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TOTAL QUALITY MANAGEMENT AS A COMPETITIVE ADVANTAGE FOR SMALL AND MEDIUM SCALE ENTERPRISES IN NIGERIA

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Abstract

The purpose of the study is to examine the influence of Total Quality Management (TQM) dimensions on competitive advantage of SMEs in Nigeria. It examined TOM along three popular dimensions: leadership, customer focus and continuous improvement quality. The study adopted a survey design, in which copies of the questionnaire were administered to 200 employees of twelve (12) selected fast food restaurants in Benin City. The data were analysed using Pearson matrix correlation techniques through Ordinary Least Squares (OLS) estimation technique. The findings revealed that a positive and significant relationship exists between leadership, customer focus and competitive advantage. Continuous improvement quality was found to have a negative and nonsignificant relationship with competitive advantage. Leadership was found to have the most significant influence, followed by customer focus. The study established that leadership and customer focus are key TQM dimensions which the fast food industry should seriously focus on in the quest for continuous quality improvement.

Key Words: Competitive advantage, Continuous quality improvement, Customer focus, leadership, Total quality management.

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Introduction

As a result of growth and development of the global economy, there has been a continuous increase in the number of businesses around the world. This influx is also due, in part, to the reduced amount of regulation and standardisation in their operations. This upsurge in their population has generated competitive pressure among the operators of SMEs resulting specifically from the continuous increase in customers' demand for quality goods and services. This situation has given rise to the need for small business' product or service uniqueness and competitive strength (Eniola, Olorunleke, Akintimehin, Ojeka, & Oyetunji, 2019; Esiaba, 2016; Gherardini, Renzi, & Leali, 2017; Jabeen, Shehu, & Mahmood, 2015). SMEs now need to engage in operations that line up with customer expectations (Eniola, *et al.*, 2019; Ibidunmi, Salau, Falola, Ayeni, & Ifeanyi, 2017; Imran, Binti, Binti, Shabbir, Salman, & Jian, 2018). They now have to introduce and develop new actions which will differentiate them from their rivals in the given locality where they operate.

Studies have revealed that in order for organisations to be distinctive from competitors, they have to pay adequate attention to their distinctive resources in a more proactive manner (Ibidunmi, *et al.*, 2017; Imran, *et al.*, 2018; Eniola, *et al.*, 2019). Thus, SMEs have to leverage on their competitive gains by raising the productivity level of their employees and other aspects of their operations. They also have to consider those practices which have worked out for many large scale businesses and adapt these to their business in the best way they can.

TQM comprises a set of management practices that can be used for improving organisation performance through the constant improvement of goods, services and business processes by striving to meet or exceed the expectation of customers and ensuring organisational performance (Eniola, *et al.*, 2019; Garcia-Bernal, & Ramirez-Aleson, 2015). It is a

long-term approach that holistically concerns itself with the continuous improvement in all areas of the company (Esiaba, 2016). Its aim is to radically transform an organisation through improvement in its systems, processes, practices and structures (Esiaba, 2016). It has been practised by some large scale businesses with some degree of success (Imran, *et al.*, 2018; Jimoh, Oyewobi, Isa, Waziri, 2019), and researchers are already emphasising the benefits of the practice of TQM to SMEs (Eniola, *et al.*, 2019; Jabeen *et al.*, 2015; Jimoh, Oyewobi, Isa, Waziri, 2019).

Eniola *et al.*, (2019) assert that TQM will enable organisations to attain business success by differentiating their products and gaining competitive position in the industry. It is also affirmed that TQM brings about better, faster, cheaper, safer, easier processing products than that of the competitors with the involvement of all employees under senior management leadership. The notion of TQM in the running of SMEs would be expected to yield positive outcomes. It is in the light of this that this study seeks to investigate the influence of TQM on competitive advantage among SMEs within the fast food industry.

Statement of the Research Problem

Due to increasing competitiveness across industrial sectors globally, organisations need to maximise quality, innovation, benchmarking, delivery dependency, etc., if they are to be successful. Moreover, going by the mounting pressure from customers for better value from their purchase, organisations cannot but adopt management practices that would help them deliver on quality, swifter delivery and lower cost (George, 2002). As a management technique, TQM plays a crucial role in influencing competitive advantage of organisations (Reed *et al*, 2000).

Ironically, a few studies have related TQM to competitive advantage and these studies did not fully explore an integrative suite of TQM activities on competitive advantage. (Addae-Korankye, 2013; Al-Qudah, 2013;

Esiabe, 2016; Genaparapu, & Prathigadapa, 2015; Jabeen, Shehu, & Mahmood, 2015).

This study seeks to bridge the existing gaps by investigating the relationship between three popular TQM dimensions such as leadership, customer focus and continuous improvement quality on competitive advantage of small businesses (within the fast food industry) in Nigeria.

Objectives of the Study

The broad objective of the study is to investigate the relationship between TQM practices and competitive advantage of fast food restaurants in Benin City. The specific objectives of the study are to:

- 1. determine the extent to which leadership influences the competitive advantage of fast food restaurants in Benin City;
- 2. ascertain the extent to which customer focus influences the competitive advantage of fast food restaurants in Benin City; and
- 3. investigate the extent to which continuous improvement quality influences competitive advantage of fast food restaurants in Benin City.

Research Hypotheses

The hypotheses in the null forms are stated as follows:

Ho1: There is no significant relationship between leadership and competitive advantage of fast food restaurants in Benin City;

Ho2: There is no significant relationship between customer focus and competitive advantage of fast food restaurants in Benin City; and

Ho3: There is no significant relationship between continuous improvement quality and competitive advantage of fast food restaurants in Benin City.

Competitive Advantage

Competitive advantage provides distinctive competencies that differentiate one organisation from other similar organisations in the industry. According to Porter, (1985) as cited in Al-Qudah, (2012:63), "competitive advantage refers to the comparative positional superiority in the marketplace that leads a firm to outperform its rivals". This implies that in order to attain competitive advantage, a small business should be able to add value to its offerings more than what the rivals are doing in the locality where the business is operating. Genaparapu, and Prathigadapa, (2015) identify the sources of competitive advantage to include the ability of an organisation to provide cost leadership, product differentiation, and effective people management.

Total Quality Management (TQM) Dimensions for Competitive Advantage

TQM is a management philosophy that holistically ensures continuous improvement by all employees under the leadership of effective top management for the purpose of ensuring superior customer satisfaction through the provision of quality products, and ensuring improved performance as end results (Jabeen, *et al.*, 2015). Similarly, Shankar (2012) defines TQM as a management approach that focuses on quality, predicated on the participation of all its members, which seeks a long term achievement through customer satisfaction and benefits to the members of the organisation as well as the public. It can be inferred from the definitions that TQM is a set of laid down principles and culture that guides management in the running of a business. This is based on constant learning, adaptation to changes in customer demand and satisfaction through continuous improvement. Genaparapu, and Prathigadapa, (2015) outline the TQM dimensions to include customer focus, leadership, team of people, process management, security/system

approach to management, continuous improvement, reliability and supplier's management.

Leadership and Competitive Advantage

The leadership demonstrated by the entrepreneur is arguably the most dominant among the TQM dimensions (Jabeen, *et al.*, 2015). This is because the entrepreneur plays a crucial role in ensuring that there is requisite commitment from organisational members. Effective teamwork, empowerment and participation in decision making have been traced to creating a competitive advantage for organisations whose leadership ensures that such practices become part of the organisation's approach towards solving problems (Jabeen, *et al.*, 2015). One of the ways of ensuring that the leadership is effective for competitiveness is by aligning all organisational members to the visions, goals and objectives of the organisation for the purpose of strategic fitness. Genaparapu, and Prathigadapa, (2015) suggest that management should establish unity of purpose and direction if they must attain competitive advantage.

Customer Focus and Competitive Advantage

Customer focus, which brings about customer satisfaction, is the ultimate goal of the TQM philosophy (Al-Qudah, 2012; Jabeen, *et al.*, 2015). This is because small businesses exist because of the customers, and TQM is a customer-oriented approach which places emphasis in ensuring customer loyalty through repeat purchase.

Continuous Improvement Quality and Competitive Advantage

An SME that pays adequate attention at improving the process and procedure of its activities is no doubt ahead of other small businesses that do not. Continuous improvement is possible by ensuring Just-In-Time (JIT) management for competitive advantage. JIT facilitates the improvement of quality and management of time. It helps in eliminating

wastes and unnecessary inventory and scrap in production. Another way of ensuring continuous improvement for competitiveness is through the organisation's Total Productive Maintenance policy. This is a production driven improvement procedure that is intended to optimise equipment reliability and guarantee proficient management of plant assets through employee participation and empowerment, by linking manufacturing, maintenance and engineering functions (Ahuja & Khamba, 2008).

Methodology

The study utilised the survey research design. The population of study is made up of 500 employees of 12 selected fast food restaurants in Benin City. They include Mat Ice, Chicken Republic, Mr Biggs, Glad Tidings, Omega and Bar restaurant, Kaydees, Mama Ebo, Kada Plaza, Sizzlers, Great foods, Mc Jerry foods, and Debbies Kitchen. The restaurants were chosen based on accessibility and level of knowledge of TQM. The Taro Yamane formula of sample size determination was used to get a sample size of 200. The questionnaire was conveniently administered based on proportional allocation of number of employees in each restaurant. Out of the 200 questionnaires administered, 160 (which constitutes 80% response rate) were considered valid, hence useful for analysis. The data were sourced in August 2020.

The questionnaire used for the data collection employed a five points modified form of Likert type scales with 5 = Strongly Agree (SA), 4= Agree (A), 3 = Undecided (U), 2= Disagree (D) = agree (A), 1 = Strongly Disagree(SD) to measure all the items. The criterion for agreement to the statement is based on an avarage mean value 3.0. Collected data was analyzed through descriptive and inferential statistics. All data were coded and the test analyses were done at 5% level of significance using the Statistical Package for the Social Sciences (SPSS) version 22.0.

Validity and Reliability of the Research Instrument

To ensure validity of the questionnaire prepared, copies of the questionnaire were given to colleagues in the research area to critically examine the applicability of the questions. Pilot study was conducted by testing and pre-testing the questionnaire with 20 randomly selected employees of the selected restaurants. Feedbacks were incorporated and questions were then revised. The final version of the questionnaire consisted of 28 closed-ended statements. To test reliability of the research instrument, the researchers used Cronbach's alpha as a diagnostic measure. It assesses the consistency of the entire scale. The results of the reliability analysisas shown in Table 1 revealed that all the variables are above 0.7 or 70%, indicating that the questionnaire is a strong research instrument for the study.

Table 1:Cronbach Alpha

| Variables | Number of Items | Cronbach Alpha |
|--------------------------------|-----------------|----------------|
| leadership | 6 | 0.876 |
| Customer focus | 6 | 0.821 |
| Continuous improvement quality | 6 | 0.709 |
| Competitive advantage | 10 | 0.791 |

Source: Researchers' computation based on the field survey 2020 using SPSS 22.0

Model Specification

The model for the study was stated functionally as:

$$CAD = f(LDS, CUF, CIQ) \dots (1)$$

Therefore, the model for the study is stated in econometrics term as:

$$CAD = \beta 0 + \beta 1LDS + \beta 2CUF + \beta 3CIQ + Et \qquad (2)$$

Where: $\beta 0$ = Constant; $\beta 1$ to $\beta 4$ parameters of the independent variables;

CAD = competitive advantage; LDS = leadership; CUF= Customer focus; CIQ= Continuous improvement Quality, and Et = error term. Apriori expectation is stated as: β 1>0, β 2>0, and β 3>0.

Agree

3.09

25

20

9

25

30

Top management is committed in ensuring that employees are well trained on best practices. Decision making by manage-

S.

decision making process

8.1%

29.4%

28.1%

15%

19.4%

Agree

3.54

24

24

69

32

15.6%

12.5%

37.5%

15.6%

18.8%

3.00

%6.9

15%

15%

43.1%

20%

ment is timely and effective

9

Grand mean

Results

disagree Agree Agree Agree DR Mean 3.07 2.19 3.00 3.08 31.8% 16.3% 15% S 26 24 13 20.6% 19.4% 26.3% 40% 33 42 64 47 26.3% 11.9% 42 19 45 31 17.5% 18.8% 9.4% 30 28 15 24 20.6% 19.4% %6.9 SA 33 31 31 Everyone is carried along in the Management supports commu-Management ensures that all workers are fully engaged at Management influences employees for superior perfornication in an effective way. Table 2: Leadership **Variables** mance work S α ω.

Source: Researchers' computation based on the field survey (2020)

Table 3: Customer focus

| Igel | table 5: Customer locus | | | | | | | |
|------|---|------------|-------------------------------|-------|------------------|-------|------|----------|
| SN | | SA | A | n | D | SD | Mean | DR |
| 7 | The restaurant strives to keep the | 36 | 17 | 77 | 20 | 10 | 3.31 | Agree |
| | customers highly satisfied | 22.5% | 22.5% 10.6% | 48.1% | 48.1% 12.5% 6.3% | 6.3% | | |
| 8. | Customers are placed first when en- | 33 | 40 | 40 | 37 | 10 | 3.31 | Agree |
| | gaging in product development | 20.6% 25% | 25% | 25% | 23.1% 6.3% | 6.3% | | |
| 9. | This restaurant has an effective | 21 | 61 | 20 | 25 | 33 | 3.08 | Agree |
| | avenue for customers' feedback on service quality | 13.1% | 13.1% 38.1% 12.5% 15.6% 20.6% | 12.5% | 15.6% | 20.6% | | |
| 10. | This restaurant maintains good rela- 30 | 30 | 31 | 30 | 49 | 20 | 3.01 | Agree |
| | tionship with its customers | 18.8% | 18.8% 19.4% | 18.8% | 30.6% 12.5% | 12.5% | | |
| 11. | This restaurant pricing policies is the 25 | 25 | 15 | 09 | 54 | 9 | 2.99 | Disagree |
| | best in the industry | 15.6% 9.4% | 9.4% | 37.5% | 33.8% 3.8% | 3.8% | | |
| 12 | This restaurant provides discount for 20 | 20 | 20 | 55 | 25 | 40 | 2.72 | Disagree |
| | individual customers. | 12.5% | 12.5% 12.5% 34.4% 15.6% 25% | 34.4% | 15.6% | 25% | | |
| | Grand mean | | , | | | | 3.07 | |

Source: Researchers' computation based on the field survey 2020

Table 4: Continuous improvement quality

| Ianic | Table 4. Communus improvement quanty | r, | | | | | | |
|-------|---|------------------------|-----------------|-------------------|-------|--------------|---------|----------|
| S/N | | $\mathbf{S}\mathbf{A}$ | \mathbf{A} | $\mathbf{\Omega}$ | D | \mathbf{S} | Mean DR | DR |
| 13. | Equipment maintenance is carried | 13 | 17 | 11 | 59 | 62 | 2.16 | Disagree |
| | out regularly | 8.1% | 8.1% 10.6% 6.9% | %6.9 | 36.9% | 38.8% | | |
| 14. | Continuous maintenance reduces the | 12 | 24 | 54 | 20 | 50 | 2.55 | Disagree |
| | breakdown of equipment | 7.5% | 15% | 33.8% | 12.5% | 31.3% | | |
| | There is timely and dependable de- | 27 | 21 | 18 | 44 | 50 | 2.57 | Disagree |
| 15. | livery of products to customers | 16.9% | 16.9% 13.1% | 11.3% | 27.5% | 31.3% | | |
| 16. | The workforce is highly motivated | 44 | 10 | 13 | 49 | 44 | 2.76 | Disagree |
| | through adequate empowerment and training | 27% | 6.3% | 8.1% | 30.6% | 27.5% | | |
| 17. | Workers have a feeling of ownership | 46 | 6 | 15 | 50 | 40 | 2.82 | Disagree |
| | of the organisation | 38.3% 7.5% | 7.5% | 9.4% | 12.5% | 25% | | |
| 18 | The restaurant keeps striving for ef- | 43 | 44 | 27 | 20 | 26 | 3.36 | Agree |
| | nciency and effectiveness. | 26.9% | 26.9% 27.5% | 16.9% | 12.5% | 16.3% | | |
| | Grand mean | | | | | | 2.70 | Disagree |
| 2115 | Source: Researchers' computation based on the field survey 7020 | n the fie | A SHITVAY | 7 2020 | | | | |

Source: Researchers' computation based on the field survey 2020

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| S/N SA A U D SD Mean DR 19 The restaurant offers competitive prices 25 24 57 44 10 3.06 Agree prices 20 The restaurant is able to offer prices lower than its competitors 19.4% 16.3% 36.9% 13.1% 15.6% 3.14 Agree prices 21 The restaurant is able to competed 12 16 51 62 19 2.6 Disagree prices 21 The restaurant is able to competed 12 16 51 62 19 2.6 11.9% 2.6 11.9% 2.6 11.9% 2.6 3.11 Agree products 3.18% 3.18% 3.11 Agree products to its customers 19.4% 20.6% 28.1% 15.6% 16.3% 3.41 Agree products to its customers 18.1% 43.1% 15.6% 15.4% 3.41 Agree products to its customers 18.1% 4.0 3.1 2.4 3.41 Agree products to its customers 18.1% 4.0 15.6% | Tank | table 5. Competitive auvantage | | | | | | | |
|--|------|--|-------------|-------------|-------------|-------------|-------------|------|----------|
| The restaurant offers competitive prices 25 24 57 44 10 3.06 Prices The restaurant is able to offer prices 31 26 59 21 25 3.14 lower than its competitors 19.4% 16.3% 36.9% 13.1% 15.6% 3.14 The restaurant is able to compete 12 16 51 62 19 2.62 based on quality 7.5% 9.4% 31.8% 11.9% 2.62 The restaurant offers high quality 31 33 45 25 26 3.11 products to its customers 19.4% 20.6% 28.1% 15.6% 16.3% 3.41 The restaurant delivers the kind of products needed by customers 18.1% 43.1% 15.6% 7.5% 3.41 The restaurant delivers customer 39 26 40 31 24 3.31 The restaurant responds well to cus- or time 24.4% 16.3% 25 25 31 3.08 The restaurant is first in the market in | S/N | | SA | Ą | Ω | D | SD | Mean | DR |
| The restaurant is able to offer prices 31 26 59 21 25 3.14 lower than its competitors 19.4% 16.3% 36.9% 13.1% 15.6% 3.14 The restaurant is able to compete based on quality 12 16 51 62 19 2.62 The restaurant offers high quality 31 33 45 25 26 3.11 products to its customers 19.4% 20.6% 28.1% 15.6% 16.3% 3.11 The restaurant delivers the kind of products needed by customers 18.1% 43.1% 15.6% 15.6% 7.5% The restaurant delivers customer 39 26 40 31 24 3.31 The restaurant responds well to cus-order on time 24.4% 16.3% 25 25 31 3.08 The restaurant is first in the market in products 27 16 52 59 6 2.99 The restaurant is first in the market in products 16.9% 32.5% 36.9% 38.6 3.8% | 19 | The restaurant offers competitive prices | 25 | 24 | 57 | 44 | 10 | 3.06 | Agree |
| The restaurant is able to compete based on quality 12 16 51 62 19 2.62 based on quality 7.5% 9.4% 31.8% 11.9% 11.9% The restaurant offers high quality 31 33 45 26 3.11 products to its customers 19.4% 20.6% 28.1% 15.6% 16.3% The restaurant delivers the kind of products needed by customers 18.1% 43.1% 15.6% 15.6% 7.5% The restaurant delivers customer 39 26 40 31 24 3.31 The restaurant responds well to cus-order on time 24.4% 16.3% 25% 19.4% 15.% The restaurant is first in the market in 27 16 52 59 6 2.99 Introducing new products 16.9% 9.4% 32.5% 36.9% 3.8% 29 6 2.99 | 20 | The restaurant is able to offer prices lower than its competitors | 31 | 26 16.3% | 59 36.9% | 21 | 25 15.6% | 3.14 | Agree |
| The restaurant offers high quality products to its customers 19.4% 20.6% 28.1% 15.6% 16.3% The restaurant delivers the kind of products needed by customers 18.1% 43.1% 15.6% 15.6% 16.3% The restaurant delivers customer 39 26 40 31 24 3.31 Order on time order on time to customer's demand for "hew" features 24.4% 16.3% 25% 19.4% 15.% The restaurant responds well to cus-s demand for "hew" features 20 59 25 31 3.08 The restaurant is first in the market in the m | 21 | The restaurant is able to compete based on quality | 12 7.5% | 16 9.4% | 51 31.8% | 62 | 11.9% | 2.62 | Disagree |
| The restaurant delivers the kind of 181% 43.1% 15% 15.6% 12. 3.41 stoducts needed by customers 18.1% 43.1% 15.% 15.6% 7.5% 15.6% 7.5% 18.1% 16.3% 26. 40 31 2.4 3.31 order on time 24.4% 16.3% 25% 19.4% 15.% 15.6% 15.6% 15.6% 15.6% 15.6% 15.6% 19.4% 16.3% 25.9 19.4% 16.9% 15.6% 15.6% 19.4% 16.9% 16.9% 15.6% 19.4% 16.9% 16.9% 16.9% 18.8% 16.9% 16.9% 18.8% 16.9% 18.8% 16.9% 18.8% 16.9% 18.8% 16.9% 18.8% 16.9% 18.8% 16.9% 18.8% 16.9% 18.8% 16.9% 18.9% 18.9% 18.9% 16.9% 18.9% 16.9% 18.9% 16.9% 18.9% 16.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% 18.9% 16.9% 18.9% | 22 | The restaurant offers high quality products to its customers | .4% | 33 20.6% | 45 28.1% | 25 15.6% | 26 16.3% | 3.11 | Agree |
| The restaurant delivers customer order on time 24.4% 16.3% 26 40 31 24 3.31 order on time order on time 24.4% 16.3% 25% 19.4% 15% The restaurant responds well to customer's demand for "new" features 12.5% 36.9% 15.6% 19.4% The restaurant is first in the market in the market in throducing new products 27 16 52 59 6 2.99 introducing new products 16.9% 9.4% 32.5% 36.9% 3.8% | 23 | The restaurant delivers the kind of products needed by customers | 29 18.1% | 60 43.1% | 33 15% | 25 15.6% | 12 7.5% | 3.41 | Agree |
| The restaurant responds well to customer's demand for "new" features 12.5% 36.9% 15.6% 15.6% 19.4% 15.6% 15.6% 19.4% The restaurant is first in the market in 27 16 52 59 6 2.99 introducing new products 16.9% 9.4% 32.5% 36.9% 3.8% | 24 | The restaurant delivers customer order on time | 4% | 26 16.3% | 40 25% | 31 | 24 15% | 3.31 | Agree |
| The restaurant is first in the market in 27 16 52 59 6 2.99 introducing new products 16.9% 9.4% 32.5% 36.9% 3.8% | 25 | The restaurant responds well to customer's demand for "new" features | 20 12.5% | 59 36.9% | | 25 15.6% | 31 19.4% | 3.08 | Agree |
| | 26 | The restaurant is first in the market in introducing new products | 27 16.9% | 16 9.4% | 52 32.5% | 59 36.9% | 6 3.8% | 2.99 | Disagree |

| 27 | 27 The restaurant provides dependable 15 20 10 62 53 2.26 Disagree | 15 | 20 | 10 | 62 | 53 | 2.26 | Disagree |
|----|---|-------|-------------------------------|-------|-------|-------|------|----------|
| | delivery of products | 9.4% | 9.4% 12.5% 6.3% 38.8% 33.1% | 6.3% | 38.8% | 33.1% | | |
| 28 | 28 The speed in service delivery makes 31 25 15 40 49 2.68 Disagree | 31 | 25 | 15 | 40 | 49 | 2.68 | Disagree |
| | our restaurant unique in the industry. | 19.4% | 19.4% 15.6% 15.6% 25% 31.3% | 15.6% | 25% | 31.3% | | |
| 29 | 29 The restaurant's quest for efficiency/ 29 33 27 25 46 3.36 Agree | 29 | 33 | 27 | 25 | 46 | 3.36 | Agree |
| | effectiveness is among the highest in the industry | 18.1% | 18.1% 20.6% 16.9% 15.6% 28.9% | 16.9% | 15.6% | 28.9% | | |
| | Grand mean | | | | | | 3.00 | |
| | | | | | | | | |

Source: Researchers' computation based on the field survey 2020

 Table 6: Pearson's Correlation Coefficient for All Variables

| | Mean CAD | CAD | LDS | CUF | 000 |
|---------|-------------|-------------|-----------------|---|------------------|
| CAD | 3.000 | 1.000 | 0.841 | 0.815 | 0.603 |
| TDS | 3.000 | 0.841 | 1.000 | 822.0 | 0.589 |
| CUF | 3.070 | 0.815 | 0.778 | 1.000 | 0.813 |
| CIQ | 2.700 | 0.603 | 0.589 | 0.813 | 1.000 |
| Source: | Researchers | computation | on based on the | ource: Researchers' commitation based on the field survey 2020 using SPSS 22 (| 1SING SPSS 22 () |

Testing of Hyotheses

Table 7: Regression Analysis Using Least Square

Coefficients^a

|) | | | | | | | | |
|----------|---------------|--------------|-------------|---|-------------|------------|---|-------------------|
| Mc | Model | Unstanda | ardized | Unstandardized Standardized | | | | |
| ٢ | | Coefficients | ents | Coefficients | | | | |
| <u>n</u> | | Std. Er- | Boto | | | | | |
| | | ror | Deta | | t | Sig. | Hypothesis | Decision |
| 1 | Constant .829 | .829 | .124 | | 889.9 | 000 | | |
| | TDS | .448 | .047 | .511 | 9.447 | 000 | Significant | Accept Ha |
| | CUF | .440 | .065 | .509 | 6.774 | 000 | Significant | Accept Ha |
| | CIQ | 091 0.48 | .048 | 111 | -1.905 058 | .058 | Not-significant Accept Ho | Accept Ho |
| | Predictors: | (constant | E), Leaders | hip, customer foc | us, continu | ons improv | Predictors: (constant), Leadership, customer focus, continuous improvement quality: Dependent Variable: | pendent Variable: |
| | Competitiv | e advanta | ige. P-valu | Competitive advantage. P-values are significant at 0.05 | at 0.05. | | | |

| | | Model su | Model summary | | | | |
|-----------------|-------------------|--|-------------------------|---------------------------------|---------------|-------|--|
| Model | R | \mathbb{R}^2 | Adjusted R ² | Std error of the F-change Prob. | F-change | Prob. | |
| | | | | estimate | | | |
| 1 | 0.881^{a} | 0.777 | 0.773 | 0.1533 | 227.528 0.000 | 0.000 | |
| Anirce: Researc | hers' computation | Source: Researchers' computation based on the field survey 2020 | ield survey 2020 | O LISING SPSS 22 (| | | |

15

iscussion of Results

In Table 2, there is consensus by majority on the statements on leadership in fast food restaurants as a TQM practice. Respondents however disagree largely on two statements, hence their means are below the average of 3.0. The mean value of leadership (3.00) indicates that leadership in the fast food industry is only at the average.

Table 3 reveals responses on customer focus as a TQM practice. Respondents agreed on all but two of the items on customer focus. Its mean value of 3.07 is slightly above the mean criterion of 3.0 indicating that the customer focus in the fast food industry is on the average and more attention needs to be given to it in order to align effectively with the demands of TQM.

Table 4 shows the responses on items on continuous quality improvement. Respondents responded in the negative to all but one of the items. The mean value of continuous quality improvement (2.07) is below the mean acceptance mean of 3.0.

In Table 5, respondents were undecided on the items on Competitive Advantage with a mean value of 3.00.

Table 6 shows the correlation statistics values which are positive. This indicates that leadership, customer focus and continuous quality improvement are moving in the same direction as competitive advantage. It further reveals that there is positive and significant correlation between competitive advantage with leadership, customer focus and continuous quality improvement at 5% level of significance. The results also shows that there is multicollinearity between the dependent and independent variables. This is evident by the correlation values which do not exceed 0.90 as suggested by Dwivedi (2008).

Table 7 reveals the results of the estimated multiple regression. The R-square of 0.777shows that based on the current period during which the study was conducted, and with respect to the data collected, leadership, customer focus, and continuous improvement quality jointly explain 77.7% of the systematic variations in competitive advantage of firms in the fast food industry in Nigeria. This shows a goodness of fit for the model, and can be used for statistical prediction.

OLS analysis reveals that leadership has a positive coefficient (0.829) and a significant influence on competitive advantage at 5% level of significance. These findings indicate that a unit increase in leadership results in approximately 82.9% increase in the competitive advantage of firms in the fast food industry in Nigeria. This also indicates that an effective leadership in the fast food industry influences their competitive advantage. Therefore, the management of SMEs should practice a pragmatic leadership approach that ensures that TQM practices are sustained in solving both present and future problems of their organisations.

The results of the analysis reveal that customer focus (0.448) is positively and statistically significant with competitive advantage at 5% level of significance. A unit increase in customer focus results in approximately 44.8% increase in the competitive advantage of firms in the fast food industry in Nigeria. This indicates that putting emphasis on customer focus in the fast food industry influences their competitive advantage. Customers are often not given enough focus because of the SMEs tendency of getting too busy with the present demands of their customers and fail to pay adequate attention to the future requirements of these customers.

Furthermore, the results reveal that continuous quality improvement has a negative coefficient (-0.091) and a non-significant influence on

competitive advantage at 5% level of significance. These findings indicate that continuous quality improvement is a weak determinant of competitive advantage of firms in the fast food industry in Nigeria. The insignificant nature of continuous quality improvement is consistent with the findings of Jabeen, *et al.*, (2015).

Considering the extent to which the independent variables affect the dependent variable, the coefficient results reveal that leadership has the most significant effect on competitive advantage (β 1=0.829, p<0.05), followed by customer focus(β 2=0.448, p<0.05), and the variable with the lowest significant effect on competitive advantage is continuous improvement quality ($\beta 3=-0.091$, p>0.05). This indicates that continuous improvement quality may not be a strong indicator of competitive advantage when compared with the other two dimensions. Hence, leadership and customer focus are stronger and more significant predictors of competitive advantage. This result validates the findings of Jabeen, et al., (2015) who revealed that management leadership is the most important TQM dimension that enhances SMEs performance. The results are however inconsistent with the findings of Mahmood et al., (2014) who revealed that continuous improvement quality has the most significant influence on performance. Al-Qudah (2012) on the other hand revealed that customer focus has the most significant influence on competitive advantage.

Conclusion

The objective of this paper was to examine the influence of three popular TQM dimensions on the competitive advantage of SMEs. The findings have revealed that the leadership role of the management of SMEs is key to enhancing competitive advantage. It also revealed that other TQM practices are important to achieving competitive advantage in the industry.

Implications of the Study

This study has implications for performance in service-based and manufacturing industry especially in the areas of developing and implementing strategies that align with the TQM dimensions. Based on the findings of this study SMEs need to focus on leadership and customer focus as key TQM dimensions. This is because it is the firm's proven ability to provide leadership and customer satisfaction that could help them achieve continuous improvement quality. In other words, there cannot be continuous improvement of quality in the absence of the right leadership and without a focus on customer's satisfaction.

Recommendations

Based on the study's data analysis and empirical findings, it is recommended that SMEs should emphasise on TQM practices that include leadership, customer focus and continuous improvement quality in ensuring superior competitive advantage. First, the right leadership should be provided which would help in strengthening customer focus and continuous quality improvement.

Continuous improvement programmes should be adequately planned and implemented by ensuring that the organisational members are fully involved. This should be installed as a culture in the organisation. For this to be possible, SMEs should continuously train and empower their employees through seminars, workshop and conferences which will keep them abreast of current happenings in the industry.

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THE CONTRIBUTION OF VIRTUE ETHICS TRAINING ON ETHICAL UTILISATION OF CELL PHONES BY MBA STUDENTS AT NKUMBA UNIVERSITY IN UGANDA

Wilson Muyinda Mande

ABSTRACT

This paper reports the findings of the study that was carried out to analyse the contribution of the training in virtue ethics on ethical utilisation of cell phones by MBA students. The study examined the relationships between virtue ethics training, acquisition of cell phones and their ethical utilisation. It was found that the training in virtue ethics had a positive relationship with acquisition of cell phones [r(46) = .330, p < 0.05]. On possession of cell phone and ethical utilisation, there was no relationship [r(46) = .043, p > 0.05]. The training in virtue ethics explained 38% ethical utilisation of cell phones by MBA students. In view of these findings the paper proposes inclusion of practical or field work when virtue ethics training is executed.

INTRODUCTION

The cardinal task of the current study was to analyse the contribution of virtue ethics training to ethical utilisation of cell phones by MBA students. The research focused on the Master of Business Administration (MBA) students at Nkumba University. The University requires every MBA student to offer the Business Ethics course unit. This requirement cuts across all areas of MBA specializations of marketing, management, finance, information technology and procurement management (Nkumba University Prospectus, 2016). The primary objective of teaching ethics to MBA class is to enable students adopt a culture of applying ethical reasoning to every decision and action students get involved in while still at the university.

The term ethics originated from Greek word ethikos from which English derived terms like ethos and ethics. In Greek ethics meant actions, character, conduct or behaviour that was valued. Actions are valued if they affect people positively or negatively. Actions that do not affect anyone are of no concern to ethical discourse. Ethics is about how we ought to live. It examines the various patterns of morality that exist in the habits of people, the fabric of communities, the teachings of the wise and analyses which ought to be followed and how we know. Ethics emphases living trustworthy and honourable lives and not living as cheats, liars, exploiters or oppressors especially in business and public undertakings.

Virtue ethics is a normative enquiry. It endeavours to arrive at moral standards that regulate right and wrong conduct. This may involve articulating the good habits that we should acquire, the duties that we should follow or the consequences of our behaviour on others. We should do to others what we would want others to do to us. Since I would want people to lend me money when I am in need, then I should also lend people who are in need of money. So a normative theory establishes a single principle against which we judge all actions.

As far as virtue ethics training is concerned, the University intention is to have students embrace ethical conduct when they are still studying. Practising ethical conduct ought to have started when they were still small children. A family is primary socialising agent as far as virtues are concerned. The University is supposed to enhance and engrain more virtues into the students

The intention that students who have read ethics would start practising it while at university was tested against the use of cell phones. Cell phones became common in Uganda in the second half of the 1990s. That is a period equivalent to almost a full generation. There are many people in Uganda who have subscribed to mobile phones. By close of 2018, about

32 million sim cards had been acquired from the telecommunication companies. This number was shared out as shown in the table 1 below.

Table 1: SIM cards of cell phones in Uganda by 2017 -2018

| | Telecom company | Customers in millions |
|---|-----------------|-----------------------|
| 1 | MTN Uganda | 18,048,353 |
| 2 | Airtel Uganda | 10,076,051 |
| 3 | Africell Uganda | 3,588,583 |
| 4 | Uganda Telecom | 213,768 |
| 5 | Smart | 113,595 |
| 6 | K2 | 81,904 |
| 7 | Others | 85,529 |
| | Total | 32,207,783 |

Source: Mpairwe (2017)

It is worth noting that the number of people using cell phones in Uganda was relatively big. The number of subscribers accounted for 56% of the total population. The number of Ugandans using cell phones had been growing steadily since the year 2000. In 2018 it is also estimated that about 2.6 million Ugandans were active on social media (Sebunya, 2018). Most of these were young people especially students in universities and tertiary institutions.

The figures in table 1 accounted for SIM cards. It is worth to note that the number of sim cards is not equal to people who own cell phones. The number of people who own cell phones is about 25 million. The difference is explained by the fact that some people own more than sim card and other sim cards are owned by organisations. The number of individuals owning sim cards has been growing every year since 2008. The changes in ownership of cell phones in Uganda is provided in Table 2.

Table 2. population owning cell phones in Uganda 2008-2018

| | Year | Millions |
|----|------|----------|
| 1 | 2008 | 8.55 |
| 2 | 2009 | 9.38 |
| 3 | 2010 | 12.83 |
| 4 | 2011 | 16.7 |
| 5 | 2012 | 16.36 |
| 6 | 2013 | 18.07 |
| 7 | 2014 | 20.37 |
| 8 | 2015 | 20.22 |
| 9 | 2016 | 22.84 |
| 10 | 2017 | 23.00 |
| 11 | 2018 | 24.95 |

Source: https://www.statista.com/statistics/501155/

Since the individuals with cell phones has risen from 8.55 million in 2008 to 24.95 in 2018, it is plausible to argue that more than half of the Ugandan population own and use cell phones. For that matter, cell phones are a dominating phenomenon which deserves all attention. Cell phones have been the centre of communication, money transactions, photographing, video recording, advertising, information storage, data capture and as a platform for collecting excise duty.

Virtue Ethics Training

Virtue Ethics training at MBA level is concerned with teaching students to approach business decisions and personal conduct in an ethical manner. The way people make decisions and conduct themselves in business and in public life, not to mention in private life, is often influenced by the values they acquired from their families, culture, religion, experience, context, peers and other socialising agencies. This means that university education is one of the socialising agencies. Each socialising agencies

have an area of emphasis. It is for this reason that virtue ethics as part of business ethics is taught to MBA students.

THE NEED FOR THIS STUDY

The training virtues ethics is expected to influence the learners' decision-making, conduct and actions. This is what is expected of the MBA students at the university. In spite of that presumption, there are many instances which seem to suggested that as far as cell phones are concerned, it may not the case. For instance, some university students were reported to have used cell phones to cheat during examinations (Okello, 2014). In the same year, in Eastern Uganda students and staff clashed over mobile phones (Papa, 2014). Similarly, another study (Ahimbisibwe, 2017) pointed out that some 18 students were punished for examination malpractice. Overall, in 2013 the Ministry of Education had issued a ban on mobile phones in schools because of the following reasons: "Government registered an overwhelming rate of exam malpractices. This was particularly noted when students were reported to use phones to receive questions and answers of leaked examinations prior to sitting Examinations; cell phones were also found to encourage other unethical actions (Ouga, 2013). In 2015 there as a debate whether to ban or allow digital devices in educational institutions (Kamugisha and Ninsiima, 2015). At Nkumba University some students were found guilty of violating examination rules by carrying cell phones into examination rooms (Nkumba University Senate records, 2016). Some staff complained about students who use phones to send obnoxious messages to cause trouble at university including organising violent strikes (Nkumba staff, 2018). On a wider level, research of 2015 indicated that cell phones had had "good influence on the realms of education, personal relationships and the economy but had negative on morality in emerging and developing nations (Pew, 2015)

The above reasons suggest that university students may not be using cell phones ethically. For that reason, it was appropriate to carry out the current research especially on MBA students who had already offered the ethics course to determine whether it had any impact on their conduct.

OBJECTIVES

- 1) To analyse the relationship between virtue ethics training and acquisition of cell phones by MBA students at Nkumba University
- 2) To assess the relationship between acquisition of cell phones and the ethical utilisation of cell phones by MBA students at Nkumba university
- 3) To gauge the contribution of virtue ethics training on ethical utilisation of cell phones by MBA students.

LITERATURE REVIEW

The purpose of virtue ethics training at the University is to equip students with competencies to make ethical decisions and minimisation of unethical aspects in business and public life (Mande, 2014). Ethics especially virtues are important for the people who serve or interact with others

The current review of related literature focused on five sub-themes namely: concept of virtues ethics training, acquisition or ownership of cell phones, ethical utilisation of cell phones. These are the key sub-themes which have relevance to the topic under study.

Virtue ethics training and acquisition or ownership of cell phones

The sub-theme of cell phone ownership or acquisition has been handled by many studies. The predominant motif is that the number of the people with cell phones has been increasing each year the world over. In 2016 about 2.1 billion people were estimated to own cell phones. The number rose to 2.32 billion and 2.53 billion in 2017 and 2018 respectively (Baron, 2018). In Universities, it was found that about 94.4% of students owned cell phones at Najran University in Saudi Arabia (Alfawareh and Jusoh, 2014). It was found that the majority of students at the University of Dar es Salaam in Tanzania owned cell phones (Mwabungulu and Mugwabi, 2017). One other study found out that some students especially female ones would do anything including unethical ones for the sake of acquiring a smartphone (Murungi, 2017). Although the acquisition of cell phones is common and increasing, its relationship with the ethics education is not included in the debate. It is for that reason that the current set out to examine the relationship between ethics education and acquisition of cell phones. Hence the first null hypothesis:

- $H = \frac{1}{o}$ There is no significant relationship between virtue training and acquisition of cell phones.
- $H\frac{1}{A}$ There is a significant relationship between virtue training and acquisition of cell phones.

Acquisition of cell phones and ethical utilisation of cell phones

As far as utilisation of cell phones was concerned, some studies found that there was a consideration addition to them (Haug, Kwon, Kowatsch, Paz Filler and Schaub, 2015). The addiction was found to be among young users of cell phones (Kumcagiz, 2018). Although addiction was associated with young adolescents, that is, between 15 and 16 years, When compared with younger adults, that is 19years and older, it was revealed that the young adults experience less addiction (Haug, et, 2018). Another dimension of the debate was that addiction to smartphones was found to reduce the rate of working and productivity (Duke and Montag, 2017).

Some studies Suhail (2017) in Uganda; Masika et. al., (2015) in Kenya; Kushwaha (2017) in India; Mojaye (2015) in Nigeria and Quist and Quarshie (2016) in Ghana found that there was a high number of young people who owned and used cell phones. On the other hand, however, other studies like that of Wanyama et al (2018) young people between the ages of 18 to 24 years did not use cell phones to learn about HIV / AIDs. The usage for that purpose was as low as 30%.

Some studies have contended that some people have used smartphones so much so that they have even developed a state of nomophobia (Tams, Legoux and Leger, 2018).

It could be noted that the debate of numbers among these authors, though useful, did not involve those who have offered ethics as a course unit at University level, neither do they include MBA students in their samples. Furthermore, they did not associate addiction ethics. When a person acts under the influence of addiction can such person be held ethically responsible? So there is gap which the above debates have not filled. For those reasons it as plausible as it is true to assert that the above authors debate did not help in answering the question of ethics education and use of cell phones by MBA students at Nkumba University. It is the current study that is trying to answer that question. Given the debate raised above the second hypothesis of the study is formulated as stated below:

- $H = \frac{2}{\rho}$ The rignificant relationship between acquisition of cell phones and ethical utilisation.
- $H\frac{2}{A}$ There is a significant relationship between acquisition of cell phones and ethical utilisation.

Virtue ethics training and ethical utilisation of cell phones

From production to usage of cell phones, there are ethical issues associated with cell phones. The 40 plus materials which are needed in production of cell phones, necessitate mining and processing (DiMarco, 2017). These activities involve unethical activities. For that matter, another study contended that talking about ethical smartphone is an oxymoron (Richmond, 2016). This view seems to suggest that smartphones are everything unethical.

Other studies were more concerned with ethical utilisation of cell phones. Some researchers (Nabulyalo, Jeyaseelah, Malagelada and Heaton, 2016) focused on ethical use of smartphones in orthopaedics. They concluded that many medical personnel using smartphones, record, store and share images of patients. This is an unethical use of cell phones.

It was also observed that beneath the text messages pictures, and other things transmitted through the cell phones, there is a dark and disturbing story (Dancey-Downs, 2018). For instance, companies in Democratic republic of Congo and sustain armed and ruthless militia there so that companies can mine metallic ore use to build mobile capacitors; tropical forests were destroyed in Indonesia to do tin mining; and human rights in various places have been abused because companies want to make cell phones (Dancey-Downs, 2018). The debate in the above literature is very informative. However, it did not cover the effects ethics education would have over ethical utilisation of cell phones, especially in Ugandan setting. This is the gap the current study sets out to fill. In view of the literature on ethics and cell phones, the third hypothesis of the study is formulated as stated below:

 $H = \frac{3}{o}$ There is no significant contribution of virtue ethics training on ethical utilisation.

 $H^{\frac{3}{A}}$ There is a significant contribution of virtue ethics training on ethical utilisation

METHODOLOGY

This study was carried out in Uganda at Nkumba University. A sample of 46 was considered sufficient for two reasons: (i) according to Roscoe's rule of the thumb, any sample between 30 and 500 can produce credible results in social science research (Roscoe, 1975); (ii) respondents were all the 46 MBA students in their second year and final year of study. All the 46 students had coffered the ethics course unit and completed.

Their demographic characteristics were as follows: in terms of gender, 52 % were male and 48% female; regarding nationality, 70% were Ugandan and 30% international students; the majority or 57% were above 25 years, 26% were above 35 years and 17% were below 24%. The study's respondents therefore were young adults. It is often held that young people are as fascinated as they are savvy at information communication technology (Makumbi, 2018).

Collinearity test

A collinearity test was intended to ascertain the independent variables were not highly correlated. This was necessary because if it happened that there was a severe collinearity, it would suggest that there was a problem of exaggerating the variance of regression coefficients making them unstable. The tolerance and collinearity test was executed in order to determine two things: (a) the strength of the linear relationship among the independent variables, otherwise known as tolerance; (b) to tell if collinearity was a problem for the data of the current study.

In detection of collinearity, the Variance Inflation Factor (VIF) is the most commonly used (O'Brien 2007; Wooldridge 2013). A VIF of 1 indicates that a variable is completely uncorrelated with other independent

variables while larger values indicate that a greater proportion of the variance can be predicated by other independent variables. The rule of the thumb is that there is collinearity problem if the VIF exceeds 4 or 10. So the variance VIF measures how much the variance of the estimated regression coefficients are inflated as compared to when the predictor variables are not linearly related.

Table 3 the test of collinearity

Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Collinearity St | atistics |
|--------------------------|--------------------------------|------|------------------------------|--------|------|-----------------|----------|
| | B Std. Error | | Beta | | | Tolerance | VIF |
| (Constant) | 1.238 | .607 | | 2.038 | .048 | | |
| 1 Ethics education | .809 | .150 | .673 | 5.399 | .000 | .891 | 1.122 |
| Ownership of cell phones | 226 | .157 | 179 | -1.438 | .158 | .891 | 1.122 |

a. Dependent Variable: ethical use

From table 6 it can be seen that (a) none of the tolerance was small. All of them were high, that is, .891 which meant that they were not close to 0. This implied that collinearity was not a problem. The data of the current study had no possible replications. For that matter, the data and its outcome were good and credible.

Furthermore, given the fact that the VIF was around 1.122, it meant that the variables of ethics education and possession of cell phones were completely uncorrelated. This implied that there was inflation of the regression coefficients. For that matter the results of the regression tests were reliable predictors.

Methods and tool of data collection

The main method used was the survey method. Data was gathered using a structure questionnaire. Besides the items on the demographic characteristics, the rest of the items on the questionnaire were on Likert scale (that is, Strongly Disagree =1; Disagree =2; Neutral = 3; Agree = 4; and Strongly Agree = 5). One expert was used to rate the validity of the items on the questionnaire. The result of the content validity index was 0.785.

The Cronbach alpha coefficient was for the reliability of the questionnaire was 0.877. This implied that the tool was internally consistent.

RESULT AND INTERPRETATION

The ethics education offered to MBA students at Nkumba University focuses more on applied ethics. It covers many areas including virtue theory. This is one of the main three normative theories of ethics. By the end of the course the MBA students are expected to have gained information and skills of not only handling most business matters ethically but also behaving well.

The relationship between virtue ethic training and acquisition of cell phones

Virtue is conceptualised as dispositions to behave properly and it embodies one's philosophy of life. That is, self—understanding and understanding the social and natural world around. Training in virtues stresses the point the view that what is important in moral life is not consistent adherence to principles and rules but reliable character, moral good sense and emotional responsiveness. Among the so many virtues taught to MBA

students are:

Table 4 some of the virtues taught to MBA students

| | Virtue | Its meaning |
|---|----------------|---|
| 1 | Accountability | The state of taking responsibility for one's own actions or inactions |
| 2 | Creativity | Being able to generate new ideas as a solution to existing gaps |
| 3 | Eloquence | Fluently and persuasively articulating issues at hand |
| 4 | Forbearance | Restraint under provocation |
| 5 | Gratitude | Being thankful for others good deeds |
| 6 | Honesty | Being sincere, not lying nor cheating |
| 7 | Humility | Not demonstrating false pride or haughtiness |
| 8 | Integrity | Consistency in values and actions |

| 9 | Impartiality | A proclivity to weigh both opinions equally without prejudice | | | |
|----|---------------|--|--|--|--|
| 10 | Justice | Giving a deserved treatment or response | | | |
| 11 | Knowledge | Information with guidance for action based on insight and experience | | | |
| 12 | Punctuality | The proclivity to always keep the appointed time | | | |
| 13 | Reliability | Being trusted to do something right and not to do something wrong | | | |
| 14 | Sensitivity | Awareness of oneself and others' in social or personal relationships | | | |
| 15 | Understanding | Holistic awareness and comprehension of facts | | | |
| 16 | Assiduousness | Being hardworking and not loafing nor mooching lazily | | | |

Source: Nkumba University Business Ethics Course Outline, 2016

The methods used to teach the above virtues included the lectures. A lecture has been defined as a method whereby the professor reads aloud from a text and also offers a commentary or leads a discussion on the topic. This method is advantageous in that is inculcating virtues because it enables students to grasp terminologies and to gain a clear understanding of concepts. Other methods used in teaching virtues include were (question and answer), discussion and case studies. This training lasts a quarter of a year.

To analyse the relationship between virtue ethics training and acquisition of cell phones, Pearson's Product Moment Correlation test was carried out. The results of the Pearson's correlation test indicated that there was a low positive significant relationship between ethics education and acquisition or possession of the cell phones among the MBA students [r (46) = .330, p<0.05]. The implication of this statistic was that to some extent, MBA students understood that as training in virtue ethics indicated, possessing a cell phone called for ethical considerations.

The regression test first revealed a model summary with the result which gave an R^2 of .109. This meant that virtue ethics training explained about

11% of the MBA students' impetus to possess cell phones. As far as linearity was concerned, the regression results were [F(1, 44) = 5.368, .025] showed a linear relationship between virtue ethics and possession of cell phones. That is to say, MBA students possess cell phones for ethical reasons. They believe that possessing a cell phone is an ethical matter. They arrive at this conclusion using virtue ethics training knowledge.

The first null hypothesis argued that "there would be no significant relationship between virtue ethics training and possession of cell phones". The results of the test of this hypothesis are reported in table 5.

Table 5 Coefficients on virtue ethics training and possession of cell phones

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------------|-----------------------------|------------|------------------------------|-------|------|
| | | В | Std. Error | Beta | | |
| 1 | (Constant) | 2.101 | .490 | | 4.291 | .000 |
| l | Ethics education | .315 | .136 | .330 | 2.317 | .025 |

a. Dependent Variable: possession of cell phones

The results of Beta = .330, p<0.05 meant that the null hypothesis was rejected and the alternate one, "there would be a significant relationship between virtue ethics training and possession of cell phones", was supported instead. Virtue ethics training was therefore important for the 98% MBA students who had acquired cell phones.

The relationship between possession of a cell phone and ethical utilisation of the same

Possessing a cell phone is one thing and utilising it ethically is another. In respect of the second objective of the current study, the analysis of the relationship between the two variables was necessary because cell phones were understood to cause a lot of anxiety among people.

As far as MBA students were concerned, about 98% owned cell phones.

The remaining 2 % which in absolute numbers was one individual, had just lost the cell phone at the time of the field research. It was trendy for MBA students to possess cell phones. As much as 93% of these MBA students had had cell phones for several years. Of these, 61% had more than one cell phone set. About 85% were smart phones.

Table 6 MBA students' key reasons for acquiring cell phones

| | Key reason for acquiring a cell phone | percentage |
|-----|---------------------------------------|------------|
| i | Socialising | 85 |
| ii | Safety | 74 |
| iii | Privacy | 57 |
| iv | Academic work | 83 |
| V | Status | 22 |

Source: Field Research

From all this it was necessary to analyse the relationship between possessing a cell phone and using it ethically. In the general population there were instances when wrongdoers were said to have used cell phones to hoodwink their victims, to cause murder, toe extort money from unsuspecting individuals, to tell lies and so on.

Unlike the general population, the MBA class is special group of people in that they are educated and have been exposed to training in virtue ethics. In that was ethics is supposed not only to influence their decision making but also their actions.

To assess the relationship between possession of cell phones and ethical utilisation, a Pearson's correlation test was done. It produced results which indicated that there was no significant relationship between the two variables [r (40) = .043, p>0.05]. It implied therefore that acquiring a cell phone and using it ethically are wo different things. In Uganda government tried to register all the sim cards so that if any cell phone is used to commit a crime, the police can easily identify the owner.

The second null hypothesis which stated that "there is no significant relationship between possession of a cell phone and ethical utilisation" was upheld. The simple linear regression test indicated that possession of cell phone had zero effect on ethical utilisation.

The contribution of virtue ethics training to ethical utilisation of cell phones

To gauge the contribution of virtue ethics training to ethical utilisation of mobile phones by MBA students constituted the third objective of the study. As already pointed out in virtue ethics training, the University endeavours to enable students to cultivate a sense of ethical conduct. In that way ethics training would lead to ethical utilisation of cell phones. Having undertaken the course, MBA students were not expected to use cell phones to steal, to lie, to cheat in exams, to convey obnoxious messages nor are they expected to relay fake information against others.

When a bivariate correlation test was executed, it yielded results which indicated that there is a moderate positive significant relationship between business ethics education and ethical utilisation of cell phones [r(46) = .614, p<0.01]. This meant that the more training in virtue ethics MBA students received, the more they use their mobile phones ethically.

A simple linear regression test was also carried out. It produced a model summary with the result of R2 .376 which indicated that virtue ethics training accounted for 38% of the ethical use of mobile phones. The remaining 62% was explained by factors outside this model. The regression results also revealed that there was a linear relationship between virtue ethics training and ethical utilisation of mobile phones [F (1, 44) 26.569, p<0.01]. The implication of this is that a unit change in virtue ethical training leads to a proportionate unit change in the ethical utilisation of cell phones by the MBA students who will have attained the training.

The third null hypothesis which stated that "there is a moderate positive significant relationship between virtue ethics training and ethical utilisation of cell phones" was also tested. It yielded results are given in table 7.

Table 7 the Coefficients virtue ethics training and ethical utilisation a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------------------|--------------------------------|------------|------------------------------|-------|------|
| | | В | Std. Error | Beta | | |
| | (Constant) | .764 | .516 | | 1.480 | .146 |
| 1 | Virtue ethics training | .738 | .143 | .614 | 5.155 | .000 |

a. Dependent Variable: ethical use

From table 7, the result of the coefficient of regression gave Beta = .614, p<0.01. This indicated that the null hypothesis, "there is no significant relationship between virtue ethics training and ethical utilisation of cell phone" was rejected. Instead the alternate hypothesis, "there is a significant relationship between virtue ethics training and ethical utilisation of cell phone", was supported. From these results, it can be concluded that virtue ethics training is useful in enabling students to use cell phones ethically.

This inference was also revealed in the following responses from the MBA students:

Table 8 Some ethical aspects practised by MBA students while using cell phones

| | Ethical aspects practised by MBA students at the University | percentage |
|-----|---|------------|
| i | I follow the university policy on the use cell phones at campus | 76 |
| ii | I tend to apply the ethics of using a cell phone | 80 |
| iii | I keep my cell phone silent mode during lectures | 70 |

| iv | I set my cell phone in vibration mode most of the time | 57 |
|-----|---|----|
| V | Virtue ethics training helps to fight phone addiction | 72 |
| vi | Virtue ethics training helps assist others to use cell phones ethically | 72 |
| vii | As an MBA, I am ready to use my cell phone ethically | 76 |

Source: field research

It is evident from table 8 that indeed training in virtue ethics helps MBA students to have uphold and practise some amount of ethics as far as cell phones are concerned.

Ethical utilisation of cell phones is important because it helps to curb malpractices like:

- (a) Disruption of attention during lectures
- (b) Temptation to share unnecessary information or data
- (c) Cheating in examinations
- (d) Impairing one's sense of concentration
- (e) Failure to apportion and manage time well

RECOMMENDATION

Virtue ethics training focuses on inculcating a moral character. The people who possess virtues are the ones who self-actualised, well adapted, fully functioning and are good specimen of the humankind. Practising virtues of accountability, forbearance, honesty, respect, justice, prudence and others for a combination of theoretical and practical training. It is recommended therefore that the training in virtue ethics should involve students going out to businesses and communities to put into practice the ethical values learnt theoretically in the lecture rooms.

The practical training may involve drafting ethics policies for organisations, offering advice to businesses on ethical matters, debating ethical topics with members of the community outside the University. They should also be to initiate a project on ethics and cell phones and work on for a year a semester or a year. During assessment, such practical training should account for 60% of the pass mark. Then other written examinations account for the remaining 40%. This approach is likely to generate more interest in the ethics generally and virtue ethics in particular.

CONCLUSION

It has become increasingly clear that virtues are as important as ICT. At Nkumba University normative ethical theories including virtues have been taught as a compulsory subject to all MBA students. However, the complaints about unethical use of cell phones have also been made rather often. The current study was undertaken in order to determine whether training in ethics modified the learners' moral character. It has been found that training in virtue ethics contributed only 61% to MBA students' tendency to use their cell phones ethically. In the light of this finding, this paper proposing inclusion of practical training if the university students are to be more ethical when using their cell phones.

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PROCUREMENT SYSTEMS AND EFFECTIVENESS OF HEALTH CARE SERVICE DELIVERY IN UGANDA: A CASE OF SELECTED RURAL HEALTH CENTRE IIIS

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Abstract

The overall purpose of this study was to assess the contribution of the public procurement system on the effective health care services delivery in Uganda focusing on selected rural health centre IIIs. To achieve the above central objective, four research objectives were formulated that included; i) To assess the relationship between public procurement system and public funding of rural health centre IIIs; ii) To assess the relationship between public funding and logistics management for rural Health Centre IIIs; iii) To analyse the effect of logistics management on the effectiveness of health care service delivery; and lastly iv) To assess the effect of public procurement system on effectiveness of health care services in rural Health Centre IIIs. A sample of 205 was used for this study. The findings indicated that (a) public procurement system and public funding for rural HCIIIs had a strong relationship. Similarly, public funding and logistics management were positively related. It was also revealed that good logistics management led to the effectiveness of health care services delivery in rural HCIIIs. It was also concluded that public procurement systems had a positive contribution to the effectiveness of health care services delivery within rural HCIIIs. In spite of the positive relationships, there was still a need to better the procurement to make the health care service delivery even more effective. The current study

recommended the adoption of the Public-Private Partnership Model.

This would increase the effectiveness of the HCIII to 85% way above the current 67% contribution of the public procurement system for health.

BACKGROUND

In Uganda, over the years government has emphasized the importance of efficient and appropriate procurement, storage and distribution of essential medicines and health supplies (EMHS) at all levels of the health management system to ensure effective nationwide delivery of the Uganda National Minimum Health Care Package (Akech, 2005). Therefore, as a result, National Medical Stores (NMS) was set up by the National Medical Stores Act 1993 (Cap 207) as an autonomous body responsible for procurement, storage and distribution of essential medicines and health supplies (EMHS), to all Public Health Facilities in the Country.

National Medical Stores is mandated to procure, store and distribute Essential Medicines and Medical Supplies to all Public Health Facilities in the Country, including those of the Police, Army, and Prisons. This includes all Medicines directly or indirectly procured by NMS and those that are donated by various donors. In August 2012 this mandate was further expanded to include distribution of Vaccines across the country. National Medical Stores receives funds from the Government of Uganda for the procurement and storage of Essential Medicines and Health Supplies (EMHS), and their distribution to the various health facilities countrywide. The Management of NMS is accountable for these funds under the purview of the Public Finance Management Act, 2015 and the NMS Act, 1993. The above procedures are guided by the current procurement system in the health sector in Uganda.

Public procurement system in Uganda begins with the Ministry of Health

and Ministry of Finance Planning and Economic Development that do the budgeting and funding of the procurement of the drugs following the PPDA under the Uganda National Medical Stores (NMS), facilities and equipment at national level, while the District Authorities, do the procurement of local Procurement of equipment and facilities governed by the PPDA Act like Health Facility (HCIII) renovation, construction, and purchases of utilities and services, procurement of human resources under the Employment Act and Public Standing Order and lastly procurement of services (cleaning, utilities, security) is done by the Health Facilities (HCIIIs) under the relevant Laws. It could be noted that there are several procurement systems; however, most of the procurement is done by the agencies above the HCIIIs facility. The implementer or supervises the procurement following the relevant laws. Other systems where the HCIII facility does the procurement are services that have their guiding laws and tariffs already established. For instance, electricity water could have the tariffs and related matters established. For instance, electricity, water has the tariffs and related matters established while as electricity, water laws and tariffs and related matters established. They are monopolies.

The procurement system of public goods and services is intended to achieve effective health care service delivery (Appiah, 2014). Therefore, it's against this background that this study was set to analyse the effect of public procurement system on effective health care services.

STATEMENT OF THE PROBLEM

Although the Public procurement system was intended to lead to effective health care service delivery in Uganda, the above expectation may not have been met especially in HCIIIs in the rural areas. The overarching question therefore was how much does a procurement system contribute to effectiveness of health care service delivery at rural health centre IIIs.

PURPOSE AND RESEARCH OBJECTIVES OF THIS STUDY

The study was set to analyse the effect of the procurement system on effective health care services in Uganda focusing on selected rural health centre IIIs in Wakiso district.

The study was guided by the following specific objectives:

To assess the relationship between public procurement system and public funding of selected rural health centre IIIs.

To assess the relationship between public funding and logistics management for selected rural Health Centre IIIs.

To analyse the effect of logistics management on the effectiveness of health care service delivery for selected rural Health Centre IIIs.

To assess the effect of the public procurement system on the effectiveness of health care services in Uganda for selected rural Health Centre IIIs.

RESEARCH HYPOTHESES

Public Procurement System and Public Funding

- H₀1: Public Procurement System is not significantly related to the Public Funding of selected rural health centre IIIs in Uganda.
- H_A1: Public Procurement System is significantly related to the Public Funding of selected rural health centre IIIs in Uganda.

Public Funding and logistics management

- H₀2: Public Funding is not positively related to logistics management for selected rural Health Centre IIIs in Uganda.
- H_A2: Public Funding is positively related to logistics management for selected rural Health Centre IIIs in Uganda.

Logistics Management and effectiveness of health care service delivery

H₀3: Logistics Management does not have a positive effect on the

effectiveness of health care service delivery for selected rural Health Centre IIIs in Uganda.

H_A3: Logistics Management has a positive effect on the effectiveness of health care service delivery for selected rural Health Centre IIIs in Uganda.

<u>Public Procurement System and effectiveness of health care service</u> delivery

- H₀4: Public Procurement System does not contribute to the effectiveness of health care services for selected rural Health Centre IIIs in Uganda.
- H_A4: Public Procurement System contributes to the effectiveness of health care services for selected rural Health Centre IIIs in Uganda.

STUDY LITERATURE

Literature in this section was reviewed under the following sections; survey of available literature on the effect of the procurement system on effective health care services in Uganda; Procurement system and health care service delivery; Logistics Management and realization of Procurement System and Effectiveness of health care service delivery and its relationship with the procurement system

Survey of the available Literature

In the Ugandan context, several studies have been done procurement. These included the following (Kasule, 2007: Zikusooka et. al., 2009: Namaganda, 2011: Nantege, 2011: Olum, 2011: Musoke and Sodemann, 2016) have been conducted in the area of procurement system and compliance since the enactment of the PPDA act (2003) and PPDA Regulations (2003), health service deliveries in Uganda resource use, costs, and financing of health facilities, and lastly issues and dynamics of

health sector management. However, they do not cover the contribution of procurement system on the effective health care services delivery. It is the gap that the current study intended to fill.

Procurement system and health care service delivery

Procurement system in other institutions is aligned with a set of rules that guide governments purchasing of works and services, covering much broader aspects that stretch beyond simple rules concerning the process of acquiring goods, works and services by public sector entities (Stephanus, 2009).

Procurement management positively affected the performance of banks (Nantege, 2011). The most significant attributes being procurement system, legislation, procurement controls and monitoring. Owuoth and Mwangangi (2011) and Nantege (2011) had a good debate but it did not answer the questions posed by the current study. They did not consider the Procurement system at the health care service level. This current study addresses that gap by analysing the effect of the procurement system and effectiveness of health care service delivery in Uganda focusing on selected rural health centre IIIs in Wakiso district.

Logistics Management and realization of Procurement System

The realization of procurement system for hospitals is hinged on the availability of finance for procurement of health commodities, even distribution of health commodities, effective supervision and constant monitoring and evaluation which are found crucial in effective and efficient logistics management, which likewise determines the effective health care service delivery and capacity. A health care service delivery capacity and perceived quality to improve, there was need for the Ugandan Health Service logistics or supply system to receive constant monitoring and evaluation (Kasule (2007). On the other hand,

Zikusooka et. al., (2007) expanded their scope by analysing equitability of healthcare financing in Uganda and established that Uganda's health sector was significant under-funded, mainly relying on private sources of financing, especially out-of-pocket spending. The above studies had gaps that the current research tried to fill creating especially by assessing the relationship between procurement system and logistics management for HCIIIs in Uganda.

Effectiveness of health care service delivery and a procurement system

The process of procurement system determines how, where and when the human resources, medical resources, infrastructure and medicines would be accessed through the health system (Stephanus, 2009) and (Olum, 2011). However, scarcity of drugs and the hospital cannot give all drugs to its people because of its limited availability, and the pharmacy at the hospital sometimes receives drugs whose shelf life is short (Musoke and Sodemenn (2016). The literature survey revealed that there had been studies concerning Procurement system, legislation, logistics management and procurement of medicals in Uganda; however, these studies have not researched on how effective health care service could be delivered, logistics management in rural health centre IIIs interacts with procurement legislation. The current study was therefore fills the gaps of earlier studies.

METHODOLOGY

In this methodology section, research design, study population and sample, sampling design and procedures, data sources and collection instruments, validity and reliability of the research instruments, measurement of the research variables, data analysis, ethical issues, limitations of the study and delimitations of the study are highlighted.

Research design

This study adopted the cross-sectional design. Cross-sectional designs are a simple and least costly alternative to use with larger area coverage, (Sekaran, 2003). The cross-sectional design also allows for a wider range of the sample to be studied at the same time and more data is covered within a short period, (Sekaran, 2003).

Numbers of study population

The population of the study was composed of 1,219 that included i) members of the Health Centre III Management Committee; ii) members from district director of health services, National Medical Stores and Ministry of Health; iii) the ward in-charge(s); and iv) the staff of the Rural health centre IIIs.

Table 3. 2: study population

| Rural health centre IIIs | Patients (average that visits the HCIIIs) per month | Health Centre III staff and district staff | overall |
|-----------------------------|---|--|---------|
| Nakawuka Health Centre III | 178 | 105 | 283 |
| Namulonge Health Centre III | 192 | 91 | 283 |
| Mende Health Centre III | 251 | 127 | 378 |
| EPICentre Health centre III | 197 | 78 | 275 |
| Total | 818 | 401 | 1,219 |

Source: AHSPR 2014/2015

Determining the minimum sample size

For the current study, a minimum sample was based on a rate of 95%. It was deemed that the error would be 5%. If 100 questionnaires were sent out, about 80% would be returned fully completed. Given the distances to the four health centres, it is as estimated that about 20% were returned or filled properly. With the above information, a minimum sample size for this study was calculated based on the formula proposed by de Vaus (Saunders, Thornhill and Lewis (2009) which is:

$$n=P \times q \times \left(\frac{z}{e}\right)^2$$

n =the minimum sample size required

p = percentage of the questionnaires that would be completed and returned

q = Percentage of the questionnaires that would not be completed or lost

Z = the z value corresponding to the confidence level required

e =the margin of error

For this study, the confidence level was estimated at 95%, with a corresponding z value of 1 .96. The confidence interval or margin of error was estimated at 5%. Assuming that 80 per cent of the sample completes and returns the questionnaire, then the minimum sample was calculated as below.

n= P x q x
$$\left(\frac{z}{e}\right)^2$$

n= P x q x $\left(\frac{1.96}{5}\right)^2$
n = 80 x 20 x $\left(\frac{1.96}{5}\right)^2$

$$n = 1,600 \text{ x } .392^2$$

 $n = 1,600 \text{ x } 0.154$
 $n = 246$

The minimum sample size (n) required for the study was adjusted to the total population of 1,219 to get the actual sample size (n') for the study. The actual sample size (adjusted) was therefore calculated in the following manner.

$$n'=1+\frac{n}{n}$$

Where: n = actual sample size, n = Minimum sample size and <math>N = Study population.

-therefore the actual sample size is:

$$n = \underbrace{\frac{246}{1 + 246}}_{1,219}$$

$$n = \frac{246}{1 + (0.02)}$$

$$n = \frac{246}{1 + 1.20}$$

$$n = 205$$

The above sample has been adjusted using stratification to determine the actual number of the respondents from each of the rural health centre IIIs using the formulae below.

$$r = \frac{(c \times s)}{p}$$

$$r = \frac{283 \times 205}{1219} = 48.5 = 49.$$

Where r = respondents, c = category (Rural health centre IIIs), s = actual sample size and: p = total study population

Table 3. sample size

| Total | | | 205 |
|---------------------|----------------|--------------------------------|--------|
| center III | | | |
| EPI centre Health | r = [(cx s)/P] | [(275 x 205) / 1,219] | 46 |
| Centre III | | | |
| Mende Health | r = [(cx s)/P] | $= [(378 \times 205) / 1,219]$ | 63 |
| Centre III | | | |
| Namulonge Health | r = [(cx s)IP] | $= [(283 \times 205) / 1,219]$ | 48 |
| Centre 111 | | | |
| Nakawuka Health | r = [(cx s)/P] | $= [(283 \times 205) / 1219]$ | 48 |
| IIIs | | | size |
| Rural health centre | | | Sample |

Data collection methods

The validity of the items on the questionnaire

The content validity index when computed by two experts it gave an average 89%. Since this was greater than 70% as prescribed by Amin (2005), signified that the items on the research instrument were valid.

Reliability

The reliability is the degree to which a data collection instrument consistently measures whatever it is measuring (Amin, 2005). Reliability results ranged between .68 and .91 with an average of a

Cronbach Alpha coefficients of 0.80 which was above the usual cut off percentage of 50. This implied that the scales used to measure the study variables were consistent and therefore reliable and meeting acceptable standards for the research.

RESULTS AND INTERPRETATION

Public Procurement System and Public Funding of selected rural health centre IIIs.

The relationship between the management of the procurement system and funding was consonant with the first null hypothesis which stated that "there is no significant relationship between the management of the procurement system and funding". The first hypothesis was tested using both the Pearson's Product Moment Correlation (PMC) and simple linear regression tests' results. The correlation results indicate that there was a low positive significant relationship between the management of the procurement system and funding [r (205) =.259, p<0.01]. The implication of this was that for the management of the procurement system for medicines to be function well, there must be sufficient funding. In this case, there seems to be limited funding hence the low significance between the two variables.

The hypothesis was also subjected to regression analysis. This yielded the following sets of results. First, the R square of the model summary was .067. This translated into 67%. This meant that management of the procurement system explained only 67% of the funding that is availed to get medicines for the Health Centre IIIs.

The regression test also revealed that the relationship between the management of the procurement system and funding was liner [F (1,203) =14.576, p<0.01]. The implied that for any unit change in the management of the procurement system, there has to be a proportionate change in the funding for the medicines that are required in health centre IIIs.

The simple linear regression results also gave confirmatory results as showed in Table 5:10.

Table 6: coefficients of regression between management of procurement system and funding

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|----------------------------------|--------------------------------|---------------|------------------------------|--------|------|
| | | В | Std. Error | Beta | | |
| 1 | (Constant) | 3.198 | .260 | | 12.314 | .000 |
| | Management of procurement system | .249 | .065 | .259 | 3.818 | .000 |

The results (Beta = .259, p<0.01) in Table 5:4 confirm the fact that there is a relationship between the management of the procurement system and funding. Given the fact that the relationship is significant, it is appropriate to argue that the null hypothesis $(H_{\overline{0}}^{1})$ "there is no significant relationship between management of the procurement system and funding" was jettisoned. The alternate hypothesis, "there is a significant relationship between management of the procurement system and funding" was supported instead.

Public Funding and logistics management for rural Health Centre IIIs

This was intended to analyse how public funding was related to the effectiveness of health care service delivery for rural HCIIIs. The relationship between public funding and logistics management for rural HCIIIs in Uganda was determined by testing the second hypothesis. The null hypothesis was that: H_o2: Public Funding is not positively related to logistics management for rural HCIIIs in Uganda.

The second hypothesis was first tested using the Pearson Product Moment correlation (PMC). This test was carried out because it would tell the direction of the relationship, that is whether positive or negative. The hypothesis was tested first using Pearson's Product Moment correlation. This yielded results of (r(205) = 0.562, p<0.01) which revealed showed that there was a positive and significant relationship between public funding and logistics management for rural HCIIIs. This statistic implied that the more public funding for the Health Centre IIIs obtained, the more logistics managed by the health sector and also for the rural Health Centre IIIs.

The hypothesis was also tested using a simple linear regression matrix. Regression analysis was used to predict the value of a variable in the model. The first output of the simple linear regression was a model summary which yielded an adj. R² of .340. This implied that logistics management had 34% effect on public funding for rural HCIIIs in Uganda.

The regression test also gave the linearity of funding and logistics management as F(1,204) = 106.600, P < 0.01. This shows that there was a linear relationship, which implied that an increase in funding led to an increase in logistics management for rural HCIIIs in Uganda and the reverse was also true. So, if there were more funds at the disposal of an H/C III, more or logistics would be managed at rural HCIIIs in Uganda, and vice versa.

Table 6. 14: Coefficients of public funding versus logistics management for rural HCIIIs.

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | | | |
|-------|--|--------------------------------|---------------|------------------------------|-----------------|------|--|--|--|
| | | В | Std. Error | Beta | | | | | |
| 1 | (Constant) public funding | 1.535 .530 | .163 .051 | .562 | 9.399 10.325 | .000 | | | |
| a. l | a. Dependent Variable: logistics management for rural HCIIIs in Uganda | | | | | | | | |

Based on table 6.14 above, it could be stated that: Beta = 0.586 P < 0.01, the null hypothesis was therefore rejected and the alternative hypothesis supported. It was therefore concluded that Public Funding is positively related to logistics management for rural Health Centre IIIs in Uganda

Logistics Management and the effectiveness of health care service delivery

This was intended to articulate the effect of logistics management on the effectiveness of health care services in rural HCIIIs in particular. Nine predictor variables as given in the table were regressed against the effectiveness of health service delivery. Only one of the independent variables; logistic management contributed significantly to the model at the level of 0.05. The model had a mean value of 1.85 when all variables are kept constant. This meant that if all other variables go zero, then evenly distribution of health commodities would increase the mean by 0.294. Again, a 1% increase in an even distribution of health commodities would result in 0.294 increases ineffectiveness of health care services in HCIIIs in particular. The result showed that evenly distribution of health commodities was a prerequisite for the effectiveness of health services.

Logistics management and effectiveness of health care services

The third null hypothesis was tested first using correlation analysis. The results from this test were [r(205) = .757, p<0.01] which showed that there was a positive and significant relationship between logistics management and effectiveness of health care services delivery in rural HCIIIs. This statistic implied that effectiveness of health care services delivery in rural HCIIIs needed more logistics management.

The hypothesis was also tested using a simple linear regression matrix. The results of a model summary being Adj. $R^2 = .571$ or 57%, indicates how much of the total variation in the effectiveness of health care services delivery in rural H/C IIIs can be explained by logistics management.

The regression analysis that revealed the linearity between the two variables: F(1, 204) = 272.069, P < 0.01. This gave a linear relationship, which implies that an increase in a unit of logistics management led to an increase in unit of the effectiveness of health care services delivery in rural H/C IIIs vice versa. The simple linear regression further yielded results that were moderate as shown in table 10.

Table 10: Coefficients of logistics management and effectiveness of health care services delivery

| Coefficients ^a | | | | | | |
|---|----------------------|--------------------------------|------------|------------------------------|--------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | В | Std. Error | Beta | | |
| 1 | (Constant) | 1.575 | .200 | | 7.874 | .000 |
| | Logistics management | .684 | .041 | .757 | 16.495 | .000 |
| a. Dependent Variable: Effectiveness of health services | | | | | | |

Based on table 10, it could be stated that: Beta = 0.757, P < 0.01. This

meant that logistics management had a moderate positive significant relationship or effect on the effectiveness of Health care services delivery. It was, therefore, true to say that the null hypothesis was rejected and the alternative hypothesis supported

Public Procurement System and effectiveness of health care services

For the health care service to be effective especially in the rural area, there should be satisfactory quality of treatment and other services. The said satisfaction can only come about if there are: (1) Sufficient number of trained staff, (2) Performance of health workers, (3) Availability of needed medicines, (4) Effective provision of information, (5) Enough infrastructure at the health facility, (6) Availability of utilities, (7) Transport means, and (8) Possibility of referral systems. When all these obtain, they enable the health service provision to be good and therefore effective. To determine which of the above factors rural health centres considered to contribute to the effectiveness of the health service provision, factor analysis was done and the results are reported in Table 11.

Table 11 Factor analysis of effective health service

| | | | Total | Variance | Total Variance Explained | | | | |
|-----------|--------|---------------------|-----------------|-----------|-------------------------------------|-----------------|----------|-----------------------------------|--------------|
| Component | | Initial Eigenvalues | sən | Extractio | Extraction Sums of Squared Loadings | ured Loadings | Rotatior | Rotation Sums of Squared Loadings | red Loadings |
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 11.312 | 37.707 | 37.707 | 11.312 | 37.707 | 37.707 | 906.9 | 23.020 | 23.020 |
| 2 | 6.313 | 21.043 | 58.750 | 6.313 | 21.043 | 58.750 | 6.548 | 21.825 | 44.845 |
| 3 | 3.760 | 12.534 | 71.283 | 3.760 | 12.534 | 71.283 | 4.816 | 16.053 | 868.09 |
| 4 | 3.117 | 10.389 | 81.673 | 3.117 | 10.389 | 81.673 | 4.306 | 14.354 | 75.252 |
| 5 | 2.380 | 7.932 | 89.605 | 2.380 | 7.932 | 89.605 | 4.004 | 13.347 | 88.599 |
| 9 | 2.016 | 6.718 | 96.323 | 2.016 | 6.718 | 96.323 | 2.317 | 7.724 | 96.323 |
| | | | | | | | | | |

Extraction Method: Principal Component Analysis.

From the principal component in order of characteristic roots were listed. The figures in the table were a result of factor extracts and factor rotation after the factor analysis. Column 2 to column 4 describe the original factor solution. Column 5 to 7 describe the intermediate factor solution. The final factor solution gave the following figures: component 1 had an eigenvalue of 6.906 with a percentage of 23%. Component 2 had an eigenvalue of 4.816 with a percentage of 16%. Component 3 had an eigenvalue of 4.306 with a percentage of 16%. Component 4 had an eigenvalue of 4.004 with a percentage of 14%. Component 5 had an eigenvalue of 2.317 with a percentage of 7%.

When rotation was done using variance maximisation with Kaiser normalisation, it emerged that staffing was the most important factor. This factor was explained strongly staff being trained with the coefficient of .916; availability with a coefficient of .837; and being enough at the health facility with a coefficient of .696. The second factor was the performance of health workers. This factor was explained by staff being hardworking with a coefficient of .723; staff being caring with a coefficient of .837; customer care provision with a coefficient of .985; The third factor was medicines in the health centre. This was explained strongly by availability with a coefficient of .984. The fourth factor was mobility. This factor was explained strongly by the transportation of drugs with a coefficient of .979; and transport necessities with .692. The fifth factor was communication which was explained by information provision with a coefficient of .982; attention being paid to patients with a coefficient of .952. the sixth factor was variety in the health care service provision. This was explained strongly by the provision of counselling with a coefficient of .918; and immunisation with a coefficient of .953. Although eight items had been identified as the key marks or indicators

of the effectiveness of health care service provision, only six factors emerged to be the major ones.

The relationship between public procurement systems and effectiveness of health care delivery

The relationship between the public procurement systems and the effectiveness of health care delivery in rural health centre IIIs in Wakiso district of Uganda. This was in line with the fourth null hypothesis (H_o4) which stated that:" Public procurement systems are not significantly related to the effectiveness of health care service delivery in rural health centre IIIs.

The fourth null hypothesis was first tested using the Pearson Product Moment correlation (PMC). This test was carried out because it would tell the direction of the relationship, that is, whether positive or negative. The hypothesis was tested using correlation analysis. This yielded the result of r(205) = 0.572, p<0.01. Implied that there was a positive and significant relationship between procurement and effectiveness of health care service delivery.

The hypothesis was also tested using a linear regression matrix. The first output of the simple linear regression was a model summary whose outcome was an adj. R² of .344. This meant that procurement supplies had 34% effect on the effectiveness of health care service delivery.

The linearity was F (1,204) = 106.600, P < 0.01. This shows that there was a linear relationship, which implied that an increase in procurement supplies led to an increase in the effectiveness of health care service delivery and the reverse was also true.

| Table 13: Coefficients of procurement supplies and effectiveness of | |
|---|--|
| health care service delivery | |

| Model | | Unstanda Coeffic | | Standardised Coefficients | t | Sig. |
|-------|-----------------------------|---------------------|---------------|------------------------------|-----------------|------|
| | | В | Std. Error | Beta | | |
| | (Constant) public funding | 1.535 .530 | .163 .051 | .586 | 9.399 10.325 | .000 |

a. Dependent Variable: effectiveness of health care service delivery for rural HCIIIs

Based on the results, it could be stated that: Beta = 0.586 P < 0.01, the null hypothesis was therefore rejected and the alternative hypothesis supported. It is therefore concluded that public procurement systems had a direct relationship with public funding.

Overall effect of public procurement system on effectiveness of health care service delivery

The measurement of effect was done using the path analysis technique. This is an extension of regression. It gives the magnitude of the hypothesised causal connections between sets of variables. In the current study, four sets were considered. A path diagram (Figure 9.1) is provided to help and explain clearly the sets of variables. The hypothesised model was used to establish a more reliable explanation that the effectiveness of health care service delivery of HCIII was a function of the public procurement system, that is EHCSD = f(PPS).

Hypothetical Model

Hypothetical Model was done to prove whether the effectiveness of health care services delivery of rural HCIIIs in Uganda was a function of procurement systems. The hypothesis model was used to determine whether procurement systems can affect the effectiveness of health care services delivery of rural HCIIIs in Uganda. The model considered the entire four hypotheses that were tested in this study. It shows the relationship between procurement systems and the effectiveness of health care services delivery of rural HCIIIs in Uganda and how they relate to logistics management public funding of health centre IIIs. The figure of the hypothesized model is shown below.

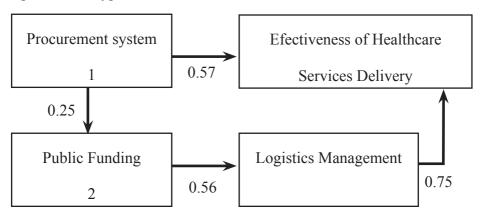


Figure 2: Hypothesized model of procurement systems and effectiveness of health services delivery

Figure 2 the following considerations were taken into account: (1) All relationships between the variables are linear; (2) There are four variables, the independent variable (procurement systems), logistics management, public funding and the dependent variable (effectiveness of health care services delivery); (3) The causal paths that are relevant to the study variable effectiveness of health care services delivery in rural

health centre IIIs are from 1 to 2 to 3 and from 1 to 4.

The paths in the model established relationships, based on testing of the three hypotheses:

Public Procurement System is significantly related to Funding of rural health centre IIIs

Logistics Management has a positive effect on the effectiveness of health care service delivery for rural Health Centre IIIs.

Public Funding is positively related to logistics management for rural Health Centre IIIs.

Public Procurement System positively contributes to the effectiveness of health care services for rural Health Centre IIIs.

The path coefficients indicating the direct effect of a variable (obtained from testing of the hypothesis) are shown in the table below.

Table 14: Paths coefficients of the study variables

| Paths | Variable | Path's coefficient |
|-------|---|--------------------|
| P12: | Public Procurement System and Public | 0.25 |
| | Funding | |
| P23: | Public Funding and logistics management | 0.75 |
| P34: | Logistics Management and effectiveness | 0.56 |
| | of health care service delivery | |
| P14 | Public Procurement System and | 0.57 |
| | effectiveness of health care services | |

Decomposition of the model and its effect

The path coefficients were used to decompose correlations in the model into direct and indirect effects. As stated earlier, all relationships were

linear; therefore, the total causal effect of procurement systems on the effectiveness of health care services delivery in rural health centre IIIs is the sum of all the paths from procurement systems to the effectiveness of health care services delivery in rural health centre IIIs. The indirect effect of procurement systems on effectiveness of health care services delivery in rural health centre IIIs was calculated by multiplying the path coefficients for each path from procurement systems to effectiveness of health care services delivery in rural health centre IIIs, that is; Public Funding to logistics management and Logistics Management and effectiveness of health care service delivery = $0.25 \times 0.56 \times 0.75 = 0.10$; The implication is that the total indirect effect of procurement systems on effectiveness of health care services delivery is 0.10. The direct effect of procurement system on effectiveness of health care services delivery in rural health centre IIIs was added to this indirect effect to establish the causal effect of procurement systems on the effectiveness of health care services delivery in rural health centre IIIs that is; 0.10 + 0.57 = 0.67(67%).

Based on the decomposition of the model and its outcome, it can be concluded that procurement systems are a major determinant of the effectiveness of health care services delivery in rural health centre IIIs, which confirms that effectiveness of health care services delivery in rural health centre IIIs can be planned strategically.

Proposed Public-Private Partnership (PPP) procurement model

Given the fact that the current procurement system contributes only 67% to effectiveness of health service delivery at H/C IIIs and complaints are still coming through, there is need to improve on the contribution of the procurement system. This study proposes new model called the Public-Private Partnership. It involves a Private Consultant as a Private Management Unit on behalf of government, a Private Pharmaceutical

Store JMS (private supplier) and the community as key players in achieving effectiveness of health care service delivery of rural health centre IIIs copied with a digitalized ICT system and hence further recommendation of the introduction of mobile clinics/Vans in the system. The PPPs will provide a vehicle for coordinating with non-governmental actors to undertake integrated, comprehensive efforts to meet community needs of health care service delivery at the rural health centre IIIs since these aim to take advantage of the expertise of each partner, so that resources, risks and rewards can be allocated in a way that best meets clearly defined public needs.

Simulating the contribution of PPP model to effectiveness of health care service delivery

The new PPP model's contribution to the effectiveness of health care service delivery of health centre IIIs could be determined by a simple simulation in the following steps.

Step 1: The percentage of a total causal effect is subtracted from 10. The total causal effect from the hypothetical model is 67%. So, 100% minus 67% leaves 33%.

Step 2: The product in step 1 above is multiplied by the direct effect. That is, $.33 \times .57 = 0.18$. So the contribution of the PPP model is 18%.

Step 3: The product in step 2 is added to the total causal effect to derive the total causal effect after simulation. In this study, 18% is added to 67% giving a final figure of 85%.

Step 4: The conclusion based on the simulation is that it is viable to adopt the new PPP model as it promised to add value (18%) to the effectiveness of health care services.

CONCLUSION TO THE STUDY

In conclusion, it is appropriate to contend that given the fact that about 80% lives in rural areas, it is important for the health care services in those areas to be effective. This is so because the populations' well-being is dependent on the availability of health care resources especially the medicines. The contribution of the public procurement for health to the effectiveness of the health care services, especially at the health centre IIIs was found to be at 67% which was not satisfactory as far health is concerned. So a new model (PPP) was proposed. This new model promised to rise the contribution of procurement to 85%. The remaining 15% is explained by factors outside of the public procurement system.

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INTERGRATING SOCIAL SOLIDARITY INTO ECONOMIC DEVELOPMENT

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Abstract

The concept of socialism is very broad and because of this, socialism has been politically misunderstood and demonised as a phenomenon that undermines development. This assumption is more especially held by the capitalist way of thinking. However this has been one sided way of thinking by the capitalist philosophers. If scanned deeply, besides political socialism there is also cultural socialism. In theory they may appear to be different but in practice they are intertwinned and are interchangeably used.

In terms of development, socialism is applicable in all spheres of social, economic and even political progress in the society, and this is why it qualifies to be a broad phenomenon.

This paper is mainly concerned with the social and economic aspects hereby referred to as cultural socialism. Africans were naturally socialists. They preferred a social way of living whereby each member participated in an activity towards the benefit of well-being of others. Africa being a multi-ethnic region, different tribes have different ways of social living but all with similar motives towards achieving wellbeing for the good of others. The Jopadhola in Eastern Uganda practiced a culture of socialism in which they worked in-turns in the fields of one another with the aim of producing enough harvest at the end of the season. The Jopadhola enjoyed communal way of living by participating in "Misingo" and "wretch" through which every household in the

community produced enough food for consumption and surplus to sell. It meant that "misingo" and "wretch" are philosophical and a socialist way of socializing through which the Jopadhola organized themselves socially, economically and even politically to achieve wellbeing. This paper examined in detail how the Jopadhola utilized "Misingo" and "wretch" to achieve well being and community development compared to the present day when such solidarity have deteriorated due to foreign influence and other environmental factors.

Key Words: Development, community development, culture, socialism, cultural socialism, wellbeing, solidarity, community, philosophy, welfare, ill-being, inequality, *Misingo* and *Wretch*.

1.0 Introduction

1.1 Socialism and wellbeing

In the political scene socialism was seen as the first step towards communism, a political system that dominated the Eastern Block; Russia, China, North Korea, Cuba and generally most countries in central Asia and the entire east. Within the African states socialism was predominant in Tanzania started by Mwalimu Julius Nyerere in 1967. Like Karl Marx and Friedrick Angels, Nyerere tried to establish a society free of exploitation of man by fellow man. One of the tenets of socialism is that the government should be the controller of all the factors of production, meaning that the government should be in-charge of people's welfare and people should be the recipients of this welfare. Equality of persons is also one of the tenets of socialism and it was impossible to maintain by status-quo other than by government. Inequality was the result of the weakness of governments in providing equitable services to the people (Marx, 1945). This inequality according to Marx could only be fought by socialism, whereby people come together to resist the evils of the government against the state. On the social and economic progress, the socialist way of living is when people come together to work for the good of every member of the group, community or society. This collective effort is the social capital that even if when one was lacking money, as a household they could still combine efforts with their neighbours and other members of the society to produce enough food for consumption and surplus for sell. It is this knowledge of socialism that Nyerere (1967/8) and his predecessors Marx and Engels (1948) applied in the political scene as a formula to establish a classless society. To Marx and Engels capitalism propagated inequality and individualism and private control over the factors of production. Philosophers of the socialist school of thought however, observed that capitalism isolates the rural poor people from the centre of economic power yet they are

the majority of the members of the society and local populace thus narrowed down the scope of the society to only a class of the few wealthy people at the expense of the majority poor, hence undermines community development. Although capitalism looked at socialism as a scenario whereby the efforts of hard working people were undermined and a way of encouraging laziness in the society it runs short of holistic development whereby the wellbeing of the majority of the members of the society should be the strategy of achieving community development. Nevertheless this paper attempted to ascertain that socialism is not a new phenomenon. By nature of traditional culture, Africans have been social animals since time immemorial. They are bound by their belief in unity and togetherness. In his study on the Bantu people, Tempels (1945) described that what binds Africans together as the "vital force", the central point and strong solidarity characterizes the behaviour of the Bantu people. This strong solidarity cuts across all African tribes and it has been carried on from one generation to the other. On the other hand Mbiti (1969) on his social philosophy referred to this African force to brotherhood". Mbiti described it "motivational force to brotherhood" as the foundation of the nature of solidarity, the very basis of social capital. Connected to this, Masolo (1995) observed that "complex family and lineage groups formed separate units of labour force....to work together by rotating turns to work collectively on respective house plots". The attempt of this paper is to iron out the negative feelings about socialism and the socialist attitude of the mind. According to Nyerere everybody including the capitalists can become socialists in such a way that they can share their proceeds or give a hand to others who are in need. Because of the way socialism works, Ishtiag & Muriisa (2004) preferred to call it collective capitalism implying that one exists for the good of the others in the community, and further more an individual should be an asset of the community-if one doctor from the community would come back to serve the community. Socialism and socialist way of living agree with the observation made by Anadha (2009) that, community development is a strategy through which its practitioners are involved in problem identification, identify assets, locate resources, analyse local power structures, assess human needs and investigate other concerns that comprise the community's character.

In this case the people through their own experience should be responsible for establishing the conditions of achieving their welfare which can only be best done through traditional way of socialism. The *Jopadhola* practiced socialism through communal work, group work, community meetings, food support and financial help. In particular this paper explains how "*Misingo*" and "*Wretch*" among the *Jopadhola* are forms of communal work and group work meant to fight a way ill-being and institute well-being in the society.

1.2 African socialism and wellbeing

Africans, the *Jopadhola* inclusive had traditional ways of organizing socially and economically to achieve community themselves development. Their forms of association were embedded within the lineage of birth and brotherhood in families and clans of kinship. The form of African socialism in the context of this paper refers to the traditional norms and values that Africans used to organize themselves socially, economically and even politically. Among the Jopadhola in Eastern Uganda there existed "Wretch" and "Misingo". Instead of looking at Ujamaa familyhood in Tanzania alone,this paper has taken the task to relate and link other traditional norms and values to the role of Ujamaa in the fight against inequality and exploitation of man by fellow man in the society. Very much so, the role of social solidarity embedded within traditional culture cannot be ignored in the economic development of the community and more so the state such as Uganda. "Misingo" and "Wretch" also embedded within the norms and values in the *Jopadhola*

traditional culture are very important entities in ushering in community development. This importance of traditional culture has also been acknowledged by other scholars of culture and social development, and Moncrieffe (2004) states that it is important to understand the significance of culture in African societies, the root to both positive and negative perceptions and how cultural traditions influence forms of behaviour that can support or undermine development.

"Misingo" and "Wretch" are forms of traditional solidarity among the Jopadhola in which families and groups of members of the community converge together to perform an activity that in the end improves on their social and economic standards. Furthermore solidarity should be related to African socialism that if the Ujamaa familyhood had borrowed, it would not have faced challenges and failures towards the end. The struggle to achieve wellbeing should have been in a way made easier by utilizing the cultural strength that has lived overtime. According to Mawa (2010) in his comment on the importance of African solidarity observed that, solidarity is a value and principle of inter-human relationship and is known to all societies whether traditional or modern, and in Africa solidarity is as old as the African societies are known to have existed. This now confirms the earlier belief and now the reality that Africans have been social animals since time immemorial, hence they practiced socialism either by their knowledge or not.

Scrutinizing the origin and knowledge about development and generally development among the African ethnicity and comparing with the fact that before the coming of Arabs, explorers and missionaries to East Africa, most Africans lived in chiefdoms and kingdoms Atuhaire, K.G (2009). These were institutions through which the pre-colonial Africans managed their affairs. Socially chiefs were the fountain of honour and they performed tasks of social nature and cementing cooperation and relationships for the good of the community. Generally the leaders carried

out social, economic and political mobilization for the development of the community. This culture of association cuts across all nations, developed or underdeveloped as had already been observed by Mawa (2010). This paper is comes out more clearly to reveal that social development is not a new phenomenon among the African race, the *Jopadhola* inclusive. Development initiatives like SACCOs, NAADS, Prosperity for all, operation wealth creation, Entandikwa schemes introduced by the National Resistance Government within the Ugandan communities and are being promoted through social mobilisation and cherishing modernization gospel towards development are not new phenomena. This is because their aims and objectives are embedded within the norms and values of the traditional culture.

1.3 "Misingo" and "Wretch" among the Jopadhola

"Misingo" and "Wretch" are forms of traditional solidarity that enabled the Jopadhola in coming together as households or individuals in groups to perform a task or activity to promote the social and economic progress of households and the entire community. "Misingo" and "Wretch" can also be described as associations formulated by the local people to carry out community or group work. They are forms of cooperate, associations formed through the principles of co-operatives and cooperative values. Self help, self responsibility, democracy, equality, equity, and solidarity are the co-operative values (Behayo, 2017). We can also put it clear that through "Misingo" and "Wretch" associations, the group is able to utilize the energy and efforts of other individuals for the good of other members in the group, something that could not have been achieved without the formulation of this association. Comparing the unity as one of the values cherished by the corporate group with that of the termites which can build a mountain-hill despite their small size, "Misingo" and "Wretch" like cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept the

responsibilities of membership, without gender, social, racial, political or religious discrimination (Behayo, 2017). In "Misingo", a large number of households or individuals in the locality can in a group work in the garden of one member of the group for a given period of time. They keep on alternating this activity to each respective member of the group. In *Misingo* the efforts of the members are paid at a later date in cash or kind. At most times a ceremony is organized after the bumper harvest to appreciate the members. This is done by brewing the local beer (kongokali) and preparing nice foods for the members. In the ceremony gifts were given to the participants and some of them can be money, hens, turkeys or even goats. These gifts are meant to strengthen the solidarity so that it flourishes for ever. On the other hand "Wretch" is a similar association but in it the participants are supposed to be appreciated just after work. Enough and good food is prepared with some little drinks to quench their thirsts. The major aim of "Misingo" and "Wretch" is to boost the efforts of the single handed individuals and households to produce enough food for the family and to become socially and economically sustainable.

"Misingo" and "Wretch" can also be utilized in other tasks other than farming, like building houses etc. They can also be utilized in attitudes of communal nature, like in clearing roads, cleaning and opening water sources. For this case it is the clan chief or the local leader to mobilize the community to participate in such activities and totally nothing is given in return. This paper can further describe "Misingo" and "Wretch" to be the forms of traditional social solidarity and as philosophy behind community development. "Misingo" and "Wretch" used to be very strong among the Jopadhola but these days they have deteriorated manly because of external factors. Like African traditional proverbs, "Misingo" and "Wretch" had a philosophical grounding attaching meaning to social development philosophy that should be scrutinized properly to bring

out additional knowledge that can be added onto social development planning. Much as traditional forms of solidarity are no longer strongly significant in contributing towards community development, it has strong connotation with social development perspectives.

1.4 Comparative analysis of Ujamaa family hood

Where-as capitalism is private ownership of all the factors of production it does not consider the inputs towards development by the rural poor. It is thus individualistic gain that leads to domination by the minority wealthy people over the majority poor creating classes in the society, the result of which is the emergence of the middle class. However, the class struggle of Kar Marx (1948) may not be the only means of eradicating capitalism and changing the society into socialism to achieve community development. These and among others things were the reasons upon which Nyerere (1967) started the Ujamaa family hood to answer the need for nationalization of all assets to be in the hands of government believed that if government owned all factors of production, this would pave way to equality in the distribution of goods and services in the society and by this the government found it easier to assist the people because they were centered in one village. The government of Tanzania looked at Ujaama as a means through which to increase production in both agricultural and industrial products. In Ujaama socialism the main focus was goods and services from the government. The kind of socialism this paper is talking about is literally similar to Ujaama socialism but different in practice because the focus is mainly about communal and group participation aimed at achieving economic wellbeing.

This paper is concerned about whether Ujaama socialism was a good project in improving the quality of life of the people of Tanzania.

This paper further concentrates on traditional forms of social solidarity that Mawa (2010) observed that it has ever existed with the existing

creation of mankind. The Ujaama familyhood was administratively implemented from top yet the people who were forced to live in together had different cultural backgrounds. Multi-ethnicity aspect was not considered important in as far as establishing Ujaama familyhood. What this paper considers to be African socialism should have been built on traditional forms of social solidarity which are the basis of humanity (Mawa, 2010).

Development is a multifaceted phenomenon that does not only mean economic growth but it goes beyond borders. The broadness of the meaning of the term 'development' has been clearly described by Todaro (1992), as the three core values of development to include life sustenance, self esteem and freedom from servitude. According to Todaro if any of the three core values is missing, we may state without reservation, that a condition of absolute poverty exists? Any society and culture develop it ways of self-esteem: how they want to be recognized or respected. In contrast today self-esteem is increasingly conferred only on the countries that possess economic wealth and technical power. Contrary to this, to some extent people should be free to use their traditional knowledge and potential to make themselves happy, hence freeing themselves from servitude or slavery. It is in this connection that this paper is taking a comparative analysis whether Ujaama familyhood would be more successful and value if it incorporated the traditional norms of the indigenous people. The way it was implemented came as a government instruction from government imposed on people in the already established villages, something that contradicted with the norms and values of the people. Political instructions cannot much well with traditional cultural instructions. It also contradicted the fact that man cannot be separated from his culture for culture made him (Mbakogu, 2004). In the Ujaama philosophy the social reality articulated by Mbiti (1969) as, "I am because we are; and since we are, therefore I am". This

kind of wellbeing availed to us by nature cannot be provided by coercion, neither by globalization and its dimensions did not guide the trend of Ujaama philosophy.

1.5 The philosophy behind "Misingo" and "Wretch"

The major philosophy behind "Misingo" and "Wretch" is the push for economic sustainability. African proverbs are very good at stating the hidden meaning of an event which at most times turn out to become a reality. The words "Misingo" and "Wretch" are proverbs used in local mobilization of the community for "an economic activity.

"Misingo" and "Wretch" affirm these incidences or events. By example, the Jopadhola have a saying that, "Oyeyo achiel kikunyi buri" translated in English it means that, 'one rat cannot dig a hole'. This kind of traditional communal attitude induces members of the community to come together to perform task for the good of all members in the community. This proverbs further means that, two heads are better than one, and 'together we can stand and divided we fall'. In other words, carrying out an activity in isolation is un accomplishable. The truth about this is that an individual/household may find it too hard to overcome social and economic challenges. Hence the unity of members and household to pull together their energy is very important in resisting the social and economic challenges. African traditional proverbs, quotation and events such as that of the Jopadhola express mainly things in life most of which are developmental.

This paper is concerned with mainly the parts that are developmental. For example in whole, "Misingo" and "Wretch" express solidarity, and Mawa (2010) made it very clear that, the practical experience of solidarity in traditional experience of solidarity in Africa is out very clearly that "Misingo" and "Wretch" are forms of solidarity networks that enabled members manifest in its organizational nature, it is the ontological reality

that finds its practical expression of inter subjectivity. Mawa went ahead to affirm that, by its very nature and meaning, African socio-political organizations such as the family clan and tribe, manifest the practice of solidarity.

In response to particular problem of suffering such as poverty, many families, ethnic groups and neighbourhoods like villages establish special solidarity networks. It has now come of the community to come together to tackle specific problems. Attached to this explanation, Masolo (1995) also rightly observed that, "complex family and lineage groups formed separate units of labour force. This social organization might help to explain why most traditional societies attached great importance to communal life and loyalty between their members. Although it was common for households to work separately on their plots, it was not rare for a collection of different households to work together by rotating turns to work collectively on the respective household plots (Masolo, 1995).

"Misingo" and "Wretch" are forms of social organizations that cement social relationships pointing at and recognizing this kind of cooperation as a social capital strengthening. The role of social organizations towards community development. In a detailed search, Masolo further observed that, social organizations are not only "a system of mutual or inter-dependent social security" (Masolo, 1995); they also serve as vehicles for individual participation and community service for less advantaged persons is the reality about "Misingo" and "Wretch" among the Jopadhola.

1.6 The distorted meaning and impact of socialism

No doubt that socialism and socialist living cuts across the three perspectives of development, social, economic and political perspectives. In other words socialism could be used to generate and achieve a form of development at any cost. The distorted meaning of socialism started with

and by the way it was organized to mean by the brains behind it which made it to appear as it is a top down approach towards development. The central authority to disseminate development policies was the beginning deviation towards the expected meaning of socialism. Hence the practice of socialism the way it reached the people and as understood by the masses is a management and administrative practice of the oligarchy. The social nature of the philosophy was not broadly explained by the scholars behind it, making its importance to achieve development and community development in particular to be narrow in scope. The answer to this distorted meaning and perceptions of socialism was almost discovered by Nyerere when he fore-sighted the misplaced meaning of socialism. To this, he tried to mend the existing gap by contending that socialism is an attitude of the mind, hence one can become a socialist even if one is an African, rich or poor. This second thought about the meaning of socialism given by Nyerere explains the social nature and group bonding for a common purpose. And this group social bonding could be done best by giving priority to traditional forms of social solidarity like that of the Jopadhola.

Looking at the challenges faced by Nyerere's Ujaama familyhood, one of them was that it did not consider people's culture and traditional backgrounds. In this case through the policy people of different cultural backgrounds were forced into Ujaama familyhoods, which meant that they had to abandon their cultural backgrounds. In the African settings people are already organized in familyhoods as clans and tribes originating from the one fore-father hierarchy. This arrangement contravened with culture being the foundation of development as contended by Mbakogu (2004) that, "man cannot be separated from his culture, for he cannot develop in a vacuum".

It is mostly likely that Ujaama familyhood would have succeeded in Tanzania if people's culture and traditional background was considered.

The distortion of people's culture made socialism and Ujaama family in particular in Tanzania appeared to be a political directive from the regime in power to re-organise the society in a way that suits their own interest. As a result the familyhoods were marred with a lot of confusions and disorganization stemming from the destroyed 'vital force' that pulled this people together as clans or tribes. Clan/cultural leaders were ignored and power was channeled through government administrators, an indicator that Ujaama was not people's initiatives. With evidence, the outcome of the role of social solidarity on community proves that if culture and traditional background of the people were considered to be the foundation of the Ujaama familyhood,more success towards the achievement of community development would have been realized.

1.7 The economic perspective of socialism

The economic perspective of socialism is the key issue in this paper. People can organize or group themselves not only through traditional culture but also in accordance with their religion, youth, gender affiliations, etc as long as they best understand themselves that they have a common goal to accomplish. In the contrary, much as this would be so, socialism had been understood through the political perspective but also partially just looking at how the government cannot take care of the state through only one powerful source of judgment that all can be good for every citizen if the government owns all the factors of production. As a political ideology, socialism is seen to be a dictatorship political system that limits people's participation and as purported by capitalists. It deprives people's opportunity to own property. The issue limiting inequality through social associations of people in form of social relations and social networks as a public good and welfare of members was left behind the certain.

As argued by Moncrieffe (2004) that people are fundamentally social creatures and acts destroying their cultural background dooms their possibility of acceptance when they are posed to a situation whereby everything and particularly personalities are exceptionally new. This was the case for Ujaama familyhood. Yet it is perfectly relative for persons to act in ways that uphold shared values and ways of living and agreed understanding, even where these actions do not serve individual interests (Barneg, 2000). Economic development could be promoted through traditional forms of social solidarity as communal works, group work, community meetings, food supplies and financial help. The traditional forms of social solidarity worked very well in mobilizing communities for development initiatives. Hence the role of traditional forms of social solidarity among the Jopadhola in community development. Moncrieffe further contends that, people's identities can resolve around their ethnic and other social group, which confers culturally specific practices and a unique set of symbols and a sense of belonging that helps to define their interactions with both insiders and outsiders (Mare, 1993:23). Agreeing with Mare, one of the problems that faced the Ujaama familyhood was that people of different social backgrounds were found to converge in different social groups or familyhoods. As a result they wondered how and why their social backgrounds could be destroyed by government and comparing the notion of familyhood, and interest because they were collected from different regions of the country. This contravened with the reality and what Moncrieffe clearly clarifies that the social cultural norms that people observe influence their attitudes and choices. People need not-and in many societies often do not-act autonomously. Therefore, by ignoring or underestimating social/cultural norms and values, policy makers can miss potentially fruitful entry points and/or over work some of the potential blocks to the policies they recommend.

Policies of government should not be one sided, for example as a government they only bound politics towards what they want to achieve rather than what the people want to achieve, hence ignoring their responsibility to provide the public good. In other words the people hardly own the policy instead they perceive it as an instrument of coercion rather than development. The development group initiatives introduced by the government of Uganda are politically initiated. In politics there is denying and giving hence the groups are owned by the people who already know how to manipulate the system for their own selfish ends, and instead perpetuates exploitation of the majority by the minority. As a result there is decline in community development.

It is believed that development programmes would score more success if chance was given to the communities to mobilize themselves through communal work, group work, community meetings, food support and financial help which have got attachment with traditional forms of behaviour. Together with the philosophy behind Misingo and Wretch encouraging communal work and group work there was increased agricultural output. People were able to produce enough food for consumption and surplus for sale. The situation is now different as people have become more individualistic and this has affected mostly the poor people in the society who form the nucleus of any country in the third world. The question about community development initiatives is whether its implementation should be concentrated at the top or at the bottomthe grassroot where the majority poor people are found. Analyzing why government programmes on NAADS, Entandikwa scheme, SACCOs, Bona bagagawale (prosperity for all), youth livelihood programme and operation wealth creation, have not received much acceptance in local communities in Uganda it appears to be self-imposed, coming from above and politically motivated. This narrows down the scope of community development to politics rather economic growth of communities.

1.8 Traditional forms of social solidarity and socialism

The analogy behind socialism is to be able to share what one has obtained with others, and according to Karl Marx (1945) capitalism had failed to enable people to achieve wellbeing because of self interest that left people divided with the minority people in the society exploiting the majority. To Marx and others it is only the state which can institute good life in the society. Whereas Nyerere described socialism to mean either wealth or poverty. To him one could become a socialist even if one is an African, implying that socialism is all about having affection for the economically disadvantaged group of people in the society. Throughout research findings this paper upholds that this form of group sharing to achieve wellbeing can be perpetuated by traditional forms of social solidarity. This is a form of economic socialism that can be instituted by the state through traditional forms of social solidarity like that of the *Jopadhola*, Eastern Uganda. Communal work, group work, community meetings, food support and financial help.

Although the current trend of global political economy praises and upholds the capitalistic political economy as the only one way through which modern economies can be hanged on by most centuries of the world, whether poor or rich, there is no doubt that capitalism has also failed to usher in development in some regions of the world. In the same way some countries have also prospered through socialism; the case for Cuba. Bad politics have eaten up the good whims of socialism. The notion of traditional forms of social solidarity is all about socialization which Schaefer and Lamm (1995) defined as the process whereby people learn the attitudes, values and actions of a particular culture. Therefore traditional forms of social solidarity should without doubt be elements of socialization. Socialism is just the act of socialization where a particular group of people share and participate in an activity that benefits them

economically. This social solidarity spirit is hailed and practiced by different ethnic groups in Uganda and the entire regions of Africa.

1.9 The philosophy of socialization as exhibited by African traditional values

The philosophy of socialization is well exhibited through African proverbs, sayings and songs. These proverbs, sayings and songs carry the hidden power of unity through socialization, which if utilized properly it can be used to fight famine in the community, improved economic stand of the people or as mobilization tools for local and national politics. For example the Baganda have a saying that, "agali awamu gegaluma enyama". In English this means that where there is unity thus the only way to bite the meat. The implication is that it is only through unity that everything is possible. Other tribes in Eastern Uganda refer to this kind of unity as Obwoko by the Samia, the Basoga refer to it as Kikinsu, and the Bamasaba refer to is as kibaga and so are other tribes within and outside Uganda. Among the *Jopadhola* this kind of group socialization is referred to as bedo kanyaciel which they carry out in two forms; *Misingo* and *Wretch*.

The birth of socialist political ideology originated from the merits and positive impacts that socialization creates in the society hence gives the name "socialism". People with the socialist view assume to be bearing the nationalistic heart for other economically disadvantaged people in the society.

Besides politics, the social aspect is that people can come together to share their ideas and work together to achieve economic prosperity. In general terms this is the basis and contribution of socialization towards community development. When the traditional forms of social solidarity existed, the rural households used not to lack food stuffs because through social solidarity each household produced what was enough. Hence besides just acquiring new culture from other people-the way socialization is claimed to be, but the only difference being that could be an adjective while socialism being a noun. From these two terms there is a very minimal distinction. Connected to this if politics is the authoritative allocation of goods and resources in the society, the one way through which this can be done is by emulating the nature of traditional forms of social solidarity especially the *Jopadhola* case. It would be easier for government to implement community development programmes through these forms of associations from which they have been born and nurtured hence they understand them much better than the new emerging forms of social solidarity. To the local people to own government programmes it takes time as these programmes come with government targets that are political. Government political targets contravenes with the notion of government provision of the public good.

Conclusion

Social solidarity makes socialism as political ideology not a new phenomenon. This paper ascertains that socialism had its foundation from social solidarity. Hence this is an indicator that traditional forms of social solidarity existed in different parts of the world. The major content of socialism being to create a society free of exploitation and domination. Socialism was specifically concerned with economic equality being the foundation upon which the society could be built. This paper attempts to make it clear that through traditional forms of social solidarity, economic inequality can be reduced or minimized. Participation in communal work, group work and community meetings gave opportunity to individual households realize each other's potential as meaningful substitutes in the community.

Aiming at achieving holistic development people and their traditional culture should be the pivot in public policy making, and more-especially the social policy that tends to see how society can be re-organised for better social and economic achievements.

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NATURE'S CHALLENGES TO CONFLICT RESOLUTION AND PEACE

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Abstract

Humanity aspires for a world without conflict and war but the planet Earth has its natural challenges to conflict resolution and peace. This article, therefore, reviews and analyzes the historical and contemporary evidence of natural challenges to peaceful coexistence and conflict resolution, and suggests some technological policy responses that should be considered for adoption internationally to minimize conflicts and to ensure sustainable peace. Competitive behaviors of organisms for scarce natural resources leading to conflicts, violent attacks, and wars among living things have existed since the start of life. Individuals have always been in competition with others over limited resources. Human societies, in particular, have throughout existence of life, been fraught with conflicts and wars over shortages, inadequacies, or absence of their basic or fundamental needs (Bible, 2015), which include "physiological", "safety" and "security", "belonging" and "love", "esteem", "selfactualization", and "self-transcendence" requirements (Maslow, 1943). Biblical narratives are full of a world of scarce resources and violent competition for them (Schwartz, 1997 and Bible, 2015). The situation is worsened by the geometrically growing global population which is outstripping the arithmetically increasing resources (Malthus, 1798). Since nature operates on the theory of "the survival of the fittest" (Darwin, 1859) and since the resources for survival are limited on

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the planet earth, competitions are bound to persist with consequences of conflicts, violence, and wars. Based on Darwin's (1871) theory of "survival of the fittest", the most aggressive competitors will continue to survive while the weak will be progressively subjugated and eventually eliminated as long as there is earthly existence amidst scarcity.

Competitions and conflicts between nonhuman biological organisms are inevitable and should be left to natural forces including human interventions to create sustainable balance. Humans, on the other hand, have at least made efforts to address immediate and some root causes of conflicts among themselves (Bondurant, 1988). They have developed nearly 250 methods of conflict resolution that were recently enumerated by the Gandhian Centre for Peace and Conflict Studies (Gangal, 1988). For the existence of peaceful or conflict free society, it is imperative to meet the basic human needs and include among the techniques for resolving conflict (a) reciprocal defense strategy (Maynard, 1982) to overcome general insecurity and threats of conflict, (b) agricultural intensification (Abdulkadir, Orach-Meza and Edaku, 2017) to alleviate nutritional insecurity, and (c) adaptive technology (Boserup, 1965; 1981; Orach-Meza, 2011; Barredo, 2013; Botkin et.al, 2013; Ipate et al., 2015) to promote sustainable environmental and socio-economic development.

Keywords: Nature, nature's challenges, peace, conflict resolution, basic human needs, adaptive technology

Introduction

Humanity aspires for a world without conflict and war, but the planet Earth, with its limited natural resources to provide for the needs of humans, has its natural challenges to peaceful coexistence. Nature is the planet earth and the resources on it. The evolution of traits and behavior for successful competition for the earth's resources, and survival among living things, based on the theory of "natural selection" (Darwin, 1859) through which adaptation and speciation take place is one such challenge. Natural selection, according to Darwin (1869), is the process in nature by which only the living things best adapted to their surroundings tend to survive and transmit their genetic traits and behavior in increasing numbers to succeeding generations, while those less adapted tend to be eliminated. Both Darwin (1869) and Spencer (1864) referred to this evolutionary phenomenon as "survival of the fittest" in describing the mechanism of "natural selection" or "the preservation of favored race (species) in the struggle for life (existence)".

Darwin (1871) and his contemporaries, therefore, theorized the existence of competitive and destructive behaviors as something inherent to living things that evolved to ensure their survival and species perpetuation through reproduction in the limited space and resources. One of the basic needs for physiological existence is food; but food becomes increasingly scarce as the number of consumers increases. It is, therefore, the increasingly limited supply of food and other basic needs for existence that compel organisms including humans to compete for them, at times, violently, even through fighting wars. Humanity has other numerous needs besides food, which, if not met with adequate supplies, could lead to perpetual competition, conflicts, and wars.

Competitive behaviors leading to conflicts, violent attacks, and wars among living things have naturally become part of life. Individuals,

including haploid cells in procreation, have always been in competition with each other over limited resources required for their existence and over dominance. Human societies have throughout existence of life, right from the time of Adam been fraught with conflicts and wars over shortages, inadequacies, or absence of their basic or fundamental needs (Bible, 2015), which include "physiological", "safety" and "security", "belonging" and "love", "esteem", "self-actualization", and "selftranscendence" requirements (Maslow, 1943). Biblical narratives are full of a world of scarce resources and violent competition for them (Schwartz, 1997; Bible, 2015). The situation is worsened by the geometrically growing global population, which is outstripping the arithmetically increasing resources (Malthus, 1798). Since nature operates on the theory of "survival of the fittest" and since the resources for survival are limited, competitions are bound to persist with consequences of conflicts, violence, and wars. Based on Darwin's (1871) theory of "natural selection", the most aggressive competitors will continue to survive while the weak will be progressively deprived and eventually eliminated as long as there is earthly existence amidst scarcity of resources.

Conflicts, arising out of competitions, between certain rivaling organisms are inevitable and should be left to natural forces to balance. However, humans have at least made efforts to address immediate and root causes of conflicts among themselves. They have developed nearly 250 methods of conflict resolution that were recently listed and reviewed by the Gandhian Centre for Peace and Conflict Studies (Gangal, 1988). For the existence of peaceful or conflict free society, it is imperative to include among the techniques for resolving conflict "reciprocal defense strategy", (Maynard, 1982; von Clausewitz, 1943) to overcome general insecurity and threats of conflict, "agricultural intensification" (Abdulkadir, Orach-Meza and Edaku, 2017) to alleviate nutritional insecurity, and "adaptive technology" or "precision agriculture", (Boserup, 1965, 1981; Orach-

Meza, 2011; Barredo, 2013; Ipate et al., 2015) to promote sustainable environmental and socio-economic development. These and other scientists believe that "the power of ingenuity would always outmatch that of demand" because "necessity is the mother of invention". The global society, therefore, aims at the development of specific solutions based on the recommended techniques that are adaptable to local realities.

Methods

Relevant and pertinent literature was reviewed and analyzed for historical and contemporary records on scarcity of global natural resources for human existence and on persistence of competitions, conflicts, and wars. This article, therefore, presents evidence, after analyzing the information gathered, on naturally evolving challenges to peaceful coexistence and to conflict resolution. Some technological policy responses that should be considered for adoption and implementation to minimize the likelihood of conflicts were suggested to enhance sustainable peaceful coexistence on earth.

Findings, Discussions, and Recommendations on Natural Challenges to Conflict Resolution and Peace

(a) Humanity's Common Village: The Struggle for the Limited Space on Earth

The Earth, which is about 4.6 billion years old, is one of the several planets in the Universe on which human nature has been able to evolve within the living ecosystem that comprises the atmosphere (air), hydrosphere (water), lithosphere (soil), and the biosphere (biodiversity or living things that includes humans).

Geographically, it has a surface area of 510,066,000 square kilometers of which 148,429,000 square kilometers (29.1%) is land area and 361,637,000 square kilometers (70.9%) is covered by water of which a small portion

(9,028,300 Km²) is fresh water (Strahler, 1963; NASA, 2017). Historical, archeological, chemical, and geological evidence indicates that the increasing human population and their expanding socio-economic activities, as well as demand for survival, are concentrated on the limited land, water, air, and biodiversity. Increasing human actions on the use of resources have been, are, and will continue to (a) affect the quantity and availability of water through modification of streams, rivers, lakes, groundwater, and even the oceans; (b) transform and degrade land through expansion of agriculture, human settlements, development of infrastructure

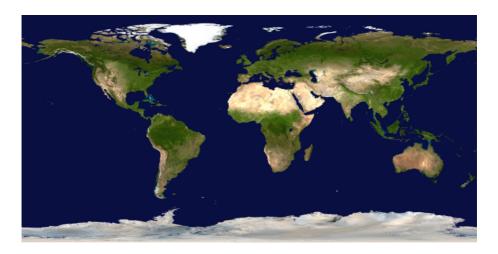


Fig. 1: Map of the Earth Showing Oceans, Seas, Lakes, and Land (Arable Land, Ice/Snow, Deserts, etc.)

(Source: Google Map 2017)

mining, and land erosion; (c) pollute water and air through the generation of destructive wastes; and (d) alter the biosphere through changing or destroying natural habitats and causing the extinction of many living species. These actions, which are usually competitive in nature, are often the causes of conflicts among organisms over the scarce natural resources, and the space available.

Table 1: Share of the Land Area (Source: *World Bank, 2015; NASA, 2015)*

| Type of Land | Area in Km ² | Percentage |
|---|-------------------------|------------|
| Land for agriculture (crop and pasture) | 71,671,207 | 48.29 |
| Land with poor top soil | 11,110,362 | 7.49 |
| Rocky mountains | 21,780,431 | 14.67 |
| Dry (hot) deserts | 15,767,000 | 10.62 |
| Ice/Snow (mainly Arctic and Antarctica) | 28,100,000 | 18.93 |
| TOTAL | 148,429,000 | 100.00 |

The share of the total land area of 148,429,000 square kilometers in Table 1, comprising arable land, ice/snow covered land, deserts, mountains, and land without good top soil for each of the current population of 7.8 billion is about 20,000 square meters. This is about 400 by 50 meters each, but by 2015, the available agricultural land was about 0.194 hectare per person (World Bank, 2015; NASA, 2015). In 2013, Uganda's arable land per capita was estimated at 0.189 hectare, that was a decline of about 10 times from 1.782 hectares per person in 1941. That may be the reason for increased conflicts over land in many parts of the world.

(b) The Effects of Human Population Growth and the Diverse Cultural Groups

The world population (Fig.2) is currently (2021) just over 7.8 billion people distributed unequally in 195 countries, 193 of which are members of the United Nations. An estimate of the people who have ever lived on Earth to 2016 is about 108+ billion (Hau; 2017). With improvement is human survival rate at global level, despite efforts towards population control, the rapid increase in population will continue. Projections of population growth estimated in 2015 predicted that the world human population was expected to reach 8.5 billion in 2030, 9.7 billion in 2050, and 11.2 billion in 2100 (United Nations, 2017). The annual growth rate of the world population was 0.4 in 1800, 0.6 in 1900, but shot 1.03 in 2021 (Google 2021). It took 127 years from 1800 to 1927 for the human population to increase from one (1) billion to two (2) billion. It wastook another 33 years for the population to increase to three (3) billion in 1960, but only 14 years to grow to four (4) billion in 1974. Then, it took the next 13 years to reach five (5) billion in 1987, and finally dropped to 12 years to increase to six (6) billion in 1999. It was yet another 12 years for it to increase to seven (7) billion in 2011. The current level of 7.8 billion has been reached in six (8) years. At a national level, Uganda's population, which was only 3.5 million in 1941, some 78 years ago, is now 47,123,531 in 2021, and it is projected to grow to 202,867,655 in 2100 (United Nations, 2021).

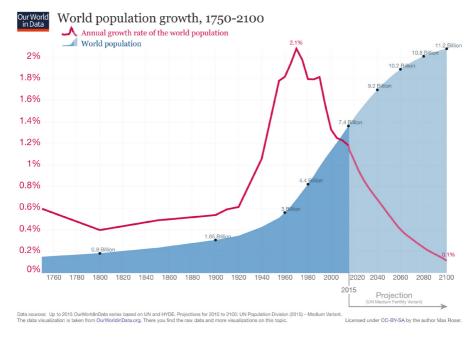


Fig. 2: World Population Growth and Forecast with the Growth Rate (1760 to 2100)

(Source: United Nations, 2021)

Although about 7,099 major ethnic groups have been identified and listed on Earth (Lewis et al., 2017 and Levinson, 1998), the exact figure of how many different societies, cultures, and ethnic subgroups is not certain. The estimated number of ethnic groups corresponds to the living languages spoken worldwide (Lewis et al., 2017) on the assumption that each language is spoken at least by one ethnic group. Fortunately, due to globalization, many cultural differences are increasingly becoming blurred, although ethnicity has remained mostly distinct. Ethnic groups and sub-groups are associated with shared cultural heritage, ancestry, history, homeland, language or dialect, and associations.

The many ethnic groups and their expanding interests and needs would tend to feud increasing competitions for the scarce resources, and hence, ethnic tensions and conflicts. For instance, Europe had the 20th century cleansing of minority groups, and the conflicts over resources in Africa are mostly between ethnic groups and not between states (*Kiernan*, 2007; *Ganguly*, 2009).

For instance, in 1941, there was more than enough land in Uganda for a population of 3.5 million people. Uganda has a total land area of 241,550 square kilometers but 41,030 square kilometers is covered by fresh water in rivers and lakes. The population has since grown to 47,123,531 in 2021. With static land area and about 27 ethnic groups and many more ethnic subgroups whose populations are increasing (*United Nations*, 2021), the tendency for conflicts over the limited requirement of human needs appears progressively enhanced.

Diversity in human societies, for the purpose of this paper, is having different races, nationalities, ethnic groups, communities, religions, professional organizations, political parties, etc., on earth and in a nation state or country. Humanity is basically diverse in ethnic and socio-cultural terms and can therefore be a source of both benefits and conflicts. Diversity should basically be valued since it recognizes differences in backgrounds, skills, attitudes, and experiences that bring benefits of fresh ideas and perceptions. On the other hand, according to Oyeniyi (2011), "conflict is an inevitable outcome of human diversity and a world without conflict is not desirable, because it would mean a world without diversity". In the same vein, Wilson (2016) referred to warfare as "humanity's hereditary curse" and another evolutionary psychologist, Pinker (2013) believed that "chronic raiding and feuding characterize life in a state of nature". All these views are right, but the latter three seem applicable in this discourse; and the conflicts, feuds, or wars are fueled by the desire to fulfill the fundamental needs of humans, which are entrenched in the limited natural resources.

(c) The Effects of Scarcity and Limitations of Essential Natural Resources

Natural resources are materials that occur in nature on the Earth and are essential or useful in meeting the needs of humans such as sunlight, air, water, land, and the living things. These resources are limited in the planetary ecosystem comprising of the sun (solar radiation or sunlight), atmosphere (air), hydrosphere (water), lithosphere (land inclusive of all minerals), and the biosphere (living things). Sunlight, geothermal energy, and air can be found everywhere and are known as ubiquitous resources because they are omnipresent and inexhaustible (will not run out in the near future, though air can, however, be polluted). The majority of the other resources on Earth are theoretically exhaustible as they have a finite quantity and their use can deplete them. Water, although limited in volumes of salt and fresh water, is replaceable and can renew itself through water cycle. Minerals are non-renewable but some can be recycled. Living things are renewable through reproduction and, along with some minerals and air, through biogeochemical cycles. Reproduction enables population of organisms to increase in numbers while the amounts of the other resources remain the same.

The capacity of the Earth to support diversity of species, humans included, is large but fundamentally limited. Living organisms exploit their surroundings for natural resources that they use for survival. However, there are limits to the life sustaining resources that the earth, with its limited space, can provide as shown in Fig. 3. Due to the rapid increase in the human population, at the rate of 2.5 per cent in some countries, which in 2011 had peaked at 7 billion, natural resources are being used up at a more rapid rate than in the past. Renewable natural resources can be replenished but when they are used too rapidly and at an increasing rate, they cannot replenish fast enough to meet the human demands. Non-renewable natural resources such as precious metals that are being

exploited can run out completely and be gone forever. Efforts to recycle, reconstitute and/or substitute some non-renewable resources once or more time are possible (Ehrlich et al., 1977) but can be prohibitively costly in the long run. The rate of use of some non-renewable resources like groundwater, fossil fuels, and high-grade minerals can be no greater than the rate at which renewable resources that are being used sustainably can be substituted for these non-renewable resources. Basically, there is a finite planetary quantity of each non-renewable resource that can be recovered economically as it is possible to calculate when the earth will run out of a particular resource, given knowledge of the amount of the resource that exists, the technology being used, the costs, and the likely demand. Such resources cannot be used in a sustainable manner. The sustainable rate of emission of pollutants is determined by the degree that they can be absorbed and rendered harmless in the environment.

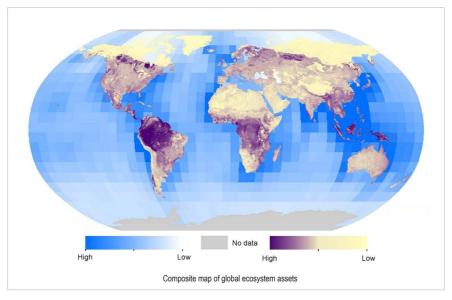


Fig. 3: Depicting Natural Resources of the World

(Source: United Nations, 2021)

There are resources that provide free services to humanity without necessarily undergoing depletion or degradation. These include microbial nutrients cyclers and soil generators, natural pest control agents, pollinators of crops, and forests that maintain balances of gases, water, soil, and biodiversity. However, other resources such as those for food, drinking water, energy, and the capacity of the environment to absorb pollutants are either consumed, or dispersed, or degraded as benefits are derived from them.

Depletion of natural resources has been associated with social inequality (Wittwer, 1989) since most virgin biodiversities are located in developing countries. These depletions can be viewed as major sources of social unrest and conflicts in developing nations.

Several studies (USA/IP, 2007; Wittwer, 1989; Le Billon, 2007) have shown that throughout history, countries have battled over natural resources. Demographic changes, increasing consumption, environmental degradation, and climate change are placing significant and potentially unsustainable pressure on the availability and usability of natural resources.

Two theories were proposed to explain the role of natural resources in conflict (Fig. 4): one argument points to scarcity and the other points to abundance of environmental resources. With scarcity, it is argued by researchers such as Malthus (1798) that rapid population growth, environmental degradation, resource depletion, and unequal resource access combine to exacerbate poverty and income inequality among the poorer communities. These deprivations are translated into grievances, increasing the risks of rebellion and societal conflict. This is the problem of overpopulation and scarcity of natural resources. Shortages of natural resources have been associated with population explosion overshooting the carrying capacity of the Earth. It is also argued that resource

abundance is the bigger threat to create conflict due to "resource curse" like corruption, economic stagnation, and violent conflict over access to revenues. For instance, lucrative mineral resources like oil, diamonds, and other strategically important minerals have fueled conflicts in countries of Africa like Sierra Leone, Congo, Angola, and Liberia (USA/IP, 2007).

The natural resources problems, both renewable and nonrenewable, are real and are only going to get worse under the current political-economic system. What happens when resources are in the process of being ruined or depleted? There is a scramble, frequently violent, for the control of the remaining resources.

A graph illustrating the Malthusian theory of population growth where population increase geometrically while resources increase arithmetically.

Note: Point of Crisis

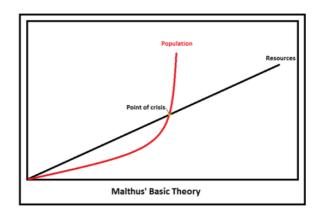


Fig. 4: Illustration of Malthusian Theory of Population Growth as Against Increase of Resources

(Source: USA/IP, 2007)

The increasing human population will soon deplete nonrenewable resources. The natural resources are already scarce *per capita* in the world, and thus, the resources crises and the resources wars are already occurring. There is no need to look very far to find evidence of friction,

conflicts, and even some wars over access to resources especially oil and gas, water, and agricultural land (United Nations, 2017). The wars in Iraq and Afghanistan by the United States of America and their military bases and support provided to local governments in the Middle East and Central Asia have been about access to, or control of oil (Bouvard, 2012). The productive aquifers on the Palestinian West Bank must be factored into Israel's reluctance to end the occupation and return to the pre-1967 war borders (United Nations, 2017). In many countries, where no ruling class is in firm control, internal conflicts and even civil wars have been taking place as a result of efforts to profit from the exploitation of resources.

(d) The Effects of the Slow Progress in Technological Development

Gradual transition to sustainable development pathways to meet the expanding human needs will require all stakeholders to adapt and adopt state-of-the-art knowledge and technologies, and it will require trying multiple technological models (Boserup 1981; Godfray, 2010; Orach-Meza, 2011; Borredo, 2013; Botkin et al., 2013, Ipate et al., 2015). To address the challenges of increasing food needs will require sustainable agriculture intensification in small and larger farms throughout the world (Abdulgadir, Orach-Meza, and Edaku, 2017). Being able to feed 9 to 10 billion people in 2050 needs to be accomplished by crop and animal productivity increases, reducing food losses and waste, and changing diets, and always keeping in mind that the Earth's natural resources base in finite (Fig. 5). In addition, technologies will have to be developed to guard against running out of water, preserving and improving soils, adapting to climatic extremes, creating better jobs and higher incomes, ensuring healthier diets and lifestyles in all countries.

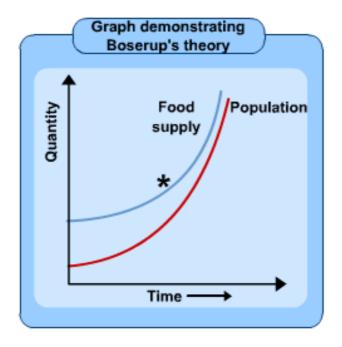


Fig. 5: Illustration of Increase in Food Supply as Technology Improves

(Source: Boserup 1965)

A sustainable development path will require decisive and ultimately transformative changes of the global food production systems to increase food availability and utilization, improve environment, make human beings healthier, and create more prosperous rural communities. Measures will have to be taken to address food demand, production, consumption, and losses. Management of population growth, food losses and waste will be important for reducing pressure on agricultural land, water and natural ecosystems, in addition to increases in agricultural productivity and efficiency, and measures to protect natural resources from unsustainable exploitation, degradation, or pollution.

Technological developments may be able to resolve many difficult issues related to human needs on a sustainable basis. However, many of the possible solutions are still ideas. As technology becomes more and more advanced, there will obviously be many more changes. New ideas to-day could become solutions tomorrow. Drones, according to Ipate et al. (2015), are already being used to help with precision agriculture where new technological innovations and systems for monitoring, supervision, management, and controlling are replacing outdated traditional agricultural practices (See Fig. 6). As technology improves, they could do many more things. In addition, every aspect of industry has some technology, including nanotechnology in it, and through these advancements, it is possible to improve the way problems of shortage shall be handled.

It will for example be possible to grow crops in 50 years in order to preserve the land, grow crops without polluting the air or destroying the soil, produce food without soil whether in hydroponic farms on land or platforms at sea, and provide healthy and efficient ways to improve everyday life for humans. The idea about food technology is to solve broader issues, such as helping with world hunger and the fast growing population, waste reduction, health problems, and to create a sustainable environment in which to live.



Fig. 6: Tomatoes Growing on Soilless Media (Source: Courtesy Photo from The Monitor, Uganda)

Nevertheless, many of these are possibilities. Humans live in an everchanging world in terms of increasing population, resource demands and constraints, possible climate extremes, and even political volatility. The demands of the increasing human population will, for certain, overwhelm the available scarce natural resources on the finite space of the planet Earth with disastrous consequences regarding peaceful coexistence. However, if these technological innovations being designed to satisfy the expanding human needs are combined with the intensification of human population control measures to reach replacement level, they could eventually be the solution for sustainable peaceful coexistence that humanity is searching.

(e) Expanding Fundamental Needs of Human Society

The concept of human needs, conflict, and peace are interrelated and affect all aspects of human life. Humans need certain essentials of life in order to live and attain well-being. These essentials are human needs. Coate & Rosati (1988) argued that conflicts and violent conflicts that often result in wars are caused by unmet human needs. Violence occurs when certain individuals or groups do not see any other way to meet their needs. Rosenberg (2003) also states that violence is a tragic expression of unmet human needs, implying that all actions undertaken by human beings are attempts to satisfy their needs.

Several studies on human needs theory including human behavior characterize human existence by the fulfillment of fundamental or human needs and they proposed that humans have certain basic universal needs, that if not met, conflict is likely to occur (Burton, 1993; Rosenberg, 2003; Maslow, 1943). Maslow (1943), in his theory, categorized human needs in a pyramid of hierarchy as "physiological", "safety", "belonging" and "love", "esteem", "self-actualization", and "self-transcendence" in that order to explain how the patterns of human motivation to act generally move through. Basically, these begin with the need for food, water, and shelter, followed by the need for safety and security, then belonging or love, self-esteem and finally, personal fulfillment and self-actualization. However, since the human brain is a complex system, having parallel processes running at the same time, the different sources of motivations from the hierarchy can occur simultaneously. It is, therefore, essential to know what each of these needs entail as deprivation from them or their absence can be major sources of natural challenges to conflict resolution and peace.

The first in Maslow's (1943) hierarchy in Figure 7 is "physiological" or survival needs. These are the basic animal needs for such things as

food, air, warmth, shelter, sex, water, and other body needs. If a person is hungry or thirsty or his body is chemically unbalanced, all of his energies turn toward remedying these deficiencies, and other needs remain inactive. If these basic biological needs required for survival are not met, the human body would struggle to function. Second in the hierarchy is "safety needs" that involves human desire for a predictable, orderly and peaceful world in which injustice and inconsistency are under control. Inability to satisfy this can lead to feelings of doubt and shame as well as the need for discipline and orderliness. Third is social "belonging needs". This involves friendship, sexual intimacy, and having a supportive and communicative society all of which are emotionally based relationships. Failure to meet this need leads to negative social emotions like guilt with low extraversion values. "Self-esteem needs" is the fourth hierarchy. Humans desire recognition, self-esteem, self-respect, and to be respected, and they desire to be involved in activities that give them a sense of contribution or feel accepted and self-valued. Inability to meet this leads to feelings of inferiority, which in turn may lead to low agreeableness. "Self-actualization or cognitive needs", the fifth hierarchy, is the need to increase human intelligence and knowledge, which is natural human need to lean, explore, discover, and create to get a better understanding of the world. When this need is not realized, it can lead to confusion and identity crisis. Humans also value pleasant and beautiful surroundings to refresh themselves in the presence and beauty of nature. Missing this need to

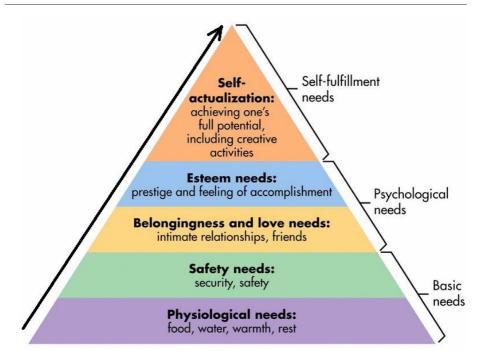


Fig. 7: Maslow's (1943) Theory: An Explanation of the General Movement Patterns of Human Motivation through the Hierarchy of Human Needs

(Source: Maslow's (1943)

relate with the beauty of the environment can lead to a feeling of the loss of the beauty that nature has to offer. It is also the need of humans to make the most of their abilities and to strive to be the best they can. Fulfilling this need leads to a feeling of being a generativist or positive contributor to the next generation. The last or the sixth hierarchy he included later is "self-transcendence needs". He referred to this as spiritual needs or the power to achieve beyond ones' limits. It is where service to others takes precedence over individual needs. Fulfilling this hierarchy would lead to feelings of integrity and spiritual or highest peace of mind; and there are individuals who aspire to be at that level.

(f) The Struggle for Existence through Natural Survival Traits

Competitions, conflicts, and even wars are part of life, and they take place when living things are struggling to fulfill their basic universal needs for survival, possession of essential natural resources, dominance, and recognition. Population growth that leads to overcrowding of the Earth increases natural demands of the basic needs thereby escalating the struggle for the scarce natural resources. In the past millennia, overcrowdings on the Earth were resolved by *major mass extinctions* that have, so far, occurred five times besides twenty (20) other smaller events (McElwain & Punyasena, 2007). Mass extinction is an occurrence in which a large number of species of life on Earth become extinct in a relatively short period as a result of natural forces. It affects a great many different groups of organisms occupying diverse and widespread environments. New species often emerge after the event. Many scientists are already predicting that the sixth major man-made mass extinction is underway and is being accelerated by climate change (Kaplan, 2015).

Competition is one of the most basic functions of nature. Individual organisms best able to compete within an environmental niche survive because they compete for a common resource that occurs in a limited supply relative to their demand. This occurs when the capability of the environment to supply the required resources is smaller than the potential biological requirement causing organisms to struggle or compete with each other for access and possession. As part of inheritance, competition starts with haploid cells, when the fastest sperm cell from the many (hundreds to millions) succeeds in entering and fertilizing the egg and preventing others to enter. The individual produced among many others in the world of scarce resources automatically becomes competitive in order to amass resources to satisfy its needs. Competition is, therefore, part of life and highly essential in natural selection because it relates to

the selection of traits which promote success or survival of the fittest in particular environments.

Humans are naturally competitive beings and competition is rooted in their evolutionary heritage. They compete to win in practically everything regarding human needs. Once competition intensifies, Darwin's (1871) theory of "survival of the fittest" commences and the loser is naturally eliminated from the niche.

Conflict, on the other hand, being part of the make of humanity, is a struggle between two forces: a protagonist and an antagonist. The individuals or groups involved seek to achieve their needs by directly challenging the adversary by violence or threat of violence. Every individual differs from each other physically and possesses personal opinions, ideas, sets of beliefs, and own ways of looking at things. Conflict involves individuals, groups of individuals, or a struggle within one's own self. Since individuals or groups have to make choices in case of conflicts, the decision to take and the choice to make are not always going to be acceptable or agreed by both sides. Conflicts arise primarily as a result of a clash of interests in the relationship within and between parties, groups, or states because they are pursuing either opposite or incompatible goals. Conflict is and has, therefore, been throughout history a normal way of conducting disputes between groups. For example, Malthus (1798) considered reduced supply of the means of subsistence as a cause of conflict, and Darwin (1871) considered the struggle for existence or survival of the fittest as the main cause of conflict. Another cause in humans could be the difference between the rate of change in the normal norms of a society and desire, hopes, dissatisfaction, or demands. Major conflicts, according to Oyeniyi (2011), are normally over intrastate and interstate borders; territoriality; ethnicity or racism; politics; governance; persecution; economic performance; foreign intervention; personal, group or national interests or differences; etc., and are normally brought about by the desire to fulfill

the basic human needs for existence. Nonviolent conflict of needs can degenerate into violent conflict, which is war.

War, according to Cambridge Dictionary (2016) is a state of organized, open-ended, collective armed conflict or hostility between states or societies, and that it is characterized by extreme aggression, destruction, and deaths using regular or irregular military forces. War, being an extension of conflict, is a product of inherited biology of humans. For war to occur, there must be some opposing interests regarding human needs, something to fight about, and capabilities to fight.

A review of the recorded history of humanity reveals that human beings have all along been bloodthirsty and aggressive species (Darwin, 1871; Holsti, 1991; Schwartz, 1997; Rosen, 2005; Bible, 2015). Warfare and brutality have been omnipresent and are natural to human beings. Throughout history, humans have shown themselves willing to fight and die to seize or defend their needs. Based on evolutionary nature in humans, the Bible presents a legacy of intolerant thinking about other people and "authorizes such intolerance as the will of God" with disastrous effects on religious, racial, and ethnic conflicts around the globe starting with Cain committing the first fratricide when he murdered Abel in a jealous rage (Schwartz, 1997; Bible, 2015).

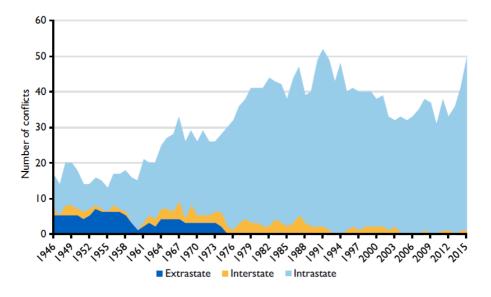


Fig. 8: Trends in Armed Conflict 1946-2015

(Source: United Nations 2017)

Territorial behavior is central to some of the most vexing cases of wars because a territory can secure access to key natural resources like water, food, shelter, and security from adversaries among other needs and protects them from competitors. Holsti (1991) found that 79 percent of all wars between 1648 and 1989 involved territorial issues, and Toft (2009) showed that 73 percent of all ethnic wars involved territorial control (Fig. 8). Another major factor in the cause of civil wars was ethnic and national identity. However, territoriality across the animal kingdom is about the defense of natural resources essential for survival and reproduction besides other needs. In case of human beings, Vasquez (2012) established that territorial interest influences individuals, groups, and even states to risk an escalation in, and persist with violence over land more often than over other issues. In all cases, the overriding reason for war is survival of the fittest and perpetuation of existence of the surviving species by securing and protecting their needs.

The linkage between competition, conflict, and war has been shown to be rooted in Darwin's (1871) evolutionary theory and explains their linkage to concerns and needs of living things including humans.

(g) Current Challenges to Peaceful Co-Existence

Peace is absence of war and meeting human needs satisfactorily. Peaceful co-existence is, therefore, a state of harmony characterized by lack of violent conflict (war), and commonly understood as absence of hostility. Macmillan Dictionary (2017) further adds that peaceful co-existence suggests the presence of healthy relationships, prosperity in matters of social or economic welfare, equality, and a working political order that serves the true interest of all. Everyone would wish to be in a conflict-free and peaceful status.

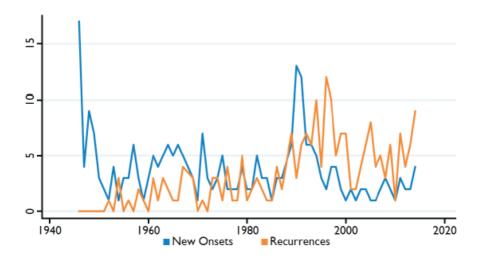


Fig. 9: New and recurring conflicts globally, 1946-2014 that Illustrates Futility of Mediated Conflict

(Source: Svensson 2015)

However, conflicts and wars are prevalent in life. Given the characteristic differences in humans and human behaviors, irrespective of current globalized interaction among human beings at family, clan, tribal, ethnic, national, regional, and international level towards conflict resolution and peace, there will always be competition, nonviolent conflict, and violent conflict (war) which are bound to become worse as human population increases. Inevitability of conflicts being part of life is obvious and has been vividly reflected in the Bible (2015) and the theories in the Curse of Cain (Schwartz, 1997), Natural Selection and Survival of the Fittest (Darwin, 1871), Population Growth (Malthus, 1798), Territoriality (Johnson & Toft, 2013), Ethnicity/Racism (Ryan, 1994), Persecution (Limbaugh 2003), Governance (Blainey, 1973), Political Volatility (Gurr, 1991), Economic Inequality (Rosen, 2005), On War (von Clausewitz 1943; Pinker, 2015) and Foreign Intervention (Gurr, 1991), which are still having practical effects in the world. These are being worsened by the prevalence of extreme poverty, political differences, social inequalities, economic disparities, poor governance, high levels of unemployment, environmental degradation, and personal or group deprivation.

Figures 9 and 10 illustrate the futility of current efforts towards conflict resolution. The reasons for flouting the agreed positions during mediation should be researched, and natural challenges should be considered.

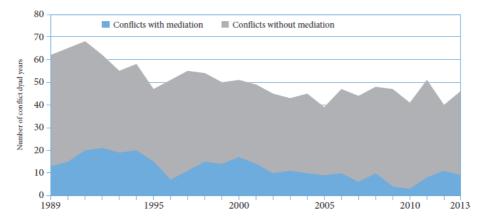


Fig. 10: Distribution of mediated and non-mediated conflict: 1989-2013 (Source: Svensson 2015)

Struggle for Sustainable Peaceful Coexistence

Every living thing is born peaceful. It is the environment in which it lives that tempers its behavior to become aggressively competitive and conflict-ridden in its endeavor to survive and perpetuate its existence and that of its future generations amidst scarce and finite natural resources on planet Earth. The only sure way to avoid conflicts with others is for a human being to be able to access the basic needs for its survival and perpetuation of its existence on a sustainable basis.

Today, as illustrated in *Figures 9 and 10*, there are as many ways of conflict resolutions and conflict prevention as there are threats to prospects of conflict resolutions (Sharp, 1973 and Bondurant, 1988). Many deal with resolving contemporary conflicts as they occur without necessarily considering the root causes of the conflicts. The current options for resolutions and/or prevention include early warning systems, human capacity building, creating a climate of peace, preventative deployment for peace enforcement, continental development imperative,

comprehending causes and histories of conflicts, and reverse intervention (Oyeniyi, 2011).

In life, every individual is different and each one behaves differently; and every behavior is according to Tinbergen (1953) driven by "proximate causes, ontogeny, survival value, and phylogeny". (Recall the evolutionary maxim that "ontogeny recapitulates phylogeny" and both are tempered by changes in the surrounding environment). Environmental conditions are constantly changing, and individuals must, therefore, adapt their means of existence and behavior to the changes over short, medium, and long geological periods. In the process, those that are best adapted to the changes are selected to survive and perpetuate their kinds, while those that fail to adapt are eliminated naturally unless nature's challenges are mitigated.

Conditions for Sustainable Co-Existence Peacefully and Free of Conflicts

Sustainable peaceful coexistence among humans shall only prevail provided their basic needs are being met (Maslow 1943) with the available natural resources within the limits of the earth. The primary requirement for action will be the development and sharpening of human intellectual and technological capacity to overcome the threats of shortages of needed resources for existence (Boserup, 1965). Intensification of agriculture and food production systems, ensuring territorial integrity and safety for everybody, and establishment of reciprocal and strategic defense mechanisms could be the required strategies. The approaches will have to involve actions along the following strategic plans if conflicts and wars are to be avoided:

(a) Development of technology for the intensification of agriculture, e.g. perpendicular staircase farming system on the available land (Ali et al 2017 and Boserup 1965).

- (b) Utilization of the aquatic systems particularly the oceans and seas more intensively for food production and other requirements (Orach-Meza, 2011 and FAO 2018).
- (c) Making changes in human diets and feeding habits to include all edible and nutritious substances as foodstuffs (Bell 2019 and Luca et al 2010).
- (d) Curbing human induced climate change by using sustainable alternative energy resources (Kaplan, 2015 and Cao and Hu 2016).
- (e) Securing ecosystem and biodiversity as well as their services that are useful to humanity (Mayer et al 2009).
- (f) Concentrating urbanization for settlements, industries, and recreation in skyscrapers at locations suitable for it (Yaskova, 2018).
- (g) Ensuring equitable sharing of water and other natural resources for the benefit of humanity (Ali *et al.*, 2017; Alao, 2011).
- (h) Implementation of population control of having only replacement off-springs since there shall be better healthcare, reduced infant, maternal, and adult mortalities, and increased lifespan, and also since there will be a limit to the number of human population earth can support (Meyer, 2004; Rosenberg, 2003; Maria, 2002).
- (i) Apportioning the finite space on earth into satisfactory territorial and intra-territorial land holding entities with respected boundaries (Johnson & Toft, 2013).
- (j) Transforming governance for sustainable development by ensuring absence of political, economic, and societal stresses, and by adopting the following principles of life: ethics, integrity, responsibility, respect for laws and regulations, respect from

majority of citizens by right, the love of work, the effort to save and invest, the will to be productive, and punctuality (Gurr 1991 and Blainey 1973).

(k) Establishment of reciprocal and strategic defense mechanisms by individuals, groups of individuals, and each state or region as deterrence and since war is also costly (Sharp, 1973 and Bondurant, 1988).

Conclusion

A world without conflict and war is the aspiration of humanity, but the earth has its natural obstacles to peace and conflict resolution. The obstacles have been highlighted in this paper which was greatly influenced by theories based on natural laws. Tinbergen's (1953) theory on animal behavior (ontology) stressed the role of biological inheritance as a major factor on aggressive behavior in defending survival needs resulting in competition or violent conflict. Maslow (1943) identified the basic needs that must be met in order to survive and exist. The absence of one or more basic needs results into conflict for access. Darwin (1869) theorized on how nature selects the fittest genetic traits to survive and perpetuate their existence and eliminate those that are not naturally selected or those that cannot defend their needs or territories. Competing for needs over the scarce natural resources available leads to violent conflict that results in the weak being eliminated by the strong or the fittest. Malthus (1798) worried over the geometrically increasing human population against the arithmetically increasing desired natural resources that could lead to human population eventually overwhelming the available natural resources. This is a cause for serious competition over the depleting resources that can result into violent conflict (war).

These natural challenges, as analyzed above, are the causes of conflicts and wars among living things including humans. They are, also, therefore,

challenges to peace and conflict resolutions. Unless appropriate mitigation measures for the natural challenges as discussed above are implemented, peace and conflict resolutions cannot be permanently achieved. Only temporary conflict resolutions can be achieved as the conflicts will recur as illustrated by Svensson, (2015) because their basic natural causes have not been addressed. When the strategic action for the intensification of agriculture and food production systems is enforced, peace can be realized. Such a strategic action ensures territorial integrity and safety of needs for everybody, and establishes reciprocal and strategic defense mechanisms. These are taken along with the specific approaches listed elsewhere in this paper that peace and permanent resolutions can prevail at the levels of individuals, groups of individuals, states, regions, and the whole world. Other organisms will continue to be controlled and manipulated by natural forces coupled with the innovative technological intervention of humans in order to ensure the maximization and perpetuation of their beneficial services to humanity.

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NON-FORMAL EDUCATION AND ITS EFFECT ON THE LEARNING ENVIRONMENT: A CASE OF RAKAI DISTRICT IN UGANDA

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ABSTRACT

The study set out to analyse the effect of the learning environment on the effectiveness of non-formal education in rural Uganda with particular focus on Rakai district. This topic was premised on the fact that Rakai after the emergency of HIV/AIDS attracted unprecedented numbers of NGOs and GAs. The purpose of these NGOs and GAs was to fight HIV/AIDS and its related problems by bringing about community development. One of the ways of achieving this purpose was the use of the non-formal education model. This was offered from the 1980s to date. However, since then community development in Rakai has not been adequately attained, thereby raising a question about the contribution of non-formal education

The major theory that was applied in the study was Karl Popper's three worlds of knowledge theory which promotes the three parts of knowledge that is: the physical world, world of consciousness and world of facts encouraging the three dimensional thinking.

The results revealed that there is a positive significant relationship between non-formal education and learning environment [r(347) = .469, p < 0.01] giving an indicator that the more favourable the learning environment is the more effective non-formal education while with less compliance from the learning environment there is no productive outcome from non-formal education.

Key words: Non-formal education, learning environment

The study objectives: Assessed to components of non-formal education, Evaluated the status of the learning environment, Determined the impact of non-formal education on the learning environment in Rakai district.

The research methodology were cross-sectional and correlation research designs with a study population of 518,008 and a sample size of 347. Data was collected using a questionnaire, semi structured interview guides, focus group discussions and observation. Qualitative data was analysed aided by thematic, content, narrative, taxonomical analysis and quantitative descriptive and inferential data was analysed using Pearson's correlation, regression and ANOVA statistical data analysis.

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Introduction

The study was to analyse the relationship between non-formal education and learning environment.

Since the identification of HIV/AIDS in Kasensero landing site in Rakai district, scores of national and international agencies have been heavily involved in non-formal education. It is well known that learning environment provides room for non-formal education to take place. It is the setting in the learning environment that fosters activity and progress for the activities of non-formal education.

Due to the great variation that exists in the learning environments, the outcome of non-formal education will continue to vary. Aspects considered included the concept of Non-formal education; the content of non-formal education; the methods used; Karl popper's theory, perspectives of Rakaians of the Non-formal education they received, the status of the learning environment and analysis of the relationship between Non-formal education and learning environment.

Problem statement

The problem being explored in this study is that despite the repetitive non-formal education given to communities of Rakai in relation to the aid to be offered, there have not been significant results of community development realised from the education given. Several development partners have given non-formal education to various groups including farmers, fishermen, youth groups, the HIV/Aids patients and families. Non-formal education has been perceived differently by different individual and groups who constitute given learning environments. The perception together with the status of the learning environment has continued to affect the results of non-formal education. Communities have continued to live in a miserable state.

Purpose of the study

The study evaluated the contribution of the learning environment on the effectiveness of non-formal education to communities.

Specific objectives

To investigate the nature of the learning environment in Rakai district

To assess values of non-formal education in Rakai district

To determine the relationship between non-formal education and the learning environment

Literature Review

The Concept of non-formal education

In conceptualization of Non-formal education there have been various points of emphasis.

Non-formal education has a view that learning which takes place outside the formal setting is a form of transfer of knowledge and skills outside the classroom setting with no structured curriculum. This nature of learning is transmitted through conversation and association with the environment, (Sennette 2012). Non-formal education as a spontaneous process of helping people to learn, working through conversation, exploration and enlargement of experience with a purpose of cultivating communities, associations and relationships that make for human flourishing, (Jeffs and Smith, 2005). Blyth (2008), asserted that conversation is 'the spontaneous business of making connections' and involves connecting with both ideas and other people then when we join in conversation it is often difficult to predict where learning will end. As such it can be a very powerful experience – 'conversation changes the way you see the world, and even changes the world' (Zeldin, 1999).

As well as talking and listening to others, learners also have conversations with themselves. They can watch themselves as they go about their lives, as we talk and think. People 'have, as it were, two internal voices, so they can both create new ideas and look at them, criticize and admire' (Zeldin 1999).

This study therefore considered non-formal education to be an extensive unstructured exploration and enlargement of experience, knowledge and skills that an individual or group of people attain from others and the environment

Methodology

The study adopted both qualitative and quantitative methods.

The quantitative methods were used to support the post-positivism paradigm that holds; the social world existing externally and its properties can be measured objectively. (O'learly,2001 citing Perry et al (1999). The study applied a cross-section survey design.

A cross –sectional research design was used in the study. The cross – sectional research design adopted in this study involved the collection of data at one point in time from a random sample representing some given population at that time.

The composition of Rakai district and her population Table: 1 Counties of Rakai district and their populations

| | County | Populations |
|---|---------|-------------|
| 1 | Kakuuto | 124,201 |
| 2 | Kooki | 226,489 |
| 3 | Kyotera | 167,318 |
| | Total | 518,008 |

Source: Results of national census of 2014

Table 2 The number of respondents from each county

| | County | Population | Number of respondents |
|-------|---------|------------|-----------------------|
| 1 | Kakuuto | 124,201 | 83 |
| 2 | Kooki | 226,489 | 152 |
| 3 | Kyotera | 167,318 | 112 |
| Total | | 518,008 | 347 |

The philosophy of non-formal education

Non-formal education has had a long history and has continuously got improved to date. The continued changes to non-formal education have continuously given variation in the learning environment.

The Phases of non-formal education

| Dates | Milestone | Philosophies influencing non- |
|--|---------------------------|-----------------------------------|
| | | formal education |
| 330 B.C | Individual teaching | Socrates and Plato were key |
| | | philosophers |
| 320 B.C | Child led to be taught by | Plato developed the idea of a |
| | pedagogues | school because children had |
| | | become many |
| 1 st | Faith teaching | Jesus taught through informal |
| century | | ways: along the road, around the |
| A.D | | lake at the well at meals, using |
| | | parables, and miracles, with no |
| | | timelines nor references. etc |
| 17 th -18 th century A.D | | Interest in science, secular and |
| Adult Ed | ucation | rational improvement of societies |
| Adult Education | | and religious adult education was |
| | | promoted. |
| Before | Teaching, trades ,social | Family, community and clan or |
| 1877 | values, language | tribal leaders ensured non-formal |
| | teaching and art | education was passed on. |

| 1877 and after | Formal education was introduced along non-formal education | Western education by various missionaries was introduced through religious groups and schools alongside non-formal education. |
|--|---|---|
| 1920s | Teaching of symbols in Africa was developed from art, language, pottery and crafts | Philosophers generated symbols that would portray meanings eg in Egypt and Mesopotamia. |
| 20 th -21 st century | Teaching for all sorts of things taught informally | As society becomes sophisticated educators also increase and more mechanisms or methods are used. |

Content of Non-formal education in Rakai

There are several areas that have continuously been addressed by non-formal education in Rakai and these areas include the following.

| | Content | Never % | A few | Many times |
|----|----------------------------------|---------|---------|------------|
| | | | times % | % |
| 1 | Health and health care | 00 | 10 | 90 |
| 2. | Hygiene | 00 | 40 | 60 |
| 3. | Nutrition | 00 | 7 | 93 |
| 4. | Communication | 23 | 34 | 43 |
| 5. | Income generation | 7 | 48 | 45 |
| 6. | Sex | 20 | 23 | 57 |
| 7. | Farming and farming systems | 00 | 30 | 70 |
| 8. | Marriage and family | 38 | 42 | 20 |
| 9. | Income generation and management | 00 | 10 | 90 |

The Learning Environment

The description of the learning environment covered a few structures of a rural setting basing thus climatic factors, Socio-cultural factors, geographical factors, health and economic activities in the area as well as the life style.

Rakai District is located in the South Western region of Uganda and has one of the highest rates of HIV/AIDS in the country, UNFPA *Uganda* (2007). Neema, Ssekiwanuka, Ssedyabule (2000): argued that between 35,000 and 50,000 out of a total number of 267 000 children in Rakai District are orphaned due to AIDS. Sibling-headed households were noted in Rakai District already in the late 1980s, Rakai Councellors' Association (2006). According to the Rakai District Local Government (2004) there were 969 sibling-headed households in the district in 2003, each having an average of 3.3 orphans, and the number is increasing, Atwine (2004). Rakai is made up of three counties of Kakuuto, Kyotera and Kooki. Rakai has a total population of 518,008 people of which 253,054 people are males and 265,954 people are females, census (2014)

The rural communities of Uganda are described using the learning environment of Rakai that is based on the factors influencing social status including Diseases, the power of money, risk denial, predisposing environment and lifestyle, peer pressure, poor housing and the search for social/material support income, assets, labour, crop and activity diversification, agricultural yields and market orientation. Bashir et al (2013), Food and Agricultural Organization (FAO). (2004). All the above being grouped into five as: Health and health care, Agriculture and production, Infrastructure and society; and resources.

Methods of non-formal education used in Rakai

Methods are a collection of artifices or mechanical devices used to guide

the teaching and learning of skills and knowledge. Non-formal education was driven by several methods through which information reached the intended destination. There were several methods used in non-formal education of Rakai district summarized as below:

The methods used included

Several methods were used to extend non-formal education to communities and these include the following, together with their tools and areas addressed.

| | Methods | Tools | Issue being taught |
|----|--------------------------------------|--|--|
| 1. | Music, dance and drama | Drama club members | -Health care -HIV/Aids prevention -Self esteem |
| 2. | Conversations | Members of NGOs, CBOs, GAs and community leaders | HIV /AIDS prevention, income generation, sex etc |
| 3. | Demonstration | -Cooking tools -Videos, etc | -Nutrition -Hygiene -Health care |
| 4. | Socratic (question and answer) | Members of NGOs. CBOs,GAs, and some leaders in the society. -Films | -Nutrition -IGAs -Self esteem |
| 5. | Literature distribution | -Staff of NGOs, CBOs,GAs and leaders in the community -Printed matter | -Healthcare -medical tips -Drug use -General care |

| 6. | Counseling | -Staff of NGOs | - Healthcare |
|----|-----------------|---|---|
| | | -Religious leaders | - Medical tips |
| | | -Some community | - Social cohesion |
| | | members | - Self esteem |
| 7 | | Members of | - Healthcare |
| | Focused group | NGOs,CBOs,GAs, and some leaders in the | - income generation, |
| | method | society. | - Hygiene |
| | | -Some community members | |
| 8 | Project based | -Staff of NGOs, | - Methods of farming |
| | learning method | leaders in the society. | - Social cohesion |
| | | -Some community members | |
| 9 | Apprenticeship | NGOs,CBOs, GAs, | - Methods of farming |
| | | and some leaders in the society. | - income generation, |
| 10 | Animation | leaders in the society, | new interests, out door |
| | | Some community members, members of NGOs, CBOs, GAs, | pursuits - income generation new skills (formation) |

The relationship between non-formal education and Learning Environment

The analysis of results generated the following results:

There was a positive significant relationship between non-formal education and learning environment represented by [r (347) = .469, p0<0.01]. The implication was that non-formal education which was offered takes into account the learning environment of Rakai. The more non-formal education given the better the learning environment becomes.

The simple linear regression yielded a model summary of R²of .220

which translated into 22%. This means that Non-formal education accounted for 22% of the learning environment. In this perspective, non-formal education affects 22% of the status of the learning environment.

There was a linear relationship between Non-formal education and learning environment

[F (1,345) =97.084, p0<0.01]. This meant that a unit change in one variable lead to a corresponding change in the other variable. Therefore, any change in non-formal education leads to change in the learning environment. Thus the more non-formal education given the more learning environment changes and vice versa.

In view of that it can be said that the null hypothesis "there is no significant relationship between non-formal education and learning environment" was not supported. It was the alternate hypothesis "there is a significant relationship between non-formal education and learning environment" which emerged with significant support.

Conclusion

For a productive education program, the educators are expected to plan and manage all the proceedings of non-formal education about the programs they introduce in the communities, acquire all necessary facts to avoid conflict of interest, carry on a clear and supportive orientation of facilitators who will give a good information and mentoring to communities.

However, in consideration of the results attained, there is evidence that the entire procedure of the non-formal education given at the beginning of any education program in the area so as to be based on the status of the learning environment to avoid wastage of resources connected to community development. The resources available in the environment demand for proper planning and management to be able to support the

progressing ideas.

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INSTRUCTIONAL LEADERSHIP AND LEARNER OUTCOMES IN SCIENCE AT LOWER SECONDARY PUBLIC SCHOOLS IN UGANDA

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ABSTRACT

The study investigated the relationship between instructional leadership and learner outcomes in science at lower secondary public schools in Uganda. Data were collected from 45 schools from districts of Gulu, Mukono and Kabale. A cross-sectional survey design with both qualitative and quantitative methods was used. The methods included administration of questionnaires, interviews with key stakeholders, document analysis, observations and focus group discussions. The sample comprised of 45 headteachers, 92 science teachers and 362 students. The main findings were that instructional supervision by headteachers and their management teams has a positive correlation with learner outcomes; The headteachers of public rural secondary schools in Uganda did not prioritise instructional supervision; and inadequate supervision of the teaching and learning of science results in poor performance by the learners. In conclusion, effective participatory instructional supervision is a desirable practice which results in continual professional learning and improved science teacher competence and effectiveness. This in turn, results in improved teaching and learning process and consequently leads to improved academic performance in science. The study recommends that head teachers should develop systems and intensify regular participatory and formative supervision of the teaching and learning of science; and the Ministry in charge of Education should institutionalize instructional leadership, train and hold headteachers accountable for the same.

Introduction

The context of school leadership in Africa has been changing. This is reflected particularly in numerous past and ongoing educational reforms and school restructuring movements. At the macro level, the main trend of educational reforms include re-establishment of new national vision and new educational aims for schools, restructuring educational systems at different levels for new educational aims and market driving, privatizing, cost sharing, greater self management and self governance and diversifying school education throughout the world. The roles of school heads in many countries is expanding as a consequence of the devolution of powers from local, regional or national bureaucracies or Ministries to school level and heads of schools have become the public face of the school. At the school site level, the major trends consist of ensuring educational quality, standards and accountability.

Generally, educational leadership and management have to be centrally concerned with the purpose or goals of education which provide the crucial sense of direction (Okumbi, 2007). The main purpose or goal of education is to prepare children for life, nourishing the potential in every learner so that each can connect and contribute to society. In educational institutions, the core purpose of the school head is to provide leadership in all areas of the school to enable the creation and support of conditions under which effective teaching and learning take place and which promote the highest possible standards of learner achievement. As leaders, head teachers provide the vision, framework for high expectation and motivation of staff, students and parents which influence the student outcomes. Consequently, school leadership plays a central role in affecting the educational development of the learners for whom they have responsibility over (Walker and Dimmock, 2002). In fact, school leadership is so critical that Leithwood et al (2004) has ranked it only second to teaching among school related factors in its impact on student

learning and achievement. This is possible when school head teachers provide effective instructional leadership.

The concept of instructional leadership is slowly entrenching into the school systems. According to DuFour (2002), instructional leadership involves setting clear goals, allocating resources to instructions, managing the curriculum, monitoring lesson plans and other academic documents as well as evaluating teachers. Instructional leadership has expanded to include deeper involvement in the core business of a school which is teaching and learning especially through instructional supervision. Instructional supervision is regarded as the process of enhancing the professional growth of the teachers, the curriculum and improving the techniques of teaching in the classroom through democratic interactions between the Teacher and the Supervisor (Okendu, 2012).

In Uganda, education stakeholders have expressed their concern over the poor performance of students in the Uganda Certificate of Education (UCE). Some blame the school administrators or head teachers and the teachers while some blame the students themselves and the parents. Whoever is to be blamed, the fact remains that, the school and its organizational management and leadership has correlation with the academic achievement of the students.

Conceptual Background

Instructional leadership is based on two predominant conceptual models which emerged during the 1980s in the USA. These were developed by Bossert et al (1982) at the Far West Lab for Research and Development in San Francisco who considered it as instructional management, and a complementary model developed by Hallinger and Murphy (1985) which expanded the framework.

The Bossert et al (1982) model sought to more clearly define the construct of 'instructional management'. Instructional management was conceptualized as actions and strategies employed by principals/ headteachers that are intended to impact the school's instructional organization and learning climate with the goal of improving learning outcomes for students. They chose the term "instructional management" because they inferred that this role of the principal/headteacher revolved around managerial functions concerned with the coordination and control of curriculum and instruction.

The model gives priority to a specific domain of the principal's activities (Robinson et al. 2008); purports that approaches to instructional leadership are shaped by personal characteristics of principals such as prior professional experience, gender, years of tenure as principal as well as attitudes or dispositions (Goldring et al. 2008; Leithwood et al. 2006). They also purport that leadership is influenced by organizational features such as school and district size and complexity, socio-economic status of the community, and socio-cultural features of the education environment (Belchetz and Leithwood 2007; Goldring et al. 2008; Hallinger and Heck 2011c); that the principal's effects on student outcomes are also mediated by features of the school (Hallinger et al, 2011); and that the ultimate effectiveness of the principal's efforts is based upon the impact achieved on students learning and development (Mulford and Silins 2003, 2009).

The second model was by Hallinger and Murphy (Hallinger et al. 1983). The model presented a

conceptual framework that incorporated three dimensions: defining the School Vision and Mission, Managing the Instructional Program, and developing a Positive School Learning Climate (Hallinger et al. 1983; Hallinger and Murphy 1985). They further identified vision and goals

as the most significant avenue through which school leaders impact learning. Vision refers to a broad picture of the direction in which the school seeks to move such as educating the whole child. In contrast, goals refer to the specific targets that need to be achieved on the journey towards that vision (Hallinger and Heck, 2002). In a meta-analysis of the school leadership effects literature, Robinson et al (2008) reaffirmed that vision and goals are the most significant avenue through which school leaders impact learning.

Both tend to converge on the fact that the ultimate effectiveness of the principal's efforts is based upon the impact achieved on students learning and development (Mulford and Silins 2003, 2009). Although Bossert and his colleagues initially employed the term instructional management, over time instructional leadership came to be more commonly used by scholars and practitioners. The formal distinction between these terms lies in the sources of 'power' used to achieve results. Instructional leadership became the preferred term due to recognition that principals who operate from this frame of reference rely more on expertise and influence than on formal authority (i.e., position power) to achieve a positive impact (Hallinger, 2003; Leithwood et al. 2008; Knapp et al. 2010). Since learning is relational, instructional leadership fits the preferred term.

Situational Analysis in Uganda

The Government of Uganda has recognises the importance of quality education and specifically of science in the socio-economic development of the country and the realisation of the national vision 2040 which aims at transforming from the peasantry to a prosperous and modern country. Consequently a number of initiatives have been implemented to promote science education at various levels of education. In addition, specific interventions targeting improvement of science teaching and learning at secondary level have also been implemented. These include the

implementation of Science Policy 2005 that made sciences compulsory at lower secondary; rehabilitation and/or construction of science laboratories in various schools; provision of Science Kits and laboratory equipment to various rural schools and institutions; recruitment of more science teachers; organising in-service training for secondary science and mathematics teachers under In-Service Secondary Teacher Education Programme (INSSTEP) in 1994-2000 and Secondary Science and Mathematics Teachers (SESEMAT) from 2007 to date; introducing computer education and laboratories and e-science learning, affirmative action on financing science courses in government Universities and Tertiary institutions (Ministry of Education and Sports, MoES, 2006).

In spite of all these efforts, the academic performance of students in science subjects at the end of lower secondary in Uganda Certificate of Education (UCE) has remained poor over the years. Analysis of student performance in science for ten years between 2005 and 2014, according to Uganda national Examination Board (UNEB), show that average performance at distinction level in Biology, Chemistry and Physics (core science subjects) is as low as 3%. Over the same period of time, the failure rate in the same subjects stands at 53% which confirms poor performance in science. The high failure rate at lower secondary imply that many young people complete that level with inadequate science knowledge and skills to carry on with science at higher levels or to apply in the world of work and contribute to their personal, community and national development. The overarching question is "what can schools do to reverse this trend? What will be the contribution of school leadership and management? How do the practices of the school leaders in supervising the teaching and learning process impact on learner achievement in science?" The study will venture to find the answers to some of these questions.

Purpose

The purpose of the study was to determine the relationship between head teacher instructional supervision practices and academic performance in lower secondary science education in Uganda.

Objectives

- 1. Assess the connection between instructional supervisory practices, and teacher Classroom behavior.
- 2. Determine the connection between instructional supervisory practices and levels of student achievement in science.
- 3. Draw lessons from the connection between instructional leadership/supervision and student achievement?

Literature Review

The review analysed the literature mainly on instructional supervisory practices and teacher classroom behavior; and instructional supervision and levels of student achievement.

Instructional supervision and Teacher classroom behavior

The main purpose of instructional supervision is to ensure that there is improvement of classroom instruction, the learning situation and the quality of learning in the school. Through effective supervision of instruction, school administrators acting as instructional leaders, can reinforce and enhance teaching practices that will contribute to improved student learning.

According to Acheson & Gall (2003), an instructional leader is an administrator who emphasizes the process of instruction and facilitates the interaction of teacher, student and curriculum. Instructional leadership involves setting clear instructional goals, allocating resources

to instruction, managing the curriculum and evaluating teachers. It focuses on strengthening teaching and learning (Kruger 2003, Musungu and Nasongo 2003; Sidhu and Fook 2010); student assessment (DuFour, 1999; Wiggins, 2004); professional development, data driven decisionmaking and accountability; and managing instructional programmes and promoting a positive learning climate (Hallinger, 2000). Blasé and Blasé (1999) expressed instructional leadership as specific behaviours such as modelling effective instructions, soliciting opinions, making suggestions, giving feedback to teachers, supporting collaboration, providing professional development opportunities and appreciating effective teaching. So, instructional leadership implies creating a climate of integrity, inquiry and continuous improvement and providing systems for instructional supervision and continuous constructive feedback (Acheson & Gall, 2003). Hence, effective instructional supervision provides a school climate that encourages teachers to prepare and deliver the lesson effectively (gives confidence and mastery), and assess systematically (Kizlik, 2010).

Strong instructional leaders increase teacher effectiveness, which in turn, improve student achievement (Wiggins and McTighe, 2005). Hence, head teachers' instructional leadership and supervision facilitate school level strategies aimed at academic improvement (Opdenakker & Van Damme, 2007; Kyriakide et al, 2010). These include ensuring effective use of the resources such as the laboratory and other school facilities (Kulbir, 1999); ensuring motivation, commitment and regular professional development of teachers (Kyriacou, 1997); and evaluating the school curriculum (Takemura, 2008).

Research further shows that effective instructional supervision should be formative and collegial. According to Jackson (2001), formative supervision is a process whereby the school administrator assists the classroom teacher to improve his/her teaching and students' learning.

School heads have to keep in mind that formative supervision is more than just routine classroom visits and evaluation of the teaching and learning process. It involves aspects of goal setting, follow-up visits, mentoring and coaching, continuous feedback on progress (Skretta, 2007) and provision of additional support to implement changes and professional development opportunities designed to improve teachers' classroom performance through analysis of data from classroom events. This is sometimes referred to as formative clinical supervision which is a teacher–centred approach and promotes continuous improvement.

In this type of supervision, the headteacher or his/her representative is seen as a facilitator, trainer and educator (Sergiovanni and Starrat, 2006). Formative supervision therefore exhibit effective and collegial dialogue to encourage teacher reflection and professional growth (Blasé and Blasé, 2000). It improves teachers' confidence and competence (McEwan, 2000), teacher motivation, satisfaction, self- esteem, efficacy and sense of security and improved performance because it is a participatory process. Zepeda (2007) further argues that teachers benefit highly when formative supervision is combined with summative teacher evaluation.

However, the consensus in the literature regarding this issue is that instructional leadership is seldom practiced (Flath, 1989) and effective instructional leaders are distinctly in the minority (Fullan, 1991). Stronge (1993) calculated that 62.2% of the elementary principal's time is focused on school management issues, whereas only 6.2% of their time is focused on instructional leadership program issues. He adds,

"A typical principal performs an enormous number of tasks each day but only 11% relate to instructional leadership" (p. 32).

Limited focus on instructional leadership reveals misalignment in the focus of most school leaders. As Stronge (1993) argues, the principal/head teacher, as an instructional leader, is the pivotal point within the

school who affects the quality of individual teacher instruction, the height of student achievement, and the degree of efficiency in school functioning. Similarly, Flath (1989) also argues that, instructional quality becomes top priority of the school through effective instructional leadership because it focuses on improving the classroom practices of the teachers and encourages them. Therefore, if schools are to progress, the head teachers cannot allow daily duties to interfere with the leadership role in curriculum implementation through supervision.

Headteacher instructional Supervision practices and Learner Achievement in science

The student outcomes are determined by a number of in and out of school factors. These include family background, student characteristics and school inputs such as availability of teacher, instructional materials and school administration support and supervision. However, research shows that head teachers who provide teachers with instructional leadership and collegial support supervision improve student achievement more than those who provide transformational leadership (Robonson, Lloyl and Rowe, 2008; Seashore-Louis, 2010). For example, the head teacher who recognizes the crucial importance of science can use his influence, power and authority to help shape critical approaches to science education reform efforts.

According to Rhoton and Shane (2006), head teachers can use the following approaches to support science education reform: creation of an instructional organisation and climate that are conducive to school-based initiatives and innovations so that all students can learn science in some meaningful way. This involves creation of a clear vision of effective science teaching and learning as well as goals that reflect content knowledge; providing high quality, appropriate and adequate instructional materials that support coherent presentation of important

science concepts to all students; supporting alternative assessment methods that more accurately measure deep understanding and a variety of skills and competences as stipulated by Bloom's Taxonomy (Anderson & Krathwohl, 2001); supporting ongoing and long term professional development of science teachers through mentoring of younger teachers, and exposure visits; maintaining class-size appropriate for science discipline; hiring new competent science teachers; communication to teachers about research and innovative practices in science. Providing support supervision to the teaching and learning process gives head teachers a deeper understanding of where they could be of assistance to teachers (Brewster, 2005). Hence instructional leadership plays a key role as "the driver for change" (Bryk et al., 2010: 61) and promoter of improved student achievement (Waters et al, 2003).

Therefore, effective instructional supervision practices facilitate effective learning because the head teacher will be kept abreast with the requirements for effective teaching so as to provide teachers with required science instructional facilities, materials and resources (Rhoton and Shane, 2006), and monitor their utilisation to ensure the link between theory and practice (Uganda Secondary Education Sub-sector Report, Seweje, 2000) and give feedback to improve the effectiveness of teaching and learning process.

According to Aladejana and Aderibegbe (2007) and Adediwura & Tayo (2007) effective teaching and learning of science is activity-based and leads to improved students' academic achievement. It is widely accepted that science is better taught using discovery or the experimental approach because students learn to handle apparatus, think independently and draw conclusions on the basis of practical observations (Mohan, 1995). In addition, the subject matter becomes more comprehensible, forgetting is minimised, and it is more likely to lead to transfer of knowledge and to acquisition of favourable attitudes towards a particular subject and

towards learning in general. When students are given opportunity to use the language of science and to experiment with nature and other scientific experiences, the outcome is enhanced conceptual understanding (Mercer et al, 2004; Zohar & Nemet, 2002). Thus students are likely to be highly motivated, score higher on all types of tests, and gain critical insight into the subject matter (Comb & Snugg, 1995) and can engender an increase in the level of achievement in science especially of low achievers (Mohan, 1995; Kyriacou, 1997). If the head teachers promote consistent support supervision in collegial manner, it is assumed that the teachers will maximize the use of available science facilities and the students will highly benefit leading to improved academic performance.

However, some other scholars who consider school administration as the most important role of head teachers and consider instructional supervision as a burden to the head teacher. Day and Sammons (2013) assert that, expanding the role of a school leader to include instructional supervision, is adding to the administrative demands of leading a school to excellence; making it difficult for many school heads to successfully fulfill all of their obligations. The additional responsibilities imposed on principals or head teachers in many countries make great demands on the post holders (Walker and Dimmock, 2006).

Besides all these roles, the assumption from the general public is that the absence of effective leaders, positive school climates created by the head, and positive attitudes of teachers can, directly or indirectly, influence school performance and student achievement (Kruger, Witziers and Steegers,2007; Waters, Marzano, and McNulty, 2004;). It is argued that, leadership in schools play a pivotal role in all phases of the school improvement and development processes. The school head is considered vital and is held responsible for keeping the school as a whole in mind and for adequately coordinating the individual activities during the improvement processes. School leadership the world over is considered

as a professional driving force and mediator for the development of the school towards sustainable improvement.

School heads empower teachers and contribute to the school improvement journey through empowerment and the spreading of good practice initiatives generated by teachers. Leithwood et al., (2004) show that, the impact of student outcomes is likely to be greater where there is direct leadership involvement in the oversight of and participation of leadership in curriculum planning and ordination and teacher learning and professional development. In many parts of the world, including both developed and developing countries, there is increasing recognition that schools require effective leaders if they are to provide the best possible education for their learners. Leithwood et al., (2004:4) argue that, "School leadership is second only to classroom teaching as an influence on pupils achievement". They concluded that, "there is no single documented case of a school successfully tuning around its pupil achievement trajectory in the absence of talented leadership" (p.5).

Methodology

The methodology explains the study design, population, sample with the sampling techniques and the data collection methods.

Study Design

A cross-sectional survey design was adopted. According to Cohen et al (2010), cross-sectional surveys produce findings more quickly; they are less likely to suffer the control effects experienced in longitudinal surveys where data is collected over time; are more likely to secure cooperation from the respondents on a one-off basis and are less expensive and yet the results can be generalised to a large population. According to Creswell (2009), studies concerned with views, opinions, perceptions and feelings of respondents on relationships are best investigated through this type of design.

Academic performance in science is a nationwide issue in Uganda. So the survey design was preferred because determination of the relationship between school management practices (independent variable) and academic performance (dependent variable) required the data that had a national stance. The cross-sectional survey design made it possible for data to be collected from a fairly large sample on 'one shot' basis with a rapid turnaround in data collection (Cohen et al, 2010). This design was preferred because it is economical and efficient and hence considered most appropriate. Since rural government secondary schools on which the study focused are many and scattered in the whole country, the data was collected from a representative sample of schools (Bell, 2004) due to time and financial constraints.

The study sample represented the cross-section of the different target populations (Kumar, 2005) including head teachers, science teachers, and students because they are all directly involved with the study variables. Although cross-sectional surveys tend to be highly quantitative, the design incorporated qualitative aspects to give a holistic picture of the data collected in determining the relationship between school management practices, and academic performance in science education because management practices are normally contextual.

Study Population

The population of this study was drawn from 595 government secondary schools classified as rural in the Education Management Information System (EMIS, 2013). The assumption was that each school has one head teacher, at least three science teachers and two streams of sixty students each. If all the rural government secondary schools were reached, it would have translated into an accessible population of 595 head teachers, 1785 science teachers, assuming that each school has at least a teacher for each of the core science subject of Biology, Chemistry

and Physics, and 71,400 senior four students (EMIS, 2013). The rural government secondary schools were targeted because they have a lot of similarities in terms of funding sources, infrastructure and facilities, centrally recruited and deployed head teachers and science teachers, and approximately the same entry scores for students at senior one. Targeting rural government secondary schools reduced on the extraneous variables such as student ability, teacher quality and variation in science facilities. Private schools were left out because of the variations in governance and management, provisions of facilities and recruitment of teachers, and variation in student abilities which may influence the performance of students in science differently.

The head teachers whose management practices were being investigated were key informants. Similarly, the science teachers participated in the study because their performance is directly affected by the head teachers' management practices and teacher performance affects the motivation and academic performance of the students. In addition, students of senior four were chosen to provide additional data because they all study sciences under the policy of compulsory sciences and had stayed in the school for almost four years.

Sample and Sampling Technique

The sample was drawn from three of the four traditional regions of Uganda to give it a national character and provide for generalization of the findings and conclusion simple random sampling. One district, with a reasonably large number of rural government secondary schools, was sampled from each of the three regions using a two stage procedure. First, stratified sampling technique was used to get the districts within each region with at least eight rural government secondary schools using EMIS data of 2009. This generated 7 districts in the central region, 12 districts in western region and 6 districts in the northern region. At the

second stage, simple random sampling was used to pick one district from each of the three regions. The districts sampled were Mukono in central, Kabale in Western and Gulu in Northern region respectively.

The school sampling frame comprised of 9 schools in Gulu, 18 schools in Mukono and 24 schools in Kabale giving a total of 51 schools. Using Krejcie and Morgan's Table (Amin, 2005), 51 schools generated a sample of 45 schools. The proportion allocation in simple random sampling was used to select the 45 schools. Each district contributed to the sample a number proportional to its size with each school having equal chances of being selected.

Using the assumption that each school would have one head teacher, at least 3 science teachers and two streams with 120 students in senior four, a population of 45 head teachers, 135 science teachers and 5400 senior four students was generated. Using Krejcie and Morgan's Table (Amin, 2005), this gave a sample 92 science teachers and 362 students. The implication was that only two science teacher and eight students could be sampled from each school. Simple random sampling was used to select the teachers and students in each school.

Data Collection Methods

A variety of quantitative and qualitative methods were used to give holistic information since head teachers' management practices are attitudinal and perceptual (Enon, 2002; Sekaran, 2003). The various methods made it possible to establish conditions, practices and perceptions that describe and explain the relationship between the headteacher instructional leadership practices and academic performance in science education. The data collection methods included surveys with self-administered questionnaires based on a five point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree, interviews, document analysis, observations and focus group discussions (FGD). The data generated

triangulated to give a holistic picture.

The observations were recorded and used to supplement information collected using other methods. Observations generated issues which were followed up in interviews with the head teachers and teachers. To avoid the observer and one-time effect and be objective (Robson, 1993), the researcher used a checklist, interviews and the available evidence in documents to make judgements on aspects being observed. The focus group discussions with a group of 5 to 7 senior four students and 2 to 3 teachers that did not participate in filling the questionnaire in some of the schools gave supplementary evidence.

Findings

The study findings focused on establishing the connection between instructional supervisory practices and teacher Classroom behavior and how that influences the levels of student achievement in science.

Headteacher instructional supervisory practices and teacher Classroom behavior

The results of the teacher questionnaires revealed that headteacher instructional supervision practices of the teaching and learning process were low. While a fair number of head teachers or their representatives (61%) assessed lesson preparation regularly, only 20% observed lessons regularly, 16% gave constructive comments after lesson observation, 31% has functional systems for teacher peer lesson observation and 30% had systems to monitor class based continuous assessment.

Supervision of Preparation to teach

Analysis of data from teachers' questionnaires on supervision of preparation for teaching revealed that practice is average (61%). Field observation revealed that in 20% of the schools, the school management

had facilitated lesson preparation by providing printed scheme books with a provision for lesson plans, template for monitoring students' class attendance, recording continuous assessment marks and record of work covered. However, the schemes of work booklets were not effectively utilized. Only schemes of work were prepared but the lesson plans, were not prepared. According to the records at the offices of the Director of Studies (DOS), supervision of preparation was taken very seriously in only 13% of the schools. In many of these schools, there were no systems to ensure that the heads of departments checked the schemes of work for accuracy of the content or that the schemes of work submitted were followed during the teaching. Where preparation for teaching was taken seriously, the head teachers and their management teams supervised the actual process and provided lunch for the teachers as an incentive to ensure schemes of work are done a few days before the beginning of each term so that teaching can start promptly when the term begins.

Consequently, in most schools the teachers just prepare schemes of work and lesson notes or use their old notes without clear plans and objectives or outcomes for each lesson. It was noted that preparation of lesson plans was resisted except where is was a clear outcome, supervised and with consequences because it is time consuming and the science teachers in rural schools work in more than one school due to high demand and inadequate remuneration. Hence lack of systems or inadequate or inconsistent supervision of preparation for teaching science encourages most science teachers to do the minimum. Lack of or inadequate preparation for teaching science affects lesson delivery, student learning and performance.

Supervision of the teaching and learning process

The teaching of Science is further affected by low level of supervision of the teaching and learning process. Results show that only 20% of science

lessons were regularly observed by the school leadership and management team and 16% gave constructive comments after lesson observation. This implies that in 84% of the schools investigated, science teachers never get a chance to know the quality of their teaching and how they need to improve. One of the science teachers said, "No one has ever observed my teaching for the last twenty years". Many headteachers concentrate on other administrative activities leaving supervising the teaching and learning process unattended. They did not consider lesson observation as one of their critical roles and lacked management systems to do it. Others especially without science background indicated that they lacked the necessary competences. As a result, teacher absenteeism is high, poor methods of teaching are continuously used and schools have no basis for conducting school-based continuous professional development for science teachers. The low supervision practices by head teachers in rural government schools were highly associated with poor attitudes towards their work. They focus on the challenging circumstances such as inadequate teachers and equipments instead of supporting the teaching and learning process to maximize the available resources. In fact, visit to the laboratories showed that even the available facilities were not effectively utelised partly due to lack of supervision.

The evidence for systematic lesson observation was found only one school (2.2%) of the 45 schools visited. The head teacher worked with the head of science in the school and observed each teacher at least twice a term after thorough discussion and agreement with teachers about the benefits of lesson observations. The observation comments were in teachers' files and the headteacher reported marked progressive improvement in the teaching of science. He confessed his excitement "I am excited about the outcome of lesson observation. Analysis of the comments given on subsequent observations indicated that teachers were progressively improving". However, no marked improvement had been realized in 10%

of the schools where lesson observation was informal, not documented, individual teachers not given feedback and lacked follow up.

In addition, the peer lesson observation practiced in only 30% of the schools was a new innovation mainly through the national effort under SESEMAT rather than institutional effort. Some headteachers had started appreciating it. For example, one headteacher confessed, "I highly appreciate the peer lesson observation started recently in this school after the last SESEMAT training and intend to make it a school programme so that it can be done in every subject". The practice was appreciated by teachers because it gives teachers collegial support in a non-threatening friendly environment. Therefore, peer supervision is a desirable practice for the improvement of the teaching and learning of science. However, it was not yet mainstreamed into the school systems for sustainability.

In the few schools where instructional supervision was done, school leadership were providing model instructions, indentifying teachers' strengths and weaknesses, making suggestions for improvement, supporting collaboration such as team planning and team teaching, giving feedback to teachers, and providing professional development opportunities, with the ultimate objective is to ensure effective learning of the students.

Supervision of School-based Assessment

With regard to headteacher supervision practices in the area of class-based continuous assessment, the study revealed that only 30% of the head teachers had some form supervisor on assessment. The schools referred to the programmed summative assessment in form of tests at the beginning of term, mid-term and end of term. There was no evidence of monitoring continuous class assessment such as home work, project work, practical work, end of topic or unit and other informal assessments. The head teachers revealed that the practice of supervising internal

assessment was low. They seem to have left it to individual teachers and to chance.

Supervision of assessment was inadequate because it was limited to summative assessment. The test results were recorded and used to determine the performance of students at the end of term rather than using them progressively to improve the teaching and learning process. For example, one headteacher confessed that "Our education system is examination oriented so we focus more on tests which are similar to the external examinations"

When responding to the question, "how do you make sure that you have an effective assessment system in the school"? Head teachers in only 30% of the schools said they had put systems in place for regular class assessment monitoring. These included randomly sampling and checking students' exercise books, ensuring regular tests were done and regular analysis of the performance of the students. Having a system of regular monitoring and head teacher participation encourages teachers to take continuous class assessment seriously. One headteacher reported that, "The teachers give weekly assessments. I have to check to ensure that it has been done. I also pick a sample of students' exercise books to confirm that they are being assessed regularly. This close follow up has led to general improvements. After adopting this system, all the classes had higher averages at the end of term than before".

This suggests that use of assessment results to inform the teaching and learning process significantly influence the academic performance of students in science. It further confirms that effectively monitored continuous assessment leads to improved academic performance.

Instructional supervisory practices and Student achievement in science

Analysis of the students' responses to the open-ended question in their questionnaires on the factors that negatively affect their performance in science revealed that inadequate supervision of the teaching and learning process featured highly. Students expressed disappointment that the head teachers and their management teams did not supervise what teachers do and indicated that their teachers behave and treat them unprofessionally in a manner that discourages them. More than 40% of the students used the following words to describe their teachers: "Not regular", "miss lessons", "consistently come late", "have poor syllabus coverage", "uncommitted and unserious", "run through the syllabus without explanations", "teach theoretically". The students reported that these unprofessional practices go unnoticed due to lack of supervision.

The students further indicated that even during the actual lesson delivery, the science teachers de-motivate them by the way they teach and respond to the students' questions. They revealed that the teachers were "boring", "too fast", "gave no explanations", "made students copy notes all the time" and "the teaching was highly theoretical". They also described their teachers as: "arrogant, rude, rough, insulting, embarrassing, uncooperative, hash, biased and very hostile". According to the students all these unpleasant things are happening in the science classes but remain unnoticed by the school management. Such teacher practices discourage and de-motivate the students. They have a negative impact on the students' attitude, understanding of the science lessons and their academic performance. The students recommended that school management should intensify supervision of science lessons. The students wrote recommendation statements such as: "The head teacher should observe regularly whether the teaching is good or not", "the management should carry out discussions with teachers of science

subjects", "the head teacher should improve supervision of teachers", "the head teacher should supervise the science teachers when they are teaching". These quotes confirm that supervision of science teaching by school management is very low and this has a negative effect on the teaching and learning process. Learning is a sensitive process that is heavily influenced by psychological environment, and if the obtaining conditions are hostile, effective learning may not take place. Therefore, inadequate instructional supervision in rural government schools is most likely contributing to poor performance.

Test of Relationship between Instructional Supervision and Academic Performance

Using SPSS statistical package, the data on instructional supervision generated from the close-ended questions in the questionnaires for head teachers, teachers and students was subjected to the chi square test of independence. It tested the hypothesis "There is no relationship between instructional supervision and academic performance in science education in lower secondary schools in Uganda". The Table 1 below gives the output.

Table 1: Chi-Square of Instructional Supervision and Academic Performance

| | Value | Df | Asymp. Sig. (2-sided) |
|------------------------------|--------|----|-----------------------|
| Pearson Chi-Square | 11.191 | 2 | 0.004 |
| Likelihood Ratio | 11.269 | 2 | 0.004 |
| Linear-by-Linear Association | 10.907 | 1 | 0.001 |
| N of Valid Cases | 490 | | |
| | | | |

The table above gives the output of the chi square test for independence for the null hypothesis that "There is no relationship between

instructional supervision and performance in science education in lower secondary schools in Uganda". The results of the chi square test, $\chi 2$ (2, n=490) = 11.19, p=0.004, indicate that there is a significant relationship between instructional supervision and academic performance in sciences. The hypothesis is therefore rejected.

In addition, the strength of the relationship between instructional supervision and academic performance in science was determined using contingent coefficient. The output r(490) = 0.149, p=0.004 is statistically significant and positive but the relationship is weak. Since the relationship is positive it implies that high level of practice will result in high performance and vice verse. This validates the findings of the study already given. However, the weak relationship suggests that performance in science does not depend entirely on instructional supervision. Other factors such as availability of science teachers, facilities and equipments, attitudes and more contribute to student performance in science.

Further analysis done to test the relationship between headship experience and instructional supervision showed that $\chi 2$ (2, n=45) = 0.792, p= 0.373. Since p > 0.05, it implies that there is no statistically significant relationship between headship experience and the level of instructional supervision. This suggests that the practice of instructional supervision does not depend on the number of years the head teacher has been in headship but rather on the significance he or she attaches to instructional supervision.

Discussion of the findings

The study brought out three major findings. First of all, it was clear that instructional supervision by head teachers and their management teams has a positive correlation with learner outcomes. Secondly head teachers of public rural secondary schools in Uganda did not prioritise instructional supervision. Thirdly, inadequate supervision of the teaching and learning of science results in poor performance by the learners.

Impact of instructional supervision on learner outcomes

In Uganda, headteachers are expected to play a three-fold role as school managers, instructional leaders and administrators. Since the focus of education is the learner, the core business of any school is to ensure effective learning so that all the learners therein maximise their potential (Kruger, 2003; Musungu and Nasongo, 2003; Sidhu and Fook, 2010). Supervision should translate into good performance in both curricular and co-curricular activities. It is the headteacher's responsibility to mobilize all stakeholders and resources, and spearhead formulation and implementation of school-based policies and systems to make it happen. In the School Excellence Model (SEM) in Singapore, purposeful leadership puts students first and sees teachers as key to make quality education happen (Tee & Chan, 2008). Instructional supervision when well done on regular basis does not generate additional pressure for the teachers which may be counterproductive as Lee et al (2012) argues, it instead helps teachers to improve and excel.

The findings of this study reveal that head teachers are pre-occupied with administrative work rather than the supervision of the core business which is effective teaching and learning. This finding contradicts the modern thinking that places instructional leadership as one of the central purposes of the principal/ head teacher (Dufour, 2001; Fullan, 2001, 2003). The administrative duties should be to reinforce rather than substitute instructional supervision. This is because instructional leadership involves setting clear instructional goals, allocating resources to instruction, managing the curriculum and evaluating teachers. The head teacher can provide both direct instructional leadership such as setting and ensuring that goals lead to effective teaching and instruction (Robinson et al, 2011) and indirect instructional leadership, for example, organising instructional programs, protecting instructional time and much more (cited in Louis and Robinson, 2012). The researcher agrees

with Brewer (2001) who argues that the head teacher as an instructional leader creates a climate of integrity, inquiry and continuous improvement of the teaching and learning process and student academic performance.

As a school manager, one of the roles of the head teacher is to take the lead in developing school-based policies and systems for continuous improvement. Such systems would include teacher supervision for improving teaching and learning (Kruger, 2003; Tee & Chan, 2008). Systematic and consistent professional teacher support supervision of the entire teaching and learning process especially lesson observation helps the teachers to identify areas for improvement. It also gives the school management the basis on which to objectively assess or appraise the performance of teachers. Lack of school systems for regular monitoring of lesson preparation, and delivery deprives the science teachers the opportunity of support supervision which enhances the quality of teaching. Teachers continue delivering lessons in the same way regardless of whether the students understand or not. This has impact on the students' learning, understanding and academic performance from year to year.

Effective instructional supervision should be participatory. If the supervision is basically management-based without sufficiently involving teachers and students, they may look at it as an inconvenience or intrusion into the teachers' freedom. As Lee et al (2012) argues, instructional supervision, if not well handled may generate additional pressure for the teachers which may be counterproductive. However, when teachers are fully involved in the preparation for supervision, receive and discuss constructive feedback that is given in a collegial manner in a climate of integrity, it will result in continuous improvement of the teaching and learning process (Acheson & Gall, 2003). Instructional supervision will encourage teachers to prepare effectively (Kizlik, 2010), put more thought and effort into their lessons and their job, enable them to own

the content they teach and the methods they use and take care of multiple intelligences of their students in teaching and assessment, and enjoy their work.

In addition, when students are involved in the processes of instructional supervision, they are not scared by the presence of the head teachers or any other members of the management team in their classrooms and other learning areas. Instead, they appreciate that it is done for their good and become more focused (Kruger, Witziers and Steegers, 2007). Regular presence of the head teachers or members of the management teams in classrooms and other student activities will not only improve the discipline but also give the management a clear understanding of the students' learning environment and the issues that affect their learning. Consequently student participative instructional supervision will most likely improve the teaching and learning process resulting in good academic performance (Sidhu and Fook, 2010).

Moreover, effective instructional supervision supports continual professional learning to improve teacher instructional abilities and supports individual teachers by monitoring and supervising their work at preparation, delivery and assessment (Seashore-Louis et al, 2010). This leads to teacher professional growth, motivation to demonstrate improvement, increased self-efficacy and self-confidence. It also reduces absentism of both teachers and students (Branch et al, 2012), enables teachers to reflect on their work, and encourages collaboration with colleagues and continued ongoing professional development (Barry, 2010). Effective instructional supervision helps the teachers and the learners to realize their full potentials in their respective careers and makes teachers more effective. As Robinson et al (2008) established, effective teachers improve student academic performance because of conducive learning and teaching environment.

However, since secondary school head teachers cannot be expected to have expertise in all the subject areas their schools offer, their ability to give guidance on instruction is generic and rather limited. It can be argued that effective head teachers have practices and systems that empower heads of departments or subjects who are in a position to offer subject specific instructional supervision to do so. When instructional supervision is participatory, decentralised, consistent and collegial, and is done by the head of department with subject expertise, teachers are motivated to use appropriate teaching methods and to handle the curriculum as stipulated by Bush (2006). Improved teaching as a result of instructional supervision and support enables the students to learn at appropriate pace and results in improved learning and academic performance (The Wallace Foundation, 2012).

Therefore, effective instructional supervision which improves learning outcomes is nested in a learning environment where each individual learner is happy, safe, confident, making good progress and achieving success (Shushila, 2004). Such an environment is realized when head teachers use democratic or participative practices that involve all teachers and students in planning and executing the supervision plans, and effective delegation in providing instructional supervision in a professional and regular manner, and where teachers are empowered to identify weaknesses in their practices and improve on them.

Conclusion

In conclusion, the extent to which the school factors influence the academic performance and outcomes of the students mainly depend on the leadership of the head teachers. In addition, effective participatory instructional supervision is a desirable practice which results in continual professional learning and improved science teacher competence and effectiveness. This in turn, results in improved teaching and learning

process and consequently leads to improved academic performance in science. Therefore, effective instructional leadership should be prioritized and practiced by all secondary school leaders to ensure effective teaching and learning of science and consequently improved performance in science.

Recommendations

- 1. The head teachers should provide instructional leadership by developing systems and intensifying regular participatory and formative supervision of the teaching and learning of science if the learning outcomes are to improve.
- 2. The Ministry in charge of Education should institutionalize instructional leadership, train and hold headteachers accountable for the same. Holding headteachers accountable will motivate them to give it the priority it deserves.

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THE EFFECTS OF TRADITIONAL CULTURAL PRACTICES ON MODERN DEVELOPMENT: A CASE OF JOPADHOLA IN TORORO- DISTRICT, UGANDA

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ABSTRACT

This article is a case study examining the effects of traditional cultural practices on modern development among the Jopadhola community of Eastern Uganda. Cultural traditional practices are ontological in the existence of the African people. Consultation with cultural traditional leaders and understanding of different traditions in the society has been found out to be very good for policy making in modern development. An assessment is made and the article concludes by pointing out the positive effects of cultural traditional practices on modern development. It also exposes the negative effects and their consequences on development as well

Keywords: Culture, community, development, underdevelopment, community development, practices, traditions

Introduction

As stated by Howard .H. (2009:60), that "ultimately, most people's normative evaluations of religious roles in politics are influenced whether, that religion's activity furthers the goals and policies the observers believe in", it also applies to the traditional cultural practices, questionable whether they enhance the modern development trends in the third world or poor countries which still suffer from its commonality aspects of political, economic or social under development.

Sociologically, all people in different parts of the world emerged to be what they are because of their behavior characterized by their cultural activities. The issue at hand then, is why African traditional culture is said to be primitive and responsible for the under development of third world communities such as the *Jopadhola*? On the contrary Mbakogu,I. (2004) stated that, development cannot be separated from man's culture, for culture makes a man, and man cannot be developed in a vacuum. What are the characteristics of modern development trends as opposed to under development? In this paper, development trends are described by the modernization theory, the relevance between the Domestic Relations Bill in Uganda with modern development and cultural traditional cultural practices.

Modern development trends

This is judged through the aspects of political, economic and social under development. The tribal-based politics contributed for ethnically divided nations or countries opposed to the developed democracies of personal merit, competitive elections and accountability. The continuous poverty due to poor economic product exhibited by unequal distribution of income, poor infrastructure among others is characteristic of economic under development. Third world poverty tends to correlate with poor social conditions such as high infant mortality and low literacy rates, which in-turn narrow opportunities for human development hence social underdevelopment. Where-as living up to the standard or style up to the status of developed nations which include depending on the bio-chemical medicines, living and changing the rural environment to urban environment through use of technology, availability of safe and clean water, information communication technology access to transport, industrialization, observance of human rights and gender awareness, good governance and democracy are some of the aspects of modern development.

Theories/Trends of modern development

There are controversies surrounding development in third world countries being mounted by modernization theory which originated in United States of America vs. Dependency theory which originated in Latin America. Despite the decolonization process which dominated the 1960s resulting into the independence of most of the African countries, development approach was also started in the same period in the United States of America by Palambora, Powelland others purportedly to show third world countries a direction whether to go West or East. According to them development in third world should take a western model and poverty in third world is aligned to heavy dependence of the third world countries upon the developed ones. It is added that even development theories attribute third world political unrest or economic backwardness to traditional cultural values, but culture is also said to have contributed to development in Western Europe during the Middle ages of the 11th, 12th and the 13th centuries which brought about great social and political change from the proceeding era.

What is challenging about the modernization theory is that the proponents did not give the possible way and origin of developmentin the great developed nations such as United States of America, Great Britain, France, Germany, and Netherlands among others. What is therefore complicated to understand is how the scope of transforming the traditional cultural values to fit that of the developed world as pointed out by Howard H. (2004:14), which was seen as the first and by most accounts most crucial in modernization process. This was contested by Max Weber and Talcott Parson in their social development theory. They distinguished between "traditional" and "modern" values. They said traditional, political and economic values as being irrational, or at least unscientific. They further asserted that modernity is judged by universalistic standards, like evaluating people basing on their ability rather than family or ethnic

origins. This is seen to be a positivist's idea except it may be difficult to substantiate the scope of this ability, and whether it is possible to take place unless given time, or what can be some of the development trends in a third world that can be applied to re-shape the destiny of a traditional society like that of the *Jopadhola* East Uganda.

Domestic Relations Bill-Uganda's case

Domestic Relations Bill in Uganda is within the elements of Traditional cultural practices such as marriage among the *Jopadhola*. It also cuts across almost all tribes in Uganda and specifically among the African people. Domestic Relations Bill (DRB) seeks to address the issue of paying dowry/bride-price as a way through which a man can get a wife for marriage. It also seeks to address the issue of women to own or inherit property where they are married. It is presumably ascertained that the major cause for the rise of this bill in the parliament was from complaints of women upon grievous domestic based violence instituted upon them by men and is totally addressing gender inequality between men and women in Uganda.

Although gender is not necessarily about women only, it so happened we are in a patriarchal society and therefore men could be held responsible for the suffering and underdevelopment of women. Black, J.K (1991) noted that 70% of the world's agricultural resources are produced by women. This was supported by Endroma (2006) that women are resource gatherers and are people who are in touch with the environment. Hence Domestic Relations Bill is a development phenomenon aimed at creating a policy in the society that may either be for the bad or good of the people. Since domestic relations bill is about marriage and bride-price, it is a cultural practice in the traditional sense but has got modern development trends. like among any other tribes in Uganda and Africa at large, it is believed that the more girls produced, the more wealth as many cows,

goats and other valuable items shall be given in exchange for the girls.

Domestic Relations Bill touches areas of modern development because wealth is achieved, by which household problems can be solved or even more wealth generated. To some extent this fulfills the three core values of development described by Todaro (1992:98-102), as being life sustenance, self-esteem and freedom from servitude. Because underdevelopment in Africa is perpetuated by poverty, dowry or brideprice is one of the sources of fighting poverty to achieve wellbeing, social development and even political development. On the other hand if it cannot fulfill the three core values of development mentioned by Todaro, then it is underdevelopment.

Cultural traditional practices

Cultural Traditional Practices are very important entities in development. They portray how exactly the world begun and in this case they are the foundation of development. These cultural practices are part and parcel of man Mbakogu,I. (2004). African religion has been condemned as superstitious, satanic, devilish and hellish and they went on to say that in spite of all these attacks, traditional religions have survived. They dominate the background of African peoples and must be reckoned even within the middle of modern changes (Mbiti, 2002). Since African religion and traditional cultural practices are inseparable, they officiate the statements that cultural practices are important entity in development. They incorporate people's behavior in the society and in sociological terms, it is also very important to study man's behavior in the society. It is people's behavior that determines whether they are developmental or not.

Behavior guides people and activities in the society. Hence without these traditional cultural practices it could have been very difficult to understand the world. All along it has been noted that the world today evolved from the behavior that people in the Western world link it with primitiveness. This assumption from the word "primitive" is ambiguous because without the background of anything its forward movement may not be realized. Without considering the effects of traditional cultural practices on development, cultural practices like making sacrifice among the *Jopadhola* have made these people known to be existing in the Eastern Uganda. It is because of the so called primitive cultures of the African people that have on several occasions been praised by the western culture as being rich.

Like African proverbs and sayings, traditional cultural practices have something of philosophical value which deserves to be taken seriously and studied accordingly. It is through these cultural practices that the western world came to know and probably understand Africa. Sincethere are no machinery and bio-chemical medicine in Africa, at least it is with the traditional cultural practices that the Western world had to compare Africa with. Hence making it a value, upon which tourists visit African. Traditional cultural practices and African religion are not universal. Different tribes, groups, villages or even individuals are affected differently. The fact that it cannot be transferred from person to person or community to community, studying it helps lay down policy strategies as cultural background is the foundation of policy making. Mbiti also notes that these traditions have been handled down from fore fathers and each generation takes them up with modifications suitable to its own historical situation needs. In no doubt, this confirms that traditional cultural practices are the sources of information upon which development can be planned. Studying it means understanding the origin of man and society which is basically sociological in nature and since there were no sacred scriptures or any written record about traditional cultural practices.

COMMON CULTURAL TRADITIONAL PRACTICES ACROSS AFRICA

Marriage event

It is believed in many African societies that from the very beginning of human life, God commanded or taught people to get married and bear children. Therefore marriage is looked upon as a sacred duty which every normal person must perform. Failure to do so means in effect stopping the flow of life through the individual and hence diminishing of mankind on earth obligation and the process from childhood makes them think about marriage. Marriage is the root for establishment of procreation that neutralizes the effect of death hence in marriage there is child bearing through which human life is preserved, propagated and perpetuated. There are as many marriage pattern engagements, wedding, and husband and wife relationships among others. According to Mbiti, African peoples look at marriage with several purposes and meanings in terms of obligation to bear children as a unifying link in the rhythm of life, the building of a family, regaining a lost immortality, bringing people together, giving a status in society among others. The traditional culture of the African people does not restrict men to marry more than one wife.

Death event

Circumstances surrounding death have been mysterious, and until today different ethnic groups in Africa have different views on what death is and what caused it, different from what the Bible and Quran mentions about the origin and the cause of death. Both the Biblical belief and the African tradition about death is that it is only the flesh that dies but the spirit does not, hence the view on the existence of the living dead. Since the belief about the living dead reigns, the African people always pay a lot of respect to the dead, and at times fear hence the dead person must

always be given good burial or else it can revenge on the people. It would certainly be that because of different versions about death that is why there are different ways, styles and beliefs of handling and burying the dead.

People also believe that every time a person dies, this death is caused either through sorcery, by spirits, by curse and-the belief that God may call on older people to leave this life, but this is controversial because even younger people die. Death is sorrowful but also important. There are therefore many and even complex and long rituals. In every African society people are very sensitive to what is done when there is death in the family, Mbiti (1991:119). To these effect rituals like disposal of body, burial of belonging with the body, feasting and songs of mourning take a carful observance of the family, the close relatives and friends and the clan. The *Jopadhola* are not an exception. They pay great respect to the dead by giving it at least four series of burials. The physical burial of the body, *mwengemapigiwanjijo* (a ceremony of wiping out the tears), *NekoKasikikodijowoburu* (ceremony of removing away the fire place in the compound and *Lumbe* (last funeral rites).

Harvest event

Since most African peoples live by farming, stock-keeping, hunting and fishing among others, these activities are accompanied by bad or good omen. Hence rituals start from making new fields, planting, harvesting. These are carried out differently by different tribes in Africa. The belief that the gods have a role to play in the success of these activities makes it vital to think that if the gods are not happy no good yield should be expected. Even in a case where there are long droughts, some peoples in Africa have special people to consult because at the end of it all people will rejoice if a bumper harvest is achieved. Poor harvest causes gloominess and reduces peoples' hopes for the future. Mbiti (1991:136) described

that harvests are marked with a lot of festivals when people relax and begin to enjoy the fruit of their labours in the fields. They dance, they eat, they take it easy and they rest from working so hard, which also gives the fields an opportunity to rest. In addition they have time to do other things while waiting for the next season. If it thus happens, then this cultural traditional practice has got a connotation with Todaro's three core values of development. The also mark the harvesting event by making rituals. These rituals include the ceremony of eating the new millet popularly known as *misia*. In *misia* pieces of millet, meat and chicken is also taken to the shrine or grave yard purportedly to please the living dead and the gods of the home.

Circumcision event

This paper also looked at circumcision, the cultural practice of the neighbouringGisu tribe. This is one of the main initiation rites practiced in many parts of Africa and some other parts of the world. Circumcision for boys and clitodectomy for girls, although the latter is now receiving a lot of negative campaign. Traditionally they are all aimed at preparing the young people for adulthood. Where the custom is practiced in Bugisu region in East Uganda, no body escapes forever without undergoing through it. They even confess to circumcise a dead body. Some people do it every year while others do it after every two years. It becomes a community or public affair that everybody feels proud to discuss the event. The candidates are informed in time and they wait for the day with curiosity.

The practice is beyond just to cross from boyhood/childhood to manhood because it entails many more things like sharing local brews with the elders, sharing conversations or giving one's views where parents are, to be able to be sustainable or stand for oneself, cleanliness and to be able to marry, build and found a family. That is why the *Omusinde*(uncircumcised

male) is exposed to a lot of rituals that he must withstand since he is crossing from childhood to manhood. Songs about sexual-intercourse accompanied by the dance of young girls around him, while the young energetic *abasani*(circumcised male) shout, intimidate and force the *omusinde*to travel miles testing and giving practice to make him strong.

Towards the circumcision season, the elders give the *omusinde*the last word as he makes the last confession. Some families call a religious leader to pray to God to bless the occasion, or at times *embalu*has got traditional spirit/god attachment. Namwendi Malik of Napuri village in Mbale district (Mushebi) stated that every circumcision year must be dedicated to the ancenstors whose spirits blesses the circumcision year to continue or not, the discovery magazine (2012). Among the Luhya, Masai and Nandi of Kenya the exercise is termed to be holy and the circumcision year also referred to be a holy year. The circumcision event is highly respected and it gathers people of all walks of life.

Development of perspectives of cultural traditional practices among the Japadhola

The marriage event has got some development perspectives which are socio-economic. Wth dowry received as wealth; a family is able to improve their lives socially and economically. It also creates social solidarity, referred to by the *Jopadhola*as, "ori-agiknono (an in-law is the end of the clan)". Through dowry many families have achieved sustainable life because they are able to support themselves as far as their household needs are concerned. They have also gained self-esteem-the case where members of the family have achieved high status of education and are working to benefit their families. Bride wealth also makes the *Jopadhola*gain freedom from servitude. Those who are being enslaved by poverty and have benefited from this cultural traditional practice are free from this enslavement. Since these are the three core values of

development described by Todaro (1991:98-102); it therefore ascertains that cultural traditional practices have got development perspectives. Featuring into the death event, it also creates solidarity because people come together to console the bereaved family among the *Jopadhola*.

The women in the village make a contribution of food stuffs such as millet/cassava floor, raw cassava or sweet potatoes, firewood and the men erect shelters for sheds. Books are opened for condolences from the in-laws, other relatives and for the community where the deceased resided. Entirely these contributions are meant to help the mourners and the bereaved family. It is out of social solidarity that this is possible.

On the other hand within the traditional cultural practice, there are various customs associated with death; the dead is buried after three days if male and after four days if female. There are about four burial processes as have already been explained earlier. Some of the series of burial processes have got developmental perspective especially the *lumbe* which gathers all relatives, and all other people who wish to attend. In this ceremony, there is a lot of eating and drinking local brews and knowing one another, a way of promoting social solidarity.

During harvest event there is a ceremony of eating the first millet-millet bread(*misia*) is prepared with sim-sim and meat, eaten by members of the family and other well-wishers. This is meant to please the gods who blessed them with a bumper harvest. Africans cherish and have the spirit of togetherness and this is a development perspective. This unity is an aspect of development. Generally if a yield of crops is achieved, enough will be eaten to gain health and strength and the surplus will be sold for money thus improving on the social and economic development of the community, and the entire nation.

CRITIQUE OF THE EXPOSITIONS

Modern development: it ignores cultural traditional practices which are the foundation of policy making. It is inclined to machinery and bio-chemical medicine ignoring the sociology of the people yet people's behavior is a very important aspect in planning strategies. The term modernity itself is ambiguous. In this case GDP-Gross Domestic Product may not be the overall determinant for development because it looks at the capital base of the country only, apart from Brazil, the Asian tigers, and South Korea that have received remarkable economic growth.

In as far as Domestic Relations Billis concerned, it is absurd that one of the major reasons given for (DRB) is to fight against domestic violence so that there should be equality between men and women. This makes the bill biased because emphasis is put only on the freedom of women and children. The African patriarchal society is being ignored. The passing of this bill will meant that the parliament of Uganda is creating a new society different from what it has originally been. One of the provisions that there should be no dowry in exchange for a girl/woman really contravenes with the natural law of social justice and order of society.

Traditionally if a girl was born the parents know that one day they would get something of value and the girl knew she was going to get married, an institution that is very highly respected by the society. Parents educated their daughters for a value. This encouraged people to take their daughters to school. Now that the bill states that there should be no dowry. How will the situation be in as far as marriage institution is concerned? Marriage has been a controlling factor in people's behavior because the majority of the members of the society do not study to the level of getting a job, and marriage is the only institution that accommodates them all. This means

the majority of the members of our society especially women will resort to subversive activities like prostitution.

The same applies to women owning property where they are married, it will make women to only target property and this will cause insecurity in the homes and society. Without marriage institutions there may be no political institutions that make the state. This means that the said misconduct in the marriage institution by few characters should not be used to ban the practice of dowry (*Nywom*). The issue of domestic violence should not be centered only on bad relationship between husband and wife and does not take place only because of *nywom*). There are factors contributing to wards domestic violence and could be checked by legal means. Neither the Quran nor the Bible protests giving dowry.

Cultural traditional practice of the Jopadhola

There are several cultural traditional practices among the *Jopadhola*. This paper considered marriage event, death event and harvest event only. On the marriage event, the *Jopadhola* extraordinarily practice it to the extent of it being misunderstood as enslavement. A woman has to over work herself in the fields to compensate for the cows given to her parents as bride price. Agreement must be transacted between the two families when marriage takes place, and once there is divorce, the girls' parents have to vomit back the cows. At times the girls' parents were imprisoned. This kind of violent action should stop and the returning of the cows should be disbanded because the girl/woman has produced children and even if she did not she has labored in the fields and contributed to the development of husband's home.

Indeed, death is inevitable and the most disrupting in all societies. Mbiti (1991:149) describes death as something that concerns everybody, partly because it brings loss and sorrows to every family and community and sooner or later everyone must personally face it. In other words, death is

an obvious thing. The four series of the burial of a dead person among the Japadhola seems to be resource and time consuming. A lot of the family's resourcesare spent on the mourners who take long to leave the deceased's home.

Comparing this with other tribes like Baganda and Basoga who at times make the funeral rites immediately after burial, the Japadhola use a lot of resources on many series of burial. The orphans and the deceased's family are left with economic problems and bankruptcy. As far as the harvest event is concerned it is very much associated with the spirits of the underworld which provokefear among some residents. Generally there is a lot of extravagance when the new yield comes and within a short time people run short of food and get back into suffering once again. This is form of underdevelopment.

Conclusion

Cultural Traditional Practice can be used to usher in modern development. It can be used for mobilization purposes where the government wants to implement modern development programmes. This is in respect of the nature of African solidarity. Cultural Traditional Practices give the historical background of the place and the people that if followed it can be used as a planning strategy for modern development. Traditional cultural practices should be appreciated because they have enabled the developed world to assess the situation and probably they would have not known where Africa is. Most importantly, cultural traditional practices such as social solidarity can be used in promoting economic development in the country. The more people are united, the more they can be mobilized to accept government policies, for example on agriculture and this will increase participation to aid production. If this is applied in NAADs, production can contribute to economic development of the community and the entire country.

Since cultural practices are not universal it can be used to study the behavior of different tribes and come out with one social policy strategy. On the other hand, cultural traditional practices undermine the use of modern medicines. It promotes indigenous technical knowledge which is not scientific. Cultural traditional practices are mainly associated with the poor, the uneducated and the unwanted that the modern people the (educated elites) do not want to associate with. Cultural traditional practice encourage progress for modern development, for example most families do not either take their daughters to school or educate them half-hazardly in order to marry them off as early as possible. This tendency has promoted primitivity in the traditional communities. Yet believing or following cultural traditional practices may not mean being primitive either, similar to what Nyerereobserved that, one could be a socialist even when one is an African. But this is different from French assimilation policy that existed in Northern Africa, where one could turn into French even if one was in a black skin. These are some of the hurdles in overcoming development challenges in Africa.

The following recommendations have been made to that effect;

The government should use cultural traditional leaders to mobilize people in the process of implementing and disseminating policies. This will give them a softer landing. The period for which the policy is supposed to make an impact on the recipients will take a shorter time.

Historical background of cultural traditional practices of the people should be used to evaluate the current situation in order to pave way for new development strategies.

Government should use traditional cultural practices in conjunction with the modern laws for positive transformation of society, rather than banning or condemning the traditional cultural practices, a case for the marriage event in the domestic relations' bill.

Consultation with cultural leaders and people with prior knowledge about culture is necessary, since cultural tradition is a good foundation for policy conception.

For a matter of modern development and transparency cultural traditional practices should not give more priority to men than women. This is one of cultural transformations needed in harmonizing the traditional cultural practices in Ugandan societies and elsewhere in Africa, and so on.

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AGENCY WORKERS IN BURUNDI; "OUTSIDERS" OR "INSIDERS"?

LINK BETWEEN ORGANIZATIONAL INCLUSION PERCEPTION AND ORGANIZATIONAL COMMITMENT

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Abstract

This study examines the perception of inclusion of temporary agency workers in the client organization where they are assigned. It seeks to verify the influence of certain aspects characterizing the relationship between these workers and the client organization on their perception of organizational inclusion and the influence of the latter on their degree of investment in the organization. Based on a quantitative data collection methodology and a binary logistic regression data analysis, findings reveal that even if these workers have no formal (contractual) employment relationship with the client organization, if the quality of social interactions they have with permanent employees and their direct supervisor is highly maintained, they will definitely recognize themselves as full members of the client organization. This will lead in fine to a strong commitment of these temporary workers in the client organization and will enhance their investment.

Keywords: Agency workers, Organizational inclusion perception, Organizational commitment, Burundi.

Introduction

Organizations are increasingly using agency workers to fill their need for labor. The growing use of this alternative mode of employment reflects the widespread need of organizations to lower their labor costs and increase their level of flexibility (Houseman 2014). However, some believe that these benefits are often acquired at the expense of a less internalization of the values of the organization by these workers and at the expense of productivity. Thus, one of the elements on which agency workers can differentiate themselves is their perception of organizational inclusion. Due to the limited duration of their employment contract with the organization, the management literature generally categorizes the latter as peripheral workers, "outsiders", with whom the organization maintains a more transactional relationship which results in lower investment by both parties (Lapalme *et al.* 2007). To our knowledge, no study has been undertaken to analyze this phenomenon in Burundi even though many agencies have emerged such as Akazi Interim, Infinity Group, NFT, to name a few and are employing a high number of Burundian young persons.

Globally, previous studies about agency workers have focused on their wages and "temporality" (Houseman 2014; Contouris *et al.* 2016), Job Satisfaction (Håkansson *et al.* 2013), their social and economic impact on the (micro)economy of a country (Belkacem 2013), among others. A study similar to this one has focused on Organization Inclusion Perception, Organizational Commitment and Discretionary Behaviors (Lapalme *et al.* 2007). It is partially to confirm or infirm its findings that we have undertaken this study.

In this study, we will focus more specifically on the perception of inclusion of these workers in the client organization and their level of commitment to the latter. These workers represent a specific category of workers who are characterized by the fact that they are employed by an organization (agency), but do their work in another (client organization). They are therefore unrelated formal employment with the client organization in which they work. Objectively, they are not considered employees of the

latter (Lapalme et al. 2007). This situation leads to greater ambiguity regarding the status of these workers in the organization and their relationship with the latter. So, the objective of this study is to assess, as a first step, how certain elements which characterize the relationship that the client organization and its permanent workers have with the agency workers can influence their perception of organizational inclusion and, secondly, how this perception of inclusion influences their degree of investment in the client organization, in particular the level of affective organizational commitment. This study will therefore help to provide a better understanding of the agency workers' business deal by providing a more comprehensive understanding of the influence of perception of inclusion on the level of commitment of the agency workers. Lastly, the general hypothesis to test, as suggested by Lapalme et al. (2007), is that, beyond their status as peripheral workers, agency workers can perceive themselves as full members of the organization in which they work and invest themselves more in it only if some conditions are met. Findings of this study will definitely help both agency and client organizations to manage agency workers. In addition, besides enriching the stock of knowledge, the study also opens a debate on a long-neglected course of studies in Burundi; namely the Organizational Behavior (OB) and its linked issues such as Organizational Inclusion Perception and Organizational Commitment.

Hypotheses development

Perception of organizational inclusion among agency workers

According to Houseman (2014), we have three (3) types of employment:

1. **Regular employment**: workers that are directly hired in open-ended contracts by the company seeking their services. They are covered by a country's employment protection laws, which may specify

notice periods or severance payments if the employee is dismissed.

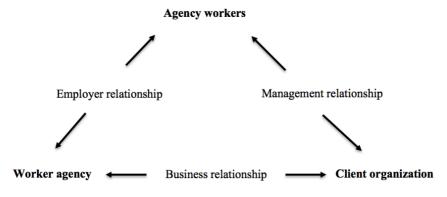
- 2. **Temporary agency employment**: workers that are the legal employees of the temporary help agency but perform work for a client organization at the client's worksite and under its supervision. In some cases, but not most, temporary agency employees have open-ended contracts with the agency and have the same protections against dismissal as regular employees.
- 3. *Fixed-term contract or direct-hire temporary employment*: workers that are hired directly by the firm that uses their services and are the legal employees of that firm. They are hired for a fixed period of time specified in the contract and so are easily dismissed when the contract period is over.

As mentioned earlier, the last few years have been marked by a strong growth in the outsourcing phenomenon of the work force. The use of agency workers is undoubtedly one of the most examples of blatant outsourcing. Due to the limited administrative control of the organization, but also due to the fixed duration of their employment relationship, agency workers are considered as external workers or peripheral devices. This idea is moreover reflected in the writings of Rousseau (1995) (cited in Lapalme *et al.* 2007) which suggested that unlike the internalisation that leads individuals to the status of full members of organization (insiders), outsourcing creates peripheral members (outsiders).

Inclusion is the degree to which an employee perceives that she or he is an esteemed member of the work group through experiencing treatment that satisfies her or his needs for belongingness and uniqueness. There is a theme of belongingness such as "accepted", "insider" and "sense of belonging" (Shore *et al.* 2011). A scholar named Mor Barak developed a theoretical model of inclusion in which she posed that diversity and organizational culture would contribute to perceptions of inclusion-

exclusion, which would then lead to job satisfaction, organizational commitment, individual wellbeing and task effectiveness (Shore *et al.* 2011). Moreover, perception of inclusion is positively influenced by the level of organizational support perceived by the employee. Thus, one might think that agent workers may perceive themselves as full members of the organization they work for as far as the organization treats them as such, regardless of their contract status (Lapalme *et al.* 2007).

Figure 1: Triangle relationship pattern in the worker agency business area



Source: adapted from Håkansson et al. (2013).

Perceptions of justice in relation to the organization

Perceptions of organizational justice constitute important indicators of the quality of the employee's relationship with the organization and the immediate superior. Organizational justice has three (3) key components: (i) Distributive justice, (ii) Procedural justice and (iii) Interactional justice. In general, the first two (2) forms refer to justice in the relationship between the employee and the organization while the latter targets the relationship between the employee and his immediate supervisor (Lapalme *et al.* 2007).

Specifically, distributive justice is regarding decisions fairness in the organization. Distributive justice conjectures that employees are equally treated in rewards distribution from job outcome. Distributive justice discusses resources distribution while keeping employees' participation and rewards. Procedural justice is related to the employee's perceived organization decision making process fairness. This form of justice is favored by the application of certain rules such as the existence of procedures clear, explicit and impartial decision-making, the control of the processes leading to the decision and the presence of formal appeal mechanisms. Interactional justice lastly talks about employees' relationship with organization and organization treatment regarding employees' respect (Sarfraz et al. 2018). A feeling of injustice could negatively influence their perception of inclusion because it reflects the differentiation that the organization makes between permanent and agency of workers. In contrast, the more workers' agency staff will feel treated fairly compared to permanent employees, the more they will have the impression of being full members of the client organization (Lapalme et al. 2007).

Perceived support from permanent workers of the client organization

Support from permanent employees of the organization can also help reinforce agency workers' perception of inclusion. Some research has highlighted the social isolation that afflicts agency workers. Organizational socialization literature emphasizes that permanent employees of the client organization can be more reluctant to help temporary workers because of the short-term nature of their relationship. The status of outsiders is therefore increased due to this social life exclusion. Support from permanent employees of the client organization would therefore be an important element that could contribute to the perception of inclusion of agency workers. Informal relationships with permanent colleagues can

act as an important vehicle for agency workers' inclusion in the social fabric of the organization (Lapalme *et al.* 2007).

Effect of the perception of inclusion on organizational commitment

Organizational commitment is a psychological stabilizing or obliging force that binds individuals to courses of action relevant to the organization. Initially conceptualized as a unidimensional construct, organizational commitment is now known to be multidimensional in nature. The most common forms of organizational commitment studied and reported on in the academic literature are affective commitment, continuance commitment, and normative commitment (Meyer and Allen's model of organizational commitment). However, since affective commitment is more likely to reflect primary feelings and attitudes toward the job and its components and expresses a more holistic approach to conceptualizing about the nature of the employee relationship as it rests on the individuals' "psychological bond" and "loyalty to the organization", it dominates the organizational commitment literature (Carrière *et al.* 2007; Azim, 2016).

Affective organizational commitment specifically refers to the employee's emotional attachment to, identification with, and involvement in the organization. Existing research reveals that organizational commitment is positively related to job satisfaction, organizational citizenship behaviors, motivation, attendance, job performance and life satisfaction. Furthermore, it is negatively related to tardiness, absenteeism, intent to leave the organization and turnover (Carrière *et al.* 2007). Employees with a strong affective organizational commitment mindset view indeed their jobs as encompassing a broader range of behaviors than employees who feel weak affective organizational commitment or who experience other forms of organizational commitment (Hunter & Gellatly 2007).

Affective organizational commitment is therefore partly dependent on the employee's perception whether or not she/he is a member of the organization he works for. At the heart of the definition and measure of emotional commitment lies in the individual's sense of belonging to the organization. An individual who is strongly emotionally committed to the organization, has the impression of belonging to the latter. The feeling of belonging differentiates the members who are part of the community and members who are excluded. It is therefore more likely that the individual who appears to be a full member of the organization will be more emotionally engaged than one who feels excluded. For an agency worker, being considered as a full member of the client organization and not just as a peripheral resource shows a form of commitment by the organization that manifests itself beyond the purely transactional relationship that links these two actors. In return of this commitment, the agency worker will therefore be more inclined to commit himself to the client organization (Lapalme *et al.* 2007).

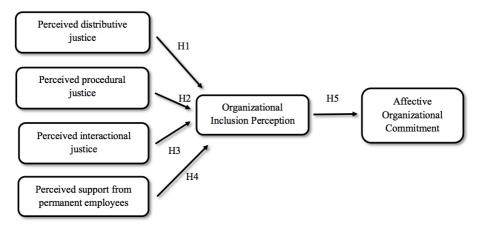
Study hypotheses

Based on the discussion above, the study poses five hypotheses such as (figure 2):

- 1. **H1**: Perceived distributive justice will positively influence the perception of inclusion of agency workers;
- 2. **H2**: Perceived procedural justice will positively influence the perception of inclusion agency workers;
- 3. **H3**: Perceived interactional justice will positively influence the perception of inclusion of agency workers;
- 4. **H4**: Perceived support from permanent employees will positively influence the perception of inclusion of agency workers;

5. **H5**: Organizational inclusion perception of agency workers will positively influence their level of affective organizational commitment.

Figure 2: Research framework



Source: adapted from Lapalme et al. (2007).

Methodology

Sampling

The study was carried out with agency workers employed by a Burundian financial institution. All in all, 60 questionnaires were distributed and 50 were returned and judged usable, giving a response rate of 83%. Our sample was made of 42% of women and 58% of men. The average age of our respondents was 28.8 years old and their average seniority level in the host organization was 16.2 months.

Measures

The study questionnaire, developed by the researcher, was an adaptation of pre-existing work-related psychometric measures developed by Lapalme *et al.* (2007). Only quantitative data were collected.

- 1. Perceived distributive justice (equity, fairness principle vis-à-vis permanent workers): in order to measure perception fairness compared to permanent employees of the client organization, we used the measure of five items.
- **2.** *Perceived procedural justice:* perception of procedural justice was measured by using four items.
- **3.** *Perceived interactional justice:* perception of interactional justice was measured by using two items.
- **4.** *Perceived support from permanent employees:* perceived employee support was measured by using four items.
- **5.** *Organizational inclusion perception:* perception of organizational inclusion was measured by using a three-items scale.
- **6.** *Affective organizational commitment:* affective organizational engagement has been measured by using a five-items scale.

Analysis

The study used a Binary logistic regression to analyze the data collected. In general terms, Logistic regression consists in linking a dependent variable y with one or more explanatory variables x1, x2, ..., xp, called predictors/independent variables. Furthermore, Binary logistic regression is used where variables of the study have only two classes (Gillet $et\ al.$ 2011), which was the case for our study.

Findings

Table 1: Binary Logistic regression results

| ORGANIZATIONAL INCLUSION PERCEPTION | | | |
|---|--------------|------------|----------|
| Variables | Coefficients | Odds value | p-value* |
| Perceived Distributive Justice | 2.0 | 14.2 | 1.32 |
| Perceived Procedural Justice | - 2.5 | .07 | - 1.18 |
| Perceived Interactional Justice | 3.4 | 32.7 | 1.95 |
| Perceived Support from Permanent Employees | 5.2 | 184.1 | 2.35 |
| AFFECTIVE ORGANIZATIONAL COMMITMENT | | | |
| Organizational Inclusion Perception | 1.5 | 4.6 | 1.37 |

N=50, *p<0.05.

Table 1 shows that perceptions of fairness in relation to permanent workers, interactional justice and supportive justice of permanent employees are positively related to the perception of organizational inclusion, thus confirming hypotheses H1, H3 and H4. On the other hand, the hypothesis H2 which states that perception of procedural justice can positively influence perception of inclusion of workers agency is rejected since findings showed a negative relationship instead between these two (2) variables.

In terms of consequences associated with perception of inclusion of agency workers, our results support the hypothesis H5 since the perception of inclusion in the client organization influences significantly the level of emotional commitment of agency workers.

Discussion

Overall, our results support the general hypothesis underlying this research, namely that beyond their objective status as peripheral workers, agency workers can perceive themselves as full members of the organization in which they work and, consequently, invest more in it. This was also the hypothesis made by the study of Lapalme *et al.* (2007). According to these scholars (Lapalme *et al.* 2007), there is a continuum of inclusion organizational associated with the employment contract which extends from the internalization to the externalization of workforce. Organizational inclusion can be defined outside the employment contract that binds the organization and the agency workers and is built on the quality of social relationships that the latter maintains with the different temporary employees of the client organization. Indeed, our results support the assertion that the quality of the treatment of agency workers by the organization and its agents influences their perception of organizational inclusion.

The quality of treatment offered by the organization was measured by perceptions of distributive and procedural justice. Our results show that when agency workers feel that what they receive from the client organization is fair compared to permanent employees, they see themselves more as full members of it. Organizations can distinguish between full members and peripheral members of the organization by offering different rewards to these two (2) groups of employees. The rewards or benefits offered by the organization therefore act as signals indicating to workers whether or not they have achieved full member status. Of course, being given the flexibility and cost reduction objectives targeted by the use of agency workers, few organizations will offer the same benefits to these workers as to their employees permanent. However, by making sure to establish a certain equity between these two groups of workers (agency workers and permanent employees), the organization

sends a positive signal to agency workers regarding its willingness to integrate and include the latter (Lapalme *et al.* 2007).

Lapalme *et al.* (2007) tried to explain the non-significant relationship between the perception of procedural justice and the perception of organizational inclusion of agency workers by the fact that being in the client organization for a short period of time, agency workers did not have time to familiarize themselves adequately with the procedures leading to decision making in the organization. They recommended that assessing the effect of procedural justice on perception of inclusion organizational of agency workers with greater organizational seniority would allow this hypothesis to be verified. Nevertheless, the average seniority of their sample was 28 weeks while ours was 16.2 months. One can assert then that perceived fairness of procedures does not really affect agency workers because they might see themselves as not bound by those procedures.

Our results highlight the paramount role of immediate supervisors and interactions with permanent workers. When the immediate supervisor of agency workers treats them with respect and dignity, the latter feel more included in the organization and *in fine* see themselves as full members. The same thing happens when there is a friendly working environment and when they can interact constantly with permanent workers. These results support the relational model of environment which suggests that the individual determine their status in the group (or organization) from how they are treated by members of the latter (Håkansson *et al.* 2013).

With regard to the consequences of perception of organizational inclusion for agency workers, our results show that the more they feel included in the client organization, the more they are emotionally committed to this organization. As we mentioned previously, the main thing that distinguishes these workers from permanent employees is that they do not have formal employment link with the client organization. Indeed, the latter has in fact very little of obligations towards those workers who do not have the status of "employee". It can therefore, in a very legit way, restrict the nature of their relationship to economic issues. Following social exchange theory and the norm of reciprocity (Shore *et al.* 2011), being considered as a full member of the organization will generate a feeling of greater investment in the organization.

Conclusion

Our study had provided two (2) main contributions to the management literature. On the one hand, our research provides a better understanding of several management phenomena such as organizational inclusion, affective commitment. It further linked them to the agency workers phenomenon. As earlier mentioned, Organizational Behavior Management is a very little researched topic in the management literature in Burundi and few studies have indeed put a focus on it. Our study has then started a discussion on how psychological aspects affect workers behaviors and outcomes, even if the latter are agency workers. On the other hand, our study has provided insights to institutions employing contingent workers to how they can effectively influence the level of organizational commitment of agency workers.

The results of our research must be interpreted with regard to its limitations however. (1) First of all, it is important to note that our data was collected during a single period. It did not enable us then to determine with certainty the relation between our variables as could do a longitudinal study. (2) Like most of our constructed were measured from the same source, namely agency workers, it is possible that some of our results are subject to common variance bias. (3) Finally, a final limit relates to characteristics and size of our sample. Coming from the banking sector, the agency workers of our research have a higher level of

qualification than the average of agency workers in general. Being given their level of qualification, it is possible that this type of resource is not considered by the organization as a peripheral workforce as well as less skilled workers. Lastly, the size of our sample was too small to allow a generalization of findings.

Despite these limitations, our study makes an important contribution by bringing up the understanding of concepts such as perception of inclusion in relation to emotional commitment among (agency) workers. It also paves the way towards different avenues of research possible in the organizational behaviour management. Future research should continue in this direction by identifying other aspects such Job Satisfaction, Corporate Social Responsibility, to name a few.

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Autobiography

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XI JINPING THOUGHT: A CRITICAL DISSECTION AND ANALYSES

Abstract

Leadership entails crafting out ideologies and formulating plans that would foster development and alleviate the problems of the society. President Xi Jinping has proffered a methodology on how to study historical phenomena and its inherent problems. His ideology was built on existing thoughts of two prominent Chinese leaders, Mao Zedong and Deng Xiaoping. This study examines the thoughts and ideas of President Xi with the aim of exposing his blueprints for the economic planning and development of China. Data obtained through typical case sampling and content analysis was used for this study. Certain factors such as economic, political, cultural, social and ecological development were selected for this study. It adopts the theory of historical materialism to comprehend this study. It ascertains that a society's mode of production will determine its social, political and intellectual development. It argues that the political leadership of a country should engineer the socio-economic development of the citizenry by making full use of the productive forces of the economy. Thus, President Xi has highlighted 14 basic areas in which government should focus to expedite socioeconomic development and progress of the nation. This work concludes that the interplay of the productive forces of the economy through the vision of the political leadership of the state can actually champion the required socio-economic development and advancement.

Keywords: Economic, political, cultural, social and ecological development

Introduction

Chinese leaders since 1949 have been concerned about the improvement, development, advancement of their nation state through the formulation and implementation of ideologies, visions and thoughts. This is a truism of the core characteristic of political leadership, they exist to steer economic development that would serve the core interests of the people. Developed nations of the world, at one time or the other have the same pattern of economic development and political leadership. Political actors create thoughts which are built on by successive governments through consistent efforts, practicality, modernization and formulation of policies. They have all acknowledged that the mode of production of the state needs to be channeled or harnessed towards the socioeconomic development of the country. Leaders have employed scientific methods and approaches to propel reforms that would make the best use of these mode of production and expedite national progress. Chinese economic development, advancement and progress emanates from several ideologies or thoughts, some crucial and fundamental ones are Mao Zedong Thought (Máo Zédong sīxiang,), Deng Xiaoping Theory (Dèng Xiǎopíng Lǐlùn), Jiang Zemin theory of Three Represents ("Sān ge dàibiăo" zhòngyào sīxiăng), Hu Jintao's theory of Scientific Outlook on Development (Kēxué Fāzhǎn Guān) and Xi Jinping Thought (Xí Jìnpíng xīn shídài Zhōngguó tèsè shèhuì zhǔyì sīxiǎng).

Mao Zedong, China's foremost ruler advocated the term-seeking truth from facts, the mass line and independence. His thought is seen in a variety of Marxism-Leninism ideologies that Mao developed to enhance the socialist revolution in the agricultural and industrial areas of China (Lenman and Anderson, 2000). Deng Xiaoping's Theory hinges on the thoughts of Mao but he seeks realistic ways to adapt them to the socioeconomic conditions of China. He advocated the opening up of China, the implementation of the one country, two systems concept and pushed

for economic and political pragmatism through seeking truths and facts that Moa has earlier advocated (Deng, 1978).

Jiang Zemin proposed a socio-political guiding theory for Chinese leaders in which he clearly defined the role of the Chinese Communist Party (CCP) and advocated that the Party must represent and champion the requirements which are necessary for developing China's advanced productive forces. He also stressed that the party leadership must represent and propagate the advanced culture of China through national orientation. Lastly, he posited that the CCP must represent the fundamental interests of the Chinese people in all ramifications and decisions. These concepts according to Jiang symbolizes the three represents of the CCP (Jiang, 2012).

Hu Jintao's Scientific Outlook on development encapsulates a lot of principles such as scientific socialism, sustainable development, social welfare, humane society, democratic participation which all leads to a Socialist harmonious society. Hu argued for economic development to improve the citizenry's material and living conditions. He proposed that the party leadership should respect and protect the political, economic and cultural rights of the people while forging improvements in their life quality. Lastly, he advocated that the party leadership create a social environment where people can develop themselves equally while making use of their intelligence capabilities (Hu, 2012).

Xi Jinping's thought embraces all the thoughts and theories of his predecessors in carving out a thought for the Chinese people. He champions certain tenets such as the ideologies of Marx, Mao, Deng, Jiang and Hu. He proposed fourteen policies which sees the CCP at the helm of the state affairs in all areas of the institutions. The need for people-centric approach in ideologies, advocating reforms, advocating the use of scientific ideas for development, adopting socialism with

Chinese characteristics principle and strengthened the national security of China amongst others. Xi's thought encapsulates and continues to champion the ideologies of his predecessors while ensuring that these ideologies are adapted to Chinese conditions (Hou, 2017).

From the above, we can infer certain tenets, China has focused on economic planning since its inception. Secondly, all Chinese leaders have a socio-economic focus of development and advancement of the nation state. Thirdly, each Chinese leader has built on the existing ideologies of his predecessor and maintained the core ideology of the party. Fourthly, Chinese leaders have identified the role of science and technology in advancing the means of production of the country to serve the interests of the people. Fifthly, their ideologies and visions are carefully guided by economic and political pragmatism. Lastly, the supremacy of the party leadership exists at the center of all affairs to guide, direct and drive the socio-economic progress of the country.

This study examines Xi Jinping's Thought as it champions the socio-economic development and advancement of China. It shows that economic policies have to be consistent over the years and political leadership have to adhere to existing economic plans while making certain modification based on existing realities. It observes that Chinese leadership over the years have adapted people-centric ideologies in the carving out of their thoughts while adapting science, technology, facts and data while upholding the rule of law. Lastly, it observes that the CCP is in the middle of the development and advancement of the means of production in China. The objective of this study is to examine and explore the thoughts of Xi Jinping as it fosters economic development of China. In pursuing these goals, this study explores the economic plans, principles and ideologies of Xi.

Literature Review

There have been several literatures and perceptions about Xi Jinping's Thought, this research would attempt to review and analyze them with the aim of drawing out the key ideologies behind Xi's thought and perception. Bader (2016) claims that the thoughts of Xi represents China's place in the international system, its economic, political and military strength with China's expectation of the international system accepting a transformed China. Holbing (2015) asserts that Xi's thought marks a new era from the four decades of reforms of opening up under Deng Xiaoping's leadership. It marks a pragmatic shift in governance, norms and regime legitimacy under all ramifications since the ushering in of the new leadership in 2012. Xi's thought is seen as a bold new vision with a strong leadership at the helm of affairs of the country by offering a selfassertive and decisive character who propagates his vision around the past, present and the future. Xi's thought centers on core concepts such as such as history, era, modernization, rejuvenation, innovation, path, struggle, sacrifice, challenge, crisis, risk, opportunity, target, expectation, hope, dream, and so on. Wang (2014) on the other hand argues that Xi's thought can be conceptualized within two centenaries often used as the Party framework of ideologies since 2007. First is the 100th anniversary of the founding of the Chinese Communist Party in 2021 and the founding of People's Republic of China (PRC) in 2049. These targets have been made to ensure that the country reaches a comprehensive construction of a moderately well-off society.

The CCP Central Committee (2013) exposes Xi's leadership traits in his thoughts. He claims to be the engineer, architect and the great helmsman who will no longer grope for stones to cross the river. He also mentions that he will steer China into deep and unchartered waters with a top-level design which would emphasize overall planning and strategic coordination of reforms in the economic, political, cultural and

environmental fields. He intends to adopt a holistic approach into his reforms of the Chinese nation. Xi has therefore appointed himself and the party as the motor of history, courageous innovator and the designer of the future.

Garrick and Bennett (2018) highlights Xi's thought as identifying the challenges for deepening reforms in the areas of creating a modern public finance system, a fiscal relationship between central and local governments with clearly delineated authority and responsibility, taxation reform, financial sector institutional reform and improved regulatory framework for monetary and macro-prudential policy. Xi advocated the use of the rule of law through the CCP leadership with economic structural reform at the center of deepening reform.

Rudolf (2021) explains Xi's plan on how to build the rule of law in China as stated in his thoughts. Xi mentioned that the Marxist-Legal concepts will remain fundamental visions for a coherent and genuine legal system in China. He aims to use the law as a political instrument to make the state more efficient and reduce the arbitrariness of how the law is applied for the majority of the population, among other things, with the help of advanced technology. The party rejects an independent judiciary and the principle of separation of powers but calls for the maintenance of a centralized and unified leadership of the CPC as the most fundamental guarantee of the rule of law in China. It also calls for prioritizing the interests of the people in establishing the rule of law and rule of virtue while taking account of the national circumstances.

Zhang (2020) posits that Xi's thought exposes the socialist thought with Chinese characteristics to navigate the innovative development of the party and the country. It's an ideology in which the party drives innovation, social development and promotion of China's modernization process. It embraces three concepts: leadership, intrinsic qualities and

practical basis. It professes that the CCP continue to adhere to the mass line and serve the people. It urges for top-level party design with strategic deployment of the party's construction to strictly govern the party to ensure comprehensiveness. It divulges that people-centric approach, self-criticism, self-revolution and youthful vitality be maintained at all times. Zhang also states that it exposes the intrinsic traits of Chinese leadership which entails increasing cultural self-confidence with an expectation to construct a new era of cultural construction. It affirms the continuous development and maintenance of the socialist ideology to ensure and guarantee the building of a well-off society in an all-round way. Lastly, Zhang argues that Xi's thought exemplifies the notion of combining theory with practice. He adopts innovative theoretical guidance that can usher in new developments.

Qian (2019) sees this theory-practice engagement emanating from revolution, construction to reform and new-democratic revolution to the socialist revolution. The political line of seeking truths from the facts demonstrates the use of the theory-practice relationship. Accordingly, Xi has pushed for practical experience to solve the actual situation, under the guidance of theory and by developing correct guidelines and methods to make specific implementation planning. Huang (2018) opines that Xi's practice of theory adopts the basic principles of Marxism but with scientific truths and Chinese realities. He sees Xi's era of socialism with Chinese characteristics as having scientific theoretical basis and a realistic foundation.

Xiang-chao (2018) offers a different insight into the discourse of Xi's thought and reaffirms that his thought is people-oriented while paying core cognizance to ecology civilization to ensure social development of economic construction and environmental protection. He asserts that Xi believes that protecting the environment and productivity are mutually reinforcing. Xi sees the utmost need to build an ecological civilization that

is related to the wellbeing of the people. Fan-yin (2017) agrees accordingly and suggests that Xi has put forward a relationship between ecological civilization construction and economic construction. He maintains that Xi has clearly offered a blueprint that ensures the coordination of ecology civilization from national governance and institutional levels. Thus, he creates a link between ecological civilization and the rule of law. Xuguang (2017) identifies that Xi's ecological civilization is wrapped around innovations, scientific and technological innovations. Xi has promoted using scientific means of finding the causes and lasting solutions to the current environmental problems that China faces. He had called for a scientific approach to guide environmental research to provide environmental protection industries, innovations and standards that would speed up the development of green consumption.

Gow (2017) ascertains that Xi's thought is a mechanism used to tighten party discipline. Xi calls for party cadres to practice self-cultivation, exercise self-discipline while being earnest in one's thinking, work and behavior. Xi has championed a massive institutionalized anti-corruption campaign that aims to reduce corruption and increase political unity though party study sessions and democratic life meetings that focus on the party ideology. Doyon and Godement (2017) opines that these meetings are essentially meant for self-criticism to ensure the unity and purity of the party and to eradicate the four bad work styles: formalism, bureaucracy, hedonism and extravagance. Holbig (2017) perceives Xi's thought as a new target to develop China into a strong modern socialist country that is prosperous and strong, democratic, culturally advancing, harmonious and beautiful. Xi's thought is an ambitious agenda of China growing strong both domestically and internationally in the middle of the twenty-first century.

The above literature has examined the different works of scholars on their conceptualization of Xi Jinping thought. One fundamental observation is

that this thought represents key fundamental principles, concepts, plans, and blueprints on how to modernize and govern China while ensuring the interests of the people are fully secured. It acknowledges the role of the CCP leadership in championing economic reforms through the law, science and technology. It also sets out timelines for the actualization of their broad objectives and goals. Xi has identified that theories should be adopted to the core characteristics of the Chinese state and must be practical. He clearly doesn't isolate theory from practice. Xi's thought can be embedded in people-centered focus, science and technology oriented with strict party cadres' discipline and orientation.

Theoretical Framework

The theory of historical materialism was articulated by Karl Marx (1845) and he argues that the material conditions of a society's mode of production will determine the way the society is developed and organized. He claims that the social, political and intellectual life of the society is conditioned after the mode of production of the state. He further states that it's the social existence of men that determines their consciousness and not their consciousness that determines their existence. Marx asserts that human society has progressed over different stages of development, from hunting and gathering through pastoralism and cultivation to commercial societies. Marx posits that humans' survival rests on their production and reproduction of the material requirements of their everyday life. Marx further argued the importance of social relations to facilitate production and exchange, a term he coined as relations of production. Marx asserts the importance of the societal productive forces such as tools, instruments, technology, land, raw materials, human abilities and knowledge to accomplish production. Marx observes the importance and the role of a super structure of institutions that correspond with the character and the development of the economic base of any society. Institutions like political, law, customs, culture, etc. institutions all arise from the economic foundation base

Cohen (1983) also argues that a society's super-structure stabilizes or entrenches its economic structure, but that the economic base is the primary while the superstructure is the secondary. Marx also argues that each generation inherits the productive forces developed previously and in turn further develops them before passing them on to the next generation. This process builds a coherence which increasingly engages more of humanity in the development of productive forces and expansion of production and exchange. This theory further posits that history is made as a result of struggle between social classes rooted in the underlying economic base. Marx identified the main modes of production as primitive communism, slave society, feudalism, mercantilism and capitalism. He observed that in each of these social stages, people interacted with nature and production in different ways with the surplus from that production distributed differently as well.

This theory is applicable to this work because it aligns with Xi's thought that argues on the need to improve the mode of production of the state to facilitate social and economic development. It also stresses the use of the natural resources of the state to expedite production and reproduction. Furthermore, it stresses the relations between the economy and other institutions, especially the political institution. Xi's thought has argued that economic development must be engineered and cannot be separated from the role of the political institution, which entails ensuring that the modes of production serves the public interest of the people. Xi's aim to improve the societal mode of production is seen in his clarion call for reforms in the modes of production in China because he sees this as a core factor that would enable the development and the organization of the nation state. Marx argues that the society inherits the productive forces developed previously and further develops them, Xi's thought is not in isolation. It builds on the thoughts of Chairman Mao and Deng

Xiaoping who have all posited different thoughts on how the economic structure should be built and how the mode of production of the state should perform.

Methodology

Data were collected from several sources and databases. Xi Jinping thought as depicted in its economic, political, cultural, social and ecological development were downloaded through the internet. Relevant information as related to the subject matter were selected through the typical case sampling method. Xi Jinping thought through its policies were downloaded from the internet, specifically on how they facilitate economic, political, cultural, social and ecological development. Hence, the data for this work were considered representative of how they expedite socio-economic progress and development through policies as engraved in the thoughts of Chinese leadership. The data used for this work were analyzed through content analysis that aims to reveal and expose the visions, ideologies and leadership characteristics of President Xi as embedded in his thoughts for China.

Discussion

Xi Jinping thought began its exposition on the development of the nation state by adopting the guiding principle which was already in existence since the opening up era championed by Deng Xiaoping. He renewed the doctrine of Socialism with Chinese Characteristics in which Xi urges party members to explore and master its inherent laws with great vigor, drive the development of the country and eventually lead the nation to a moderate prosperous society. Xi relied on the theories of his predecessors in carving out his own thought because he observed the Chairman Mao provided the core theoretical basis for the building of socialism with Chinese characteristics, while Deng Xiaoping, Jiang Zenmin and Hu Jintao built on this core thought by advancing it with communist ideals,

explorations, aspirations, struggles and visions of the Chinese people (Jinping, 2017).

Likewise, Xi called for a fusion of path, theory and practice. Xi identified the importance of party cadres following the path to reach or attain the goal of socialism with Chinese characteristics, he implored on the adoption of Marxist-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, Jiang Zenmin Three Represents and Hu Jintao's Scientific Outlook on Development. All these theories, ideologies and philosophies have a central focus of ensuring economic development and progress of the nation state. Chinese leaders understand that the material conditions of the societal mode of production is crucial to the development of the state and its organization. As a result, all Chinese leaders have focused on developing the mode of production to engineer progress and development (Jinping, 2017).

Furthermore, Xi proposed the core importance of short and long term plans for the economy. Historical materialists have observed that human society progresses over different stages of development and as such Xi has implored that governance should facilitate short- and long-term planning to ensure all round economic development and progress. As China moves from one stage of development to another, Xi has urged for plans based on the economic growth of the country through the advancement of the productive forces of the nation (Lams, 2018).

Xi advocated the rule of law to ensure social fairness, justice and equity that would allow common prosperity to flourish. He urges for the rule of law to remove all forms of oppression, alienation of rights, conflicts, social unrests and instability of the social system. Xi proposed that the law should be used to ensure social harmony and progress of the Chinese state. Marx in his discourses of historical materialism opined that super structures of institutions like the law arise from the economic foundation

base and it stabilizes the society or entrenches the economic structure (Peters, 2017).

Historical materialists have revealed the importance of superstructures of certain institutions that can have a great effect on the economic productive forces of the nation. The role of the political institution in ensuring that the economic productive forces develop is of core importance to President Xi. He identified the role of the Chinese Party of China (CPC) as one of extreme importance in achieving a moderate prosperous society and modernization. Government should be at the center of all development plans and ideologies for China. They should champion innovation, reform and modernization. To achieve the strategic role of the party, he called for proper leadership and governance through party building, responsibility and the elimination of corrupt practices (McCahill, 2017).

Xi also emphasized the importance of moral education for the citizenry. He is of the opinion that moral education should be integrated into all aspects of ideological and moral education, cultural and knowledge education, and social practice education, which should run through all fields of basic education, vocational education, and higher education. School education should not only pass on knowledge, cultivate highend talents who master modern information technology, but also aim to cultivate people with moral integrity. Besides meeting development needs of the young people, school education should also meet expectations of the society and the country. The core mission of teachers is to cultivate people by virtue. The quality of students includes scientific and cultural quality and ideological, political and moral quality. We should not only enhance students' scientific and cultural knowledge, but also strengthen students' ideological, political and moral education, and help students to establish a correct outlook on the world, life and values. The goal of education is to cultivate people by virtue, which is the essence and core idea of education. Ideological, political and moral education focuses on

training students how to behave and become talents, which is the most important factor for students' growth. If a student's thoughts and morals go wrong, even if he is well educated, he will do harm to the society (Jinping, 2013).

Xi's thought argues for the use of science and technology to drive economic development through innovative methods and approaches. Xi posits that scientific and technological innovation holds the key to development and as such uncompetitive areas of the economy needs to be reformed towards this process. He urged the scientific and technological approach towards the economic growth drivers of the country. We will promote alldimensional, multi-tiered and wide-ranging changes in principles guiding development, institutional structures and business models so as to bring about a fundamental transformation of the forces driving development and create new impetus for it. Xi strives to make breakthroughs in major projects and priority areas conduct research on and resolve pressing scientific and technological issues holding back economic and industrial development. He hopes to speed up the commercialization of R&D achievements to meet the need of the shifting growth model, adjusting economic structure, building a modern industrial system, fostering strategic emerging industries and developing a modern service industry. He also aims to move industries and products up to the medium-high end of the value chain and create more innovation-driven growth areas with first-mover advantages that will lead development. Xi also aims to use science and technology to promote green development and to achieve better economic performance. He perceives the environment as key to productivity and to boost productivity, science and technology must be adapted (Jinping, 2016).

Lastly, Xi has made a clarion call for increased globalization by pursuing a win-win strategy and introducing a comprehensive, profound and diversified strategy of opening up. He has advocated economic globalization and multilateral trading regimes. He intends to expand foreign investment, pilot and construct high-standard free trade zones, carry out market-based reforms, open up the domestic capital market and push for the internalization of the renminbi currency. He also agitated that the international community tap into the inherent benefits of the Belt and Road Initiatives as sponsored by China across the globe. He intends to launch major key projects and build economic corridors to facilitate trade across regions. Xi has also asserted that his aim is to improve the current international economic and trading system so that China and his global partners can achieve win-win cooperation and common development.

From the above, we have observed that key tenets of Xi Jinping thought is the drive towards economic prosperity, modernization and development while the party leadership holds the center together to ensure that the harmonious society is realizable. It has also exemplified the role of science and technology in all his reforms strategy, Xi sees science and technology as key factors that would engineer Chinese economic growth and improve the means of production. Xi has also proved to be a pragmatic leader who upholds the socialist ideals of the past leadership of the CCP. His ability to merge and combine Marxist-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, Jiang Zenmin Three Represents and Hu Jintao's Scientific Outlook on Development shows his dynamic form of leadership. Xi is a great planner and foresees the changes that would evolve in the nearest future, hence he has admonished short- and long-term plans to guide and prepare the nation for such.

Findings

One key finding of this research work is that Chinese leaders understand that theories must be adapted to the existing situation of a particular environment. While they have adopted the Marxist-Leninist theory as the guiding ideology, they have adapted the theory to the Chinese

situation and context. This approach offers a realistic phenomenon into the practicality of theory. Socialism with Chinese Characteristics has ensured that China's development and trajectories are designed and formulated based on the local, market and political situation of China.

Secondly, Xi's thought has embraced all the thoughts, ideologies and visions of previous leadership. His thought is a crystallization of Chairman Mao's theory, Deng's ideology, Zhang's concepts and Hu's philosophy. This approach offers a continuous form of ideology in which Xi readapted himself to the changing narratives of China's present condition and vision. It also projects to the party cadres that Xi offers a collective form of ideology which has emanated from the socialist path as enshrined by the ideologies of the party.

Thirdly, Xi' thought not only offers a crystallization of theories, ideologies, concepts and philosophies, it urges for a practicality of these ideas to realize the central goal of socialism with Chinese characteristics. Xi has implored that his government would develop the productive forces of the state and champion economic development through reforms and opening-up policies which are in line with the present realities of the Chinese nation to ensure prosperity for the people.

Fourthly, Marx argued that the survival of human life is determined by their production of their material needs. Xi has observed that government needs to plan effectively and holistically to ensure the survival of the Chinese citizenry. Short- and long-term plans enables political leadership to identify their goals while giving them directions on the paths to follow. It also enables policy makers to be innovative and take strategic measures to deal with problems that might tend to reoccur in the future. The central aim is to ensure that it guarantees and secures the goals and objectives of the nation. It would guide policies and ensures that political leadership achieves the expectation of the people.

Fifthly, Xi understands the importance of the rule of law to ensure political and economic stability. He has pushed that the law be used to create a harmonious state that would ensure that the economic productive forces are utilized for the prosperity of the people. As people interact in the society and as it develops from one stage to another, there are bound to be changes and reactions from the people. Conflicts, misunderstanding, classes and groups of people would emerge in the economy. Xi has called that the rule of law must exist to provide a balanced society that would ensure coordinated development and promote social harmony.

Xi has revealed the role of the government CPC in the affairs of the state. To him, he has proposed that government should be in the center of all activities of the state. They should initiate reforms and developmental policies, facilitate modernization, organize, serve and educate the people. Xi has proposed that the leadership of the CPC serve the main function of governments assiduously. They should formulate, execute and implement people-oriented policies and coordinate the affairs of the state to ensure party goals are achieved.

Xi has also called for education, specifically moral education knowledge and practice among the citizens to ensure the cultivation of talents, moral integrity and build social character of the people. He strongly believes that moral education can guide the citizenry in acting rationally by identifying right and wrong. He also believes that it would assist them to acquire a set of values and systems that would guide their behavior. Xi's central aim is the building of a harmonious society that would be void of violence, jealousy, dishonesty while promoting honesty and human dignity amongst other values.

In addition, Xi identified the importance of science and technology in all his reform policies and opening up strategies. Science and technology offer an innovative approach that would engineer the means of production effectively. It would offer political leadership new methods, techniques, approaches that would enable them achieve their goal of modernization and prosperity. Xi's approach of adopting science-based ideas for innovative, coordinated, green, open and shared development offers China a rapid developmental path to modernization.

Lastly, it has been observed that Xi has called for increased globalization to achieve win-win outcomes of economic prosperity and progress. While observing that there are some fundamental shortcomings of globalization, it offers most countries a platform to increase their trade supplies and tap into the international global chain. It exposes nations to new methods of scientific and technological means of production, offers new paths of economic growth and generates revenues for the trade actors.

Conclusions

This research work has explored and analyzed Xi Jinping thoughts with the aim of understanding how it fosters economic development of China. It has observed that there is an interplay of certain factors that have engineered the developmental path of China over the years. Political Ideologies, leadership, rule of law, science and technology with practicalities are vital elements that have propelled Chinese development, advancement and progress over the years. Since the inception of modern China, there has been a myriad of ideologies, thoughts, visions and philosophies promulgated by Chinese leadership. One key factor here is that all these ideologies are embedded in one another and its continuous adaptation of the core thoughts to the modern realities in China. Xi Jinping's thought encapsulates the core idea of leadership which entails serving the interests of the people wholeheartedly, carving out short- and long-term economic plans for the benefit of the societal development, ensuring equity under the law and eliminating all forms of injustice, oppression and suppression. Creating policies that are realistic and practical based

on core ideals of the government. It also entails the development of the citizenry by pushing for education, specifically moral education to ensure that people are exposed to moral values and vices. Chinese economy is science and technologically driven which ensures that the productive forces are being innovated to ensure high productivity and output. Xi has extolled the importance and use of science and technology in his thoughts and he has adapted it to revolutionize Chinese economy.

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