compared to satellite campuses. Students especially secondary school leavers viewed admission to main campuses which are mainly located cities to be more prestigious as they were reputable and endowed with more resources, better human resource, infrastructure including hostels and libraries and recreation facilities. Agarwal (2015) argues that even with differences much lower there is competition among students for top institutions based on reputation and perceptions.

With regard to facilities administrators acknowledged that some of the satellite campuses had received overwhelming numbers putting strain to the limited facilities. For the administrative staff they opine that initially it was very challenging for registry staff to move to the off campuses and effectively offer this service due to the constraint of distance, differences in sessions and students coming from interior regions were challenged often demanding an extension of registration period. Without on-site offices, any student who would miss the registration day, for whatever reason would travel to main campus to register. This contradicts the Commission for University Education (2014) guidelines in Kenya that campuses should provide students with services like sports facilities, counselling, indoor games, health unit, worship rooms and eating places. A study on Makerere in transition observed that massive increase in enrolment had not been accompanied with increased improved facilities. Notwithstanding, the pressure of work staff and faculty were grappling with (Nakanyike and Nansozi, 2003).

Among the key indicators of performance in higher education is graduation rates of students enrolled in different programs. In relation to retention of students they observed that among the reasons causing students to drop out; majority dropped out due financial related reasons, while a smaller number among the employed would abandon courses due to deployment to different parts of the country which was viewed as common with government employees, a few students would also discontinue their studies due to low capacity to engage academically resulting to low grades thereby failing to meet the institutional set standards, in other instances students would register but discontinue due to job demands that cannot allow them to fit in any of the provided modes especially those working for small private companies which do not provide leaves with pay and employees worked to late hours in the week and on weekends. However, it was observed that over 90% complete their studies successfully. Agarwal (2015) called on universities to develop specific

programs to guarantee not only access to students of diverse backgrounds but also success for every student, reducing failure and dropout rates without compromise to quality of degree awarded.

With reference to composition of students' study centres, outside the capital city Nairobi hosted mainly Kenyans from rural regions while the main campus centre had students from diverse nationalities ranging from the US, Spain, Nigeria, Ghana, Cameroon, DRC, Rwanda, Tanzania, Southern Sudan, Ethiopia and Eritrea among others.

The extension staffs were of the opinion that the management seeks to locate centres in premises usually church or college facilities preferably within a town or its environs with ample space, conference halls/classrooms as well as residential facilities, (accommodation and meals) for both teachers and students, rooms that can be used for Library/IT laboratories, and offices in future. Preferably a centre with potential for growth in terms of physical development and reliable transport hired on contract.

On establishment library facilities were gradually developed by utilizing available rooms which are modified to suit the purpose. Volumes of text books and other related library resources are availed guided by the programmes on offer and/or courses on offer at the centre. Other resources include DVD's, on line journals and e books. For teaching staff as many as 15 books on 'one month loan' are availed. Extension students access all the above resources as well. To ease the difficulties in handling their course assignments the main campus library extends special loans to the extension students who can borrow books for a whole month and can renew books on line or just through a text message. However, the part time instructors expressed concern that sometimes they have been forced to obtain relevant course materials from the main campus library, which they provide for students to photocopy to get going. This is common with first groups in various programs whereby key reference materials are missing from the off campus centres' resources rooms. This is contrary to conditions in many developing countries where "in general students have no textbooks, and professors must dictate their notes or copy them onto a blackboard. The majority of schools have no library, no telephone, and not a single computer that students can use". According to World Bank (2000), schools in the DRC share a number of serious problems. The DRC as a whole lacked sufficient resources to provide adequate support to faculty.

As concerns the faculty fulltime staffs mainly serve in the main campus. However, depending on the workload, they are also deployed to the out-of-campus centres. The ratio of fulltime to part time academic staff was found to be at 1/3 as reported by administrative staff;

We have more part teachers serving in the off campus centres and some of the part time teachers also get teaching assignments in the main campus. Regular faculty members are also assigned extension classes – although the

number willing to teach evening and school based is small as part of their regular workload. However, if a regular lecturer has overload by teaching an extension class, he/she gets paid for the extra course (s) taught. The extension staff were of the opinion that many faculty members were sceptical and unwilling to teach a course in the study centres. Some centres were operating through the presence of part time teachers only. It was equally difficult to 'convince' officers from accounts and registry to go to these centres to collect money and carry out registration in the study centres respectively as they felt overstretched. These responsibilities were left solely on the extension office which had few staff members to cope with the needs of growing number of students.

From the foregoing the issue of covering the required course hours is not guaranteed specially with the part time teachers mainly drawn from regular staff in other universities. From the students the study established that "punctuality is also not guaranteed as well and as a result students have often complained to the management in this regard". This raises issues of whether the content was adequately covered and whether the students have been exposed to required guidance. There were cases where courses had been rescheduled due to unavailability of teachers in some technical courses due to inability of part-time lecturers to cope with the demands of their regular engagement as retaliated by most staff. However, it was noted that the inadequate number of lecturers in technical and advanced level was a country wide problem and to some extent international.

4.2 Challenges

Increasing student enrolment has overstretched the capacities of libraries, lecture theatres, laboratories and the faculty. In public universities it has been observed that library capacities serve even five times more than the student population they were meant to serve. It is in the light of this that libraries at Kenyatta and Nairobi Universities have expanded with computer units that allow staff and students remote access to digital resources. Among the recent developments Kenyatta University established her "Post Modern" library and a "Mute Court" to match increased enrolments and variety of programmes providing the state of the art services to both local and international students.

Extension studies being a new phenomenon faced challenges ranging from staff, infrastructure, institutional support, students community acceptance and course material development. In regard to faculty in one private university coming from an initially donor funded and church sponsored programmes the faculty members were used to the comfort zone and were not willing to welcome the idea of people learning outside the perimeter fence of the main

campus and they were hostile towards extension studies. This hostility became a real threat to development in extension studies centres. At some point “some HODs were highly suspicious and were unwilling to assign their fulltime teachers to extension studies neither giving the way forward”. More often courses were delayed as they looked for part time teachers, asked them to fill application forms and requested the institutional management to process their files urgently. In many cases they depended on marginally qualified lecturers who were readily available.

The extension staffs were emphatic on challenges related to condition of lecture rooms “in some cases we have had to request for renovations to be carried out in or order for the rooms to suit the teaching learning requirement/environment in terms of ventilations, opening of doors and windows that are in many cases inadequate. Many times the staff had to contend with complete absence or inadequate basic teaching/learning components like white boards/flip charts and projectors. However, this is not a problem of campuses in Kenya alone. For instance in South America some institutions have had to stretch their organizational boundaries, giving birth to “mega-universities” such as the National University of Mexico and the University of Buenos Aires in Argentina, each of which has an enrolment of more than 200,000 students. In many instances expansion, both public and private, has been “unbridled, unplanned, and often chaotic. The results—deterioration in average quality, continuing interregional, inter-country, and intra-country inequities, and increased for-profit provision of higher education could all have serious consequences (World Bank 2000, pg. 27)”. In a related discussion Lane and Kinster (2015) established that 18% of institutions had rented their campus space and that in some cases multiple institutions could rent similar space in same building giving students academic options to choose from. However, this served as transitional phase as institutions planned to build their own campus.

Learners have also had their share of challenges. Many learners expressed concern that quite often they feel orphaned as the teachers are too far and inaccessible at times when they need their assistance to meet their individual needs. They also felt detached from the institutional warmth and lack sense of belonging. According to the coordinator of extension studies in one of the universities “some ensure they visit the main campus before their graduation to have a feel of the institution they claim to belong to”. They also feel isolated from their fellow students when off session and do not have the advantage of group discussions. Many students lived in rural set ups where internet facilities are not accessible this complicates their effort to access relevant learning resources in form of e-books or journal articles especially in centres that have no adequately equipped libraries. Lack of infrastructure frequently caused

students to study humanities and arts resulting to educated unemployment (Levy, 2015).

This amounts to long duration in completion of courses especially research projects where they lose contacts with lecturers and other students necessitating delays. In Botswana the thinking behind the study centres was to set up well lit and comfortable place to study away from homes where students were distracted from their studies. The centres were aimed at making students feel they are members of a larger community especially with the presence of tutors to respond to their problems. This encouraged students to continue with their studies as compared to learning through correspondence.

Initially the centres were managed from the main campus with the implication that without support staff the centres remained closed for long periods with no one to handle day –to-day correspondences between students and the institution and many questions remained un answered slowing down students' progress. However, with increased enrolment the centres have had to engage support staff to manage and facilitate operations in relation to staff and student matters.

4.3 Prospects of Study Centres

The centres provide face to face tuition which most students preferred so as to take part of their learning together, engage in discussions, and consult lecturers gaining a sense of belonging. They however, provided golden opportunities for working students to pursue educational aspirations as they work especially in the case of courses offered in the evenings, Saturdays, school based, and one day a week “providing education at our door step”. They have also enhanced development in the community as highlighted by extension staff:

The centres mainly engage both teaching and support staff locally and provide learning resources for the local community. The centres' library remains open for public at affordable rates. They provide a golden opportunity for many rural community members who had missed out on higher education for a long period because they were not able to move to mainstream universities mainly located in Nairobi and other major towns. They have also facilitated the physical development of these regions where the centres are located.

On a similar note one respondent reiterated that “the campus has grown from a consistent enrolment of about 100 students to currently over 600 in our study centres”. The institution has made an impact in building the human resource capacity in Kenya, Africa and the world through its alumni more so among the rural groups that have been marginalized in access to higher education. Through the centres the institution has participated in creation of employment

through engagement of more faculty and support staff in phase of increasing number of students. The institution has also gained popularity in the regions that host the centres an important step in boosting the institution's financial base

As pertains to the role of ICT in development of learning centres, the recent advancement in technology offers more options for delivery and receiving education over geographical distance paving way for more opportunities in study centres without necessarily spending more on physical facilities. Staff in extension study acknowledged that management of students/staff records was made easier and coordination of staff/students activities through emails and mobile phones has gone further to ensure effective flow of information. They further reported that the institution have email accounts for all students where they can instantly access information on registration and any other information relating to their courses. The role of ICT in Teaching and learning cannot be under estimated "there are already attempts in applying interactive modes of teaching and learning where some lecturers use the e learning platform in the area of content, delivery, issuing and delivery of assignments making extension studies more convenient". Mobile phones information transfer in teaching and learning between lecturers and students is also another mode that is currently being used. The staff further observed that some lecturers are using projectors for power point presentations and effort was being directed to exploring e learning platform to cater for students in more diverse regions. It was on this line that Kenyatta University opened the Digital School where use of multimedia is making learning interesting and flexible for working students and those in remote locations.

It was further noted that advances in information technology, meanwhile, have made this ever-increasing volume of knowledge more accessible, effective, and powerful. The Internet, in particular, means that more knowledge than ever is in circulation and for those who have the skills to use it have access to valuable resource locally and at international level.

5 Conclusion

Evidently many Kenyan universities have established study centres or campuses in main urban centres. These centres as a more widespread phenomenon now in Kenya have been faced with various challenges, they may not have achieved the required in terms of material and human resources, however, they have provided a platform for higher education access especially for initially marginalized groups. These centres have enormous potential to provide higher education programmes at various levels. The centres have

created economic hubs where business community have also set up businesses to cater to growing demand for goods and services among students and staff creating employment opportunities. To achieve their vision Universities should explore alternative funding, integration of better planning and efficient management to promote access and improved quality of higher education for sustainable development of the nation, the region, and beyond.

6 Recommendations

In view of foregoing the study recommended more varied modes of funding higher education through partnerships with government and non-governmental organizations to enhance more access especially to the disadvantaged groups. More investment is critical especially in ICT which forms the pillar on which future successful higher education lays and especially for the study centres which are getting overwhelmed in terms of physical facilities in face of limited donor funding. Internet based technology is the vehicle to reach a wider range of students in remote locations as well as the urban poor in low income areas. Accreditation of institutional facilities and programmes by respective national bodies like Commission for University Education in Kenya will play a vital role in effort to improve the quality while expanding access which is equally important in promoting social and economic development of this country. This must be complemented with establishment of quality indicators and instruments to measure them at institutional level that are continually reviewed and publicized in all functional departments.

To succeed in opening access to meet the ever increasing demand partnerships at local and international levels are critical in mobilizing resources needed for transformation of higher education. Such partnerships entail cooperation and collaboration of state institutions, universities, students, private sector organizations, professional bodies, communities and civil society and individual experts. This will help universities to consider basic requirements in their off campus centres like physical infrastructure, library facilities, lecture rooms and faculty members matching launched programmes. They can also explore possibilities of partnering with existing institutions and local communities. In such environment faculty and students will be able to engage in teaching and learning, research and community service. Essentially students will be able to graduate in set timelines encouraging more students to enrol. This is will definitely lead to individual students, benefits, employer satisfaction and the general social, economic and political development at national, regional and global level leveraged on human capital and innovations to solve problems affecting modern society. There is need for a coherent model to enhance higher education development creating frontiers of knowledge,

research and community service as compared to the current haphazard development where many have opened campuses as quick fixes for generating extra income as illustrated in the proposed model Figure 1.

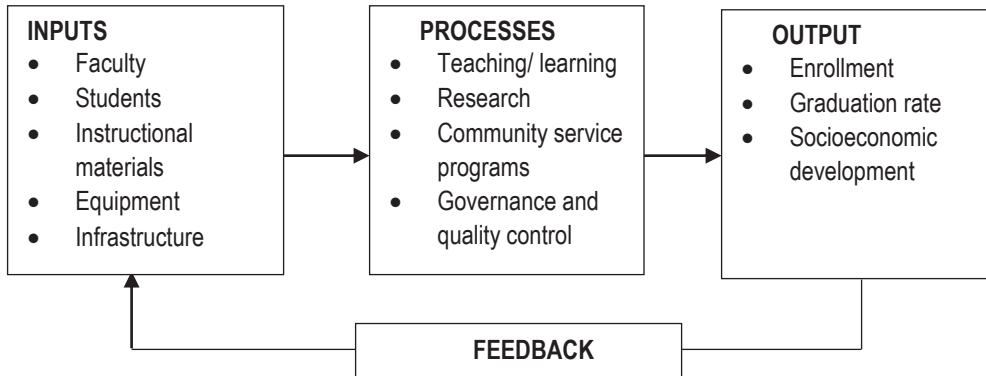


Figure1: Model for improving Quality in Higher Education

A critical examination of trends in higher education development reveals that it is also possible for institutions to cooperate with others in specific regions whereby they can share human, physical capital, knowledge and ideas. There is need to move from competition to cooperation forming learning centres where computer laboratories and libraries are open to all students.

References

- Ali, A. (2012). Academic Standards of Extension and Satellite Programmes of Nigerian Universities: Management and Control. Nsu'kka: University of Nigeria (<http://www.col.org/forum/PCFpapers/ali2.pdf>). Retrieved February, 2012.
- Agarwal, P. (5015). Next Two Decades of Higher Education: A Developing Countries Perspective. Symposium Essays. HE in Developing Countries. Pdf Retrieved March, 2015.
- Bahemuka, J. M. and Brockington J. L. (2001). East Africa in Transition: Communities, Cultures and Change. Nairobi: ACTION.
- Cleote, N., Bailey, T. and Maassen, P. (2011). Universities and Economic Development in Africa. CHET (www.chet.org.za). Retrieved January, 2013.
- Commission for University Education (2014). Universities Authorized to operate in Kenya at www.cue.or.ke re.
- Handbook of Research for Educational Communication and Technology: History of Distance Education, <http://www.aect.org/edtech/ed1/13/13-02html>.

- Lane, J and Kinster, K. (2015). Models of International Branch Campus Ownership. IHEpaper.pdf.
- Levy, D. C. (2015). Do Not Fall for It. Albany University. New York. Higher Education Quality. Pdf. Retrieved January 2015.
- Mwiria, K. Njugunah, N., Charles, N., Douglas, O., Violet, W. and Daniel, W., (2007). Public and Private Universities in Kenya. Nairobi: East African Educational Publishers.
- Nakanyike, B. and Nansozi, K. (2003). Makerere University in Transition (1993-2000). Kampala: Fountain Publishers.
- Republic of Kenya (2000). Totally Integrated Quality Education. Nairobi: Government Publisher.
- Schuller, T. (1991). The Future of Higher Education. Buckingham: Open University press.
- World Bank. 2000 Higher Education in Developing Countries: Peril and Promise. The Task Force on Higher Education and Society. Washington, D.C.



Educational Ergonomics in Higher Education Institutions in Nigeria

Uche C. M. ^{1,*}, Okata Fanny C. ¹

¹ University of Port Harcourt [* Corresponding author: nezenwam@yahoo.com]

Abstract. This study focused on investigating the ergonomics and ergonomic considerations of learning environments of higher education institutions (HEIs) in Nigeria. It adopted a descriptive survey design. Population of study comprised all the three universities in Rivers State and a total of 136 lecturers, 230 students and 6 staff of works departments constituted the sample. Four research questions and one hypothesis guided the study. Data was collected using a researcher-constructed questionnaire entitled Educational Ergonomics in Higher Institutions questionnaire (EEIHQ). An observation checklist and interview schedules were also used. The instrument was validated by experts and its reliability index was established at .75 index using Pearson Moment correlation coefficient. Mean scores were used to answer the research questions while the z-test was used to test the hypotheses at the .05 level of significance. The findings were that school buildings and other teaching and learning facilities in the universities are ergonomically below standard and unsafe. Recommendations towards improvement are made.

Keywords: Physical facilities planning; Ergonomics; Quality assurance

1 Introduction

In the wake of globalization, every aspect of the human life – science and technology, culture, economic, environmental, social and political has undergone tremendous transformation. Education and educational institutions are vehicles that propel the rapidly changing world and its new ideas and demands, and therefore must constantly and continuously undergo changes and improvement both in its curriculum and learning environment. With the explosion of information and global competitiveness, the nature of teaching and learning is rapidly changing in order to remain relevant, competitive and be conformed to the current dispensation. It becomes very necessary and

imperative therefore for teaching and learning environments to be designed to fit its users – students and lecturers, as teaching and learning cannot take place in isolation of an enabling and safe environment.

Ergonomics is that science of making jobs and environment fit the worker or their users. Noe, Hollenbeck, Gerhart & Wright (2004) define ergonomics as the study of the interface between individual's physiology environments. The goal of ergonomics is to minimize physical strain on the worker (or the users of the environment) by structuring the physical work environment around the way the human body works. Ergonomics focuses on outcomes such as reducing physical fatigue, aches and pains, and health problems. Ergonomics is aimed at engineering products and the environment to meet the comforts and health of the individuals, human beings directly involved in its utilization.

The theoretical framework used for the study is the Normative Theory of Service (NTS) by Bammer (2002) which states that knowledge and tools can be used in producing the service especially for optimizing it or planning improvements to it and these should be made sufficient to workers for maximum productivity. Teaching and learning outcomes can be greatly optimized in the higher institutions of learning if the facilities, equipment, buildings and the likes are adequately provided and improved upon by designing them in such a way that they fit the health and safety of its users – ergonomics. When this is so, productivity in terms of quality of outcomes will be greatly enhanced. Educational ergonomics requires that the school administrator provides environment that will suit teaching and learning processes as well as ergonomically consider the health and comfort of the key players and its users – lecturers and students.

Education, as has been widely accepted by nations all over the world is the bedrock of national development. The higher institutions are the nation's manpower development storehouses where the dreams and aspirations of a nation especially like Nigeria is being translated into realistic goals and being actualized. The objectives of education can only be achieved in a comfortable and safe teaching and learning environment. Teaching and learning environments in higher institutions must be designed in such a way that it matches the capabilities, limitations and the needs of the users. A lecture room with no seats, no lecture, highly placed chalkboards, where the lecturer will have to constantly strain to write on it, broken ceilings and leaking roofs of buildings, inadequate lighting provisions, unpolished floors with rough and cracked surfaces, poorly ventilated classrooms, lack of toilet facilities etc. does not conform to ergonomic standards and not safe for use by the users as it will affect their physical health conditions. When work environments are ergonomically designed in such a way that the safety and health of the employees or the users are put into consideration, then it will become user friendly and enhance efficiency of work and productivity.

Quality of teaching learning environments of any institution of learning, in terms of conformance to standard and safety of purpose is a direct determinant of the quality of the products or graduates from such institutions. According to Ebong (2006), the standard of the environment in which teaching and learning take place helps to determine the progress or failure of the school endeavour. If the quality is high, it will manifest in the products (graduates) and if not, it will reflect on them. Quality in teaching and learning environment refers to the elemental components; physical, internal, social and so on, and in terms of physical, it relates to classrooms, libraries, workshops, lecturers offices etc. The environment in which teaching and learning process takes place can determine the satisfaction derived by students, teachers, parents and the general public.

The International Ergonomics Association (IEA) divides ergonomics into three broad domains: physical ergonomics, cognitive ergonomics and organizational ergonomics. Physical ergonomics is concerned with human anatomical issues such as workplace layout, working posture, safety and health issues. The cognitive ergonomics is concerned with mental processes and handless issues like mental workload, decision making, skilled performance, human – computer interaction, stress etc. while organizational ergonomics deals with issues on socio – technical systems such as organizational structure, policies and processes (communication, resource, management, quality management, teamwork, workplace design etc.). For the purpose of this work, educational ergonomics which is the science of applying ergonomics to education, will be considering only the domain of physical ergonomics of learning environments of higher institutions in Nigeria with focus on those in Rivers State (Southern part).

Ergonomics is concerned with the ‘fit’ between people and their technological tools and the environment. It considers the user’s capabilities and limitations in ensuring that tasks, equipment, information and the environment suit the user. The study reviews the state of teaching and learning facilities their status and conformance to ergonomics and to identify areas of non – conformance with a view to addressing it so that the objectives of higher education can be achieved. Odejele (2002) observed that in Nigeria, there is poor maintenance culture, hence facilities in most of the schools located across the country are in dysfunctional state. According to him, there is need to maintain school facilities in such a way that they will not constitute hazards to the health of the teachers and learners. Onyekwelu (2002) opined that the educational industry is one of the largest sub-sectors in Nigeria economy and so government cannot fold her arms and watch the existing structures in the educational system collapse. From the foregoing, teaching and learning facilities are of critical importance in education and for it to be functionally effective it must be designed to fit the users in order to encourage students to be willing to learn and the lecturers to be able and willing to teach. When

conditions of work as regards to health hazards are not considered, as well as safety conditions and provisions, the users will be discouraged and the willingness to teach and study gradually diminishes. This is because matters of health and comfort are of prior importance to a man.

Hanushek (2009) observes that some schools in the third world attract better teachers when they create a more pleasant and safe work environment. Good ergonomics can be used as a strategy to remain best workers, boost morale and even enhance productivity. Ergonomics can help reduce cost by improving safety (International Ergonomics Association, 2000). Pleasant work environments includes environment where the amenities provided for teaching and learning meet their specified needs and serve their purposes to enhance teaching and learning in a safe and healthy way. Teachers in such environment put in their best, learners optimize their abilities, productivity is consequently increased, and educational objectives are attained quicker. Ergonomics is aimed at re – engineering products and the environment to meet the comforts of the teacher and learner. Ergonomically considerations are about determining the extent to which the comfort of teachers and learners can help them achieve the objectives of Education.

In the present age of globalization, educational systems all over the world are re–designing and transforming both in content and context and making their education more relevant and competitive to be able to fit into the global environment. Ergonomics works to minimize physical strain on the worker by structuring the physical environment round the way the human body works. The design of chairs and desks to fit posture requirements is very important in teaching and learning places particularly in the classrooms, offices, laboratories, libraries etc. Giving ergonomic consideration to school environment reduces number and severity of communicative trauma disorders (injuries that result from performing the same movement over and over), lost production time and restricted duty days. The environment where teaching and learning process takes place needs not be just conformable but also meets the physical and health needs of the teachers and students. When this is not so, excuses, absenteeism, turnover, as well as health challenges become the order of the day. Examples of ergonomic considerations in design of teaching learning facilities include adjusting the height of a computer keyboard in a computer laboratory which minimizes the occupational injuries such as carpal tunnel syndrome. Inadequate lighting systems in halls and classrooms, offices, laboratories, increased unwise levels of machine in workshops and near buildings where teaching and learning process takes place, can result to health problems of the eyes and ears respectively.

When the educational environments and its facilities become health threats probably due to their design or their present state of dilapidation and disrepair, teaching and learning process cannot take place. When teachers have to suffer

from ill – health resulting from their work environment, and students find it difficult to learn effectively due to the poor state of facilities, the educational process suffers. No wonder, the brain drain syndrome affecting the institutions of higher learning in the country. Environmental designs to suit the needs of professional users needs a combination of all professionals e.g. in education – the teacher, learner, architect and planners should be involved (Altaman 1975). Zeisel (1975) identified user needs to be: “*Those characteristics required of an environment to permit the completion of activities planned typically, undertaken in a special setting*”.

In playing, the ergonomics contribution an expert advice is needed and very importantly, to identify user needs so that the system recognizes and gives consideration for these user needs and the physical factors that influence them.

Agu and Shonekan (1997) regretted the prevalence of poor teaching and learning facilities, inadequate accommodation and ill – equipped laboratories. Chukwuemeka (2000) opines that science teachers in Nigeria are dissatisfied with facilities available for the performance of their task. Uche, Okoli and Ahunanya (2011) found out that the infrastructural development in higher institutions is of low quality and not student friendly. Inadequate working materials, poorly designed and unsafe laboratories and workshops, lack of basic facilities, seats, tables, equipment, inadequate space as well as large class sizes have become a common observation in higher institutions of learning. The possible result of this state of affairs is poor achievement in science and technology and turning out of graduates who cannot meet up with society’s needs and demands. McVey (1989) states that teaching/learning environments must be designed in such a way that learning may proceed with minimum stress and maximum effectiveness. This study therefore focused on the ergonomics and ergonomic considerations of learning environments of the three higher institutions in Rivers State (One University of Education, one specialized University and one traditional university).

1.2 Statement of the Problem

If the teaching/learning environment lacks proper planning and ergonomic consideration from the onset, educational goals will not be achieved. Teaching and learning process can only be enjoyable when the available facilities are adequately safe and suitable for the users. It is therefore imperative that ergonomics of teaching and learning facilities consideration and standards are strictly adhered to in planning, implementation and maintenance of the facilities. This study therefore investigated the ergonomics and ergonomic considerations of learning environments of the higher institutions in Rivers State of Nigeria. The main areas of focus addressed were: the ergonomically safety considerations of school buildings and teaching – learning facilities; the

safety provisions made; the regularity of maintenance services available for the learning facilities; the extent to which the facilities are fit for the users in the higher education institutions.

1.3 Purpose of Study

The main purpose of this study was to examine the ergonomics and ergonomic considerations of higher institutions in Nigeria, with focus on Rivers State. Specifically, the study was conducted to investigate.

1. The ergonomically safety considerations of school buildings and teaching – learning facilities.
2. The safety provisions available in the building and learning facilities?
3. The regularity of maintenance services available for the learning facilities.
4. The extent to which the facilities are fit for the users in the higher institutions.

1.4 Research Questions

1. How ergonomically safe are the school buildings and teaching learning facilities in the Institution
2. What are the safety provisions available in the building and learning facilities?
3. How regular are the maintenance services available to the learning facilities?
4. To what extent are the facilities fit for the users in the higher institution?

1.5 Hypothesis

There is no significant difference in the mean ratings of male and female students on how safe the buildings and learning facilities are in the institutions.

2 Methodology

The study adopted a descriptive survey design. The aim is to describe the current status of ergonomics and ergonomic considerations of teaching – learning environments in higher institutions of learning. The population of the study comprised all the three universities in Rivers State – one University of Education, one specialized University and one Traditional University. About 370 lecturers, 2300 final year students from the Faculties of Education, Humanities/Arts and Engineering, as well as 60 staff of the works department of the three Universities were used to generate the data. A total of number of

people used was 2730 out of which 372 were selected as sample size of the respondents, which is about 20% of the entire population. A simple random sampling technique and purposive balloting were used in selecting the sample of the respondents. Out of the 372 respondents, there were 136 lecturers, 230 students and 6 staff of works department constituted the sample size for generating data. The instruments used for the study include a 25 item questionnaire titled Educational Ergonomics in Higher Institutions Questionnaire (EEHIQ), Checklist Observation and Interview schedule. Content validity of the instruments was carried out by experts in the field while the reliability was tested using the Pearson Product moment correlation-co-efficient at 0.75 reliability index. Instrument was administered by the researcher and a return rate of 93% was recorded. Mean scores and z – test were the statistical tools used to analyse data at 0.05 significant – level.

3 Results

Research Question 1: How ergonomically safe are the school buildings and teaching learning facilities in the Institution?

Table 1: Mean scores on Ergonomic Safety of Facilities in the Institutions

Facility	Lecturers		Students	
	Mean	Remarks	Mean	Remarks
School buildings	2.41	Unsafe	2.38	Unsafe
Classroom blocks and lecture halls	2.51	Safe	2.46	Unsafe
Lecturers offices	2.40	Unsafe	2.18	Unsafe
Laboratories	3.10	Safe	2.24	Unsafe
Engineering workshops	2.44	Unsafe	2.33	Unsafe
Library	2.48	Unsafe	2.42	Unsafe
Computer rooms	2.30	Unsafe	2.25	Unsafe
Toilets (conveniences)	2.26	Unsafe	1.36	Unsafe
Work benches and tables	2.41	Unsafe	2.18	Unsafe
Classroom environment	2.65	Safe	2.55	Safe
Machines and Equipment rooms	2.44	Unsafe	2.27	Unsafe
Language studies	2.53	Safe	2.58	Safe
Stairways and walkways	2.36	Unsafe	2.42	Unsafe
Hostel accommodation	2.36	Unsafe	2.15	Unsafe
ICT centre	2.46	Unsafe	2.30	Unsafe
Grand mean	2.43	Unsafe	2.27	Unsafe

Table 1 shows the mean ratings of responses of lecturers and students on the safety of buildings and learning facilities. From the result of the analysis, it was revealed that items 1, 3, 5, 6, 7, 8, 9, 13, and 15 were considered ergonomically

unsafe by both lecturers and students while items 2, 4 and 10 were considered safe. This shows that buildings, computer rooms, library work benches and tables, machine and equipment rooms, ICT Centre, engineering workshops are all in ergonomically unsafe conditions for use by students and lecturers.

Research Question 2: What are the safety provisions available in the learning facilities of the institution?

Table 2: Safety provisions in the facilities observed

Attributes	%	Remarks
Classroom Ergonomics (space seat and seating arrangement, location, lighting, colour, chalkboard, projector, noise -level lecture, ventilation (etc.))	43%	Not Adequate
Laboratory ergonomics (dark room, furnaces, fume cupboards, windows, work benches and table tops, air - condition, fans fire extinguisher, ventilation storage facilities for chemicals, lighting, noise -level, seats, etc.).	56%	Moderately Adequate
Workshop ergonomics (hard - hat safety shoes, coveralls, gloves, goggles, ear - muffs, ventilation fire fighting equipment, emergency exists etc.).	48%	Not Adequate
Library settings and ergonomics (location, easy access, display settings, noise - level, ventilation, convenience, lighting, colour, seat arrangements, space ancillaries etc.)	63%	Very Adequate
Others (lecturer's offices, conveniences, space, lighting walkways, stairs, computer rooms, ICT centres, audio - visual aids etc.)	60%	Very Adequate

Table 2 presents of analysis from observation schedule of various safety provisions and ergonomic considerations of various parts of the institutions as it touches teaching and learning facilities. Results showed that classroom and worked shop ergonomics and safety provisions have the least percentage scores of 48% while the library ergonomics settings and safety provisions was the highest with 63%. This was followed loosely by category (lectures offices No 20 item with 60%. Laboratory ergonomics has a percentage score of 56% from the above results, it was revealed that classroom ergonomics was not adequate, meaning that the safety provisions and ergonomic considerations actually falls below standard. Other percentage scores revealed that their safety provisions were either moderately adequate or very adequate.

From the interviews, responses received revealed a similar result as the one observed above. Provisions for safety and ergonomic considerations were as

observed with the observation schedule. However, interviews also revealed a similar result as the one observed above. Provisions for safety and ergonomic consideration were as observed with the observation schedule. However, awareness of safety and safety procedures or even the term ergonomics, safety gadgets and equipment when available are over – used.

Research Question 3: How regular are the maintenance services available to the learning facilities?

Table 3: Regularity of maintenance of facilities

Facilities	Mean	Remarks
Buildings, classrooms, lecture halls	2.43	Not regular
Laboratories and its settings	2.69	Regular
Workshops and its settings	2.41	Not Regular
Library	3.13	Very Regular
Others (offices, conveniences, lighting, walkways, stairs, computer room, ICT centres, audio-visual aids)	2.46	Not Regular

Results of data analysis in Table 3 shows that classrooms, lecture halls and buildings as well as workshops and other categories of facilities do not enjoy regular maintenance services. This is evident in their mean scores of 2.34, 2.41 and 2.46 respectively. The laboratories and libraries show regular maintenance services with mean ratings of 2.69 and 3.13 respectively. The laboratories and libraries show regular maintenance services with mean ratings of 2.69 and 3.13 respectively.

Research Question 4: To what extent are the facilities fit for the users in the higher institutions?

Table 4: Fitness of facilities for their purpose

Facilities	Mean	Remarks
Buildings, classrooms, lecture halls	2.21	Not fit
Laboratories and its settings	2.57	Fit
Workshop and its settings	2.36	Not fit
Library	2.75	Fit
Others (lecturers' offices, conferences, lighting space, stairs, walkways, ICT centres and audio-visual rooms)	2.33	Not Fit

Table 4 shows that teaching facilities such as classrooms, workshops and lecturers' offices are not fit for users (see items 26, 28 and 30 with low mean

scores). However the result reveals that laboratories and libraries are fit for user (items 27 and 28 with high mean scores).

Research Hypothesis 1: There is no significant difference in the mean ratings of male and female students on the ergonomic safety of school buildings and teaching – learning facilities.

Table 5: Mean difference in scores on the ergonomic quality of facilities

Gender	N	Mean	S.D	DF	Z - Cal	Z - Critical	Decision
Male	142	2.43	1.42	228	1.32	1.96	Accepted
Female	88	2.31	1.38				

0.05 Level of Significant

Table 4 presents the z – test difference of the mean scores of male and female students on the safety of school buildings and facilities. The result shows that there is no significant difference between the mean scores of male and female students at 0.05 alpha level of significance. This is evident in the fact that the z – calculated value of 1.32 is less than the critical value of 1.96 at 228 degree of freedom. Hence the null hypothesis is accepted while the alternative is rejected. Therefore there is no significant difference between the mean scores of male and female students on the ergonomic safety of school buildings and learning facilities.

4 Discussion

Research question one sought to find out how ergonomically safe the buildings as well as the teaching and learning facilities in higher institutions of learning under study were. Findings revealed that majority of the buildings and teaching and learning facilities were in an unsafe condition in ergonomic terms. These include the classrooms, lecture halls, offices, workshops, computer rooms, conveniences amongst others. This shows that the facilities do not conform to ergonomic standards. Teaching and learning facilities take place under ergonomically unsafe environments. A situation where educational activities cannot effectively take place due to the state of the environment cannot lead to high productivity or the realization of educational goals. This finding is supported by a statement of report of the committee on vision 2010 (1997):

At tertiary level, education has experienced phenomenal expansion without a proportionate increase in funding and facilities. The system suffers from problems such as outdated, dilapidated or non – existent infrastructure, poorly stocked libraries, inadequate laboratories, poor conditions of services prompting main drain”.

The state of infrastructure as well as teaching – learning facilities in the institution of higher learning cannot be delineated from the politics behind the establishment of most of them. Educational objectives of the tertiary level of education can only be achieved when the teaching and learning environment and facilities are structurally and functionally designed to meet the comfort and health demands of the users.

The study also revealed that most part of the teaching and learning facilities, do not enjoy ergonomic consideration and provisions for safety were inadequate. From the results and their percentage scores it was evident that most of the facilities do not conform to ergonomic standards. Again, this is an issue that can gravely affect the outcome of educational endeavours, it will adversely affect performance as users begin to develop one health challenge after another. This problem can be avoided if an ergonomics approach is given to the design from the onset. This finding is supported by the findings at an ergonomics event conference, NZES 2010. Some benefits were identified when user centred approach is applied to the design of learning environments. These include: lower injury and accident rates, faster learning times, fewer errors, easier maintenance, a general increase in job satisfaction, less absenteeism, increases in productivity amongst others. In line with this, Pooja and Remul (2006) observed that to sustain a workforce, it has become important to ensure a hazard free and safe working environment and it has been embraced by managers that a safe working environment can result in greater efficiency and productivity. However Fasasi (2009:183) disagrees with this view by stating that a poorly motivated manager or school leadership and not necessarily ergonomic considerations of teaching – learning environments, constitute a cog in the wheel of progress and in the achievement of educational objectives.

The findings of this research also revealed that gross lack of regular maintenance of facilities and infrastructures account for their present poor states some of the buildings and facilities may have been given ergonomic considerations in their design at the initial time, but overtime due to over-use and lack of proper and regular maintenance, has been rendered unsafe for use, this finding was supported by the findings of Asiabake (2008) who stated in the study conducted to find out the effectiveness of school facilities, that physical facilities in schools are not fully utilized due to poor maintenance and inadequate facility planning. According to him, poor plant planning brings about reduction in educational quality and contributes to students' poor academic achievement. Findings also show that there was no significant difference between male and female students on the ergonomic safety of school buildings and learning facilities. The implication of this is that the treatment and perception of both groups on the issue were the same. This finding is not consistent with "Safe Building Alliance" memo a non-governmental

organization memo (273/2006), which revealed that all education buildings should be so designed in such a way that prevents injuries to staff and students and also provides the safest environment for them to teach and acquire their learning property. The sight of some of the buildings and facilities are scary as most of them are in very terrible looking state with classrooms looking bare and empty. No seats, leaking roofs, rough fence, inadequate lighting broken windows and doors, no seats and desk or tables, overcrowding and the likes are some of the features of these buildings and facilities. Physical observation also revealed that very few functional buildings and an array of uncompleted or dilapidated or abandoned building projects. The few completed ones have become poor in shape probably due to over-use or over-stretched as a result of over-population. A classroom or lecture hall meant to sit 30 and 50 students now is forced to take 150 students and above, no seating facilities, the few available ones have either no tables, nor is it broken down with exposed jagged and sharp metallic edges or surfaces posing threat of injury to the users. Facilities like equipment furniture, laboratories, workshops, libraries, audio-visual rooms, computer rooms, projector rooms, lecturer's offices etc. vary in quality and standard. Yet, these are institutions of higher learning where the economic and development goals of the country are expected to be realized in terms of manpower production.

5 Conclusion

The Ergonomic consideration of physical teaching and learning facilities constitutes major determinants in the success of teaching and learning. It is therefore very pertinent that priority be given to the provision of proper environment so that the key factors in the educational processes can effectively play their roles. Educational objectives cannot be achieved in an unsafe environment with teaching learning facilities that are detrimental to the health of its users. Teaching and learning cannot take place in an environment whose facilities are not designed to "fit its users" in regards to their health and physical well-being. The teaching-learning facilities in the tertiary institutions in Rivers State as the findings of this research revealed are not ergonomically conformed in terms of standard and specifications and the facilities suffer from lack of maintenance.

6 Recommendations

1. The government and planners should ensure that appropriate and pragmatic strategies are adopted in higher institutions to improve on the teaching and

- learning environments and particularly to see to it that facilities are conformed to ergonomic standards.
2. The government should allocate more funds and resources to the universities to enable expansion of facilities, repair and maintenance of already existing but dilapidated infrastructure and facilities and to ensure that safety provisions and procedures are made and adhered to in laboratories and workshops. All necessary places and facilities should be regularly maintained by the institutional leadership.
 3. Training and awareness programmes should be organized by school an administrator for staff and students on ergonomics issues as it pertains to their jobs and usage of the learning facilities. Best practices should be encouraged.
 4. Ergonomic experts should be consulted by the administrators, to identify ergonomic issues that hampers on employees job and the student's effective learning. Appropriate programmes and intervention should be employed.
 5. The concept of public and private partnership in maintenance should be explored in the maintenance effort of the institutions.

References

- Asiabake, I.P (2008). The need for effective management of schools in Nigeria. *New York Science Journal* (10.21). Retrieved from <http://www.sciencepub.org/newyork/1020/02-0366-AsiabakafacilitiesPDF>.
- Agu, A. A. & Shonekan, S. (1997). *An Overview of the Nigerian University System*: University System News, Abuja National University Commission.
- Benner, J.R. (2002). Lighting for school Washington, D.C. National Clearing house for Educational Facilities. Retrieved 10/08/2014 from <http://www.edafacilities.org/pubs/lighting.Html>.
- Chukwuemeka, S.S. (2000). Adoption, diffusion implementation and institutionalization of educational innovations. In R. Ruser & J.V. Dempsey (Eds.) *Trends & Issues in Instructional Design and Technology*. Upper Saddle River. N.J: Prentice – Hall.
- Ebong, J.M. (2006). *Understanding Economics of Education*. Port Harcourt: Eagle Lithograph place.
- Fasasi, Y.A. (2009). Management behaviour in educational organizations. In J.B. Babalola & A.O. Ayeni (Eds.). *Educational Management: Theories and tasks*. (183 – 194). Macmillan Nigeria Publishers.
- Hanushek, L.N (2009). Lighting for schools Washington D.C: National Clearing house for Educational Research. Retrieved 12/08/2014 from <http://www.edfacilities.org/pubs/lighting:html>.

- <http://en.wikipedia.org/wiki/Ergonomics> retrieved 10/08/2014.
- International Ergonomics Association (IET) August 2000.
- International Labour Organization (ILO) May 2010.
- McVey, G.P (1989). Learning Environment in International Encyclopaedia of Educational Technology. Oxford: Bergamot Press, pp. 124 – 131.
- Onyekwelu, B.A. (2002). *Teacher and Teaching*. Harmondsworth: Bengin Books Ltd.
- Pooja, & Remul, R (2006). New model of Job design, motivating employees' performance, *Journal of Management Development*, Volume 26, Page 575 – 583.
- Safe Building Alliance Memo “Non – Governmental Organization Memo (273/2006): Retrieved October 10th, 2010 from <http://en.wikipedia.org/wiki/change>.
- Uche, C. M., Okoli, N. J. & Ahunanya, S (2011). Infrastructural Development and Quality Assurance in Nigerian Higher Education. *Journal of Emerging Trends in Educational Research and Policy Studies*. Vol. 2, No. 1. February 2011. 9-16.



Funding of Academic Staff's Research in Public Universities in Uganda: Challenges and Opportunities

Robert Kyaligonza ^{1,*}, Joseph Kimoga ¹, Catherine Nabayego ¹

¹ Makerere University [* Corresponding author: kyaligonzarobert@yahoo.com]

Abstract. This article discusses the funding of academic staff's research in public universities in Uganda, with specific reference to challenges and opportunities. The specific objectives of the study were to: 1) investigate the sources of funding for academic staff research; 2) evaluate the extent of funding available; and 3) explore alternative sources of funding for academic staff research. The study revealed that research is grossly underfunded. There is little support from the industrial sector for research, and universities give little attention to research in their budgetary allocations. It is recommended that government injects more funds into the research function of its universities. It is also recommended that the universities consider *third stream* sources of funds with the view to increase allocations to research.

Keywords: Funding; Academic Research; Public Universities.

1 Introduction

The achievements of each university mission largely depend on the funding mechanism in place. Sawyerr (2004) and Ahemba (2006) contend that the critical factor for production and dissemination of quality research is the financial capacity of universities. This is attested by Sanyal & Varghese (2006). If other capacity correlates such as human resource and educational facilities are available without financial support, research cannot take off. In a world driven by competition in all spheres of life, and in more recent times by competition in advancement in technology, inadequate funding of research has development implications for every nation.

The financing of research in universities worldwide especially in Sub-Saharan Africa has become a major problem for both government-aided and private universities because of severely constrained financial budgets coupled with other competing demands. In the past decade a number of reports dealing

with this issue have been presented. The World Bank (2000) drew attention to the need for restructuring educational financing and it stated that public ownership and control of Higher education in Africa has meant for all practical purposes that tertiary education is very expensive and that nations must encourage self-sponsorship and cost-sharing by students. This view is also expounded by Donwa (2006).

According to scholars such as Mayanja (2007) and Mamdani (2011), a host of factors militate against academic research by the teaching staff in Ugandan Public Universities. The reasons are many and varied and among others the following are outstanding: Government underfunding of Public Universities in general and research in particular, annual university budgeting which gives little attention to research, lack of committed researchers who are well trained to produce credible proposals which can attract foreign funding, the heavy teaching work-load because of large class sizes, the materialistic culture which emphasizes material wealth than intellectual property, the defective remuneration where academic staff are paid chicken-feed salaries, lack of university-industrial linkages and intermittent strikes by students and lecturers which disrupt university calendar. Kasozi (2005) agrees that all these challenges are linked to inadequate funding.

1.1 Literature Review

Many scholars such as Sutherland (2003), Ssempebwa (2004) and Sicherman (2005) attribute the decline of research funding for academics in Higher education institutions in Uganda to Amin's regime that took power in 1971 and plunged the country into dictatorship, economic ruin and depredation. The period of military rule and general mismanagement of the economy from 1971 to 1979 and the post-Amin civil wars and instability of the early 1980s represent the sad phase in the country's educational development during which Higher Educational Institutions (HEIs) lost integrity, credibility and professionalism (Musisi & Muwanga 2003). The Academic Staff were isolated from international scholarship and access to up-to-date books. Subscription to scholarly journals was drastically reduced because of lack of foreign exchange and university lecturers lost morale and self-esteem. Makerere University which was a prime institution in East and Central Africa renowned for basic and applied research was degraded to a teaching centre in most respects (Magara, 2009). During this time the university research and infrastructure suffered greatly. The East African Institute of Social Research which became Makerere Institute of Social Research (MISR), Makerere University Agricultural Institute Kabanyolo (MUARIK), and the Medical research at Mulago Hospital nearly collapsed as many foreign researchers left the country or were expelled.

Many researchers in Africa such as Nyagotti-Chacha (2004), Sawyerr (2006) and Vogel (2012) blame the lack of funds for research on underdevelopment and wholesale adoption of the conditions of the International Monetary Fund (IMF) and the World Bank's (WB) Structural Adjustment Programmes (SAPs) adopted in 1980s by most African governments, Uganda inclusive. The policies of these two lending institutions undermined funding for Higher education and research in favour of Universal Primary Education (UPE) and Universal Secondary Education (USE). The conditions by these organisations were accepted by the government of Uganda (Kasozi, 2005). Mamdani (2011) avers that the two western lending institutions are neo-colonial and insensitive to the development goals of poor countries and that Uganda gained little from the arrangement.

In this paper, funding is conceptualized as the total portion of the income of the university from government, grants, foreign and local donations, endowments, and Internally Generated Funds (IGFs). Funding is very important for research because researchers must be remunerated and motivated. Funds are needed for acquiring research equipment and educational facilities such as computers, internet facilities, libraries and laboratories and accessing modern relevant current information from books and journals. Adequate funding enables academics to publish their research findings in journals, refereed books, research papers on websites, to subscribe to scholarly academic journals, have access to professional bodies and that there is lack of university-industry linkages as most research done in Public Universities is characteristically basic and ignored by government.

According to Banya (2001), Donwa (2006) and Ondari-Okemwa (2007), the inadequate budget provision in the national and university budgets, inevitably makes the university remuneration system and funding for research defective. This leads to poor reward for researchers. Because of poor remuneration, the brain drain phenomenon depletes the lean cream of the crop of capable research fellows. A number of scholars move to countries where their worth is better remunerated and acknowledged (Tettey, 2010). This further compounds the problem of work load for those on the ground. The view is acknowledged by the National Council for Higher Education (NCHE 2013), which avers that Ugandan Public Universities are apparently teaching centres with little research going on.

University fiscal policies are skewed to staff salaries, maintenance of buildings and purchasing of teaching consumables. Banya (2001) and Businge (2008) contend that government financial subvention is grossly inadequate and that money generated from tuition fees by students and from Internally Generated Funds (IGFs) is hardly enough to supplement funds from government and that, Public Universities perennially face financial constraints. In the Public university budgets, funding for research is hardly mentioned,

which implies the insignificant position of research in these Public Universities (*Report of the Visitation Committee to Public Universities, 2007*).

The average annual allocation to the Public Universities for recurrent expenditure is very little as NCHE (2013) reports that for the last two years modest funds have been channelled through the NCHE for research and staff training in Public Universities. Of this allocation 0.82% was to be used for research (NCHE, 2013)

In a world driven by competition particularly in science and technology, Uganda has remained a consuming society. There is little Research and Development (R&D) because of lack of innovation research. If adequate research is carried out, the nation would be able to develop products and methods of production which would reduce dependence on importation of manufactured goods. The dependence on other nations for finished products has grave consequences for Uganda. Carrol (2007) contends that in spite of abundant human and material resources in Uganda, there is notable poverty. The abundant natural resources could be translated into prosperity through research aimed at combating poverty in the country. There's unemployment, poor roads, erratic electricity supply, lack of clean water, poor educational facilities, prevalent dependence on used/obsolete items such as motor vehicles, clothes and aircraft. Sutherland (2003) argues that manufacturing as a means of deriving man-made wealth, which is sustainable cannot be achieved unless there is serious university academic staff research as it is in developed countries (Bradley, 2008).

Mugimu, Nakabugo and Katunguka-Rwakishaya (2007) contend that Uganda is not acclaimed for world-class research because the universities which should be centres of research and knowledge creation are handicapped financially to motivate researchers and therefore have not been able to tap into potential areas of veritable research. In this case, Traore (2002), Williams (2003), Bako (2005), and Donwa (2006) affirm that the achievement of any university mission like research largely depends on the funding mechanism in place. This is in agreement with the findings from the research conducted by Payne & Siow (2003) on 68 universities in the United States of America. The importance of funding for the university research mandate is also confirmed by Sawyerr (2004) and Ahemba (2006), who argue that government interference in governance and financial matters of Public Universities, resource mismanagement and corruption complicate the problem of funding research in Public Universities in Uganda. This is complemented by Magara (2009) who asserts that Higher education in Uganda is characterized by high unit costs, paltry funding for Academic staff research, low capacity utilization and high teacher- student ratio and negative government attitude to university research.

Financial resources are crucial mainly in the payment of academics and non-teaching staff; setting up laboratories, purchasing equipment, books, journals

and consumable materials and offering scholarships and fellowships. World Bank (2002), Banya (2001) and World Bank (2002) bring out the fact that the budget share of higher education in Africa dropped from 19.1 % in 1980 to 17.6% in 1988. During this period, real wages fell by 30% which could have negatively affected research. This is because the World Bank and International Monetary Fund, had imposed harsh austerity measures and recommended the prioritization of free Universal Primary and Secondary education at the expense of Higher education and research.

Scholars such as Bok (2003), Sabo (2005) and Bako (2005) explored the theoretical link of the small financial allocations to research in universities with lack of funds extended to staff to do research, poor facilities, limited access to publishing facilities, poorly paid staff, poor database, low research output which is basic and absence of the research culture. The argument is supported by research and findings of Teferra & Altbach (2004) and Tetey (2006) and Zeleza (2012) who agree that money is one of the most important motivating correlates in research productivity and dissemination. They postulate that the continuing crisis in African universities in general and Uganda in particular regarding their capacities to create and sustain the levels and quality of research by Academic Staff members is lack of enough funds. Similarly the results of the case study about Makerere University by Carrol (2007) point out that Public Universities in Uganda inevitably allocate a very small percentage of their budgets to the research mandate. The Makerere University recurrent budget of 2012/2013 did not even mention research as shown in Table 1. Research was sandwiched in the budgetary vote for academics and tuition. This definitely shows that research by academic staff in Public Universities in Uganda is at its lowest because the university administrators themselves are incapacitated by poor funding and hence by omission neglect the research function which is a core mandate of universities worldwide.

The *Report of the Visitation Committee to Public Universities* (2007) recommends that universities must generate their own funds and manage institutional finances frugally. This involves minimizing wastage, curbing mismanagement of funds, encouraging Senior Lecturers and Professors to source funds for research through consultancies and selling of patents and the government to allow Public Universities to charge realistic fees according to the market forces and inflation. It is imperative therefore that there is inefficiency, mismanagement or even corruption in the management of university funds. *The Report of the Visitation Committee to Public Universities* (2007) also revealed that Makerere University failed to account for funds from private students and equally Mbarara University of Science and Technology (MUST) had no clear internal controls and auditing procedures.

Whereas it is true that universities give little priority to research in their annual budgets, it is important to note that Public Universities in Uganda are

grossly underfunded by the state which owns them. The critical study of Makerere University budget of 2005/2006 had a total budget of 98.5 billion shillings of which 38.5 billion shillings (39%) came from government, 56.2 billion shillings (57%) came from Internally Generated Funds by private students and 3.9 billion shillings (4%) came from donors. The University could hardly realize half of the money (Mayanja 2007). The gap that seems to exist is that the inadequate funding extends to the research function and subsequently the scanty research output published in books, book- chapters, articles in scholarly journals and research papers. The study however, does not disclose the quantified impact of financial resources on academic staff research. This paper therefore set out to establish the extent to which financing explains the nature of staff research output in Public Universities in Uganda.

However all is not lost as college based research projects have improved the profile of Makerere University and research done at Mbarara University of Science and Technology has added a lot to fighting tropical diseases. According to Makerere University Annual Report 2014, the university has been able to produce a two-seater electric vehicle and a bus through innovation and research. The report adds that the Presidential Initiative has boosted research in the two universities to the extent that Makerere University is one of the ten best universities in Africa (Webmail Ranking, 2014).

1.2 Statement of the Problem

There is a lot of criticism about the funding of Academic research in Public Universities in Uganda as intimated by Businge (2008) and the National Council for Higher Education, NCHE (2013). The funding of academic research in Ugandan Public universities seems to have not been given enough consideration at national and institutional level as manifested in national university annual budgets. The problem of academic research funding is again highlighted by the *Report of the Visitation Committee to Public universities* (2007). Funding as a significant factor contributing to the poor academic research had not been explored or investigated and therefore this investigation is necessary and timely.

1.3 Objectives

1. To determine the sources of funding for Academic staff research in Ugandan Public universities?
2. To find out the extent of funding available for Academic staff research in Ugandan Public Universities?
3. To recommend the best ways of improving academic research in Public Universities in Uganda.

2 Methodology

The study was qualitative and utilized secondary data from relevant university publications: annual reports, abstracts and yearbooks. The tools to collect data were Interview Guide and Documentary Analysis guide. The study population comprised all the **seven** Public Universities in the country namely; Makerere, Kyambogo, Mbarara, Busitema, Gulu, Muni, Soroti, and Kabale. The research was done at two oldest Public Universities namely: Makerere University (MAK) and Mbarara University of Science and Technology (MUST). The universities were chosen for this study because of their research history. The subjects of study were 26 and consisted of two Vice-Chancellors, Two Deputy Vice-Chancellors in Charge of Finance and Administration and two Directors of Research and Post-Graduate Training and five Lecturers from each university. One official each from Ministry of Education, Science, Technology and Sports, National Council for Higher Education (NCHE), the Ministry of Finance and Economic Planning and Uganda National Council for Science and Technology (UNCST). The subjects were interviewed and data was generated according to study objectives and content analysis was done according to study objectives.

3 Findings

3.1 Source of funding for Academic Staff Research

According to Makerere University Annual Report (2014) and Mbarara University of Science and Technology Annual Report (2014), the sources of funding for academic staff research are from three main sources, Government subvention, Internally Generated Funds (IGFs) which constitute fees paid by students as tuition and functional fees and funds generated from commercial units. Funds from donors are mostly channelled to science-oriented programmes. A number of external donors among others include: Norway Aid for Development (NORAD), Carnegie Foundation, Rockefeller Foundation, Swedish International Development Association (SIDA), Walter Reed Project, Bill and Melinda Gates and Pfizer have been funding research in Public universities in Uganda. There are at present few local donors supporting Public Universities at a level comparable to external ones. The situation at Mbarara University of Science and Technology and Makerere University show that the universities cannot achieve their research strategies when almost 80% of research funding come from donors who invest funds in research on the basis of their goals and ideologies (Musiige & Maassen, 2015).

This paper reveals that due to inadequate funding for research, most lecturers in Public universities do research for academic interest in order to be awarded higher degrees or to merit a promotion. This trend however is not unique to Uganda because according to Musisi and Muwanga (2003) and Carrol (2007), governments in Africa by 1960s provided all funds that were needed for research, but today post-graduate education is no longer free. The fact that universities have now been neglected reveals that there is a substantial gap in the relationship between universities and governments and that there is no adequate commitment on the side of government to make university research funding a priority. Funding university research in Uganda is mostly an affair of individual faculty members, and those who are lucky to benefit from foreign Agencies. Government does not fund post-graduate education.

3.2 Funding of Academic Research

Table 1: Operating Expenses (2011/ 2012 and 2012/2013, in Billions)

	2011/2012		2012/2013	
	Budgeted	Actual	Budgeted	Actual
Employee Costs	82,137	81,524	101,277	103,146
Goods and Services Consumed	31,907	36,891	35,456	42,032
Consumption of Property, plant and Equipment	17,985	12,279	30,282	17,066
Transfers to other organisations	67	7	2,032	1,634
Social benefits	-	-	-	-
Other expenses	12,722	17,399	15,439	18,293
Foreign Exchange (Losses/ Gains)	-	(28)	-	3
Total Operating Expenses	144,817	148,072	184,486	182,174
Surplus/ Deficit after extraordinary items	-	4,107	-	149

Source: Makerere University final accounts FY 2012/13

Table 1 shows that among the items budgeted for expenditure, research is conspicuously absent and yet it is one of the three cardinal mandates of the university: Teaching, Research and Community service. Money from government is inadequate and not regular and there is very little research funding for the academic staff in Humanities and Social Sciences unless they access foreign funding. Businge (2008) reports that there is corruption and misplaced priorities in Public Universities.

Table 2: Public University Expenditure Pattern

Items	Expenditure	% input
Books	22969800	0.03%
Equipment	19047000	0.03%
Furniture	350898599	0.50%
Infrastructure	1297816579	1.85%
Material supplies	8388105947	11.96%
Research	573353500	0.82%
Staff development	958094668	1.37%
Staff emoluments	39263786294	55.97%
Students accommodation	8025125824	11.44%
Students welfare	7799853595	11.12%
Utilities	3067284665	4.37%
Vehicles	389943348	0.56%
Total	70156279817	

Source: National Council for Higher Education (2013)

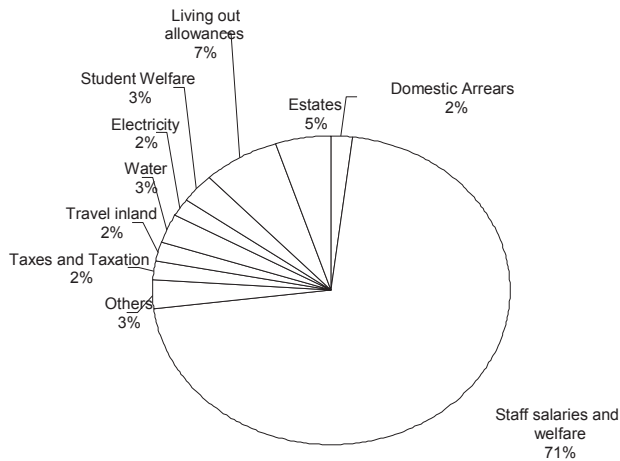


Figure 1: Makerere University's Expenditure (2011/ 2012)

Source: Bursar's Office, Makerere University

It is very clear from Figure1 that in the financial year 2011/2012, Makerere University spent over 70% of its revenue on salaries and allowances for staff. Therefore, it is difficult to fund research activities adequately.

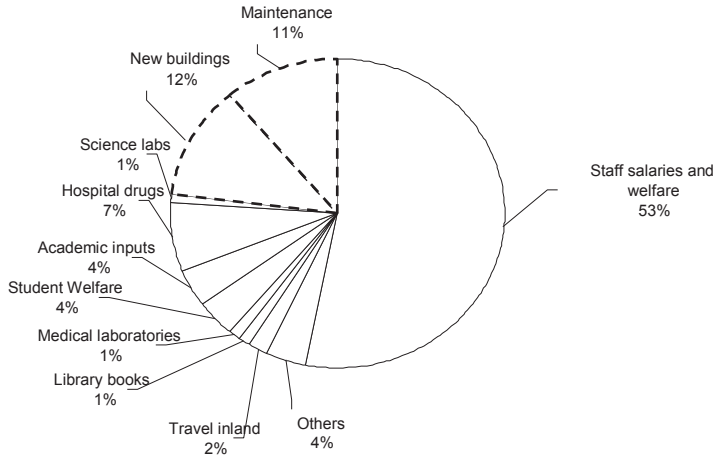


Figure 2: Mbarara University Expenditure (2011/2012)

Source: Bursar's Office, Mbarara University of Science and Technology

As shown in Figure 1 and Figure 2, both cases of Mbarara University and Makerere University, expenditure on research is absent yet teaching and research constitute the cardinal reasons for setting up universities. In both cases of Makerere University and Mbarara University, it remains a matter of concern recognized by all stakeholders that the failure to realize the full development of research in these universities, to a certain extent lies with university policy makers who deliberately give very little allocation of funds to the research function in their annual budgets. .

This assertion is confirmed by the Mbarara University Deputy Vice-Chancellor when he argued in an interview that: Research does not seem a priority for us in Public Universities because government neglects us when it comes to funds and the university administration does not care. If one waits for funds from government, no research can ever be done. The research done by graduate students is totally self-sponsored, apart from few staff members who are sponsored by the university and donors. The culture of research has been undermined by lack of focus and sensitivity by ministry and government leaders.

The conclusion drawn here is that research is given very little attention by university policy makers who happen to be highly educated or former members of the academic staff who are supposed to know the crucial significance of scientific research for the universities and the nation. The views raised by this study hence concur with the findings of Harle (2011) on the factors responsible

for financial crises in the African universities. Like the findings of the current study, he expresses the fact that the increase in the number of lecturers pursuing Masters and PhD degrees could have made it costly for the universities to fully support their research as it used to be in the past. At Makerere and Mbarara University, it was revealed by the Director of the School of Graduate Studies that since the year 2010, there has been generally a 30% increase every year of the lecturers enrolling for Masters Degrees. He noted however, that the low rate of completion was due to lack of supervisors and that some students were failing to pay fees in time.

According to Magara (2009), it was revealed in the study, that the government of Uganda does not take graduate funding as a priority. When the researcher interviewed the officials of the National Council of Higher Education, they revealed that the government of Uganda finds it impractical to fund faculty graduate education when there are many people who do not access undergraduate education and those who do not have access to education at all. This had forced the government to concentrate on some few undergraduate sponsorships and sponsorship of lower levels of education such as UPE and USE leaving graduate education not being attended to. This study reveals that comparing Uganda with other countries in terms of support for scientific research undertakings, the government of Uganda has very little consideration for university research. Unlike European and American experiences where the governments have ideological commitment to fund research activities in universities as expressed by Mouton (2010), Uganda government has no such similar ideological commitment. According to Harle (2011), the American, European and some Asian governments ensure that research funds are selectively and adequately distributed to institutions that have demonstrated their research capacity to produce quality research output.

Considering the results of this study, among the issues undermining research and production of quality research output in Public universities in Uganda is the frequent closures of universities due to riots by students and industrial action by teaching staff especially in Makerere University. Frequent closures mean that longer periods are used to complete programmes or that the course content is reduced because courses are not completed or are rushed over and that university resources are underutilized. In an interview with a high ranking official of the Ministry of Education, Sports and Technology, it was revealed that government is flabbergasted by staff and student strikes in Public Universities especially at Makerere University. The official suggested that the errant university academic staff must be employed on contract and that all those in service must sign contracts for a specified period of time.

Funding for research must be a critical priority by government. The government must inject in adequate funds into the research function of its universities and universities must adopt policies where they generate money to

run their research activities. The best option here is to allow the universities fix their own realistic fees according to market forces and inflation. Research in university budgets must be allocated the same funds like other university activities such as teaching, estates, outreach and community service.

The way forward is to let universities raise realistic fees without government interference, diversify their resource base by engaging in profitable commercial activities, seeking more financial aid from donors, encouraging the alumni to financially contribute generously to their alma-maters, seeking endowments and involving local industrialists to utilize research findings so that they can tap support.

4 Recommendations

In this research study, it was observed that there is serious need for an integrative approach in research development with the business community coming on board. There is great need for Ugandan leaders to develop goodwill and vision to put down policies which can rejuvenate research in institutes, universities and other tertiary institutions. As it was revealed by the current study, there is dire need for the government to interlink with the business community with the intention of addressing business needs through university social research. Despite the poor funding however, this study does not rule out the fact that some lecturers remained shrewd enough and carried out a number of research activities.

More funds should be allocated to universities by the Government in order to enhance the aspect of research. This is important since the Government of the Republic of Uganda is a proprietor of the seven Public Universities in the country and therefore should devote substantial amount of the national budget to research with hope of producing better researchers and quality research output that will add value to the national economy.

University management should streamline funding of lecturers' research activities. Management needs to be fully informed that the University exists to transmit knowledge from generation to generation through research and hence neglecting the research mandate would mean compromising future needs of the future generations. There is need to make research funding a priority other than leaving it to speculation, likelihood or donor intervention, yet it is what builds the university and the country.

The government should totally phase out its sponsorship of pedagogical and non- pedagogical components of university education at undergraduate level. All undergraduate and graduate students should meet the full cost of their education, based on realistic assessment of unit costs. Those who cannot meet

their fees requirements could access loans from the state and a strategy be put in place to enable them pay back.

Public Universities in Uganda should begin to seek for endowment funds to earn themselves the scarce funds. Makerere University has a lot of real estate around Kampala at Katanga, Kololo, Makindye and Katallemwa and Mbarara University has a big chunk of land at Kihumuro and Ishanyu which can be used for real estate development to generate funds. Public Universities with good planning can build a strong base that could greatly increase its wealth. The government could help its Public Universities as Saudi Arabia did to Islamic University in Uganda (IUIU), by assisting it to put up a ten storey building endowment on Kampala Road from which it earns millions of shillings monthly from renters.

Public Universities should adopt more proactive resource mobilization approaches. They should sell their programmes and projects to would-be sponsors at home and abroad to earn funds for more research. They should work out strategies to build confidence in their institutions by demonstrating that they can manage university funds frugally and effectively. Public Universities should strive to build performance records in research that will attract a sustainable inflow of funds. The onus of devising and implementing alternative sustainable approaches rests more with the universities than with the government. Therefore Public Universities in Uganda must operate as private firms by becoming commercial, profit-oriented and responding to needs of their communities. Public Universities must be open 24 hours and during vacations to promote full utilization of university resources such as halls and lecture theatres by outsiders to generate income. Universities must encourage Professors and Lecturers to apply for research funding from local and international sources. It should be a condition for all university academic staff to raise their own funds for research.

There is need for diversification of the financial resource base of Public Universities in Uganda. This involves tapping all possible avenues for funds and among others; money can be tapped from foreign aid, endowments and investments. The universities can sell technical expertise and skills and can monopolize commercial ventures at campuses. The commercial ventures among others include, transport of students, construction and running of hostels, hotel and catering services, running bookshops, bakeries, and petrol stations and utilization of excess land for farming and lease it to those who can hire it. Public Universities must tap funds from university convocations and alumni. Many old students would generously contribute to their alma-maters. However, there is little communication and guidance. There should be serious sensitization to make the alumni understand that they are obliged to support their former universities.

References

- Ahemba, T. (2006). Decay dims Africa's once proud universities. Reuters 15th November 2006.
- Bako, S. (2005). Universities research and development in Nigeria: time for paradigmatic Shift. University of Zaria Department of Political Science
- Banya, K. (2001). The World Bank and financing higher education in Sub Saharan Africa. *Higher Education* (42), 1-34.
- Bok, D (2003). *Universities in the marketplace: The commercialisation of higher education*. Princeton: Princeton University Press.
- Bradley, M. (2008). On the agenda: North–South research partnerships and agenda-setting processes, *Development in Practice*, 18(6), pp. 673–685.
- Businge, C., Natukunda, C. (2008). Uganda's Limping Universities. *The New Vision*. Vol 23 No 047. Available online at: http://www.newvision.co.ug/new_vision/news/1195030/uganda-eur-limping-universities.
- Carrol, B. (2007) Harnessing private monies to fuel university growth – a case study of Makerere University. *Southern African Review of Education*. 13, 2 (2007).
- Donwa, P. A. (2006). *Funding of academic research in Nigerian universities*. Benin City. University of Benin.
- Harle, J (2011) *Foundations for the Future: Supporting the early careers of African researchers*, London: British Academy and Association of Commonwealth Universities, available: <https://www.acu.ac.uk/publication/download?id=429> (accessed 27 November 2012).
- Kasozi, A. B. K. (2005). *State of higher education: executive summary*. Kampala: NCHE.
- Mamdani, M (2011) 'The Importance of Research in a University', *Pambazuka News*, available: <http://www.pambazuka.org/en/category/features/72782> (accessed 6 December 2012).
- Kasozi, A. B. K. (2003) *University education in Uganda: challenges and opportunities for reform*. Kampala: Fountain Publishers.
- Magara, E. (2009). Financing a public university: Strategic Directions for Makerere University in Uganda. *Journal of Higher Education in Africa*. 7(3), 61-86.
- Mayanja, M. K. (2007). *Improving Income from internally generated funds without provoking students or staff strikes at Makerere University*. Cape Town: AHERO.
- Mouton, J. (2010) 'The state of social science in sub-Saharan Africa' in *UNESCO/ISSC World Social Science Report 2010: Knowledge divides*, Paris: UNESCO/International Social Science Council.

- Mugimu, C. B., Nakabugo, M.G., & Katunguka-Rwakishaya, E. (2007). Exploring the factors affecting staff research output and completion rates of graduate students in Makerere University. Kampala: Makerere
- Musiige, G. & Maassen, P (2015). "Faculty Perceptions of the factors that influence research productivity at Makerere University" in N Cloete, P Maassen and T Bailey (eds), *Knowledge Production and Contradictory Functions in African Higher Education*. Cape Town: African minds.
- Musisi, B. & Muwanga, N.K. (2003). *Makerere University in Transition 1993-2000*. Oxford: James Currey.
- Nyagotti-Chacha, C (2004). *Reforming higher education in Kenya: Challenges, Lessons and Opportunities*. Naivasha Inter-university Council for East Africa.
- Ondari-Okemwa, E. (2007). Scholarly publishing in Sub-Saharan Africa in the twenty-first century: Challenges and opportunities. Presented at the PKP Scholarly Publishing Conference, 11-13 July, 2007
- Payne, A.A & Siow (2003). Does federal research funding increase university research funding output? *Barclay. Advances in economic analysis and policy* Vol 3: ISS.
- Sabo, (2005). Universities, research and development in Nigeria: time for paradigmatic shift. A paper prepared for 11th Generally Assembly of CODESRIA, on Rethinking African Development. Dakar: CODESRIA. Also available on: <http://www.codesria.org>.
- Sanyal, B.C & Varghese, N.V (2006). *Research capacity of the higher education sector in developing countries*. Paris: UNESCO
- Sawyer, A. (2004). *African Universities and the challenge of research capacity development*. Dakar: CODESIRIA.
- Sawyer, A. (2006). *Renewal of the African University. A discussion on African Universities*. 20th May 2006. Accra: AAU.
- Ssempebwa, J (2004). Funding higher education in Uganda. A case for the Liberalization of fees. *Kampala International University Research Digest*. 1(1): 44-59.
- Sicherman, C. (2005). *Becoming an African university: Makerere 1922-2000*. Kampala: Fountain Publishers.
- Sutherland, C. (2003). "Securing the future: student financing at Makerere University, Uganda. *Journal of international Development* 12:549-58.
- The National Council of Higher Education (2013). *The state of higher education and training in Uganda*. Kampala: NCHE.
- The New Vision*, (February 2008 Vol 23, No 28): Makerere University on strike.
- Teferra, D & Altbach, P.G (2004) *African higher education: challenges for the 21st century*. Boston: Centre for international higher Education.

- Tettey, W (2006). Academic staff attrition at African Universities. Calgary: University of Calgary
- Tettey, W.J (2010) 'Challenges of Developing and Retaining the Next Generation of Academics: Deficits in Academic Staff Capacity at African Universities', unpublished paper, Partnership for Higher Education in Africa, available: www.foundation-partnership.org/pubs/pdf/tettey_deficits.pdf (accessed 27 November 2012).
- Traore, A. (2002). The difficulties of building up and funding research in Africa. Ouagadougou: University of Ouagadougou.
- Vogel, I (2012) *Research capacity strengthening: Learning from experience*, London: UK Collaborative on Development Sciences.
- Williams, H. A. (2003). Factors related to research productivity. Louisiana State University.
- World Bank (2002). Constructing knowledge societies: New challenges for tertiary education. Washington D.C: World Bank.
- World Bank (2000). Higher education in developing countries: peril and promise. Washington, DC: World Bank. Available at: http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/peril_promise_en.pdf (accessed 5 December 2014).
- World Bank (2002) *Constructing Knowledge Societies: New Challenges for Tertiary Education*, Washington DC: World Bank.
- Zezeza, P. T. (2012) 'Internationalisation in higher education: Opportunities and challenges for the knowledge project in the global South' in Kotecha, P (ed.) *Internationalisation in Higher Education: Perspectives from the Global South*, Johannesburg: Southern African Regional Universities Association.



HIV-related Stigma Tendency among Undergraduate- Library Users in Lagos State

Haastrup, Adenrele E. ^{1,*}, Jinadu, Iliasu ², Daki, Lordson ¹

¹ University of Lagos. ² Adeniran Ogunsanya College of Education [* Corresponding author: adenrelehastrup@gmail.com]

Abstract. This study examined the knowledge of student library users about the modes of transmission of HIV vis-à-vis their attitude towards colleagues living with HIV. A total of 300 students from four higher institutions in Lagos responded to a survey questionnaire. Findings of the study revealed that most of the respondents were knowledgeable about the transmission of HIV. However, there was a gap between their knowledge and attitude towards people living with HIV (PLH). The study suggested periodic HIV training programmes to continuously update library users' knowledge with the intention of influencing their behaviour towards people living with HIV. The paper also recommended that libraries should incorporate new technologies within the Library 2.0 platform to improve information sourcing and retrieval for all undergraduates in order not to stigmatize PLH.

Keywords: Stigma; HIV/AIDS; Web 2.0.

1 Introduction

Students, like any other category of individuals, may encounter one or different health challenges at one time or the other during their academic pursuit. As much as possible, health managers endeavour to help them regain their health without a disruption of their (students) academic pursuits. From HIV/AIDS in years past to Ebola disease in 2014 and to the recent LASSA fever outbreak in 2016, government and organizations have intensified efforts to sensitize, enlighten, and educate everybody on how best to interact and live a healthy life in public and at home with people affected by any of these infections. Persons diagnosed and confirmed to be HIV-positive are free to associate, live or work anywhere as they may deem convenient. Unlike other people with physical challenges, who enjoy special track, seats and so forth, PLH do not require such

identity indicator; to avoid stigmatization which may lead to frustration, anxiety, lack of concentration, and/or reduced-library patronage. Immediately people are aware to be living with HIV, they become bewildered and shocked but they soon become active information seekers about their new life. The library like any other workplace should appreciate the advice of Farrelly (2006) that youth should have their own place to do things in their own way without too much rules from the adults.

The instincts of ‘finding out’ anything first from the library should be the guiding spirit for librarians to see library service beyond acquisition of information resources but more of access. Eek (2012) has confirmed that the youth are in a hurry to get information perhaps because they are people in the ‘web generation’ (Godwin, 2008), ‘Smart phone generation’ (Nicholas, 2014) or as ‘digital natives’ (Prensky, 2001 cited in Walker, Huddleston and Pullen (2011). As such, the library should understand the psychology of having to live with HIV, being a youth, and yet in need of information to address academic pursuits(Varni,Miller, Mccuin and Solomon, 2012).

Good libraries, probably a decade or two ago, would feature well stacked ‘precious’ books, polished wooden catalogue cabinet, and librarians moving around to help users access information materials. That was an era when library was seen as a ‘place’ rather than an interface. In the opinion of O’Reilly (2012), people (including library users) are now part of Web resources. They generate information, initiate discussions and share images via the Web.2.0 applications. Almost everything is possible on the Web; especially with the Internet-of-Things (Wilson, 2016). Today’s library provides opportunities for users to access information and interact with them (resources) in a participatory mode without necessarily being in the confines of the physical library building. This new paradigm shift prompted Nasir (2007) to advise librarians to “rethink, relearn, retool and repurpose their roles” in service delivery. Studies such as Tripathi and Kumar (2010) and Godwin(2008) have described the potentialities of Web 2.0 tools and how academic libraries can employ them to improve library services. In describing how libraries can take the advantage of the information age to achieve improved user-centred services, Winn (2008) suggested that “wikis, blogs, flickr, tagging, mashups, folksonomies, RSS, hosted services, social media, and Instant Messaging(IM), are tools that can take library services to the convenience of users”.

1.1 Attitude toward PLH

The PLH are in a world of realities and they look in almost all directions to seek information to fill a gap occasioned by their awareness that they have to live with an infection that has no cure (Zolfo, Lynen, Dierckx and Colebunders, 2006). Depending on the people and communities they find themselves, PLH

feel the environment should have the information (Case,2007) that would provide answers to their questions even though they may not know how to seek such information. At the point of diagnosis, they feel withdrawn and do not see hope in people around them. Some of them take solace in drinking and may take to drug use to 'ease' depression (Comulada et al, 2010). As such, academic pursuit (for those that are students) may become secondary especially if such pursuit will mean taking them out of their 'hiding'. Out of ignorance of the modes of transmission of HIV, people withdraw from them, reduce or stop sharing things with them thus frustrating PLH (Ford, 2016). People around them seem not to know that the information they need is anything that can assure them of a future, a promise to cover their 'secret', and empathize with them by providing them with care and support. Narayan (2010) simply captured the state of mind of PLH as "the constant stream of 'self-talk' that happens while (we) are conscious; (our) understanding of (our) external environment and internal state of mind, often formed in relation to other actors, events and environments".

Stigma is a concept that is not peculiar to HIV. Throughout history, many diseases have brought stigma, including: tuberculosis, cancer, mental illnesses and many different sexually transmitted infections (Catalan, 2003). Catalan further stated that cases of stigma against people with HIV/AIDS are found throughout the world since the early diagnosis of this disease and that stigma often targets individuals, families, groups and communities with people living with HIV/AIDS associate with.

There are different definitions of stigma. According to UNAIDS guidelines, 'stigma' is 'a shameful sign or trace, or impairment of the individual' (UNAIDS, 2008). Stigma is a type of prejudice that discredits or rejects an individual or a group because he or they differ from others or from ordinary people (Herek & Capitanio, 1999). Stigma has deep roots in the structure of society as a whole and in the norms deriving from the daily life of every society. As such, stigmatization is generally intended to discredit and shame certain groups (Herek & Capitanio, 1999). Stigma can be a result of specific features, such as physical deformities, for instance visible symptoms of disease, or can come from negative attitudes towards the behaviour of certain groups, such as homosexuals, drug users, commercial sex workers etc. (Visser, 2007). The definition of HIV-related stigma is derived from the definition of Goffman (1963) on stigma. Goffman defined stigma as an attribute or characteristic that is profoundly discrediting to the individual possessing the attribute or characteristic. A distinction is made between 'discrediting', meaning others perpetrate stigma, and 'discreditable', in which case a person is dishonorable or of disreputable character. A substantial discrepancy may exist between how people view themselves and the views of others. Goffman termed this discrepancy 'virtual and actual identity', and believed this inconsistency

negatively influenced one's social identity, leading to social isolation. According to him, the issue of greatest concern to the stigmatized individual is 'acceptance'. Visser (2007) define the stigma associated with AIDS as prejudice, disgrace and discrimination directed at people living with HIV/AIDS and toward individuals, groups and communities with whom they associate. In 35% of countries with available data, over 50% of men and women report having discriminatory attitudes towards people living with HIV (UNAIDS, 2015).

According to Guni (2005) there are two forms of stigma: institutionalized and individual stigma. The institutionalized stigma is the situation when an institution such as hospital or other institutions dealing with various forms of healthcare practices stigmatizes, be it actively or passively. On the other hand, individualized stigma is the situation when attitudes are directed toward an individual. He further posited that the Individualized stigma is doubled in that it can be done by a person or a group of persons directed to an individual and based upon negative social attitudes and perceptions.

PLH wish every document is about how to live positively with HIV. They wish to see photographs of people who have been diagnosed and are living with the virus; this would be motivating. They wish to discuss and interact, but only, with people that would understand their plight and empathize with them. But the question is do people around PLH exhibit this attitude? For the undergraduates living with HIV, they wish to continue to study. So, they need to add the rigors of academics to the challenges of HIV-seropositive status. The library should therefore be their hope and place that assure them of understanding, care and effective access to resources that would meet their information need. If they have their way, they probably wish to access the library resources from a remote destination; suppose the library has such facilities.

1.2 Objectives of the Study

The main objectives of this study are:

1. To assess the knowledge of library users on the modes of transmission of HIV
2. To evaluate the library users' level of comfort interacting with their colleagues living with HIV
3. To establish a relationship between library users knowledge of the modes of HIV transmission and discrimination against colleagues living with HIV.

1.3 Theoretical Framework

Even when it may not be overtly displayed, stigmatization may occur in settings where PLH have to interact as a matter of necessity, with other people especially in sharing of public facilities. The library may also be included. Going into history, Goffman (1963) explains that the term stigma dates back to the Greeks, who in order to identify criminals, slaves and traitors made cut or burned-marks on them as tainted or immoral people that should be avoided. In those days, stigma was more of physical stain. But today, stigma is more of an attribute resulting in widespread of social disapproval. Goffman describes this situation as a discrediting social difference that leads to a spoiled social identity.

The role of the society is very important in stigma. In fact, it has been stressed that stigma is not considered to reside in the individual but rather in the social context (Hebi & Dovidio, 2005). By implication, what is stigma in a certain social context may not be a stigma in another social situation.

Stigmatization has been described as an instrument to achieve a set of objectives. These objectives are looked at by Phelan, Link and Dovidio (2008) as functions from social psychological perspective. They include: exploitation and domination (keeping people down); social norm enforcement (keeping people in). The fear of stigmatization often encourages deviants to conform to in-group norms. Also, disease avoidance – cheapens people away.

Whatever the motive of stigmatization, it has negative effects on the person or group stigmatized, people who are family members and associates of the stigmatized. Pryor and Reeder (2011) model presented in figure 1 below explains four basic types of stigma.

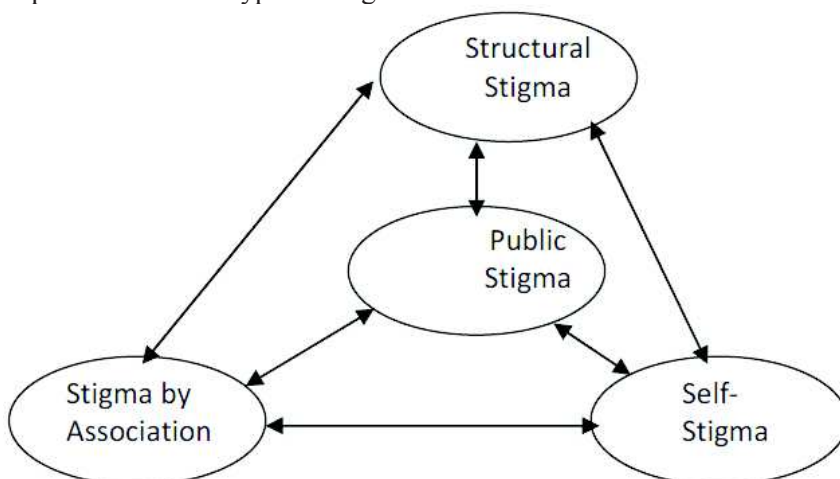


Figure 1: Four types of stigma (based on Pryor & Reeder, 2011)
Source: Pryor & Reeder, 2011

Pryor and Reeder's model illustrates four dynamically interrelated manifestation of stigma. The elements in the model are:

1. Public Stigma: This represents people's social and psychological reactions to someone they perceived to have stigmatized condition.
2. Self-stigma: Reflects the social and psychological impact of possessing a stigma. Variables here include: the apprehension of being exposed to stigmatization and the possibility of the potential internalization of the negative beliefs and feelings associated with the stigma condition.
3. Stigma by association: In this third type of stigma, the focus shifts from the central figure being stigmatized to people associated with the stigmatized person who could be family or friends. At times, people's reactions to being associated with people being stigmatized also constitute stigma by association.
4. Structural stigma: Entails legitimization and perpetuation of stigmatized status by societal institutions and ideological system.

Elements in the Pryor and Reeder model of stigma are interactive with public stigma playing a central role. If efforts are directed towards eliminating or drastically reducing public stigma, the effect will as well rob on the other elements permeating the society.

2 Method and Procedure

2.1 Research Method

This study is a descriptive survey. It uses questionnaire for data collection looking at respondents attitudes towards library users living with HIV vis-à-vis respondents' knowledge of mode of transmission of HIV.

2.2 Population and Sampling

Tertiary institutions students in Lagos, Nigeria, constituted the population of the study. The study covered three major types of tertiary institutions namely: University, College of Education and Polytechnic. The sample size for this study was 300 student-library users in tertiary institutions in Lagos state. The multi-stage sampling technique was employed in selecting this sample size. The simple random sampling technique was used to select four (4) institutions from a total of seven in Lagos state. In each of the selected institutions, the purposive and convenient sampling techniques were used to select the students and administer the questionnaire on the respondents.

2.3 Instrument

A self-developed and validated questionnaire named: Students Attitudes towards People With HIV (SATPLH) was the only instrument used for data collection. The questionnaire was segmented into three sections. Section A focused on the demographic information of the respondents (sex, course of study, year of study and faculty/school). In section B, respondents were asked to provide information on the state of their institutions' libraries: accessibility to the library resources, the sitting arrangements, health consideration, while section C sought information on the respondents' knowledge about mode of HIV transmission, disposition to casual interaction with PLH, and how comfortable they are likely to be, using the library with PLH.

2.4 Validity and Reliability

Content validity was used to ascertain the ability of MWCP to measure the variables in the study while the Test-Retest Method of reliability was used to measure the consistency of the instrument. The R-value was 0.81 using Cronbach's Alpha.

2.5 Data collection and Analysis

Copies of the questionnaire were administered on the respondents at their various institutions with some in and around the library. Since copies of the questionnaire were administered and retrieved on the spot, the entire copies of the administered questionnaire were retrieved. Upon return, none of the questionnaire was void. The data collected were collated and analysed using simple percentage and frequency tables. Inferential statistics of Chi-Square and Pearson Product Moment Correlation were used to test the hypotheses.

3 Data Presentation and Analysis

Table 1: Institution and Number of Respondents

Institutions	Respondents	%
University of Lagos, Akoka	150	50
Yaba College of Technology, Yaba	50	16.7
Federal College of Education-Technology, Akoka	50	16.7
St. Augustines College of Education, Akoka	50	16.7
Total	300	100

From the Table 1 above, 150 (50%) of the respondents were students of University of Lagos, Akoka; 50 (16.7%) respondents were from each of the

other three institutions: Yaba College of Technology, Yaba; Federal College of Education, Technical, Akoka; and St. Augustines College of Education, Akoka each.

Table 2: Demography of Respondents

Characteristics	Variables	Frequency	%
Sex	Male	137	45.7
	Female	163	54.3
	Total	300	100
Age	15-19 yrs	45	15
	20-24 yrs	166	55.3
	25-29 yrs	75	25
	30-34 yrs	14	4.7
	Total	300	100
Faculty/School	Education	136	45.3
	Environmental Science	30	10
	Social Science	36	12
	Arts	30	10
	Mass Communication	13	4.3
	Law	4	1.3
	Engineering	51	17
	Total	300	100
	Current level of study	100 level	20
200 level		137	45.7
300 level		86	28.7
400 level		57	19
Total		300	100

From the Table 2 above, 137 (45.7%) of the respondents are male while 163 (54.3%) are female. 45 (15%) of the respondents were between the ages of 15-19 years, 166 (55.3%) were between the ages of 20-24 years, 75 (25%) were between the ages of 25-29 years while 14 (4.7%) were between the ages of 30-34 years. Regarding the faculty/school of the respondents, 136 (45.3%) of the respondents were from education, 30 (10%) were from environmental science, 36 (12%) were from social sciences, 30 (10%) were from arts, 13 (4.3%) were from mass communication, 4 (1.3%) were from law while 51 (17%) were from engineering

Table 3: Patronage and Motive of School Library

Variables	Responses	Frequency	%
Frequency of use	School/ Faculty		
	Education	Very Often	81
	Environmental Science	Often	96
	Social Science	Not Often	55
	Arts	Once in a while	68
	Total	300	100
Motive of use	Meet with colleagues	38	12.7
	Read newspaper/Mag	44	14.7
	Study for exams/assignment	135	45
	Research purpose	83	27.7
	Total	300	100

From the Table 3 above, 81 (27%) of the respondents use the library very often, 96 (32%) use the library often, 55 (18.3%) of the respondents do not often use the library while 68 (22.7%) of the respondents use the library once in a while. On motive for library use, 135 (45%) of the respondents claimed they use the library for examination preparation/assignment, 83 (27.7%) for research purposes, 44 (14.7%) to read newspapers and 38 (12.7%) use the library for the purpose of interacting with colleagues.

Table 4: Rating of library Resources

Characteristics	Responses	Frequency	Percentage
Adequacy of resources	Highly adequate	53	17.7
	Adequate	83	27.7
	Fairly adequate	87	29
	Not adequate	77	25.7
	Total	300	100
Accessibility from home	Very much	64	21.3
	Little	67	22.3
	Very few	93	31
	None	76	25.3
	Total	300	100

From Table 4 above, 77 (25.7%) of the respondents are of the opinion that the library resources are not adequate, 83 (27.7%) are of the opinion that the library resources are adequate, 87 (29%) are of the opinion that the library resources are fairly adequate while 53 (17.7%) are of the opinion that the library resources are highly adequate. On the other hand, 76 (25.3%) of the respondents stated that none of the library materials is accessible from home,

67 (22.3%) stated that little of the library resources are accessibly from home, 93 (31%) stated that very few of the library resources are accessible from house while 64 (21.3%) stated that very much of the library resources are accessible from home.

Table 5: Respondents’ Knowledge of HIV Modes of Transmission (N=300)

Questions	Correct	Wrong
Shaking hands with someone who is HIV positive	169 (56.3%)	131 (43.7%)
Casual contact with someone who is HIV positive	148 (49.3%)	152 (50.7%)
Sleeping on the same bed with HIV positive person	164 (54.7%)	136 (45.3%)
Anal sex	105 (35%)	195 (65%)
Deep kissing	111 (37%)	189 (63%)
Sitting on the same bench with HIV positive person	141 (47%)	159 (53%)
Sharing office/classroom with HIV positive person	153 (51%)	147 (49%)
Sexual contact	242 (80.7%)	58 (19.3%)
Un-protected sex	277 (92.3%)	23 (7.7%)
Mother to child	208 (69.3%)	92 (30.7%)
Casual contact	78 (26%)	-74%
Sharing of body- piercing instrument	238 (79.3%)	62 (20.7%)
Transfusion of un-screened blood	252 (84%)	48 (16%)

From the Table 5 above, the knowledge of the respondents about the modes of transmission of HIV was quite high.

Table 6: Respondents’ opinion on sitting arrangement in libraries (N=300)

Statements	SA	A	D	SD
The seats are too close to each other	68 (22.7%)	74 (24.7%)	96 (32%)	62 (20.7%)
You can breathe directly on the person sitting opposite to you	43 (14.3%)	46 (15.3%)	79 (26.3%)	132 (44%)
The numbers of people on the same table are always too many.	56 (18.7%)	44 (14.7%)	93 (31%)	107 (35.7%)
Sitting arrangement encourages spread of communicable diseases	55 (18.3%)	53 (17.7%)	70 (23.3%)	122 (40.7%)
Readers’ seat are not well partitioned	18 (6%)	40 (13.3%)	114 (38%)	128 (42.7%)

From the Table 6 above, 34% of the respondents agreed to the statements above while 66% of the respondents disagreed to them.

Table 7: Respondents' level of comforts using Library with PLH (N=300)

Statements	VC	C	SC	NC
Sitting next to someone who is HIV positive	88 (29.3%)	65 (21.7%)	71 (23.7%)	76 (25.3%)
Exchanging books with someone who is HIV positive	66 (22%)	84 (28%)	93 (31%)	57 (19%)
Queuing with someone who is HIV positive at the loan desk in the library	61 (20.3%)	67 (22.3%)	94 (31.3%)	78 (26%)
Having to sit on the seat someone who is HIV positive have just used	95 (31.7%)	67 (22.3%)	56 (18.7%)	82 (27.3%)

From the Table 7 above, 50% of the respondents are comfortable interacting with PLH in the library while 50% are not comfortable interacting with PLH in the library.

Table 8: Inclusion of PLH (N=300)

Statements	SA	A	D	SD
People who are HIV positive should not use the library with other students	48 (16%)	24 (8%)	56 (18.7%)	172 (57.3%)
There should be a separate corner for people who are HIV positive in the library	32 (10.7%)	26 (8.7%)	38 (12.7%)	204 (68%)

From the Table 8 above, 21.7% of the respondents agree with the statements above while 78.3% of the respondents disagreed with the statements.

Hypothesis One: Students of tertiary institutions in Lagos will not be knowledgeable about HIV modes of transmission.

Table 9: Chi-square Analysis of Students' knowledge of modes of HIV transmission

Variable	N	df	sig. level	X ² cal	X ² crit	Decision
Students' knowledge of modes of HIV transmission	300	5	0.05	112.9	11.07	Rejected

From Table 9 above, the Chi square calculated are greater than the Chi square critical i.e X²cal 112.85> X²tab 11.07 with a degree of freedom 5 at 95% Alpha level.

Hypothesis Two: Students of tertiary institutions in Lagos will not feel comfortable interacting with their colleagues living with HIV

Table 10: Chi-square Analysis of Students' comfort in interacting with PLH

Variable	N	df	sig.	X ² cal	X ² crit	Remark	Decision
Students' comfort in interacting with PLH	300	4	0.05	11.65	9.488	Sig	Rejected

From Table 10 above, the Chi square calculated are greater than the Chi square critical i.e $X^2_{cal} 11.65 > X^2_{tab} 9.488$ with a degree of freedom 4 at 95% Alpha level.

Hypothesis Three: There will be no significant relationship between knowledge of HIV modes of transmission and behaviour towards PLH among students of tertiary institutions in Lagos.

Table 11: Correlation analysis between knowledge of the mode of transmission and attitude towards PLH among students

Variable	N	df	sig.	r. value	r. critc	Decision
knowledge of the mode of transmission and attitude towards PLH among students	300	1	0.05	0.762	0.998	Accepted

From Table 11 above, the r value (Pearson product moment correlation) is lesser than the r critical i.e. $r_{cal} 0.762 < r_{tab} 0.998$, with a degree of freedom 1 at 95% Alpha level.

4 Discussion of Findings

In table 9 ($X^2_{cal} 112.85 > X^2_{tab} 11.07$) the assumption that students of tertiary institutions in Lagos will be knowledgeable about the mode of transmission of HIV is accepted. This finding is in consonance with a study conducted by Prashanth, Mohd and Mohd Fadzil (2015) which reported that generally, students were well informed about selected aspects of HIV/AIDS. Thus, a very high (> 80%) proportion of students were conversant with the major modes of spread of HIV and with utility of condoms in preventing HIV infection. Also, Oppong and Oti-Boadi (2013) reported that over 90% of the students have heard about HIV/AIDS while students could identify the various modes of HIV transmission and preventive measures. Many studies have reported good knowledge on HIV/AIDS but negative attitude is still prevalent (Lal, Vasan, Sarma & Thankappan, 2000). Similar comparable results were also reported in

studies done in Ghana (Abebe &Fekadu, 2000; Kebede, Aklilu & Sanders, 2000; Gashaw, Afework, Feleke, Yigzaw, Molla & Fisseha, 2007).

In table 10 ($X^2_{cal} 11.65 > X^2_{tab} 9.488$) the assumption that students of tertiary institutions in Lagos will feel comfortable interacting with their colleagues living with HIV is accepted. This finding is in concurrence with the position of O'Hare, Williams and Ezoviski (1996) who pointed out that the persistent negative societal response plays a critical role in the experiences of individuals with HIV/AIDS. Since HIV/AIDS was discovered, affected individuals have been met with hostility, prejudice and stigmatisation. Most studies show that people with AIDS are perceived differently than individuals with other fatal diseases (van Aswegen, 1995). This statement is supported by studies done by Leone and Wingate (1991) and Posson and Jackson (1995). In both studies it was found that people tended to respond more positively towards a person with haemophilia than towards a person with AIDS.

In table 12 ($r_{cal} 0.762 < r_{tab} 0.998$) the assumption that there will be no significant relationship between knowledge of HIV mode of transmission and behaviour towards PLH among students of tertiary institutions in Lagos is accepted. This finding is in concurrence with that of Ajala (2012) who observed that knowledge may not always translate to positive behaviour. This position has played out in this study. In spite of the seemingly high knowledge of mode of transmission of HIV, most of the respondents were not too comfortable having casual contacts with their colleagues living with HIV. This could be a manifestation of fear. At the early period of the HIV and AIDS pandemic, a lot of myths and misconceptions were woven around the 'dreaded' disease. People were made to believe that casual contact can transmit the virus. The fear this created may not have been totally wiped-off even in the perceived available scientific information regarding modes of transmission of HIV. According to Rachman (1990), fear can be generated by information that is slightly or not at all threatening but which is misinterpreted by the recipient as being threatening. The behaviour of respondents in this study is not an isolated case. In an earlier study amongst nurses, Haastrup (2004) found that nurses, in spite of their high knowledge of HIV/AIDS were not too comfortable nursing HIV and AIDS patients. The effects of this type of behaviour on PLH should be our concern. Stigma and discrimination have been identified to be a factor that further spread HIV (Kenneth, Haastrup & Oscar, 2004). When people living with HIV are stigmatized, the tendency is for them to hide and deprive themselves the opportunity of sourcing help which may improve their status.

Conclusion

The trend in the library world today has gone beyond library within walls. While we celebrate academic libraries that have employed the capabilities of

Library 2.0 to provide services to users, it is also important to note that PLH, like other students deserve to access library resources without being stigmatized. They should not be discouraged by the behaviours of their colleagues who may not feel comfortable with their (PLH) presence in the library especially when library resources could not be accessed from a remote destination. It is hoped that academic libraries will intensify efforts to enlighten users more on the need for care and support for PLH while also planning to launch their library services on the platform of Library 2.0 to enable all users access resources from a remote destination; if they choose not to visit the library physically.

5 Recommendations

The paper recommended that the library should incorporate new technologies within the platform of Library 2.0 to achieve improved information sourcing and retrieval for all undergraduates (users) in order not to stigmatize PLH. Also, academic libraries should increase the awareness campaign on HIV/AIDS and care/support for PLH. Such awareness would prepare library users to render care and support for PLH. Inviting PLH to give a talk or share experiences during enlightenment programmes would improve the attitude of library users towards their colleagues living with HIV.

A further study targeting people living with HIV/AIDS as respondents may be conducted to find out their feelings about what they go through in respect of stigma and stigmatization relating to library use. Perhaps, such a study should incorporate types of library resources and services.

References

- Abebe G, Fekadu A: A health concerns and challenges among high school adolescents. *Ethiop J Health Dev*, 10(1):37-40.
- Ajala, J.A. (2012). *Reflection on Human Kinetics and Health Education: One Most Vital to Education, Academic Achievement, Wellness and Better Society*. Ibadan, Nigeria: Printmarks.
- Case, D.O. (2002). *Looking for Information: A Survey of Research on Information Seeking, Needs, and Behavior*. San Diego, Academic Press.
- Case, D.O. (2007). *Looking for Information: A Survey of Research on Information Seeking, Needs, and Behavior*. Emerald Group Publishing. Electronic.
- <http://books.google.com/books?hl=en&lr=&id=BNMQ16FPzLIC&pgis=1>

- Catalan, J. (2003). *Mental Health and HIV Infection - Psychological and Psychiatric Aspects*. Taylor and Francis. University College London.
- Comulada, W. Scott, Mary Jane Rotheram-Borus, Willo Pequegnat, Robert E. Weiss, Katherine A. Desmond, Elizabeth Mayfield Arnold, Robert H. Remien (2010). "Relationships over Time between Mental Health Symptoms and Transmission Risk among Persons Living with Hiv." *Psychology of Addictive Behaviors* 24, no. 1: 109-18.
- Eek, Tee Shiao (2012). Helping Doctors Connect with Generations X and Y. *The Sunday Star*, May 22.
- Ford, Z. (2016). We know all we need to know to end the HIV epidemic. here's why it continues. Accessed at: <http://thinkprogress.org/lgbt/2016/02/05/3746424/hiv-stigma/>
- Gashaw A, Afework K, Feleke M, Yigzaw K, Molla G, Fisseha W, et al: Low prevalence of HIV infection, and knowledge, attitude and practice on HIV/AIDS among high school students in Gondar, Northwest Ethiopia. *Ethiop J Health Dev*, 21(2):179-182.
- Guni, F. (2005). *HIV/AIDS Stigma and Discrimination*. National Association of People with AIDS (NAPA). USA.
- Herek.; G. dhe Capitanio, J. (1999). AIDS Stigma and Sexual Pejudice. *American Behavioral Scientist*. University of California. Vol. 42, No. 7.
- Ilo, Promise Ifeoma, and Goodluck .I Ifijeh (2010). Impact of the Internet on Final Year Students' Research :A Case Study of Covenant University,Ota,Nigeria. [In English].
- Kebede D, Aklilu M, Sanders E: The HIV epidemic and the state of its surveillance in Ethiopia. *Ethiop Med J*, 38(4):283-302.
- Lal SS, Vasan RS, Sarma PS, Thankappan KR: Knoweladge and attitudes of college students in Kerala towards HIV/AIDS, sexually transmitted diseases and sexuality. *Natl MedJ India*, 13(5):231-236.
- Leone, C. and Wingate, C. (1991). A functional approach to understanding attitudes toward AIDS victims. *The Journal of Social Psychology*, 131, 6, 761-768.
- Mann, Caroline Elliott (1999). Searching for Hiv/Aids Information on the World Wide Web. *Journal of the Association of Nurses in AIDS care* 10, no. 2: 79-81.
- Narayan, Bhuvaneshwari (2010). Towards Developing an Integrated Model of Information Behaviour. Queensland University of Technology.
- Nasir, Nor Edzan (2007). Modeling an Information Literacy Programme for Undergraduates: A Soft System Methodology Approach. Unpublished, University of Malaya, Kuala Lumpur, Malaysia.

- O'Hare, T; Williams, C.L. and Ezoviski, A (1996). Fear of AIDS and Homophobia: implications for direct practice and advocacy. *Social Work Journal of the National Association of Social Worker*, 41, 1, 1-120.
- Oppong Asante K and Oti-Boadi M (2013). HIV/AIDS knowledge among undergraduate university students: implications for health education programs in Ghana. *African Health Sciences*; 13(2): 270 - 277 <http://dx.doi.org/10.4314/ahs.v13i2.11>
- O'Reilly, T. (2012). O'reilly Velocity Web Performance and Operations Conference- 25-27 June.
- Pinto, Maria, Viviana Fernández-Marcial, and Carmen Gómez-Camarero (2010). The Impact of Information Behavior in Academic Library Service Quality: A Case Study of the Science and Technology Area in Spain." *The Journal of Academic Librarianship* 36, no. 1: 70-78.
- Posson, TR and Jackson, T.T (1995). Differing attitudes towards people who have AIDS. *The*
- Prashanth Talwar, Mohd Fadzil and Abd Rahman(2015). Assessment of HIV knowledge among university students using the HIV-KQ-18 scale: A cross-sectional study. *South East Asia Journal of Public Health*. 2015;5(1):33-38. DOI: <http://dx.doi.org/10.3329/seajph.v5i1.24849>
- Rachman, S. J. (1990). *Fear and Courage*. 2nd ed. New York: W. H. Freeman and Company.
- Tripathi, Manorama, and Sunil Kumar (2010). Use of Web 2.0 Tools in Academic Libraries: A Reconnaissance of the International Landscape. *The International Information & Library Review* 42, no. 3: 195-207.
- Ulası, Chijioke I., Peter O. Preko, Joseph A. Baidoo, Budry Bayard, John E. Ehiri, Curtis M. Jolly, and Pauline E. Jolly (2009). Hiv/Aids-Related Stigma in Kumasi, Ghana. *Health & Place* 15, no. 1: 255-62.
- UNAIDS (2015) 'On the Fast-Track to end AIDS by 2030: Focus on location and population'
- Van Aswegen, E. (1995). Aids-related knowledge. Attitudes and behavioural practices among high school pupils. *SA Family Practice*, 16,307-308.
- Varni, Susan E., Carol T. Miller, Tara Mccuin, and Sondra Solomon (2012). Disengagement and Engagement Coping with Hiv/Aids Stigma and Psychological Well-Being of People with Hiv/Aids. *Journal of Social and Clinical Psychology* 31, no. 2: 123-50.
- Visser, P. (2007). *HIV/AIDS and Stigma*. AfroAIDSinfo.
- Wilson, C. (2016). The Internet of Things" accessed at: [theinternetofthings.eu/clariss-wilson-internet of things](http://theinternetofthings.eu/clariss-wilson-internet-of-things)
- Winn, P (2008). State of Blogosphere:Introduction 2008.
- Zolfo, Maria, Lut Lynen, Jan Dierckx, and Robert Colebunders (2006). Remote Consultations and Hiv/Aids Continuing Education in Low-Resource Settings. *International Journal of Medical Informatics* 75, no. 9: 633-37.

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