Articles

Integrating Sustainability in the Nigerian Architectural Education.  
Adegbile M.B.O.  

Familial Factors Predicting Resilience among Adolescents in South Eastern Nigeria  
Dr. Barnabas E. Nwankwo  
Prof Regina N. Eya  
Prof. Shyngle K. Balogun

ONI, S. I.  
EKOP, Godwin  
EGE, Emmanuel

Adoption of Improved Aquaculture Production Technologies among Fish Farmers in Lagos State, Nigeria.  
Jaji, M. F. O  
G. O. Akolade  
A. A. Agbelemoge  
A. K. Yusuf

Culture and Moral Values: an African Christian Perspective
Taiye Adamolekun PhD

The Importance of Total Quality Management and Leadership Communication to Enhance Islamic Quality at Malaysian Civil Service

Assoc. Prof. Dr. Raja Roslan Raja Abd. Rahman

Dr. Kalthom Binti Husain

Hassan Bin Adnan

Mohamad Zahir Bin Zainudin

Norazlina Mohd. Darus

Noor Watee Binti Rahman

Teacher's Questions and Students' Oral Production in Spoken English Classes at the University Level

Dr. Nemah Abdullah Ayash Ezzi

Comparative Studies of Proximate and Mineral analysis of *Tetracarpidium conophorum*.

Oluwole S.O

Osundiya M.O

Fajana O.O

Jinadu O
Integrating Sustainability in the Nigerian Architectural Education.

Adegbile M.B.O.
Department of Architecture, University of Lagos, Akoka, Nigeria.
E-mail: mboadegbile@yahoo.com

Abstract.
This study aims to integrate sustainability into the thinking and teaching of architecture in Nigerian tertiary institutions from an abstract manner to a concrete one by modifying present educational approach and practice as well as developing a road map for its implementation. This paper reveals that sustainability in architecture is multidimensional and requires the ability to critically analyze, process and think creatively about how sustainable solutions might be designed in the Nigerian built environment. The findings of the study show that there is the need for an institutional framework to integrate sustainable concept in both architectural education and practice. This will assist to draw a plan to introduce sustainability design studios and sustainability related courses to the Nigerian architectural education. The study concludes that there is the need to upgrade the training of Nigerian architectural educators and students on how to apply design management techniques to coordinate their green building designs. This will enable future Architects propose designs and architectural solutions to challenges facing communities e.g. climate change, environmental destruction, social disintegration, poverty, natural resource exhaustion, and financial instability. The paper recommends that all stakeholders should cooperate at all levels to achieve sustainability as a unified goal. Finally, the research concludes that policy enforcement, monitoring, awareness, funding, training, research, sustainability strategies, practices, programs, leadership and administration, curriculum, community outreach and student initiative/involvement must be implemented consciously at all levels in Nigeria. It recommends the introduction of a centre for sustainable buildings in Nigeria as well as concepts and principles of sustainable development by the National Universities Commission, National Board for Technical Education, Architects Registration Council of Nigeria and the Nigerian Institute of Architects.

KEY WORDS: Architectural education, built environment, green buildings, Nigeria and sustainability,
Introduction

Nigeria (Africa’s most populous nation), independent since 1960, occupies an area of 923,768 km² with varied climates and seasons. Presently, its estimated population is over 100 million people. Prior to oil, agriculture (before 1970) was the economic mainstay. With financial resources available from oil and no development policy, unguided urbanization and industrialization took place. Uncontrolled population growth, desertification, and deforestation led to degradation and devastation of the environment.

The need to initiate a change in architectural education that supports the implementation of considerations of sustainability in architecture is mainly triggered by the following factors: natural resource depletion, climate change, ecological damage, current building practices have been slow to respond to the need of enhancing sustainable environmental design within a creative architectural discourse; accreditation and qualification criteria established by professional bodies do not yet comprehensively contribute to the efficient promotion of environmental sustainability in building design; university curricula have proved to be sparsely effective in systematically integrating sustainable environmental design in the education of students of architecture.

The role of higher education in creating a more environmentally sustainable future is undeniable. The aim would be to train the professionals, students and community to be environmentally literate. These issues present a challenge to the educationist as well as to the students of the Built Environment, to reconcile the environmental aspects as part of the built environment.

Sustainable buildings can be defined as those buildings that have minimum adverse impacts on the built and natural environment, in terms of the buildings themselves, their immediate surroundings and the broader regional and global setting. Thus, the rational use of natural resources and appropriate management of the building stock will contribute to saving scarce resources reducing energy consumption and improving environmental quality (Dudek, 2007).

Practicing green measures and embracing the concept of Green Building is one of the ways which can enlighten the individual on how the earth can survive longer in a sustainable way. Currently buildings consume approximately 50 percent of the world’s resources. To reduce this demand, the role of sustainable education needs to be examined. The economist registers that the most prestigious universities’ students claim far more information and education in sustainable architecture but the only credit for certain projects that are so called by authors and critics environmental is that they incorporate a garden in their interior or a solar panel that’s more symbolic than effective in their roof. Some of the so-called intelligent buildings that come up are usually environmentally dumb since they consume energy in reaction to small climate changes that could easily be fixed by opening a window (Alvarado, 2006).

A sustainable architectural education enhancement program will work to bridge the gap between the demands of the society and the ability of the existing and up-coming professionals to address these demands, towards improving the quality of education and its relevance today and in the future. Schools of architecture need to examine their existing architecture education and their future education plans. This will be done first by examining the curriculum of the Nigerian University in terms of building the undergraduates and postgraduates sustainable awareness.
1. Architectural Education in Nigeria

Architectural education in Nigeria has experienced dramatic turn-around over a period of time since it was introduced into the country in 1947 with the establishment of Yaba College now Yaba College of Technology, Lagos State. The next college of architecture, Nigerian College of Arts, Science and Technology located at Ibadan in 1952, was later relocated to Zaria, in the present Kaduna State in 1955. It was later to form the core faculty of the present day Ahmadu Bello University, (ABU), Zaria in 1962.

At the onset and within this period, only diplomas in Architecture were awarded to students. The diploma being awarded qualified the students upon graduation to be exempted from parts I and II of RIBA (Royal Institute of British Architects) Professional examinations; but only to sit for the final diet before being certified registered architect. In essence, the Nigerian architectural education was tailored after the British education and to a larger extent in line with the curriculum of our colonial masters.

The link with RIBA was maintained till 1968, when the course programme was again restructured into two-tier, with the offer of the Bachelors Science (B.Sc.) and Master of Science (M.Sc.) degrees in architecture.

The University of Nigeria, Nsukka was established in 1962, thereby making it to be the second university offering architecture in the country. In 1970, the University of Lagos, Akoka, Lagos established the department of architecture, thereby making it the third university department. Presently, the number of departments of Architecture in Nigeria has increased to twenty-four universities and twenty-two polytechnics / colleges of technology, with the recent establishment of several private institutions of higher learning thereby totaling forty six.

2. Present State of Sustainability in Nigerian Architectural Education

Presently, the majority of current architectural education neatly skips any examination of how societies maintained themselves (in a more or less sustainable state) in the past and what sort of built environment this generated. In the current world situation where a number of resources that are essential for the current western lifestyle, such as oil for energy and phosphorous to grow food, have a known life, it would seem vital that the architects of the future should be learning to define the future through understanding how societies in the past have learned to live within the limited resources available to them. (Vale and Vale, 2009).

Nigerian architectural education at present, the closest to a consideration of what the future might be like is presented in some type of course, often optional or peripheral, with the word "sustainable" in its title. Some of these courses raise the issue of resources and this often leads to the study of buildings that use solar energy for heating and cooling. Seldom do these courses explore architecture for a society living without fossil fuels and other non-renewable resources. Students are not being asked to design buildings that use only renewable resources, and rarely is the whole architect/client relationship examined in such a context. The assumption of architectural education is that the current economic model will still exist in a sustainable future and that buildings will be procured in the same way as now, it is just that they will more or less face the sun for winter heating and may have a grass roof for summer cooling.

Currently, in the Nigerian architectural education inclusions of sustainabilit aspects are fragmented relying heavily upon individual efforts of lecturers that ar familiar and inclined towards the subject matter. There is a need to review the existin
curriculum to significantly include the worthy aspects of sustainability in the course content and delivery mode.

3. Integrating Sustainability Education into the Future Architect

In the United States of America, for example, the American Institute of Architects is at present seeking to inject ecological literacy and sustainability principles into architecture education. It is also worth noting that, in the USA, sustainability has been added since 2004 to the ‘Conditions for Accreditation for Professional Degree Programs in Architecture’, with a particular emphasis on the “understanding of the principles of sustainability in making architecture and urban design decisions and in the creation of healthful buildings” (NAAB, 2004). The US Educators Practitioners Network is also closely working with the Society of Building Science Educators, the AIA Committee on the Environment, and the AIA Sustainability Discussion Group to generate a Carbon Neutral Design Resource for educators and professionals (Boake, 2008). This resource will provide invaluable practical guidelines that will support the process of design and planning of carbon-neutral projects, including case studies that illustrate successfully constructed buildings and an extensive bibliography of available software and tools (Wasley, 2007).

Concurrently, in the United Kingdom, to address current pedagogical and professional challenges and facilitate discussion between academics, designers and representatives from qualification bodies, in 2008 the ‘Designs on the Planet’ workshop series was set up as a forum by Oxford Brookes University, the University of Nottingham and Cardiff University, with the primary aim of contributing to the development of environmental responsibility as a creative factor in the practice and pedagogy of architecture (Stevenson, et al., 2009). The workshop series was sponsored by the Centre for Education in the Built Environment (CEBE) and supported by the Royal Institute of British Architects (RIBA), which is at present working with the UK Architects Registration Board (ARB) to review existing criteria for qualification so as to meet contemporary professional demands and legislative requirements (e.g. the Code for Sustainable Homes, DCLG, 2007).

According to Myers (2012) trends, outliers, best practices and obstacles to the implementation of sustainable initiatives are in five categories: leadership and administration, operating practices, curriculum, and community outreach and student initiative/involvement.

3.1 Environmental awareness campaign in government, schools, adults, community and leaders’ programmes to encourage participation of all in sustainability.

In Nigeria, environmental awareness is not a prominent feature of education programmes in institutions of primary, secondary or higher learning. However, its presence helps to mainstream environmental education programmes into schools as a regular part of the curriculum, increase public environmental awareness and demonstrates a commitment to environmental protection. Environmental education can be integrated into existing disciplines or it can be taught as a subject as early as primary school as well as in adult education programmes this will foster the environmental responsibilities amongst students.
Awareness raising campaigns are found to be successful when they are targeted at specific groups because information can be tailored to the activities, needs and challenges of the group. Additionally, involving organizations and communities in environmental protection and enforcement can create a sense of stewardship towards the environment, ease hardship through the collaboration and provide a forum for new ideas and greater participation.

Awareness can be raised amongst children who are taught about the need to conserve water and instilling the next generation with an environmental consciousness at a very early age. This awareness raising is also observed to permeate into the workplace. Employees are seeing the advantages of working in improved environments which equates to working in a sustainable building. Employers recognized the effects of working conditions as it will have a trickledown effect within the workplace especially in the productivity of staff. Leaders can play an influential or even decisive role in how people act. Education of leaders can assist in facilitating the implementation of sustainable buildings. As a global concern, over the last two decades literature talked about the missing link between architectural education and professional practice (Elnachar, 2010).

The print, broadcast, and Internet media can be a powerful ally in educating the public on environmental matters. The government has work with the media to broaden the environmental interests amongst the public. The involvement and participation of celebrities in media campaigns has been found to be an effective way of increasing understanding of the importance of environmental issues and enforcement.

Support for change must come from the highest levels of the organization, to create a culture that values sustainability AASHE (2012).

3.2 Implementing sustainable principles and green buildings in courses in Architecture and Construction.

In Nigeria, the National Universities Commission, National Board for Technical Education, Architects Registration Council of Nigeria and the Nigerian Institute of Architects are yet to approve sustainability as part of the knowledge to be acquired throughout the architecture education, sustainable issues and development has not coordinated in the curriculum in a systematic way, where it has been introduced. Although there were some inputs integrating sustainable issues and development but these are piecemeal and do not give exposure to the students in broader perspectives. The education is only limited to single discipline with isolated topics based on the knowledge and interests of the lecturers. New curricula, courses and techniques are needed for whole architectural education emphasizing on how buildings are developed and designed, and how interdisciplinary teams can be used to maximize energy efficiency, reduce resource waste, and improve the environmental quality of the buildings being constructed and re-connecting them to the natural environment.

A typical four to six years architectural training in Nigeria focuses on the required range of skills and creativity in design, managerial, media, and technical expertise with core subjects or courses ranging from design, technology, history, theory, practice and environmental behavior.

The success of sustainability in design and in the built environment relies on how institutions of higher learning respond to the ideas generated as a result of widespread interest in sustainable development. If sustainability is to become an essential aspect of
society and economical development then it has to become an essential part of education (Samad & Rahman, 2007).

Studies show that a complete integration of sustainable development across the curriculum, i.e. in all modules and parts of relevant subjects and activities through all phases is needed in encouraging sustainable practices in civil engineering fields (Shafii, 2007). The fundamental idea is that when sustainability is to become essential for all activities within society and all sectors of economy, it cannot remain as an isolated field of expertise but must form mindset for everyone.

A sustainable environment’s program should consist of an interdisciplinary set of courses spread throughout various university departments, such as Architecture, Anthropology, Agriculture, Biology, Botany, Building, Civil Engineering, Estate Management, Urban and Regional Planning, English, Economics, Forestry and Natural Resources, Geography, Humanities, Landscape Architecture, Philosophy, Political Science, Psychology, Quantity Surveying and Sociology. The sustainable environment’s program’s broad scope offers students comprehensive exposure to the close relationships between the environment and every field of human endeavor (Shafii, 2008).

Schools of Architecture should take a proactive role in promoting ecological literacy through aggressive advocacy for green building projects in their own institutional communities. Also assessing the state of ecological literacy in architecture education as part of a long-term effort to inject sustainability principles into architecture education and present a mosaic of current activities as the basis for an ongoing discussion of the future of environmentally progressive architectural education.

There is real need of reorienting architectural education towards sustainability so that architects are trained to have a clear understanding of how their role interacts with others to bring about good buildings and designs in many contexts.

Information and communications technology is today one of the most critical tools in architectural education. New ways to deliver instruction are now available, with the resulting ability to reach students in many ways other than the traditional classroom setting. Changes in research tools and methodologies in many disciplines and professions have resulted from the spread of information technology throughout the disciplines. New computerized studios such as design methods, computer aided design (CAD) visualization, paperless architectural studio and the virtual design studios have been introduced in many architectural schools as new ways of practicing and teaching architectural design. Recent developments to computer networks are offering further opportunities for collaborative work and knowledge transfer at the global scale.

A smaller number of private and a few public colleges have either been created or have evolved to make sustainability the core mission of their education and practice. They emphasize interdisciplinary learning, experiential learning on campus and in their local communities, and model sustainable action in their institutional operations. (Cortese, 2012).

4. Obstacles to Integrating Sustainability in Architectural Education

Many of the barriers to sustainable outcomes in the property sector in Nigeria are related to government at all levels, infrastructure, funding and learning. Direct barriers include lack of awareness, lack of skills (translating awareness into action), and the time and cost of pioneering new approaches.
Barriers to sustainability initiatives in architectural education in Nigeria include inadequate funding and planning in setting up departments of architecture, limited expertise on sustainable buildings of the inadequate number of lecturers’ available, lack of inspiring prototypes to counterbalance prevalent non-sustainable lifestyles, unawareness of environment crisis, shortage of studio spaces, lack of workshops, laboratories and equipment to teach courses of high technological input, inadequate number of books and journals of sustainable buildings, lack of technical courses that support sustainable design studios inside the classroom, the question of aesthetic and high cost of sustainability outside the classroom.

Other obstacles include inadequate managerial and administrative staff, unresolved ambiguity around defining sustainability principles, efforts often lack linkage to one another, lack of sincere commitment on the part of governments (federal, state and local) to prioritize education (especially technological education) which is the bedrock of infrastructural developments and obsolete curriculum.

5. Research Methodology

The study surveyed a total of 368 students and 368 members of the Nigeria Association of Architectural Educators in Nigeria (ARCHES), a body that was established in 1978 on the state-of-the-art of curricular structures in Nigerian tertiary institutions by a simple random sample. The research study was conducted in some selected states of Nigeria comprising of Abia, Akwa Ibom, Anambra, Bauchi, Delta, Edo, Ekpoma, Gongola, Ino, Kaduna, Lagos, Niger, Ogun, Ondo, Osun, Oyo, Plateau, and Rivers states. In these states are universities or polytechnics offering architecture as a course of study.

The study conducted an analysis of the state of sustainable education at tertiary level (including curricular contents and structure, course syllabuses, delivery methods, assessment criteria, etc.), and investigated how these relate to the conditions for accreditation of academic curricula and requirements for professional qualification as established by National Universities Commission, National Board for Technical Education, Architects Registration Council of Nigeria and the Nigerian Institute of Architects.

This task included a general overview of education literature and a comparison of the state-of-the art with contemporary theories/practice. In addition, the study ascertained the level of awareness, knowledge, ability-base and requirements of sustainable design within schools of architecture, so as to identify strengths and weaknesses of various pedagogical methods and define an agenda for sustainable architectural education that consistently responds to the demand of enhancing environmental design in buildings and therefore contributes towards a sustainable built environment.

6. Findings

The study surveyed a total of 201 students and 237 members of the Nigeria Association of Architectural Educators in Nigeria (ARCHES) who returned questionnaires and were found useable resulting into a response rate of 54.62 % for students and 64.4 % for academic staff.

The following tables show the summary of the questionnaire investigation into the ranking of categories of recommended changes / suggestions to integrate, promote and
emphasize sustainability aspects in the Nigerian architectural education in a sustainable age.

**Table 1:** Ranking of categories of recommended changes / suggestions to integrate, promote and emphasize sustainability aspects in the Nigerian architectural education in a sustainable age.

Table 1: Descriptive statistics of suggestions to integrate sustainability in the Nigerian architectural education.

<table>
<thead>
<tr>
<th>Categories of suggestions to integrate sustainability</th>
<th>Ranking</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government factors</td>
<td>1</td>
<td>3.65</td>
<td>2.256</td>
<td>4.523</td>
</tr>
<tr>
<td>Private sector support</td>
<td>11</td>
<td>1.92</td>
<td>1.609</td>
<td>3.431</td>
</tr>
<tr>
<td>Monetary factors</td>
<td>6</td>
<td>2.68</td>
<td>2.364</td>
<td>4.006</td>
</tr>
<tr>
<td>Public sector support</td>
<td>13</td>
<td>1.52</td>
<td>1.304</td>
<td>2.855</td>
</tr>
<tr>
<td>External support</td>
<td>14</td>
<td>0.76</td>
<td>2.341</td>
<td>2.081</td>
</tr>
<tr>
<td>Professional bodies support</td>
<td>2</td>
<td>3.23</td>
<td>2.534</td>
<td>4.701</td>
</tr>
<tr>
<td>Publicity requirements</td>
<td>10</td>
<td>2.08</td>
<td>1.977</td>
<td>3.411</td>
</tr>
<tr>
<td>Resource factors</td>
<td>5</td>
<td>2.69</td>
<td>2.071</td>
<td>4.234</td>
</tr>
<tr>
<td>Educator factors</td>
<td>4</td>
<td>2.76</td>
<td>2.301</td>
<td>4.614</td>
</tr>
<tr>
<td>Regulatory requirements</td>
<td>3</td>
<td>3.01</td>
<td>2.333</td>
<td>5.662</td>
</tr>
<tr>
<td>Internal &amp; external collaboration</td>
<td>15</td>
<td>0.66</td>
<td>2.473</td>
<td>3.622</td>
</tr>
<tr>
<td>Research requirements</td>
<td>12</td>
<td>1.76</td>
<td>1.962</td>
<td>3.502</td>
</tr>
<tr>
<td>Educational programmes</td>
<td>7</td>
<td>2.51</td>
<td>2.301</td>
<td>4.617</td>
</tr>
<tr>
<td>Curriculum review</td>
<td>8</td>
<td>2.44</td>
<td>2.061</td>
<td>3.708</td>
</tr>
<tr>
<td>Student factors</td>
<td>9</td>
<td>2.23</td>
<td>1.817</td>
<td>3.907</td>
</tr>
</tbody>
</table>

Table 1 presents the descriptive statistics of the rankings of the suggestions to integrate sustainability in the Nigerian architectural education the results show that government factors has the highest priority attached to it, followed by professional bodies support, regulatory requirements, educator factors, resource factors, monetary factors, educational programmes, curriculum review, student factors, publicity requirements, private sector support, research requirements, public sector support, external support, and collaboration in that order.

**Table 2:** Level of awareness of sustainable buildings among architectural educators and students in Nigeria.

<table>
<thead>
<tr>
<th>Level of awareness of sustainable buildings</th>
<th>Students</th>
<th>Academic staff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Unaware</td>
<td>14</td>
<td>6.96%</td>
</tr>
<tr>
<td>Aware</td>
<td>187</td>
<td>93.04%</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 2 shows that a great number of the architectural students and academic staff are aware of sustainable buildings while a few are not aware of sustainable buildings.

**Table 3:** Level of preparedness of architectural students and lecturers to preparedness to learn and participate in sustainability design and buildings.

<table>
<thead>
<tr>
<th>Level of preparedness to participate in sustainable buildings in course work and studio</th>
<th>Students</th>
<th></th>
<th>Academic staff</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Not prepared</td>
<td>6</td>
<td>2.98%</td>
<td>4</td>
<td>1.687%</td>
</tr>
<tr>
<td>Undecided</td>
<td>8</td>
<td>3.98%</td>
<td>3</td>
<td>1.27%</td>
</tr>
<tr>
<td>Prepared</td>
<td>187</td>
<td>93.03%</td>
<td>230</td>
<td>97.04%</td>
</tr>
<tr>
<td>Total</td>
<td>201</td>
<td>100%</td>
<td>237</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3 above shows the degree of preparedness of architectural students and lecturers to learn and participate in sustainability design and buildings in the regular course work and studio.

The study shows that there is the need to integrate sustainable concept and practice in design thinking in all levels ranging from ideological level (sustainability as a conceptual and an ethical reasoning for architecture) to the methodological level (principles and strategies for various range of disciplines) and finally the practicing level, by introducing sustainability related syllabuses to the architectural education, and inculcate the ability to critically analyze, process, and think creatively about how sustainable solutions might be designed in the Nigerian built environment.

**Recommendations**

The paper recommends that all stakeholders within the society – government, accreditation and regulatory bodies, professional bodies, educational institutions, lecturers, students and the general public should cooperate and be committed at all levels to achieve sustainability as a unified goal.

A systematic policy in Nigeria is essential, one that concentrates on all three important parts of an educational system: well-defined goals, planning in accordance with these goals and the assessment of programs to refine goals. This paper proposes two level programs consisting of architecture education system and sustainable architectural design subsystem (This consists of sustainable theoretical and design studio teaching/practical courses, and interdisciplinary courses, relating to sustainability education in architectural curriculum). This should require students to work on and analyze real life environmental problems relating to water and energy systems at different scales either on the campus itself or in the community at large. Thereby implying a review of the present curriculum of the architectural education and the need to specifically bridge the gap between the academic environment and the professional practice world which will infuse in the prospective architect what the school could not give through Student Industrial Work Experience Scheme (SIWES).

Adequate research, human, financial and time resources must be devoted to sustainable architectural education.

Architectural educators and professionals should promote sustainable architecture through direct experiential learning, using appropriate methodologies, tools and
techniques, must continually evolve and disseminate the knowledge base of sustainability through exemplary research and architectural practice. The knowledge base must be widely disseminated in a manner that is easily accessible to students, educators, practitioners and the general public via a web portal or online sustainable search engine.

Generate and perpetuate a dialogue, collaboration and partnership locally and internationally between the professionals, academics and students to facilitate and encourage exchange of ideas, joint research, study tours and faculty exchange programs in order to extend domestic and international connections.

There is the need for the architectural education system to place emphasis on fostering attitudes compatible with sustainability behavior and needs as well as human capital development through the training of lecturers in sustainable building to teach, supervise and support students. Also, there is the need to attract and sustain world renowned sustainability specialists and under their guidance, students should receive substantial training in sustainable architecture design and cultivate a global competitiveness in the international society.

**Conclusion**

The introduction of education on green architecture in Nigeria and the existing rating systems on an international level such as the Building Research Establishment Environmental Assessment Method (BREEAM, UK); Comprehensive Assessment System for Building Environmental Efficiency (CASBEE, Japan); Green Globes (Canada); Green Star, (Australia, New Zealand and South Africa); the Leadership in Energy and Environmental Design (LEED, US); Haute Qualité Environnementale (HQE, France) and the Indian Green Building Council (IGBC) Green Homes will create a more informed approach towards designing buildings based on the principles of sustainable architecture at a national level.

To achieve architectural education for sustainability lecturers should take a leadership role, breaking new grounds to prepare society for a sustainable age accelerating change in a world of increasingly diverse and growing populations, an expanding economy, and changing global environment and technology. Also, policy enforcement, monitoring, awareness, funding, training, research, sustainability strategies, practices, programs, leadership and administration, curriculum, community outreach and student initiative/involvement must be implemented consciously at all levels in Nigeria.

There is the need to cooperate with other groups, provide networking and cluster opportunities for architectural schools, lecturers and students, support schools in their growth from awareness through to leadership in education for sustainable development, foster empowerment in sustainability program and focusing on student involvement and learning.

There is the need to integrate sustainable concept in design thinking in ideological level, methodological level and the practicing level. This hierarchical multi-layer approach can help to formulate a value-based design philosophy for introducing sustainable design laboratory/studio and sustainability related syllabuses to the architectural education.

Developing a sustainable design curriculum should be part of the focus and a long term goal of architectural sustainable thinking in education worldwide since the architect's fundamental responsibility is to create environmentally responsive designs, creating connections between people and aspects of place. This demands perceptual and
analytical abilities pertaining to ecological wisdom and practical means essential to create a built environment that would fit a triplet system of social, economic and environmental attributes.

Literal cooperation and participation between academic and practical expertise is essential to incorporate sustainability concepts within the educational process. Sustainability has many approaches so it is necessary to introduce supporting structures and value engineering, train students on how to utilize this managerial methodology to organize their green building design thinking. Sustainability as a continuing cyclic concept requires feedback action which encourages introducing post occupancy evaluation to the architectural profession. This will enable future Architects propose designs and architectural solutions to challenges facing the world e.g. climate change, environmental destruction, social disintegration, poverty, natural resource exhaustion, and financial instability. The paper recommends that all stakeholders within the society should cooperate at all levels to achieve sustainability as a unified goal. Finally, the research concludes that policy enforcement, monitoring, awareness, funding, training, research, sustainability strategies, practices, programs, leadership and administration, curriculum, community outreach and student initiative/ involvement must be implemented consciously at all levels in Nigeria.

References


DCLG, Department for Communities and Local Government. (2007). Building a Greener Future: policy statement:

Towards Zero Carbon Development. London: Crown


Familial Factors Predicting Resilience among Adolescents in South Eastern Nigeria

Dr. Barnabas E. Nwankwo
Department of Psychology, Caritas University, Amorji-Nike, Enugu, Nigeria
E-mail: banniewankwo@yahoo.com; +2348023611991

Prof Regina N. Eya
Department of Psychology, Enugu State University of Science and Technology (ESUT), Enugu, Nigeria;

Prof. Shyngle K. Balogun
Department of Psychology, University of Ibadan, Ibadan, Nigeria.

Abstract
The present study focused on the influence of living with parents and family types on the exhibition of resilience among adolescents in selected secondary schools of Enugu metropolis from the Eastern part of Nigeria. From the study it has been observed that differences exist in the exhibition of resilience across different family-of-origin types. However, living with parents did not influence the show of resilience. There is need for parents no matter their level of education and socioeconomic status to foster internal locus of control by having their children participate in activities which are meaningful and related to their lives and which they have control over the outcome. Parents and caregivers should be responsive to the needs of their children and wards in whichever way they can, as these go a long way to ensure the success of the youths later in life. A social support policy should be developed by the government.

Keywords: Resilience; Family types, living with parents, Social support
Introduction

In Nigeria, there is a great emphasis on adolescent vulnerability to drugs, HIV/AIDS, teenage pregnancy, and truancy. Studies abound on youth maladaptive behaviours (Inerhumwunwa, 2009; Odebunmi, 2007). However, there is need to shift focus on the other adolescents who live a productive life and stand out regardless of the seeming challenges (Ibeagha, Balogun, & Adejuwon, 2004). For example two adolescents of the same age and sex are exposed to the same stressful experience; one crumbles while the other remains emotionally stable. Why? Changes in every facet of life and development of the Nigerian society such as political, economic, social, psychological and technological contain many risk factors with the potential of forming key barriers to the wellbeing of adolescents. The factors include socio-economic deprivation, poor access to basic services, unemployment, crime and gangsterism, inaccessible and unsafe residential environments, poor parental involvement in educational matters, poor human resource development in schools, dysfunctional family orientations and the profound ravages of HIV/AIDS on all aspects of family life (Ibeagha, Balogun, & Adejuwon, 2004). These changes may also have brought stressful situations to which individuals most especially adolescents have to adapt. Protective social factors and individual characteristics of resilience are essential in helping individuals to cope and bounce back from such stressful experiences. Adolescents are known to experience many problems, such as teen pregnancy, alcoholism, drug use and abuse, violence, school failure, and eating disorders (Callahan, Tolman, & Saunders, 2003; Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003; Elkins, McGue, Malone, & Iacono, 2004; Millan, Ickovics, Kershaw, Lewis, Meade, & Ethier, 2004). The extent and seriousness of these problems may cause social scientists, policymakers, and parents not to focus on youth who are well-functioning; teens that excel in school; have positive family and peer relationships; and have minimal participation in risky behaviours such as drug use, premarital sex, or delinquent acts and over emphasize on youths who are dysfunctional or engage in maladaptive behaviours (Damon 2004). Psychology as a field has operated within a disease model (Seligman & Csikszentmihalyi, 2000) which highlights the prevalence of mental illnesses (such as depression, personality disorder, or anxiety attacks) and other maladaptive behaviours. However, the costs of adopting this disease model included the negative view of psychologists as ‘victimologists’ and ‘pathologisers’, the failure to address the improvement of normal lives and the identification and nurturance of high talent. Just to illustrate, if you were to say to your friends that you were going to see a psychologist, what is the most likely response that you would get? ‘What’s wrong with you?’ How likely are you to hear something along the lines of: ‘Great? Are you planning to concentrate on self-improvement?’

The myriad stress factors confronting young adolescents in the various contexts in which they find themselves, all hold grave potential of becoming risk factors, especially in the family, if the normal support structures are absent or poor. There are three sub systems in a family system: parents, parent-child and siblings. The power structure in healthy families is hierarchical, with the parents sharing equal power and children having input in a democratic fashion. Yet, it is clear the parents are parents, and children are children. While status refers to the position and implies rank in a social hierarchy, “role refers to the more dynamic aspects of the position, it is more to do with what the people in various positions do or are expected to do… In the family, individuals only exist within the context of the roles and statuses they occupy.” (Longress, 1990. p.322).
Unhealthy family systems have almost closed boundaries with fixed and rigid connections or no connections whatsoever. Almost everything is fixed and rigid: goals, roles and relationships and rules and norms. Unhealthy family systems don’t have equal power, the higher levels subsystem (father) usually rules and the lower level subsystems (mother/children) are subservient. The father can rule his family and limit their behaviour. He can effectively block healthy adaptations by limiting the behaviours /roles of family members and by isolating the family system from the community.” The family, like all systems, relate through a process called Feedback. It is the feedback loops or circuits that maintain the system functioning. In closed system families, the feedback circuits are negative and work to keep the system frozen and unchanging. This is called “dynamics homeostasis”. For a family to be healthy, fathers and mothers must have a good sense of who they are, evidenced by good communication skills, healthy ego boundaries, and flexible roles. Each parent must be healthy in order to have healthy relationships. Intimacy requires that power be shared in the relationships. Since children don’t have equality with their parents, the nature of the parental-child relationship is not intimate. According to Bradshaw, (1988) if the marriage is functional, the children have a chance to be fully functional. If the marriage is dysfunctional, the family members are stressed and adapt dysfunctionally.

Kizziar, (1989) characterized four types of troubled or dysfunctional family systems, which are breeding grounds for co-dependency.

- The Alcoholic or Chemically Dependent Family System.
- The Emotionally or Psychologically Disturbed Family System.
- The Physically or Sexually Abusing Family System.
- The Religious Fundamentalist or Rigidly, Dogmatic Family System.

In dysfunctional families, parents violate the boundaries of their children. Parents from these families do not respect their children’s personal freedom and privacy, they discount their children’s feelings, do not honour their attempts at independent thinking and impulses towards creativity, spirituality and self actualization. These deficits in the children’s development are revisited by problems in their adult relationships and careers, and with raising their own families. When parents disrespect a child’s boundaries, the child’s sense of self –his or her autonomy, self respect, feelings of effectiveness and of making a difference are compromised. In place of a healthy sense of self, children may come to feel they are damaged goods: unworthy, inferior, inherently bad, incompetent, stupid or ugly. This negative conditioning limits what they believe they are capable of doing, being and having throughout their lives. One of the central priorities of the recovery process must be to reconstruct this damaged self-esteem. Boundaries in the family are violated and are manifested in different parenting styles as thus:

Deficient parents hurt their children more by omission than by commission. Frequently, chronic mental illness or a disabling physical illness contributes to parental inadequacy. Children tend to take on adult responsibilities from a young age in these families. Parental emotional needs tend to take precedence, and children are often asked to be their parents’ caretakers. Children are robbed of their own childhood, and they learn to ignore their own needs and feelings. Due to the fact that these children are simply unable to play an adult role and take proper care of their parents they often feel inadequate and guilty. These feelings continue into adulthood (Lambert, 1997).
Unlike the deficient parents, controlling parents fail to allow their children to assume responsibilities appropriate for their age. These parents continue dominating and making decisions for their children well beyond the age at which this is necessary. Controlling parents are often driven by a fear of losing their control on their children. This fear leaves them feeling betrayed and abandoned when their children become independent (Forward, 1989). Consequently, these children frequently feel resentful, inadequate, and powerless. Transitions into adult roles are quite difficult, as such adults frequently have difficulties making decisions independent from their parents. When they act independently, these adults feel very guilty as if growing up were a serious act of disloyalty (Lambert, 1997). Alcoholic families tend to be chaotic and unpredictable. Rules that apply one day don’t apply the next. Promises are neither kept nor remembered. Expectations vary from one day to the next. Parents may be strict at times and indifferent at others. In addition, emotional expression is frequently forbidden and discussions about the alcohol use or related family problems are usually nonexistent. Family members are usually expected to keep problems secret, thus preventing anyone from seeking help. All of these factors leave children feeling insecure, frustrated and angry. Children often feel there must be something wrong with them, which makes their parents behave this way (Lambert, 1997). Children from this family develop mistrust for others and difficulty with emotional expressions. They also develop difficulties with intimate relationships which is carried over into adulthood (Lambert, 1997). It is important to note that children of alcoholics are at a higher risk of developing alcoholism than children of non-alcoholics (Lambert, 1997). Abuse can be verbal, physical or sexual. Verbal abuse such as frequent belittling criticism can have lasting effects, particularly when it comes from those entrusted with the child’s care. Criticism can be aimed at the child’s looks, intelligence, capabilities, or basic value. Some verbal abuses are very direct, while others use subtle put-downs disguised as humour. Both types are just as damaging. Definitions of physical abuse vary widely. Many parents, at one time or the other may have felt the urge to strike their child. With physically abusive parents, however, the urge is frequent and little effort is made to control this impulse. The Federal Child Rights Act of Nigeria (2007), defines physical abuse as “the infliction of physical injuries such as bruises, burns, welts, cuts, bone or skull fractures; These are caused by kicking, biting, beating, knifing, strapping, paddling etc.” Striking a child has much to do with meeting the parent’s emotional needs and nothing to do with concern for the child; parents often erroneously justify the abuse as “discipline” intended to “help” the child (Lambert, 1997). Physically abusive parents can create an environment of terror for the child, particularly since violence is often random and unpredictable. Abused children often feel anger. Children of abusive parents have tremendous difficulties developing feeling of trust and safety even in their adult lives.

While parents may justify or rationalize verbal or physical abuse as discipline aimed at somehow helping the child, there is no rationalization for sexual abuse. Sexual abuse is the most blatant example of an adult abusing a child purely for that adult’s own gratification.

Sexual abuse as defined by Lambert, (1997) can be any physical contact between an adult and a child where that contact must be kept secret. Demonstrations of affection—such as hugging, kissing or stroking a child’s hair—that can be done openly are quite acceptable and even beneficial. However, when physical contact is shrouded in secrecy then it is most likely to be inappropriate. Sexual abuse happens to both boys and girls. It is perpetrated by both men and women. It cuts across lines of race, socioeconomic level,
education level, and religious affiliation. In most cases, sexual abuse is part of an overall family pattern of dysfunction, disorganization and inappropriate role boundaries. Responsibility for sexual abuse in all cases rests entirely with the adult. No child is responsible for being abused. Most sexually abused children are too frightened of the consequences for themselves and their families to risk telling another adult what is happening. As a result, they grow into adulthood carrying feelings of self-loathing, shame and worthlessness. They tend to be self-punishing and have considerable difficulties with relationship and with sexuality.

According to Kizzier (1989) in authoritarian families whose members may be subjected to inflexible religious values or a black-and-white one-dimensional view of the universe by a dominant parent, children may be subject to the following problems: They suffer from a dozen identity states, dominated by oppressively strict moral values. Their feelings become cut off from belief and they are no longer certain of what they really feel. The members experience great difficulty in thinking and deciding for themselves, as dogma or parental authority overshadows free choice and independent thinking. They have discomfort sharing honestly about their past, as they believe they must continually pretend they are living up to the ideal held up to them by their authoritarian parents. Kizzier (1989) opined that children who grew up in families where the system is unhealthy or dysfunctional show a variety of psychological, behavioural and interpersonal issues. Psychologically, they suffer from sleep and eating disorders, fears and phobias, recurring nightmares, dissociative reactions, depression, anxiety and hysterical reactions, have low self esteem, believe they are polluted or inferior and feel intense guilt, fear, shame, and anger. The behavioural consequences include: school problems, truancy, delinquency, running away from their families, prostitution, promiscuity and higher rates of suicide attempts and complete suicides. Interpersonally, they have difficulty trusting others, and they are more likely to physically and sexually abuse their own children and are more likely to be sexually victimized (Finkelhor, Araji, Baron, Peters & Wyatt, 1986). Some adults experience difficulties with adult sexual adjustment and nearly half show decreased sexual drive after childhood sexual abuse (Herman and Hirschman, 1981). So intense are some of the reactions to growing up in these families that Cermak, (1986) believes they are similar to “Post Traumatic Stress Disorder” experienced by survivors of disasters or wars such as Vietnam veterans. War veterans and adults growing up in dysfunctional families may, without warning, re-experience feelings, thoughts and behaviour that were present during the original traumatic event. These re-immerging painful feelings are newly triggered by environmental stimuli (Briere, 1984).

**Theoretical Background**

**Transactional model of resilience (Kumpfer, 1999)**

For the purpose of this research work, the transactional model of Kumpfer will form the theoretical basis because it considered the interaction between social and psychological factors that impinge on the resilience process of an individual. The Resilience Framework of Kumpfer aims to “review resilience forces in multiple environmental risk factors and the interaction between the high –risk environment and the internal resilience factors of the individual” (Kumpfer, 1999). The background, of resilience research mostly founded on high –risk individuals, may seem to exclude individuals from a seemingly supportive care giving environment; however, it is essential
to note that “the support and opportunities that represent protective factors of individuals facing adversity apply equally to all individuals” (Bernard 2004) The Resilience Framework of Kumpfer takes a holistic view of the individual and elucidates internal resilience factors that can be considered in resilience education. The model consists of four main areas of influence and two areas of transactional processes, making up six major predictors of resilience (Kumpfer 1999).

The model begins with an initiating event, which is a stressor or a challenge that signifies the disruption in homeostasis of the individual or the environment and calls for a resilient integration to maintain the stable equilibrium of the individual or environment (Kumpfer 1999).

The initiating event marks the beginning of the resilient process, and the process ends with an outcome, which may constitute either resilient reintegration or maladaptive reintegration, the later constituting non-resilience.

The six major predictors of resilience are:

- The stressors or challenges.
- The environmental context.
- The person–environment transactional process.
- The internal resilience factors or individual characteristics and outcomes of interaction.
- The resilience process or the area of transaction between the individual and the outcomes.
- Adaptive, resilient reintegration or maladaptive.
The Resilience Framework of Krumpfer consists of Six major predictors of resilience, with each predictor of resilience being discussed individually below.

**Stressors or Challenges**

According to Kumpfer (1999), the model indicates that the resilient process begins with an exposure to stressors, demands and challenging situations that compel an individual to develop strength and grow from such experiences and cope successfully with the negative events.

The studies of Werner & Smith (1992); Rutter (1995); Haggerty et al (1995); Wang & Gardon (1994); and Kumpfer (1999) regarding the lives of troubled children from troubled environments include major stressful events like poverty (unemployment), parental death, psychopathology and violent environments. In this study, stressful events will include major and acute stressors such as being bullied at home, struggles with relationships, being exposed to stressful environments; which are peculiar features in a dysfunctional family, and individual demands.
The Environmental Context

According to Kumpfer (1999), the social environment of an individual is extremely important in the resilience process. It influences the development and socialization of the child. It also serves to either cushion or intensify the impact of stressful and challenging events on the child. Kumpfer (1999) mentions that resilient individuals even in high-risk social environments manage to find some support that will ensure them adequate opportunity for a positive and healthy development. The support and nurturance that individuals receive from caring families, communities, school, and peer group members enable them to acquire positive and healthy socialization skills. The individual’s social environment is able to provide the following support to encourage the resilience process:

- Effective teaching, advice, a sense of connectedness, family cohesion, good parenting styles and values, positive role modeling, effective supervision and discipline.
- Opportunity for meaningful involvement, empathy and emotional nurturance, prosocial peers (as opposed to anti-social) and social support, a sense of autonomy and self-worth.

Person-Environment Transactional Process

The transactional process reconciles the social environment and the individual (Kumpfer 1999). It also explains different strategies the individual implements to adapt and modify the environment in order to reduce environmental risk factors. Figure 1.1 (The Resilience Framework model of Kumpfer), illustrates strategies that can be employed by the individual to adapt and modify the environment. These include using selective perceptions, cognitively reframing, changing the environment and actively coping (Kumpfer 1999); Rutter (1995); and Joseph (1994) mentioned internal resilience factors like temperament as precursors to resilience.

The Resilience Framework of Kumpfer indicates that the interactional processes, which empower individuals to reduce the effect of stressors, challenges and demands, include seeking and identifying with prosocial elements in the environment and facilitating relationships with positive role models and mentors. It also includes.

The need to change the risky social environment by either migrating or seeking the company of prosocial peers or individuals in their environment who will serve as protective factors.

Individuals seeking a positive life development and adaptation by identifying with adults/peers who provide positive role modeling, advice, nurturance, support, structure, discipline, supervision and create opportunities for effective and meaningful involvement.

Hypothesis

Living with parents will significantly predict resilience amongst adolescents.

Family type will significantly predict resilience amongst adolescents.

Methods

Participants

A total of 423 Senior Secondary 1 and 2 students (208 females and 215 males) were randomly selected using proportionate stratified random sampling. Since the population has subgroups that differ in various aspects such as sex, family type and class
size. According to Akuezilo and Agu (2003), stratified random sampling is used when we have sub groups in our population that are likely to differ substantially in their responses or behavior. The participants were drawn from Six Government (Single Sex) Secondary Schools in Enugu metropolis. The female Schools were; Girls Grammer School Awkunanaw, Queens Secondary School and Girls Secondary School, Abakpa while, Union Secondary School Awkunanaw, National Grammer School Nike, and New Haven Boys Secondary School were the male schools used. Using proportionate stratified random sampling technique, 50 were selected from Girls Grammer School Awkunanaw, 70 from Girls Secondary School Abakpa; 100 from Queens Secondary School; 100 from Union Secondary School Awkunanaw; while, 70 and 60 participants were sampled from National Grammer School Abakpa and New Haven Boys respectively. The researcher adopted proportionate stratified random sampling to maintain proportionate representation of the participants. The participants are within the biological age range of 14 to 18 years. The S.S 3 Students were not in session at the time of the study, because they had concluded their 2010 WAEC Examinations.

Instrument

The instrument used in the study was, Mampane (2005) 18-item Resilience Scale. However, during data collection, the instruments were categorized into two sections (A & B) for easy administration and scoring. (See Appendix 1)

Section A comprised of demographic and social information like age, gender, family type, and living with parents.

Section B comprised a 25-item Resilience Scale developed by Mampane (2005). The scale is designed to measure resilience amongst young people. It has five response options ranging from strongly disagree (1) to strongly agree (5). According to the Scale, Scores above the mean 4.51 for the girls and 4.22 for the males respectively indicate high resilience. For this study, the instrument was re-validated using Nigerian sample. 250 adolescents comprising 100 females and 150 males were selected from three secondary schools in Okeigwe Local government of Imo State. The 25-item scale was reduced to 18 items. This is as a result of some items that could not load up to 0.30 during the item total correlation where therefore dropped. According to Pedhazur (1997), any item that did not load up to 0.30 on item total correlation analysis does not have much relevance in tapping into the construct. However, a concurrent validity of 0.83 was obtained by correlating the instrument with Family strength Scale. In addition, a pilot study was carried out using 100 students (52 males and 48 females) selected from College of Immaculate Conception (C.I.C) Enugu. Data obtained yielded a split half reliability coefficient of 0.73 at p< .01.

Procedure

First and foremost, an approval was got from the Principals of the six secondary Schools that were used for the study. The six schools were selected out of about 18 State owned Secondary Schools in Enugu metropolis, from three Local Government Areas (Enugu North, Enugu South and Enugu East). Systematic random sampling was used to select two single-sex schools from each local government area. From Enugu North L.G.A., New Haven Boys Secondary School and Queens Secondary School were selected. Schools selected from Enugu South L.G.A included were Girls Grammer School Awkunanaw, Union Secondary School Awkunanaw, while, Girls Secondary School, Abakpa, Nike Grammer School, Nike, were selected from Enugu East L.G.A. To have a good representative sample, proportionate stratified random sampling was used to
select participants from each school for the study. In doing this, the schools were grouped into two strata of boys and girls and further grouped into SS I and SS II. The simple random sampling was used to appropriate sample size from each stratum. The sample size approximated the same relative number from each stratum of the whole population. This was done by the researcher with the assistance of the Form teachers after the creation of rapport and confidentiality. Copies of the research instruments were distributed among the Schools selected within a period of four weeks. The students were assembled during their break periods. After creating rapport and confidentiality, those selected responded to the items of the questionnaires and handed it over to the researcher within a short period of time, though there was no time limit for that. Obviously, the organization of the students was done with the assistance of Class Form teachers. 423 copies of the research instruments were correctly filled and returned and were used for data analysis.

The table A, below showed the number of questionnaires administered the percentages and number of copies properly completed/returned in each school.

Table A.

<table>
<thead>
<tr>
<th>SN</th>
<th>Name of School</th>
<th>Number Administered To each School</th>
<th>Number Properly Competed &amp; Returned</th>
<th>Percentage of Return %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Girls Grammer School Awkunanaw</td>
<td>50</td>
<td>46</td>
<td>92%</td>
</tr>
<tr>
<td>2</td>
<td>Union Secondary School Awkunanaw</td>
<td>100</td>
<td>98</td>
<td>98%</td>
</tr>
<tr>
<td>3</td>
<td>Girls Secondary School, Abakpa</td>
<td>70</td>
<td>62</td>
<td>88.6%</td>
</tr>
<tr>
<td>4</td>
<td>National Grammer School, Nike</td>
<td>70</td>
<td>62</td>
<td>88.6%</td>
</tr>
<tr>
<td>5</td>
<td>Queens Secondary School</td>
<td>100</td>
<td>97</td>
<td>97%</td>
</tr>
<tr>
<td>6</td>
<td>New Haven Boys Secondary School</td>
<td>60</td>
<td>58</td>
<td>96.7%</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td>450</td>
<td>423</td>
<td></td>
</tr>
</tbody>
</table>

**Design/ Statistics**

Correlational design was used. The choice of this design was informed by the following assumptions as stated by Elmes, Kantowitz and Roediger (1995). These assumptions hold that correlational design is applied where experimentation (manipulation of variables) is practically impossible, when the researcher is looking for degree and direction of relationship between two or more variables, allows the researcher to determine simultaneously the degree of direction of relationship with a single statistics, and knowledge of this relation allows prediction to be made. Multiple regression as a
A statistical test was applied to the six hypotheses respectively to test them. The choice of this statistical test was built on the assumptions of multiple regression analysis as posited by Cohen and Cohen (1983), Pedhazur (1997), Osborne and Waters (2002). The assumptions hold that multiple regression can only accurately estimate the relationship between independent and dependent variables if the relationships are linear in nature. Regression assumes those variables are multivariates (measuring the predictors as we find them rather than fixing them in advance). It considers the relationship between two or more variables. Multiple regression needs at least 3 variables of metric (ratio or interval) scale. Finally, a rule of thumb for the sample size is that regression analysis requires at least 20 cases per independent variable in the analysis. In the simplest case of having just two independent variables it is required that $N > 40$.

**Results**

**Table 2:** Mean scores on resilience by different types of families.

<table>
<thead>
<tr>
<th>Family Types</th>
<th>N</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Emotionally Depressed</td>
<td>48</td>
<td>79.13</td>
</tr>
<tr>
<td>2. Controlling</td>
<td>104</td>
<td>76.98</td>
</tr>
<tr>
<td>3. Alcoholic</td>
<td>45</td>
<td>78.60</td>
</tr>
<tr>
<td>4. Abusive</td>
<td>15</td>
<td>72.87</td>
</tr>
<tr>
<td>5. Functional</td>
<td>211</td>
<td>79.61</td>
</tr>
<tr>
<td>Total</td>
<td>423</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3:** A summary table of multiple regression analysis showing the joint and independent interaction on resilience by living with parents and family type.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>$R^2$</th>
<th>B</th>
<th>T</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience</td>
<td>Constant</td>
<td>.30</td>
<td>7.48</td>
<td>3.39</td>
<td>&lt;.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Living with Parents</td>
<td>.04</td>
<td>.75</td>
<td>n.s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Family Type</td>
<td>.11</td>
<td>2.15</td>
<td></td>
<td>&lt;.05</td>
<td></td>
</tr>
</tbody>
</table>

**Table 4:** The confidence limit of Living with Parents and Family Type on Resilience.

<table>
<thead>
<tr>
<th>Variables</th>
<th>95% confidence Interval of B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Constant</td>
<td>45.43</td>
</tr>
<tr>
<td>Living with Parents</td>
<td>-1.73</td>
</tr>
<tr>
<td>Family type</td>
<td>.05</td>
</tr>
</tbody>
</table>

The association between the dependent and the independent variables is shown to be 0.30 (multiple R). Together living with parents and family type accounted for 30% of the variations in resilience. The independent variables are positively related to the dependent variable (See Table 3).
Living with Parents

The regression coefficient for living with parents was 1.06 (95% CI = -1.73 to 3.85). The confidence limits was also found to encompass a negative value, it is then concluded that the population regression coefficient for living with parents is negative (t = 0.75, P = 0.46 N.S). The standardized regression coefficient (Beta = 0.04) shows that living with parents is not a strong predictor of resilience (See Tables 3 & 4).

Family types

The regression coefficient for family type was 0.57 (95% CI = 0.05 to 1.10). Since the confidence limits did not encompass a negative value it can be concluded that the population regression coefficient for family type is positive (t = 2.15, P < 0.5). The standardized regression coefficient (Beta = 0.11) indicated that family type is a strong predictor of resilience. It accounted for 11% of the variations in resilience (See Tables 3 & 4). From the mean table (Table 2), adolescents from functional families were found to exhibit higher resilience (x̄ = 79.61) than other adolescents from dysfunctional families (Emotionally Depressed, x̄ = 79.13; Controlling, x̄ = 76.98; Alcoholic, x̄ = 78.60; and Abusive, x̄ = 72.87 respectively). Adolescents from abusive families tended to be lower in resilience than any other family type.

Discussion

The present study contributes to the literature by examining variables hypothesized to serve as protective factors that predict resilience among adolescents. Specifically, the present study investigated the relationships living with parents, family type and resilience of 430 college students.

The first hypothesis which stated that living with parents will significantly predict resilience among adolescents was not confirmed. Nigeria is a collectivist culture that has a profound system of the extended family pattern. This cultural pattern makes it very difficult to assess the impact of not living with biological parents on resilience. This is because, whether the adolescents are living or not living with their parents, there will be significant others who provide same if not better care and nurturance thereby balancing the supposed influence of living or not living with parents. Nonetheless, living with parents has been found as a strong factor in family connectedness which is a resiliency factor (Scott-Fisher et al., 2000).

Hypothesis 2 which states that family type will predict resilience among adolescents was confirmed. A cursory look at the mean table (Table 3) for family type shows that adolescents who come from functional families scored higher on resilience scale than those from dysfunctional families. This presents the family as a protective factor and characteristic that facilitates the development of resilience in youth. The family as a protective factor is more powerful than risk factors and serves to protect adolescents across ethnic, social class, geographic and historical boundaries (Scott-Fisher & Campbell-Forester, 2000). The family as an environmental factor authenticates the ecological domain of resilience. In their work, Jackson and Warren (2000) found that social support, positive family environment operated as protective factors in the prediction of resilience. The ecological approach in resilience as a process –oriented model argues that the family, individual attributes (e.g. locus of control), community and social levels are potential protective factors (Sandler, 2001). Middle adolescence as a developmental life cycle is characterized by changes and transitions in the biological,
cognitive, and psycho-social facets of life. These developmental changes are affected by the adolescents’ social environment such as the home (Rutter, 1995). To function effectively, the developing middle-adolescents rely on the interconnections, communications and participation within and between the Microsystems with which he/she has relationships such as the home, school and community (Bronfenbrenner, 1979). Many of the salient risk and protective factors for youth problem behaviours originate in the family (Spoth, Kavanagh, & Dishion 2002).

In functional families consistent parenting practices promote attachment and emotional bonding which are implicated in the development of resilience.

**Implications of the findings**

The results of this study revealed that living with parents and family type accounted for 30% of the variance in the adolescents’ resilience scores. Specifically family type accounted for 11% of the variance in resilience scores. The present study has found that family type (condition) as a cluster of protective factors, has predicted psychological resilience (Masten & Coatworth, 1998). This study has implications for parents, guardians and counsellors in handling youths that are exposed to risk conditions. Important factors that have been consistently mentioned by the resilient youths in this study are protective monitoring and motivational support received from adult relationship. This has implication for the quality of parent-child relationships as perceived by the youths. Resilience should be viewed as something we foster throughout children’s development by strengthening protective processes for children at critical moments in their lives. When resilience is viewed as a developmental process that can be fostered, then strategies for change can be directed toward practices, policies, and attitudes among practitioners. Within every young person is a delicate balance during those critical life events between the protective processes and risk factors that originate both internally and externally. Protective processes have to be reinforced constantly so that the potential for young people to be resilient when faced with risk factors and vulnerabilities remain intact. Adequate and current information are necessary to keep youths at risk on track and to learn from the mistakes of others who may not have listened and have fallen into error. However, more research will be needed, both qualitative and quantitative to establish the exact causal pathways to resiliency development in children. However, all individuals have the capacity for resilience. Environmental and individual protective factors play a prominent role in determining the type of resilience the individual will demonstrate. Building up resilience in learners could be effectively achieved by means of the development of resilience factors through empowerment by primary and secondary educators. Resilience education is mentioned by numerous researchers as an effective intervention to promote and nurture resilience (Boyd & Eckert, 2002; Brooks & Goldstein, 2001; Brown, D'Emidio-Caston & Benard, 2001; Joseph, 1994; Krovetz, 1999; Thomsen, 2002; Winfield, 1994). Resilience education recognises the importance of providing skill programmes and encouraging the awareness and development of strengths and talents to augment personal weaknesses. To this end, the reliable identification, of those learners in need of the intervention, would certainly make a vital contribution. Researchers focusing on a variety of situations, such as wars, natural disasters, family violence, extreme poverty, and parental mental illness, have uncovered the predictive abilities of traits, conditions, and situations in enabling vulnerable children and youth to achieve healthy outcomes despite profound risks (Masten, 2001). Consistently, three clusters of protective factors have been recognized as fostering
psychological resilience: (1) characteristics of the individual, such as intelligence and an appealing disposition; (2) characteristics of the family, such as its consistent and close relationships and socioeconomic advantages; and (3) characteristics of the community, such as bonds to non-related adults who are positive role models, connections with community organizations, and good schools (Masten & Coatworth, 1998). Although the influence of the first two types of factors in this triad of protective factors has been fairly well established, relatively few studies have focused specifically on the protective qualities of support outside the family (Garmezy, 1985).

The findings of this study highlight the importance of the family system, and social support from significant others for the resilience of adolescents. These findings, therefore, point to the need to contextualize programming for children and youth with emphasise on the family system. For example, educational programs that promote healthy family systems, as well as address the social injustices they face, will help to make foster resilience (Dei, Massuca, McIsaac, & Zine, 1997). The researcher suggests that interventions and programs that simultaneously promote culturally embedded and meaningful expressions of power and control, identity, relationships, and cohesion are likely to help young people navigate to health resources effectively. Moreso, there is need for parents no matter their level of education and socioeconomic status to build up their homes in whichever way they can, as these go a long way to ensure the success of the youths later in life. There is also need for the development of social support policy by the government, which will attempt to improve the lives of children especially those in poverty. Policy and programs for youth must be sensitive to developmental processes, and the environmental structures that put adolescents at risk.

Conclusion

Stress, demands and challenges are part of life. Adolescents in a township schools are exposed to numerous and severe risk factors by virtue of their life-stage and the township environment (Mumpane & Bouwer, 2006). However, all individuals have the capacity for resilience. Environmental and individual protective factors play a prominent role in determining the type of resilience the individual will demonstrate. Building up resilience in learners could be effectively achieved by means of the development of resilience factors through empowerment by primary and secondary educators. Resilience education is mentioned by numerous researchers as an effective intervention to promote and nurture resilience (Boyd & Eckert, 2002; Brooks & Goldstein, 2001; Brown, D'Emidio-Caston & Benard, 2001; Joseph, 1994; Krovetz, 1999; Thomsen, 2002; Winfield, 1994). Resilience education recognises the importance of providing skill programmes and encouraging the awareness and development of strengths and talents to augment personal weaknesses. To this end, the reliable identification, of those learners in need of the intervention, would certainly make a vital contribution.
References


Lambert, D. J. (1997). Dysfunctional families: recognising and overcoming their effects. [http://www.k-state.edu/counseling/topics/relationships.dysfunc.html](http://www.k-state.edu/counseling/topics/relationships.dysfunc.html).


ONI, S. I.
Department of Geography, University of Lagos, Lagos,

EKOP, Godwin
Department of Geography, University of Lagos, Lagos,

EGE, Emmanuel
Department of Geography, University of Lagos, Lagos,

Abstract
The use of trailers and tankers has become a major means of transporting heavy goods as well as petroleum products from one place to another. This paper examines the problems associated with trucks and trailers on Nigerian roads with particular attention to increasing number of accidents associated with it. The paper uses data collected by Federal Road Safety Commission (FRSC) to examine the extent and distribution of road traffic accidents involving trucks and trailers on selected highways in Nigeria. The paper recommends amongst others the need for harmonization and linkages between different data sources and users to obtain maximum value from the information and effectively control the use of trucks and trailers and by extension reduce the rate of accidents or crashes involving them.

Keywords: Trucks/Trailers, Routes, Accidents, Nigeria.
Introduction

Truck and trailer traffic crashes occur on almost all roads in every country of the world. Each year it takes the lives of more than a million people and incapacitate many millions more (Fasakin, 1990). Pedestrians and users of non-motorized vehicles – including bicycles, rickshaws and carts – and motorcyclists in low-income and middle-income countries carry a large proportion of the global burden of road traffic death and serious injury (Meakin, 1989). The elderly, children and the disabled are particularly vulnerable. Despite the growing burden of road traffic injuries, road safety has received insufficient attention at both the state and local levels. The reasons include lack of general awareness and specific information on the scale of the problem, on the health, social and economic costs of road traffic crashes. The responsibility for dealing with the various aspects of accidents involving trucks and trailers is especially hinged on the design of road networks and the introduction and enforcement of road safety legislation, and the care and treatment of crash survivors. In this environment, it is not surprising that political will has frequently been lacking to develop and implement a holistic and effective safety policies and programmes in Nigeria.

Buses and trucks are a major mode of travel and haulage in developing economy. High volumes of passengers and goods being transported with trucks have an impact on safety, not only of the passengers themselves, but also on vulnerable road users. In Nigeria, buses and trucks are involved in almost two thirds of crashes involving vulnerable road users, and these people make up over 75% of all road traffic deaths (Jacob, 1989).

Statement of problem

Articulated vehicle accidents have been associated with serious damages to road furniture, environment and in some cases private properties. These accidents are familiar sights on our urban roads and intercity highways. It is not uncommon to see damaged guardrails, signage, kerbs (median and sides) etc caused as a result of truck and trailer accidents. Different opinions have been put forward in the area of morbidity and mortality burden in developing countries. To these opinions, there have been numerous suggestions concerning articulated vehicle crashes and different factors have been stated in the literature which include rapid motorization, bad road, poor traffic infrastructure and poor behavior of road users. In summary, most trailer traffic accidents often involve three elements-the driver, the highway and motor vehicle. These three are linked in one way or the other with the following parameters which have been listed by the Federal Road Safety Commission - dangerous driving (DGD), Speed Violation (SPV), Tyre Violation (TyV), Brake Failure (BFL), Mechanically Deficient Vehicle (MDV), Overloading Violation (OVL), Loss of Control (LOC), Wrong Overtaking (WOV), Speed Violation (SVL) etc. All these characterize truck vehicle accidents in Nigeria.

Heavy duty truck accidents are actually challenging and what this means is that we require special knowledge and careful investigation to evaluate the causes of crash and find solution to this problem. The increasing use of heavy-duty vehicles to transport bulky goods that could otherwise have been transported by rail or water has given a lot of problems which will continue to exist until multimodal system is addressed in our transportation plan. This coupled with the lack of vehicle maintenance and the institutional failure in the aspect of the enforcement of traffic laws. Another worrisome area is the level of education. Most of them can hardly read the road signs and this could
lead to reckless driving. This paper therefore, examines the problems associated with trucks and trailers on Nigeria roads.

Methodology

Method and Data Acquisition

Data from Federal Road Safety Commission (FRSC, 2010) provided the bulk of information used in this study on road traffic accidents involving trucks and trailers on major highways in Nigeria. Road traffic crashes involving trailers and trucks included the routes and cases of road traffic crashes from 2007 to June 2010. Six major routes in Nigeria were selected based on the high volume trailers/trucks traffic on the routes. The routes include: Lagos- Ibadan, Kaduna – Zaria, Jos – Maiduguri, Calabar – Akamkpa, Lokoja – Abuja and Port-Harcourt – Aba Expressways. Descriptive method is used in analyzing the data collected. This descriptive method is useful in highlighting in clear terms the extent of the road traffic crashes on major Nigerian roads.

The following variables with abbreviation were used in the study: OBS – obstruction; SPV – Speed violation; DGD dangerous driving; TYV – tyre violation; BFL brake failure; MDV mechanically deficient vehicle; OLV – overloading violation; DOV – dangerous overtaking; LOC loss of control; RTV – route violation; DAD driving under the influence of alcohol and drug; SLV speed violation; WOV – wrong overtaking (adopted from FRSC, 2010).

Data Analysis and Discussion

The speed of trucks and trailers is at the core of the road accident problem. Speed influences both crash risk and crash consequence. “Excess speed” is defined as a vehicle exceeding the relevant speed limit; inappropriate speed” refers to a vehicle travelling at a speed unsuitable for the prevailing road and traffic conditions. While speed limits only declare higher speeds to be illegal it remains for each driver and rider to decide the appropriate speed within the limit. The speed drivers choose to travel at is influenced by many factors (see Table 1). Modern trailers and trucks have high rates of acceleration and can easily reach very high speeds in short distances. The physical layout of the road and its surroundings can both encourage and discourage speed. Crash risk increases as speed increases, especially at road junctions and while overtaking – as road users underestimate the speed, and overestimate the distance of an approaching vehicle.

Between 2007 and June 2010, dangerous driving (DGD) cumulatively accounted for the highest causes of crashes involving tankers and trailers with 1,038 representing 26.41%. Other major causes included speed violation (SPV) with 907 cases (23.08%), brake failure (BFL) 359 (9.14%), tyre violation (TYV) with 337 (8.58%), obstruction (OBS) with 306 (7.79%), and dangerous overtaking (DOV) 116 (2.95%). (see Table 2 below ).
### Table 2: Summary of Causes of Tankers/Trailers Rtc, 2007-2010.

<table>
<thead>
<tr>
<th>Causes</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OBS</td>
<td>313</td>
<td>7.79</td>
</tr>
<tr>
<td>SPV</td>
<td>927</td>
<td>23.08</td>
</tr>
<tr>
<td>DGD</td>
<td>1098</td>
<td>26.41</td>
</tr>
<tr>
<td>TYV</td>
<td>337</td>
<td>8.58</td>
</tr>
<tr>
<td>BFL</td>
<td>359</td>
<td>9.14</td>
</tr>
<tr>
<td>MDV</td>
<td>51</td>
<td>1.3</td>
</tr>
<tr>
<td>OLV</td>
<td>92</td>
<td>2.34</td>
</tr>
<tr>
<td>DOV</td>
<td>116</td>
<td>2.95</td>
</tr>
<tr>
<td>LOC</td>
<td>89</td>
<td>2.26</td>
</tr>
<tr>
<td>RTV</td>
<td>34</td>
<td>0.87</td>
</tr>
<tr>
<td>DAD</td>
<td>5</td>
<td>0.13</td>
</tr>
<tr>
<td>SLV</td>
<td>11</td>
<td>0.28</td>
</tr>
<tr>
<td>WOV</td>
<td>36</td>
<td>0.92</td>
</tr>
<tr>
<td>DOT</td>
<td>27</td>
<td>0.69</td>
</tr>
<tr>
<td>BRD</td>
<td>10</td>
<td>0.25</td>
</tr>
<tr>
<td>MDI</td>
<td>19</td>
<td>0.48</td>
</tr>
<tr>
<td>OTHERS</td>
<td>493</td>
<td>12.54</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4017</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: FRSC, Sept., 2010

**Legend:**
- OBS – obstruction; SPV – Speed violation; DGD dangerous driving; TYV – tyre violation; BFL brake failure; MDV mechanically deficient vehicle; OLV – overloading violation; DOV – dangerous overtaking; LOC loss of control; RTV – route violation; DAD driving under the influence of alcohol and drug; SLV speed violation; WOV – wrong overtaking.
Table 1: Accidents Involving Tankers/Trailers on Nigerian Roads by Selected Routes

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Lagos-Ibadan</th>
<th>Kaduna-Zaria</th>
<th>Jos-Maiduguri</th>
<th>Calabar-Akamkpa</th>
<th>Lokoja-Abuja</th>
<th>Port Harcourt</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>39</td>
<td>14</td>
<td>26</td>
<td>9</td>
<td>18</td>
<td>2</td>
<td>99</td>
</tr>
<tr>
<td>2008</td>
<td>68</td>
<td>34</td>
<td>21</td>
<td>14</td>
<td>19</td>
<td>3</td>
<td>159</td>
</tr>
<tr>
<td>2009</td>
<td>111</td>
<td>39</td>
<td>19</td>
<td>11</td>
<td>12</td>
<td>4</td>
<td>196</td>
</tr>
<tr>
<td>2010 June</td>
<td>78</td>
<td>28</td>
<td>14</td>
<td>11</td>
<td>50</td>
<td>3</td>
<td>184</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>638</td>
</tr>
</tbody>
</table>

Source: FRSC, Sept 2010

Analysis of 2007 records revealed that Lagos – Ibadan Expressway had the highest of 39 crashes followed by Jos – Maiduguri Highway with 26 crashes. While Lokoja – Abuja and Kaduna – Zaria Highways had 18 and 14 crashes respectively. Mechanically deficient vehicle, overloading violation, dangerous overtaking, loss of control, driving under the influence of alcohol and drugs were the prominent causes of the tankers/trailer accidents.

In 2008 and 2009, Lagos – Ibadan Highway recorded the highest of 68 and 111 truck and trailer crashes for both years followed by Kaduna – Zaria with 34 and 39 numbers of crashes for the same period. These were probably due to speed violation, brake failure, Tyre Burst, obstruction and dangerous overtaking.

Furthermore, in 2010 (Jan – June), speed violation, dangerous driving, brake failure and overloading violations were the major causes of tanker/trailer crashes on Lagos – Ibadan Expressway with a total of 78 and Lokoja – Abuja with 50 road traffic crashes involving trucks. This was followed by Kaduna – Zaria and Jos – Maiduguri routes with 28 and 14 road traffic crashes respectively.

Hand-held mobile telephones

The increase in the number of hand-held mobile telephones has rapidly and additionally increased traffic crashes in many instances. This is so because the use of hand-held mobile telephones can adversely affect driver behaviour – as regards physical as well as perceptual and decision-making tasks. The process of dialling influences a driver’s ability to keep to the course on the road (Meakin, 1989). Results of studies on distraction and mental load show that driver reaction times are increased by 0.5 – 1.5 seconds when talking into a mobile telephone (Bolade, 1993).

Safety defects in existing roads

Deformations contributing to crash risk can be found in road designs, especially if they have not been reexamined by experienced road safety experts. Such deformations are frequently caused by the poor design of junctions or by design that allows for large
differences in the speed and the mass of vehicles and in the direction of travel. Poor road surfaces are a particular risk factor for users of trucks and trailers.

Vehicle-related risk factors

While trucks and trailer design can have considerable influence on road crashes, its contribution is generally around 3% in Nigeria. Though periodic vehicle inspections have not been found useful in reducing truck crashes, inspections and checks for overloading and safety related maintenance for larger trucks and trailers could be very important if such vehicles are more than 12 years old.

While there is in general no evidence that periodic truck and trailer inspections reduce crash rates, defective brakes on large trucks have been shown to be a risk factor. Brake failures have contributed to vehicles leaving the road and colliding with solid roadside objects such as trees, poles and road signs on major roads nationwide. These collisions are usually single-vehicle crashes and frequently involve young drivers, excess or inappropriate speed, the use of alcohol or driver fatigue as other road safety problem associated with trucks and trailers. The study also identified the negative impacts of billboards off the road as the occurrence of crashes were caused by restricted visibility, due to the poor siting of these billboards.

Conclusion

Analysis of available crash data and other road traffic researches show that while the main road safety problems experienced by trucks and trailers in various parts of Nigeria often differ in quality and quantity, they have many characteristics in common. The dominant or common characteristics of the risks associated with trucks and trailers on road traffic environment were as follows: unnecessary travel, the choice of less safe travel modes and routes, and unsafe mixes of traffic all lead to increased risk. The design of roads and road networks is an important factor. Exposure to risk is increased significantly by road networks failing to route heavy traffic around populated areas or to separate pedestrians from motorized traffic.

The study concluded that a reduction in all three of these behaviours could reduce the incidence of crashes involving trucks and trailers by up to 19%. Surveys of commercial and public road transport in Nigeria and as confirmed by other studies (Adesanya, 1998; Armstrong, 1987; Badejo, 2009) have revealed that transport owners, in pursuit of increased profits, frequently force their drivers to drive at excessive speeds, to work unduly long hours and to work when exhausted. Studies by the Federal Road Safety Commission (FRSC, 2010) in Nigeria found that 52% of 107 single-vehicle crashes involving heavy trucks were fatigue-related and that in nearly 18% of the cases, the drivers admitted to having fallen asleep. Investigations by FRSC (2010) into fatigue showed that fatigue was a factor in about 30% of fatal crashes involving heavy commercial transport (Jacob, 1989; ITE, 2005).

Although studies have been less comprehensive in Nigeria, and have often involved retrospective accounts that were likely to underestimate the impact of fatigue, scholars (Bolade, 1993; Badejo, 2009; Fasakin, 1990) suggest that drivers’ fatigue is a significant factor in approximately 20% of commercial transport crashes. The results from a range of surveys show that more than a half of long-haul drivers have at some time fallen asleep at the wheel (Bolade, 1993).
This study on accidents involving trucks and trailers showed that their risk of crashes related to fatigue increased when they were driving at night; when the length of their working day had increased; and when they were working during irregular hours. Other factors included drugs abuse, alcohol, long-distances, types of food, insufficient rest, and overall health conditions of the drivers.

**Recommendations**

The linkages between vehicle crash protection and roadside crash protection need to be strengthened. For example, cars do not provide protection for occupants in head-on collisions at speeds above 60–70 km/h (or even lower limits with other types of impact), although many cars travel at these and higher speeds. The road environment needs to be designed so as to eliminate head-on collisions – into trees, poles and other rigid objects – at high speeds, where the truck itself cannot offer sufficient protection. Trailers, trucks and roads must be designed in a mutually-linked way within the traffic environment.

Road traffic crashes involving trucks data and evidence should be collected and stored by a range of agencies. This is in itself a positive feature, as it reflects the multi-sectoral nature of the phenomenon. However, it should take care of important issues such as access, harmonization and linkages between different data sources and users. Ideally, where there are a number of data sources available, it is important that the data should be linked, to obtain maximum value from the information. A major problem is coordination and sharing of information among different users was noted in the study. While there are usually issues of confidentiality and other legal restrictions involved, it should still be possible to find ways of summarizing the relevant information and making it available, without violating any legal prohibitions.
References

Badejo, Bamidele (2009) “Unbundling the Challenges of Transportation and Development in Nigeria: The Lagos State example” being a paper delivered at the Sixtieth Anniversary Lecture organized by the Department of Geography, Faculty of Social Sciences University of Ibadan on 10th of June 2009.


Bolade, T. 1993. Urban Transport in Lagos. The Urban Age 2 (1), pp 7-8


Adoption of Improved Aquaculture Production Technologies among Fish Farmers in Lagos State, Nigeria.

Jaji, M. F. O  
Lagos State Polytechnic, Ikorodu  
Mfoj1@yahoo.com +2348023205321

G. O. Akolade  
Lagos State Polytechnic, Ikorodu

A. A. Agbelemose  
Olabisi Onabanjo University, Ayetoro Campus, Yewa

A. K. Yusuf  
Lagos State Polytechnic, Ikorodu

Abstract  
This study examined the adoption of improved aquaculture technologies among fish farmers in Lagos State, Nigeria. Data were collected from a sample of One hundred and fifty fish farmers randomly selected from the five divisions of the state. Responses were elicited through well-structured questionnaire. Descriptive statistics and multiple regression were used to analyse the data. The recommended aquaculture technologies at different stages of adoption process were water pH testing and regulation, testing of dissolved oxygen, feed formulation, polyculture practices, integrated fish/poultry, recirculatory method, cage system, spawning and stocking density. The grand mean of adoption score and adoption index were 0.94 and 0.19 respectively. The low level of adoption was attributed to the complexity and cost of the technologies, low extension contacts, level of education, age, income and farm size all of which influenced the adoption of aquaculture technologies. The findings suggest that Extension officers need to be motivated and trained frequently in order to enhance their competence and low interest loans should be extended to fish farmers to enable them adopt such innovation perceived as having high capital outlay, Micro-finance institutions could be explored towards this end.

Keywords: Adoption, Aquaculture Technologies, Fish Farmers, Lagos State
Introduction

The fishery industry is a very important and indispensable aspect of the economic landscape of Nigeria. A large number of the population of Nigeria depends on the fishery sub-sector especially fish farming for their livelihood. Fish provides a rich source of protein for human consumption. The flesh of fish is also readily digestible and immediately utilizable by the human body, which makes it suitable and complementary for regions of the world with high carbohydrate diet, like Africa (FAO, 2005).

Aquaculture is the breeding and rearing of fish, shellfish, or plants in ponds, or any enclosure for direct harvest of the product. It has come to greatly augment the dwindling marine fish production worldwide, and this field is growing rapidly (Muir & Nugent, 1995; FAO, 2004).

The importance of aquaculture to the socio-economic growth of a nation cannot be overemphasized, as it increases the production of animal protein to meet the needs of a fast growing population; it produces highly priced commodities for export to earn foreign currency, and creates employment opportunities. It utilizes large areas of idle land and water bodies for food production.

Nigeria has over 14 million hectares of inland water surface, out of which about 1.75 million are available and suitable for aquaculture (FAO, 2006). In Nigeria, aquaculture is predominantly an extensive land based system, practiced at subsistence levels in fresh waters (Anyawu- Akeredolu, 2005). Commercial farming is yet to become widespread (Fagbenro, 2005). At present, most fish farmers operate small-scale farms ranging from homestead concrete ponds (25-40 metres) to small earthen ponds (0.02-0.2 hectares). The industry produced over 30,000 tons of fish in 2000 (FAO, 2005). A large concentration of these producers is located in Lagos State because of the state’s location.

Lagos State is endowed with 147,877 hectares of swampland and large areas of water bodies suitable for aquaculture to feed its ever increasing human population of over 10 million people, however, only 61.28 hectares (about 0.04%) is used for aquaculture (Lagos State Fisheries Department, 1998).

However, in spite of the various research and extension services efforts embarked upon by the government which has led to the development of improved packages on aquaculture production; these are not being adequately used by farmers. These information on aquaculture techniques, when acquired and effectively utilized by the farmers, will help to increase aquaculture and translate into income, improved farmers’ standard of living, improvement in rural economy and by extension, the nation’s economy. The issue of low productivity of aquaculture in Nigeria is widespread and more severe in Lagos State; this is in spite of the vast maritime resources. Its activities are dependent upon the use of natural resources, such as water, land, seed and feed. As population grows, there is the need to intensify efforts towards increasing output from aquaculture, this result in a rising demand for these resources, thereby resulting in increased competition for these limited resources and ultimately creating a negative impact on the environment.

There is an interaction between aquaculture and changes in the environment induced by human activities like pollution from urbanization, industrialization, intensification of agriculture and oil exploration. In order to reduce these negative effects, there is the need to increase productivity through aquaculture technology.

While capture fisheries production has stagnated throughout the African continent at about 8 kg per person, aquaculture-based consumption has continually increased from
50 gm per person in 1984 to 100 gm per person in 1992. However, this is still 1.30 percent of total fish intake (Bardach, 1997).

According to Akinbode (1982) rather than engage in direct production, the ADP was designed to stimulate and motivate small-scale farmers to the use of modern techniques of aquaculture through farm extension education. The extension service has a vital role of increasing and improving aquaculture production through their linkage between researchers and end-users. Without extension services most research endeavour will be a futile exercise (Adebolu and Ikotun, 2001).

The development of aquaculture can only be enhanced by the introduction of modern technologies. While there have been instances of successful introduction of technologies to boost production in Bangladesh (Thompson, et al., 2005) and the major problem has been the lack of appropriate technology (Gupta, Bartley, & Acosta, 2004; Toure & Noor, 2001). Aquaculture technologies have been developed and disseminated to farmers. While some scholars have stated that what is needed is to develop the technologies and make them available (Joshua & Omidiji, 2002), others insist that the transfer of technology would be more effective when there is a greater interaction among the developers, transfer agencies, and the farmers (Dlamini 2003).

In view of these, this study will seek to address the level at which adopting new improved technology will help in increasing fish production in Lagos State by providing answers to the following research questions:

What are the socio-economic characteristics of the fish farmer?
What are the improved aquaculture production technologies available to the farmers?
To what extent has the farmer adopted the available improved aquaculture production technologies?
What are the problems farmer’s encounters in the process of adoption of the improved aquaculture technologies?

Objectives of the Study
The general objective of this study is to assess the adoption of improved aquaculture production technologies. Specifically, the study will be aimed at the following

(i) To describe the socio-economic features of the fish farmers in the study area.
(ii) To highlight the improved aquaculture production technologies available to the farmers in the study area.
(iii) To determine the extent of adoption of available improved aquaculture production technologies.
(iv) To identify the problems farmers encounter in the process of adoption of the improved aquaculture technologies.

Statement of hypothesis
H_{01}: There is no significant relationship between the socio-economic characteristics of fish farmers and adoption of improved aquaculture production technologies in Lagos state.

Methodology
Area of study: Lagos state has an estimated population of about 9 million people and has the second highest population in the country accounting for over 6.49% of the
National Estimate (NPC, 2009). The state is made up of five (5) administrative divisions; Lagos, Badagry, Epe, Ikeja and Ikorodu which are divided into 20 Local Government Areas. The state has a border with the expansive Atlantic Ocean spanning about 180 Km. Fish farming is growing at a very high rate in the state, and thus a need to check the extent of adoption of improved technologies and also to proffer useful recommendations.

Data was obtained from the respondents through the use of well structured interview schedule and was administered on the respondents to elicit required responses from the respondents.

The multi-stage random sampling technique was used in the selection of respondents. There are five administrative Divisions in the State; one local government area was randomly selected from each administrative division to make a total of five local government areas. Thirty Fish farmers were randomly selected from the list of fish farmers in each of the local government areas used for the study. This gives a total number of One hundred and fifty respondents.

Data Analytical procedures
Regression was employed to determine the relationship between the adoption of improved aquaculture technologies and selected socio-economic variables of the fish farmers. The explicit model is a non linear model as specified below:

\[ Y = \alpha_0 + \beta_1 \log X_1 + \beta_2 \log X_2 + \beta_3 \log X_3 + \beta_4 \log X_4 + \beta_5 \log X_5 + \beta_6 \log X_6 + U \]

Where:
Y = Adoption of improved fish farming technologies (Number of technologies adopted).
X\(_1\) = Level of education (years spent in school)
X\(_2\) = Age of farmers (years)
X\(_3\) = Farm size (population of fish)
X\(_4\) = Household size (number of persons in the household)
X\(_5\) = Farm income (Naira)
X\(_6\) = Extension contact (Number of visits by extension agents)
U = Error term

Results and Discussion
Socio – economic characteristics of respondents
It has been noted that people do not just adopt a technology because it is available to them. Even when the technology is available and appropriate, some personal and socio-cultural factors bear on the decision to adopt or not (Berdegu & Escobar, 2001). In this study some of the socio-economic characteristics of fish farmers were identified, studied and presented in Table 1.

The economically active age groups consist of 31 – 40 years and 41 – 50 years which constitute 35.6 percent and 27.8 percent respectively of the respondents. Studies have shown that middle age farmers are more inclined to adoption of innovation (Bolorunduro et al., 2005) and the mean age of farmers in Nigeria is usually between 45-48 years (Ezedinma & Otti, 2001; Ogunwale, 2000). Male fish farmers significantly dominate the study area with a proportion of 85.6 percent as shown in Table 1. The
dominant household size was between 3 – 5 members per household. Most of the respondents as shown in table 1 were literate with primary, secondary or tertiary educational attainment. The implication of this is that adoption of modern technologies can be accelerated, since level of education is known to be influential in the adoption decision of farmer (CIMMYT, 1993).

Majority (67%) of the respondents are married; 30 percent are still single.

The result in Table 1 revealed that 36.7 percent of the respondent in the study area earn an annual income of #101,000 – 200,000 only. While 15 percent of the fish farmers earn below #50,000; while 21.10 percent of the total respondents earn above #200,000. This implies that the farmers will be able to afford the cost of the innovations as more than half 57.77% earn above #100,000.00

Table 1: Socio-economic characteristics of the respondents (n = 150)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (year)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 – 30</td>
<td>32</td>
<td>21.10</td>
</tr>
<tr>
<td>31 – 40</td>
<td>53</td>
<td>355.6</td>
</tr>
<tr>
<td>41 – 50</td>
<td>42</td>
<td>27.78</td>
</tr>
<tr>
<td>51 and above</td>
<td>23</td>
<td>15.56</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>128</td>
<td>85.56</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>14.44</td>
</tr>
<tr>
<td>Size of household</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – 2</td>
<td>70</td>
<td>46.67</td>
</tr>
<tr>
<td>3 – 5</td>
<td>80</td>
<td>53.33</td>
</tr>
<tr>
<td>Educational level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>13</td>
<td>8.89</td>
</tr>
<tr>
<td>Secondary</td>
<td>37</td>
<td>24.44</td>
</tr>
<tr>
<td>Tertiary</td>
<td>93</td>
<td>62.22</td>
</tr>
<tr>
<td>No formal education</td>
<td>7</td>
<td>4.44</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>45</td>
<td>30.00</td>
</tr>
<tr>
<td>Married</td>
<td>102</td>
<td>67.78</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
<td>2.22</td>
</tr>
<tr>
<td>Widow</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Level of income (#)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 50,000</td>
<td>23</td>
<td>15.56</td>
</tr>
<tr>
<td>50,000 – 100,000</td>
<td>40</td>
<td>26.67</td>
</tr>
<tr>
<td>101,000 – 200,000</td>
<td>55</td>
<td>36.67</td>
</tr>
<tr>
<td>Above 200,000</td>
<td>32</td>
<td>21.10</td>
</tr>
</tbody>
</table>


Available improved fish production technologies

The result in table 2 revealed that 58.90 percent of the farmers were already using some of the improved breeds of fish Holland clarias and heteroclarias etc. Polyculture was being practiced by 40.8 percent of respondent, while 46.70 percent adopted the cage system of fish culture.
On awareness bases, the table revealed that over 90 percent of the respondents formulate their feeds; over 80 percent cultured improved breeds while 65 percent practices polyculture.

The mean adoption score for using improved fish breeds; polyculture and cage system of fish culture was computed as 3.47, 3.26 and 3.45 respectively. The grand mean adoption score was computed as 2.6, while the adoption index was 0.52. Table 2 and Table 3 indicated that the fish farmers are yet to fully adopt most of the recommended aquaculture production technologies.

**Assessment of adoption of aquaculture innovation**

The level of adoption of the highlighted ten (10) recommended aquaculture technologies among the fish farmer in the study area were derived by computing the adoption scores and adoption index. The scores were arranged in descending order for all innovations. Fish farmers were classified into low, medium and high level adopters. The category of low adopter were farmers who adopted between 1 and 3 of the ten (10) aquaculture technologies, medium adopters are those farmer who adopted between 4 and 6 while the high adopters were those who adopted above 6 of the aquaculture technologies as shown in Table 3.

**Table 3: Distribution of fish farmers’ aquaculture technologies adoption score**

<table>
<thead>
<tr>
<th>Adoption score of aquaculture technologies</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (&lt;3)</td>
<td>115</td>
<td>76.67</td>
</tr>
<tr>
<td>Medium (4-6)</td>
<td>28</td>
<td>18.67</td>
</tr>
<tr>
<td>High (&gt;7)</td>
<td>7</td>
<td>4.66</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100.00</td>
</tr>
</tbody>
</table>
The computation revealed that 76.6 percent of the farmers adopted between 1 and 3 technologies, 18.67% adopted from 4 to 6 technologies while only 4.66% of the respondents adopted more than 6 technologies. This result showed that the adoption level was low generally since 76.67% of the respondents was in the low technology adoption category.

Multiple regression analytical tools using the ordinary least square (OLS) method was applied. The parameter of the estimated linear regression model shown in Table 4 revealed that the level of formal education ($X_1$) was positively related to adoption of improved aquaculture technologies. The implication is that educated farmers would readily adopt improved production technologies. This is in consonance with Ewuola & Ajibefun, (2005), Lemchi et al., (2003) noted that technological change is achieved through formal education. The age of the fish farmers ($X_2$) is negatively related to adoption. This implied that older farmers are more risk averse and are unwilling to accept changes, because of the risk involved with new technology (Lemchi et al., 2003). Farm size ($X_3$) showed a positive relation which revealed that fish farmers with large farm more readily adopt improved technologies than fish farmers with small farm size. This is where economy of scale in aquaculture production comes in to play. Farm income ($X_5$) was also positive. Extension contact ($X_6$) was also positive with the adoption of fish farming technologies. This was because the more the extension agent visits the fish farmers and educates them on the recent technologies the more they will understand and the larger the number of adopters. This observation was in agreement with Asiabaka (1996) who report that the frequency of extension contact influences, the adoption behaviour of farmers.

**Table 4:** Multiple Regression Analysis of Socio-economic Characteristics of the Fish Farmers and their Adoption of Improved Aquaculture Production Technologies

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Standard Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Constant</td>
<td>.667</td>
<td>1.107</td>
<td>.046</td>
</tr>
<tr>
<td>log X₁</td>
<td>.204</td>
<td>.330</td>
<td></td>
<td>2.617</td>
</tr>
<tr>
<td>log X₂</td>
<td>.003</td>
<td>.010</td>
<td>-.022</td>
<td>-2.264</td>
</tr>
<tr>
<td>log X₃</td>
<td>.300</td>
<td>.014</td>
<td>.032</td>
<td>3.556</td>
</tr>
<tr>
<td>log X₄</td>
<td>.020</td>
<td>.078</td>
<td>.020</td>
<td>.257</td>
</tr>
<tr>
<td>log X₅</td>
<td>.060</td>
<td>.019</td>
<td>.042</td>
<td>4.208</td>
</tr>
<tr>
<td>log X₆</td>
<td>-.043</td>
<td>.150</td>
<td>-.002</td>
<td>2.284</td>
</tr>
</tbody>
</table>

1. Dependent Variable: Y

**Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.738*</td>
<td>.545</td>
<td>.512</td>
<td>1.212</td>
</tr>
</tbody>
</table>

(ii) Predictors: (Constant), log X₁, log X₂, log X₃, log X₄, log X₅, log X₆

Constraints to adoption of improved aquaculture technologies.

The adoption of any improved aquaculture technologies is dependent on socio-economic and institutional factors and the attribute of such technology (Bolorunduro et al., 2007). The result from Table 5 revealed that 73 percent of the respondent revealed that the adoption level was attributed to the cost of the technologies, 68 percent attested to scarcity and complexity of the technologies. About $\frac{2}{3}$ of the respondent (63%) complained of non-availability of extension agent to introduce, teach and demonstrate the technologies. About 75 percent of the respondents complained about lack of technical support in adoption practices while 48 percent attested to lack or insufficient awareness of the technologies. In packaging a technology, it is the responsibility of research and extension agencies to introduce features in that innovation that will be friendly to farmers, because friendliness is a question of affordability, simplicity, availability and ease of operation and maintenance.

Table 5: Perceived constraints to adoption of improved aquaculture technologies

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Frequency</th>
<th>%</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Cost</td>
<td>110</td>
<td>73.3</td>
<td>2</td>
</tr>
<tr>
<td>Complexity</td>
<td>102</td>
<td>67.8</td>
<td>3</td>
</tr>
<tr>
<td>Lack of Technical Support</td>
<td>113</td>
<td>75.6</td>
<td>1</td>
</tr>
<tr>
<td>Non-availability of Input</td>
<td>102</td>
<td>67.8</td>
<td>3</td>
</tr>
<tr>
<td>Insufficient awareness</td>
<td>72</td>
<td>48.0</td>
<td>6</td>
</tr>
<tr>
<td>Lack of Extension Contact</td>
<td>95</td>
<td>63.3</td>
<td>1</td>
</tr>
</tbody>
</table>

Conclusion and Recommendation

Recommendations

Based on the findings from this study, the following recommendations are hereby made:

To improve fish farming in the Lagos State and in Nigeria, the practice should be introduced early to the populace especially youths as a viable venture that could generate income and become sustainable especially in the face of unemployment among the youth.

Extension officers should be highly motivated and trained frequently in order to enhance their competence.

Low interest loans should be extended to fish farmers to enable them adopt such innovation perceived as having high capital outlay. Micro-finance institutions could be explored for this.

In most cases the funding of field extension work has been problematic in Nigeria. Extension contacts with farmers are often irregular due to mobility problems as a result of inadequate funding.

Extension agents should increase the frequency of their visit to fish farmer.

Conclusion

It can be concluded from this study that the highlighted 10 recommended improved aquaculture technologies were yet to be fully adopted in the study area. It can also be inferred that the initial policy of the extension agents to introduce aquaculture as subsistence farming was wrong. According to Nwachukwu and Onuegbu, (2007), when people do not see a technology as generating income immediately, the motivation to commit resources to the venture will not be there.
The adoption level were generally low, the overall mean adoption score was computed as 0.94 while the adoption index was 0.19. Five variables were discovered to have influenced the adoption level of improved aquaculture production technology by the farmers. Some of the reasons given for non-adoption of the improved technologies were scarcity of the technology; complexity of the technologies, capital for the acquisition of the technology and lack of extension contacts. These constraints should be removed if mass adoption of aquaculture production technologies is to become realisable.
References


Asiabaka, C.C., 1996. Factors Influencing the Adoption of Cassava Plant Protection Among Farmers in Nigeria IITA, Benin, ESCA., pp: 197-200


Culture and Moral Values: an African Christian Perspective

Taiye Adamolekun PhD
Senior Lecturer (in Church History and Christian Studies)
Department of Philosophy & Religious Studies, Adekunle Ajasin University,
Akungba-Akoko, Ondo State, Nigeria
E-mail- tadamolekun@yahoo.com

Abstract
This paper discusses culture and moral values in Christianity. It attempts a broad analysis of cultural traits and values and points out the nature of Christian moral values and the extent to which they affect the society. The paper opines that Christ is the model of moral values upon whom Christian moral principles subsume. It also discusses the principles of moral value in Christianity. The paper establishes the fact that moral value in Christianity takes root in God through the teachings of Jesus Christ. Love, obedience, honesty, respect, and honour are examined as case study for Christian moral values. It is the opinion of the paper that language, dressing habit and healing (i.e. Western orthodox medicine) among others are traits of cultural values while love, obedience, honesty, respect, and honour as Christian moral values are capable of transforming societal moral standards in Nigeria.
Introduction

Religion has qualified for so many titles in human thinking that there is almost nothing left which it cannot be to human society (R. A. Akanmidu 1990, p. 31). Religion is human being’s interaction with the supernatural in order to cope with life crisis. It is man’s encounter with the supreme being. Religion is one of the most powerful, deeply felt and influential force in human society. Value entails or relates to the attitude of appraising, estimating the quality (i.e. the worth, merit, importance) of a thing or behaviour in relation to persons. In essence all phenomena have worth, merits, and importance and such estimations reside in the attitudes, choice, and tastes of people. Value also relates to a set of belief principle which becomes standard for behaviour and basis for cultural appreciation of persons or social groups.

The key objective of this paper is to discuss culture and moral values in Christianity. In an attempt to achieve the objective of this study, effort will be made to define the key terms used and also discusses cultural traits or values in Christianity. It will also explain the nature content and extent of moral values in Christianity. With a strong conviction that moral value in Christianity like love, obedience, honesty, honour and respect take root in God through the teachings of Jesus Christ.

Definition of Terms:

The key terms used in this work are culture, moral or morality and values. In this section, attempt shall be made to define and discuss these terms.

Culture:

Culture connotes various or diverse definitions. Culture according to Longman Dictionary of Contemporary English is “the ideas, beliefs, and customs that are shared and accepted by people in a society”. Culture generally, refers to the “configuration of learned and shared patterns of behaviour and understanding concerning the meaning and value of things, ideas, emotions and actions” (T. Adamolekun 1995; 258). This configuration of patterns and understanding arise out of language communication within a social group and helps an individual to adapt to his biological environment, his biological nature, and his group life.

Yet another part of culture often refers to the aspects of human behaviour in terms of his taste, refinement and interests in music and arts. In this context many people have the opinion that culture means civilization, development or improvement acquired through education. Hence it is common to hear ‘an uncultured’ or in a favourable way, ‘as a person who is highly cultured. This in the view of Awolalu, indicates that “every society possesses some element of culture irrespective of the socio-economic development of the society” (Awolalu, J. O. 1979; 40).

Culture in the opinion of Akonga is considered to be a way of life of a distinctive group of people, community or society” (J. J. Akonga 2003; 25). To Akonga, this definition is not completely accurate since a way of life of a people is only a reflection of the people's culture but does not itself constitute culture. This is largely because culture is an abstraction from reality and is not itself the reality. (G. Fredrick and E. Norbeck 1976; 5) Swartz and Jordan (1980; 57) define culture simply as “shared understandings” These are understandings about norms, rules or laws that govern and control behaviour, beliefs as in religion, superstitions, witchcraft and sorcery, myths, legends, ideology, and artifacts. In the view of Akonga (2003; 25), we cannot logically claim that culture include all these things but it is reflected in them. Beliefs also constitute an important aspect of
culture because they guide human conduct. Geert Hofstede (1991; 25) is of the opinion that culture is mental and social programming which is influenced by man’s environment and is reflected in such things as greeting, eating, showing or not showing feelings, keeping a certain physical distance from others, maintaining body hygiene, even the way people approach and actually carry out their sexuality.

What is important in our view having realized that culture connotes various or diverse definitions is that there cannot be culture without society and that the environment plays a vital role in the culture of a society. Each society has its own unique culture which has developed throughout its history and which is passed on from one generation to another. “New members born into the society concerned do not inherit their culture biological but it has to be learned from childhood (J. O. Awolalu 1979; 40). This means that everyone born into a particular society will have to learn the way of life of the society and will, in the process of growing up, have acquired certain patterns of behaviour in common with others in the society which will make them different from people in another country or society.

Moral

Moral is defined as things concerning principles of right and wrong while morality is the practice of moral duties, ethics, right or wrong of a thing. Orebanjo (1974; 443) has traced the derivation of the term or the word morality from the Latin word “mores” meaning “manners or morales. The Chambers’ twentieth century Dictionary defines morality as the quality of being moral, and moral as character or conduct considered as good.”

In Christianity, morality or moral values is seen in his ethical values. Ethics (from Greek ethos) refers to the science of moral conduct that guides the behaviour of people in every society. From the Christian point of view, Biblical injunctions on morality or ethics deal with “do’s and don’t of human conduct in relationship first towards God, and secondly towards fellowmen. These moral concepts were revealed through divinely inspired people such as prophets, kings, and disciplines but most profoundly by Jesus Christ. Ethical behaviour in the Old Testament was exemplified in Yahweh – Israel covenant relationship which was more-often-than not characterized by national demands and activity; unlike what obtains in the New Testament where emphasis is placed more on individual responsibility (see Galatians 6:5; Romans 14:4). Here full recognition is given to the reality of sin and redemption, while the life and character of Jesus is set as the standard for Christians. The basis of moral principles are shown in the Ten Commandments (see Exodus 20: 1-26); Deut. 5: 4-22); in Jesus teaching about moral behaviour in the sermon on the mount (see Matthew 5-7; 19:19; 7:12; 12:29-30: 22:37-39); and Paul’s teaching on morality (see Galatians 5:19-23: 7:12).

Morality in Christianity derived its content and sanction from God. Morality in Christianity is a system of conduct that conforms to standards of right conduct or behaviour sanctioned by or resulting from Christian teachings. The connection between moral rectitude and moral teachings jointly constitute the basis upon which Christian moral values are acknowledged. Christianity, according to Haselbarth (1976; 7) preach humility, steadfastness, truth, faith, cooperation, obedience, kindness, sympathy, respect to elders, and love. It condemns unethical behaviour such as adultery, theft, murder, hypocrisy, hatred etc. (see Galatians 5:19-23)
Value:

Value is defined in Longman Dictionary of contemporary English as “quality of being useful or desirable”. To A.S. Hornby, and A. Wakefield etc. (1963; 1108), value means “to think that something is important to you”. Value is described as “ideas, life motivations, rules or principles of life, things that are given some primary importance in life; (I.B. Ewelu 1991; 40). Ike Benjamin Ewelu sees values as “Ideas that determines and guide people’s daily efforts” (1991; 41). Values are standards. Standards in a given society determine what the members are to aim at and what is expected of them. African values, therefore, are things that serve as the yardsticks for measuring success among Africans. Among values cherished by Africans are: sacredness of human life; extended family system, honesty, fidelity to promise (especially to marriage promise), truthfulness, hardwork, good name, hospitality, brotherliness and friendship. Values determine praise or blame, respect or dishonour, achievement or failure within the society. They are also things that people price daily.

Cultural traits or Values in Christianity

In this section, attempt will be made to discuss cultural traits or values in Christianity. We shall discuss language, dressing (clothing) and healing as case study in discussing cultural traits in Christianity as it affects Nigerian nation.

The culture of Christianity is a fusion of Jewish, Hellenistic, Graeco-Roman and European cultures. S.N. Adiele in P.A. Dopamu, Odumuyiwa et.al. (NASR 2003, P. 259-270) opined that a journey through the memory lane of the culture of Christianity shows that Christianity has encountered many cultures in her nearly two hundred years of existence. These cultures include Jewish. Greco – Roman, Hellenist, and European cultures. Though these encounters were not without incidents, the strength of Christianity had been in her ability to fuse with the cultural values of the converts. (Adiele in Dopamu 2003; 260). The good effect of the fusion of the Jewish, Greco-Roman and European culture with Christianity and its influence on African society deserve our attention here.

We shall consider three cultural traits among these cultures that influence Christian society in Nigeria. They are language, Dressing habit, and healing or medical science (orthodox medicine).

Language according to Balogun (2003; 281) occupies a unique position in a people’s culture. It serves as the means of inter personal communication among a group of people and binds the people together more than any other aspect of their culture. Language is the most resilient aspect of any human culture as it is not basically prone to changes as the case with other aspects of culture. Moreover, it assumes a central position in the enculturation process of any given society. Consequently according to Balogun, after Tylor’s definition of culture in 1871, importance was increasingly given to man’s ability of cultural traditions in which knowledge and experience were transmitted and accumulated through the use of language.

This importance of language vis-à-vis culture creates a problem for Nigeria in an attempt to evolve cultural identity for the country. There are not less than 250 languages in Nigeria with the result that each language represents a sub-culture. Each language with its sub-culture, yearns for development. The existence of so many languages and sub-cultures in the country makes Nigeria a pluralistic society. Consequently, any attempt to make any of the languages a lingua franca in the country will definitely compound her problem of cultural relativism. Some anthropologists uphold the view that cultural
relativism emphasizes an inherent dignity in every culture and that such dignity is absolute in relation to other cultures. If therefore, any Nigerian language were made the lingua franca for the country, it automatically conveys the status of the best culture on that language’s sub-culture, as well as on its ethnic group. Nigerians are definitely not ready for that if we go by the political wrangling that obtain among them. Christianity influence Nigerian culture in the sense that European language that is, English was introduced. The Bible was written and taught in English, before it was translated to Nigerian major languages. The official language of Nigeria is English; Nigeria has not been able to have a lingua franca.

Another area of cultural influence is clothing, clothing is very important to the Africans especially the Yoruba community. According to Fadipe 1970: 153 among the economic activities of the Yoruba people, weaving was very important. The people planted cotton thus, there was no much problem in getting the raw materials needed for their local weaving industry. The type of cloth which the Yoruba people wore was the locally made cloth called “Kijipa” or “Kitiponpon” (Adamolekun T. 1987; 95). This was a cloth specially woven for resisting cold during cold weather Fadipe called it “traditional loom cloth (1970; 153). It was an obligation for every woman to know how to weave cloth. Parents therefore, made it a point of duty to teach this vocation to their daughters. The people of Isanlu, Isin in Igbomina area for example had cloth that match different seasons and occasions. Oyedepo (1986); Daramola & Jeje, A. (1975; 93) ‘Kijipa or Kitiponpon’, the locally made cloth was very durable and could last for three years. The cloth was sown into different styles as the occasion demanded for it. The one for work, the one for play and the one for occasional outing were sewed (Daramola & Jeje 1975; 93). All the clothes worn before the coming of the Christian missionaries were locally made ‘Kijipa’. When the missionaries came, they brought their own European culture of wearing cloth. Their type of flexible cloth was introduced. As time went on, pupils in the mission schools no longer used the (local type of) locally made cloth for their school uniform again. Eventually, all schools changed to European type of cloth. This type of European mode of dress became acceptable to Nigerian society. Today, only few people wear Nigerian locally made cloth. Perhaps you can only see it with old men or young people at either marriage or funeral celebration. The European type of sewing cloth was introduced by the missionaries and colonial masters. Traders travelled far and wide to buy these ‘Kijipa’ or kitiponpon’ cloth for sale. Eventually the local kijipa or kitiponpon is displaced or replaced with the European type of dress.

Medical science or European Healing method was another area where Christianity influenced African culture. The missionaries built hospital along with education. Orthodox medicine was introduced. Before the establishment of Christian mission, traditional medicine was widely used. It was difficult for the mission to convince the converts against the use of the traditional medicine, Awolalu (1979; 72-73) has described what traditional medicine means to the people when he said:

By medicine, we mean any substance or substances that are used in treating or preventing disease or illness; in other words, medicine as conceived by the Yoruba involves medicament as well as prophylactic.

Thus, the professional skill of a medicine man includes curing, alleviating and preventing diseases as well as restoring and preventing health. In many cases, he is a diviner, a priest as well as a manufacturer of charms. He has the means of ascertaining the causes of ailment, misfortunes and death. He employs different means including
herbs, plants, leaves, roots, barks, animals, birds, skins, bones, rings, brooms, pieces of thread, needles and minerals to do his “business” in almost all cases, he has some magical words to go with his preparation. And so, unavoidably, magic finds a place in the practice of medicine. The people believe that medicine have extra mysterious power which can cure or prevent ailments.

Apart from schools, the missions came to exert some impacts on the Nigerian community through hospitals. By 1914, there had been founded the C.M.S. Iyi Emi Hospital near Onitsha; the Baptist Hospital in Ogbomoso; the Wesleyan Guild Hospital in Ilesha and the Sacred Heart Hospital of the society of African Missions in Abeokuta (Ayandele 1960: 343). But these medical centers did not being to flourish until after 1914, when European medical science came to be progressively appreciated by the rapidly swelling number of Christian adherents. For a long time, (Ayandele 1966: 343) opined that “European medical science did not commend itself to large sections of the Nigerian population because the people, as in many other things, were suspicious of European medical skill and continued to have a much greater faith in indigenous medical facilities”.

It is to be noted that though orthodox medical science have come to stay in Nigerian society, inspite of the medical facilities, the people still use traditional medicine in addition to western orthodox medicine. Both orthodox and traditional method of healing are taught in some Nigerian Universities Medical Schools today. It is important to note that the three cultural traits of language, dressing habit, and western orthodox medicine have become part of Nigerian culture today.

What are Christian Moral Values?

Christian Moral Value according to (Akanmidu 1993:165) “refers to the attitude of appraising behaviour considering the worth, merit, and importance of such in the light of Christian ideals”. It also refers to beliefs that remain basic to Christianity which turn to become values. As far as Christian moral values are concerned, the worth, merit and importance of any moral judgement of the Christian often finds justification in the underlying beliefs of Christianity. The Christian moral values exist only because Christianity exists and not that Christianity exists for them. The moral values of Christianity to humanity are determined by the ways the character of people are influenced by it. Christian moral values, by definition according to (Akanmidu 1993:165) “are values which take source from the doctrines of Christianity and have standards in the moral authority of God”. The religion that has no moral value to people is one that puts its adherents in contempt and has no articulated pattern upon which its adherents can attach meaning to their lives and other people’s lives. Morality in Christianity derive its content and sanction from God. Morality in Christianity is a system of conduct that conforms to standards of right conduct or behaviour sanctioned by or resulting from Christian teachings (Osun 1992, 11). The connection between moral rectitude and Christian (moral) teaching jointly constitute the basis upon which Christian moral values are acknowledged. Love, obedience, and honesty are taken as case study for model of Christian moral values in this paper.

Christ as Model of Christian Morality

It is accepted that Christ’s life, his interactions with others, and his teachings all sum up to constitute a biography of perfection. As it has been widely represented without any known opposition, Christ, lived “the only perfectly unselfish life ever seen on earth”
Christ’s moral perfection has become a moral pattern for others (especially the adherents) to emulate. It is this sense that Christ has become a model of Christian morality. Christ remains a permanent model of Christian morality because of the high moral standard Christ has set, and Christ’s moral teachings which were reproduced in practice. Christians believe that Christ was fully man like any human in all things except sin. This important exception makes the morality of Christ to remain a permanent pace-setting phenomenon. Another thing that makes him (Christ) a permanent pace-setter is his moral teaching. Take for example the teaching of Jesus Christ on Love. Christ’s own estimation of love is in the first instance related to love of self and then radiates to the love of others. This reflects clearly in the celebrated “Golden rule” which stipulates that ‘Love others as yourself’ (see Matt. 9.19:19) and His teaching that “Whatever you wish that men would do to you, do so to them (Matthew 7:12).

Underlying the Golden rule doctrine is an affirmation of love for self from which one can love others. Paul Tillich interprets the golden rule to mean that Christ “presupposes, without saying it directly that there is a natural self-affirmation in a person which should not prevent the affirmation of others” (P. Tillich 1965, 206). This is the sense we have taken love to begin with self before it radiates to others through us.

The second point on Christ’s teaching on love is loving not only one’s neighbour but one’s enemies (Matt. 5:44). The obligation to love will serve positive roles only among person of like manners. On this account love will become a fraternal issue. This point in itself demonstrates high morality. Although this is true, the extension added to this with the teaching that enemies should be loved looks morally superegotary even to the Christian. The morality in this form of love does not predicate on the anticipation for gain but on the struggle to be of high moral rectitude. The intrinsic worth of loving one’s enemies has much to do with helping the enemies themselves to understand the attraction or beauty inherent in loving. The one who is loved when he/she knows to be an enemy is best placed in a position to contrast between what it means to be loved from what it means to be hated. This point makes Christ moral standards retain its high class of morality. The ideal of conduct sets by Christ for Christian is best explained when teaching in line with practice. There is no gainsaying that the inadequacies that bedevil people’s character today have much to do with their teaching good morality but living differently from these teachings. Persons who cannot live what they teach do not mean to say that their teachings have moral merit rather, they mean to say that morality contains some ‘selfless’ services that lack material rewards. It requires some degree of sacrifices before the teaching of morality can mutually co-exist with mode of living. The important point inherent in the mutual co-existence of moral teachings and practical living is the factor of sacrifice. The by-product of moral modality is teaching virtues and living the virtues practically. It is the combination of the uniqueness of Christ’s teachings which outshines all forms of moral standards and the existing coherence between what Christ taught and lived that make him a moral model to Christians. The Christina delights in the fact that Christ is the moral standard of Christianity because the standard gives the Christian inner sense of duty. Coupled with this is the conviction that the sacrifices that are attendant pursuing the mark of the standard have the promise of future reward. The leadership of Christ does not work itself out into some forms of vague religious feelings, rather it expresses itself both in thought and practice. Christ is the basis of Christianity without whom Christianity does not exist. He gives it (Christianity) identity and guarantees its perpetuity.
The Nature of Moral Values in Christianity

There are different kinds of values. In their differences the underlying factor that determines the idea of values is the factor of quality. However, what formulates the concept of quality is explained both intrinsically and extrinsically as related to the assessor. In this regard, value(s) carry the meaning of the judgement of persons appraising an object which reflects people’s feelings and desires. When the assessment of the values of an object comes out of the interests of people, there is often little or no ground for agreement on what has values. The sense in which we are conceiving values from the point of view of human judgment relates to personal estimation of an object. More difficulties ensue when what is desired may not have value and vice-versa. Akanmidu (1990: 168) takes notice of this difficulty when he says in quoting Titus that:

“not all things that are desired are valuable, and some things that are not desired by many people today are undoubtedly valuable”.

The values which breaks away from human estimation of an object and speaks to principles which are beliefs that become appreciated standards by persons of some common identity are less difficult. The moral values that constitute standards that are seen. As moral in Christianity are in reference to behaviour, standards and principles that are regarded morally valuable by Christians. The Christian moral values do not rest only on human judgement but also in the judgement of God.

The nature of moral values that begins with Gods is Holy, inerrant, and pure. Human behaviour, standards, and principles that willfully negate biblical injunctions are sins. Such cannot please God some actions may satisfy the wishes of men and may be good for them but it is a sin. For example, look into a given situation in which wealth is acquired through falsehood or perhaps, through roguery. If in the name of deliberate sense, the person decided to tithe the money and pass it to the church as his contribution to church growth, some complex issues will come into the matter. This kind of behaviour as we are willing to state satisfies human interest but does not please God. From this we know that it is not all actions that satisfy human interest that are acceptable to God. Still, the wealth acquired through hardwork and also tithed is free from ‘sin’ from all Christian classification. This last example depicts a situation in which the satisfaction of human wishes satisfied the side of God.

From the above two alternate examples, we can develop a hypothesis that “morality is a two-way pattern; the pattern of satisfying man in the process of satisfying God. Two patterns of interest is seen in this hypothesis namely: the pattern of God’s interests and man’s interests. This not withstanding, one important irony inherent in this hypothesis is that the moral action expressed to target man’s interests as a goal is a sin, whereas the one expressed to target God’s interests as a goal is not a sin. This irony is very true in the acknowledgement of which action is sinful and which one is not in Christianity. This has been the case because there is a restatement in Christian ethics that ethical experience includes in it eschatological motifs. Since God is ultimate in eschatological matters and whose disposition is also final in it, man’s interest alone in moral matters cannot be ultimate in moral judgement. Christianity believes that God has the final say, indeed the very “last authentic judge who determines innocence from guilt” (C.T. Apata 1993, 53). If as the final judge, before who nothing can be hidden, then it can be argued that actions that expunge God’s interest in content lose their moral significance.
The whole argument here aims at showing that both the interests of God and man remain one way of identifying the nature of moral values in Christianity. In determining moral values in Christianity, there is no going round the interest of God, for God’s interest remains focal for such considerations. In essence, all human behaviour, standards, and principles that are cynical to God’s interests have no moral values. Therefore, God’s interest are linked with the value the places on every human being and not that man’s choice to behave morally was going to improve his own well-being.

The Content of Christian Moral Values

The claims of Christ are identified as the model of morality in Christianity. These claims which collectively form an important part of Christian beliefs are such that identify Christ as the same personality as God. Christ says that “I and the father are one: (John 10:30). From this, Christ makes it abundantly clear that to see him, is to see God (John 12:45; 14:9); to believe in Him is to believe in God (Mark 9:37); to hate Him is to hate God (John 5:23). The relevance of these claims to the idea of content is that in Christianity, Christ in God remains the source of Christian moral values. It follows from this that the source of Christian moral values is purity since they all take source from God who is holy and cannot be wrong.

This observation accounts for one important aspect of the content of Christian moral values. This is holiness, or purity. This is to say that Christian moral values consist of pure character and pure principles. This point which drags from the claims of Christ and on the inerrancy of Christian moral values cannot be faulted without granting that God’s purity is in doubt. The point can only be doubted when it is argued that Christ and God are not one and the same. This kind of doubt again requires that it is established that Christ was not saying the truth about His claims to be one and the same as God. If Christ said the truth, the doubt is apparently overruled and if he has told lies in His claims, then it remains to show with evidences that he has told lies about his claims. It seems reasonable to say that the life of a liar is always characterized with coincidences that conflict with the truth.

Since God is the source of Christian Moral Values and ‘moral finesse’ has intimacy in God, then all moral values that take source from God have no parallel in any human society. The highlight of the content of Christian moral values is purity, purity of standards, of character and of principles.

The Principle of Moral Value in Christianity

The focus in this section is the principle of moral value in Christianity. As we have pointed out above, moral values in Christianity cannot dispense with God. It has become a tradition in Christianity that Christian morality is a revealed morality. This tradition distinguishes Christian morality from some mere forms of religious morality. Christian moral values are standards which have been brought to be by a transcendent being who is external to human beings. The Christian conduct is rooted in faith in God and sustained by divine grace. Therefore, Christian moral values are not borrowed from the world, but proclaim a ‘non-conformist’ morality over against the “ethics” of the world. The real problem arises when a Christian deviates from the principle of trusting in God for spiritual sustenance.

The Christian is united with Christ and Christ is the one who shapes the conduct of Christian since it is in Him alone that grace to sustain the Christian resides. The principle at work here is that when the life of a Christian reflects Christian moral values,
it is by the grace of God. Therefore, the attainment of Christian moral values is not dependent on idealistic efforts nor on intellectual grasp but, on the powerful outflow of the spirit. Christian moral value is transformist.

What is moral value in Christianity reckons with helping people as much as possible and at the same time constrain the urge to expect corresponding help. The principle of helping and not expecting help back does not refute receiving help from those you have helped before, should the need arise. The point in it is that morality should not be reduced to expecting because you have given. The ways in which this principle differs from the principle of “rub my back, I rub you back” or “help me, I help you” are essentially three: first, the principle of not expecting back as a result of giving, inculcates in us not to see our good moral conduct as some investment that aims primarily at achieving selfish interest. Second, the principle which enhances the possibility of engaging in some widespread moral attitudes extended to as many people that need help. This enhancement disengages the attitude of giving help only to those who by all estimation can pay back. Third, the principle which disallows morality to be up for sale since morality becomes the reserve of only those who can bargain higher in return.

The grounds upon which the principle of helping people and constraining the urge for corresponding help underlying Christian moral values contrast with the principle of rub my back makes the latter principle looks immoral. There can be no doubt that the facts apparent in the contrasting principles guarantee some patterns that are capable of constraining moral growth.

Contextualization or Application of Moral Values in Christianity for National Development

This section discusses the adaptation or application of Christian moral values in shaping character for development in Nigerian society. Moral Values in Christianity are numerous. It includes among others love, obedience, honesty, respect, contentment, life, truth, chastity, humility, sympathy, cooperation and steadfastness. The values discussed here are limited to love, honesty, and obedience as a case study.

The Golden rule of love as a basic teaching of Jesus has been discussed earlier in this paper, Jesus taught that whatever you want people to do to you do the same to others (Matthew 19:19; Matthew 7:12). Love in our sense or application here is not only romantic attraction or having strong feeling of caring for and liking someone, but loyalty. “It is to have a strong feeling of loyalty to your country, institution, neighbour (see John 15:12, Matthew 19:19; Matthew 7:2), and whatever you do. In a society where love radiates, development, understanding, respect, peace, and progress will reign. Jesus in his moral teaching said “Love your enemies do good to them; love one another” (Luke 6:27; John 15:12). If this injunction of Christ on love is inculcated in every citizen in Nigeria, the country will be better of than what it is now.

Obedience, another moral value deals with subjecting oneself to constituted authority. Obedience is doing what you are told to do. To be obedient is to always do what you are told to do by your parents or someone in authority. The Bible teaches obedience to constituted authority (Heb. 13:7; II Cor. 2:9). It is expected of a servant to be obedient to his master (Phil. 2:8; 6:5; Titus 2:9). If this attitude of obedience is inculcated into the working ethics of Nigeria, there will be development and progress. Obedience builds, while disobedience destroys; this was the case of Saul when he was
sent to destroy the Amalekites (I Sam. 15:10-16). Saul disobeyed the instruction given to him by Samuel (I Sam. 15:3). He was therefore rejected as King.

Honesty as moral virtue taught in Christianity is the quality of being honest. Someone who is honest does not steal or lies. The early Christian church appointed men of honest report to position of deaconship to serve the community (Acts. 6:3). Whatever things that are true and honest are expected of Christians (Phil. 4:8). Christians are advised to provide things honest in the sight of all men (Roman 12:17; II Cor. 8:21). The practice of moral values in Christianity especially in the area of love, obedience, and honesty is an asset to the development of any nation.

Violation of honesty either in the form of stealing or of cheating is a great violation of African value. Luke Mbeto (1999: 41) describes it as the original sin in traditional Igbo ethics. Africans, according to I.B. Ewelu, are supposed to be stewards of African values, especially such values as sacredness of human life and honesty. Many of the leaders in African society have mutilated the values of human life and honesty. Some, through their paid agents, have turned into assassins, kidnappers, dupes under the able of 419 (in Nigeria). In a society where the leaders connive with robbers and dupes to flout the value of honesty, one would not be surprised if duping and cheating have become the major ways of becoming rich overnight. If such a leader becomes the head of his country, what type of society would he lead? Or what quality of leadership will he give to his people? In a country where people publicly and openly bribe their way into the Presidency or leadership of a State, what importance will such a leader and his subordinates attach to the value of honesty and integrity? In a society where leaders embezzle worker’s salary and loot public treasury, how can he control the poor workers that are bent on bribery and corruption in order to keep life going or make two ends meet. Many African leaders have contributed a lot to creating a situation where there is a total lack of value of honesty and probity. In a country for example, where leaders kill at will to protect both their business and selfish political interest, definitely the value of honesty and human value is lost there. It is our opinion that the value of honesty is a building block for a decent and stable society.

Respect and honour go together. The values of respect and hour as moral virtues are important for the development of any society. The Bible teaches respect and honour to elders and constituted authority. (see Ex. 20:12, Lev. 19:32). Paul urged Roman Christians to show respect to whom it is due while Peter advised believers to respect everyone, love fellow-believers, fear God and respect the Emperor” (Rom. 13:7, I Peter 2:17). Honour is the moral principles and standards of behaviour that make people respect and trust someone else. In a society where respect and honour reign, lawlessness, corruption, bribery, falsehood and all sorts of crimes do not exist. The major problems facing Nigeria are respect for constituted authority, the rule of law and honouring court injunctions. The wave of crimes in Nigerian society increases due to lack of respect, honour, regard, and obedience to the rule of law and constituted authorities and their agencies.

Conclusion
Attempts have been made in this paper to discuss culture and moral values in Christianity. The cultural traits of language, dressing habit, western orthodox medicine, and moral values of love, obedience, honesty, respect, and honour are taken as case study in this work. The work has established the fact that moral values in Christianity takes
roots in God through the teaching of Jesus Christ. The work has pointed out the nature and extent of moral value in Christianity. It also discussed the principle of Christian moral values.

The forms of attractions which have moral values in Christianity are those that are unselfish in determination, seek to improve human welfare and in the process achieve all these within the interest of God. Apparently, moral values in Christianity emphatically include a combination of two interests; namely God and man’s interest. The practice of moral values in Christianity especially in the area of love, obedience, honest, and respect constitute asset to the development of any nation.

It is the opinion of the paper that language, dressing habit, and healing (i.e. Western orthodox medicine) among others are traits of cultural values while love, obedience, honesty, and honour as Christian moral values are catalysts capable of transforming societal moral standards in Nigeria.
References

1. R.A. Akanmidu ‘Religion and Morwality’ in Journal of Arabic and Religious Studies, University of Ilorin 1990 Vol.7 p.31
7. J. O Awolalu Yoruba Beliefs and Sacrificial rites


The Importance of Total Quality Management and Leadership Communication to Enhance Islamic Quality at Malaysian Civil Service

Assoc. Prof. Dr. Raja Roslan Raja Abd. Rahman
Dr. Kalthom Binti Husain
Hassan Bin Adnan
Mohamad Zahir Bin Zainudin
Norazlina Mohd. Darus
Noor Watee Binti Rahman

Abstract
In the leadership communication styles, most of the middle management positions such as managers, assistant managers and those at executives’ level are practicing good leadership communication via enhancing the Islamic quality at Malaysian Public Service. A two-way communication does exist among the staff especially in meetings, discussions and working in team. A good leadership communication among the staff and their involvement are important in Malaysian Civil Service in order to achieve the total quality management objective. Reason being is that the leadership communication is the most important tool and vital part in all organisational operations. Leadership communication could be the basis for understanding, cooperation, teamwork and positive action, which without it such goals would be undermined at Malaysian Civil Service. Two-way communication gives more opportunities to the staff to be involved in discussions and meetings which create the spirit of togetherness in the organisation. The Total Quality Management (TQM) has positively affected job satisfaction, the employees' ability to work together, improve the staff work and builds leadership communication at Malaysian Public Service. Obviously, provide a significance relationship between leadership communication and quality management in Islamic perspectives on job satisfaction among the staff at Malaysian Public Service.

Keywords: Total Quality Management, Leadership, Leadership Communication, Job Satisfaction, Malaysian Public Service.
1.0 Introduction

The Malaysian Public Service formerly known as the Malayan Civil Service (MCS) has assumed a significant key role in the economic and social development of the country. Shaped by the country’s historical development and its social and political institutions, the Malaysian Public Service has had a remarkably interesting record. During the pre-independent period, the British introduced structures and practices to help provide various basic services to the public in order to maintain law and order which were aligned to the economic and political activities of the time. Those structures and practices set the foundation of the Malayan Civil Service (www.pmo.gov.my/ksn/?frontpage/content/1995/2015).

With the aim of progressing towards self-determination after independence, the Malaysian Public Service has undergone many changes to re-orientate and evolve into a civil service structure that is relevant and progressive through the introduction of planned improvements and innovations to cope with the developments at that time as well as future needs. To date, the Malaysian Public service has staff strength of 1.2 million employees covering 28 schemes of service including the Federal Public Service, the State Public Services, the Joint Public Services, the Education Service, the Judiciary, the Legal Service, the Police and Armed Forces (Tan Sri Datuk Haji Arshad, 2008).

Since independence the Malaysian public service has assumed a multitude of roles in meeting the needs and expectations of the public and other stakeholders. The public service, with the strength of 1.2 million members, has assumed the roles of negotiator, controller and facilitator. In addition, it has also become the pace setter and the change agent for the country. In assuming these roles the public service needs to perform numerous duties which include delivering services, handling public interest, ensuring public security and safety, and community programmes (Wan Mansor Abdullah, 2005).

Significantly the Malaysian Civil Service has over the years carved its name and is recognised as one of the best in the regions. It is credited for playing a key role in Malaysia’s development and modernisation. Generally, the governmental efforts made during the past decades, have produced favourable impacts in improving governance and the quality of services in the public sector.

In its efforts to meet the expectations of both the National Vision Policy and the National Mission spanning from 2001 to 2020, the Malaysian Public Service continues to redefine itself in these challenging times. Through the various tag lines such as “No Wrong Door Policy”, “Business is not as Usual” and the creation of PEMUDAH for improving public service delivery system by reducing bureaucratic obstacles and providing productive, creative and innovative services, it aspires to become a strong partner with the different sectors in creating wealth for the nation. All in all the Public Service has sought to be world-class and meet international benchmarks of performance and excellence Dato’ Seri Syed Hamid, 2008)

2.0 Problem Statement

Leadership is the most important part of management. Leadership is stirring people so that they are moved from within. It is stating goals that excite [people] and lift their sights. It is setting the personal example, putting enthusiasm into the operation, and communicating with workers both ways, listening as well as talking at Malaysian Civil Service. Leadership is a rewarding merit and penalizing demerit, honestly and fairly. It is the right combination of these [qualities] that will lead people to do the work that makes a
business successful because they want to [Goble, 1972]. Leaders must understand the difference between leadership and authority. Authority is delegated from those above in the chain of command, whereas leadership is earned from those below and from peers [Rosenblatt et. al, 1982]. In an organization, the utopian situation is for the individual who has been delegated the leadership role from higher authorities to be leadership role from those below and from peers. Above all, leadership is a position of servant hood [DePree, 1992]. The Japanese leader recognizes that rank does not confer privileges, but that rank entails responsibilities [Drucker, 1992].

Leadership is one of the most important aspects in our life cycle. As we all noticed that leadership communication is used in all elements at Malaysian Civil Service for example economic, social, political, management, marketing, and many others. In leadership it consists all the needs to manage your worker or your subordinates in an organization. Here the quality and leadership move together towards their goals. For the past thousands years, philosophers, historian and social scientist contemplated the phenomenon of leadership and their quality. The Ohio States of University have made a research on this case since the past 40 years. This lead to understanding of leadership and the quality as a set of behavior.

Leadership in quality at Malaysian Civil Service means that all the decision makers (leader) turn to identify and define the skills and the abilities critical effectiveness at all level in a quality organization. The importance of this concept is to translate these criteria along with the other quality principles and practices into a set of leadership competencies. This is useful in selecting development and rewarding in quality organization. It involves all the quality principles (the collective capacity of the organization) and leadership practice (individual skill required for leadership success like communication) at Malaysian Civil Service. So, the research question in this study were: What is the importance of leadership the approaches of leadership at Malaysian Civil Service, Why the effective communication skills and quality in islamic management importance at Malaysian Civil Service, What is importance of Total Quality Management (TQM) and Leadership Communication at Malaysian Civil Service, How the behaviour and attitude modification at Malaysian Civil Service, and What are the Levels of Leadership Communication from the Islamic Perspective at Malaysian Civil Service?

3.0 Objectives

3.1 To understand the importance of leadership at Malaysian Civil Service.
3.2 To determine the approaches of leadership at Malaysian Civil Service.
3.3 To understand the importance of effective communication skills at Malaysian Civil Service.
3.4 To know the quality in islamic management at Malaysian Civil Service.
3.5 To understand the importance of Total Quality Management (TQM) at Malaysian Civil Service.
3.6 To know the importance of Leadership Communication at Malaysian Civil Service.
3.7 To understand the behaviour and attitude modification at Malaysian Civil Service.
3.8 To know the Levels of Leadership Communication at Malaysian Civil Service.
3.9 To understand the Leadership Communication from the Islamic Perspective at Malaysian Civil Service.

Literature Review

Leadership

Leadership is the heart and soul of an organization at Malaysian Civil Service. No one really manages an organization by shuffling numbers or rearranging organizational charts. What is really managed in an organization is people! Leadership is the ability to inspire people to work together as a team to achieve common objectives. People want to follow an effective leader [Geneen, 1984]. No leader can prove to a board of directors show much leadership contributes to the bottom line in the success of an organization at Malaysian Civil Service. However, leadership is, no doubt, the single most important ingredient in organizational management, and good leadership which inspires people to excel contributes as much as 80-90 per cent to an organization’s success [Geneen, 1984]. This leadership can be exercised only through quality communication [Well and Spinks, 1992]. Leaders are people who are able to express themselves fully; they know what they want, why they want it, and more important, how to communicate what they want to others to gain co-operation and support [Bennis, 1989].

Total Quality Management

An emerging school of management thought today is the total quality management (TQM) approach, emphasizing vision- and value driven leadership. This approach holds that an organization elevates “customer focus” to a major element of its strategy. It presumes that all people in an organization should strive constantly for the highest quality productivity possible [Well and Spinks, 1992]. All employees must be dedicated to this commitment to excellence effort, and more important, senior management must lead this quality effort [Walton, 1990]. The concentration is on performing the best job possible on the first attempt and on working with any project as a team until a high quality result is accomplished.

Total Quality Management can be defined as a meeting and striving to exceed the requirements of the customers at Malaysian Civil Service. Another definition is providing the customer with quality products and services at the right time and at the right place. According to Adnan (1996), TQM is not a program, it is a transformational process of bringing positive change that is a positive organizational change for:

a. Excellent performance
b. Comprehensive and balanced human development.
c. Everybody in the organization doing the right thing rightly.
d. Customer both external and internal is satisfied, confident and loyal.

To produce a quality service requires a quality process at Malaysian Civil Service. A quality process can be defined as service delivery operation that utilize such as accepted TQM processes as employee empowerment, employee education and training, solicitation of employee suggestions for improvement, utilization of teams for problem solving and for getting work done, utilization of the latest information and communication technology, utilization of concurrent engineering where appropriate, development of focused units, focus on cycle time minimization, constant search for productivity improvements, and other aspects of TQM (Pegels, 1995).
Effective Communication

Most leaders do not communicate effectively. They typically underestimate the importance of communication to their success. Consequently, they often fail to communicate passionately their vision, goals and expectations, elicit and act upon employee input, consistently share information with employees, maintain sufficient information exchange with peers, customers and other stakeholders, and regularly reinforce the goals and employees’ achievements at Malaysian Civil Service. As a result, employees frequently feel uninvolved and uninspired. They are unlikely to commit fully to their leader, to key goals, or to their organization. Productivity and retention suffer, and customer loyalty weakens.

Islamic Quality Management

Islamic values provide a conducive framework for Quality Management with appropriate techniques, approaches and management ethics. The Islamic concept of brotherhood and sisterhood to each other is well defined. The distinction of race, colour, tribe, caste and language are not valid criteria for superiority for it is quality behaviour that matters at Malaysian Civil Service.

All people are entitled to an ethically right behaviour irrespective of distinctions of caste, creed, race and geographical locations. This has positive implications on attitudes towards one another and this motivating factor of musawat (equality) given by Islam impacts a strong sense of responsibility and belongingness. And this feeling further fosters a culture and incentives for continuous improvement and commitment to work at Malaysian Civil Service. Islam considers work as ibadah (deed).

Leadership Communication

Leadership communication consist of those messages from leaders that are rooted in the values and culture of an organization and are of significant importance to key stakeholders, such as employees, customers, strategic partners, shareholders, and the media at Malaysian Civil Service. These messages affect the vision, mission, and transformation of an organization. The chief intention of a leadership message is to build trust between the leader and her or his constituency at Malaysian Civil Service. According to Baldoni (2003), traits of leadership communication reflect:

i. Significance. Messages are about big issues that reflect the present and future of the organization (e.g.; people, performance, product, and services)


iii. Consistency. Message exemplify stated values and behaviors.

iv. Cadence. Messages occur with regularity and frequency.

In its simplest form, leadership communication is communication that flows from the leadership perspective. It is grounded in the character of the leader as well as the values of the organization. It is an expression of culture as well as an indicator of the climate, likes openness, integrity, and honesty at Malaysian Civil Service. Leadership communications emerge from organizational culture and values as from the values of the leader. Their ultimate aim is to build, or continue to build, a relationship between leader and follower. The purpose of leadership communication is to build (or establish) trust between leader and follower. This trust is essential to leader’s credibility at Malaysian Civil Service.
There are many purposes and types of leadership communication. According to Baldoni (2003), each of the emerges from a leadership action that is communicated from the point of view of leader, such as on doing what is beneficial for the organization and the people in it. Leadership communications are designed to engage the listener, gain commitment, and ultimately create a bond of trust between leader and follower. They also do something more such as drive results, enabling leader and follower to work together more efficiently because they understand the issues and know what has to be done to accomplish their goals at Malaysian Civil Service.

4.0 Methodology

4.1 Qualitative Research

In defining the qualitative research, Creswell (1998, 2007) argued that it is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem in the natural setting. While, on the other hand Ghosh and Chopra (2003) defined qualitative data as the form of descriptive accounts of observations. In real sense, qualitative research is used to gain deeper understanding of the research concern, thus it is common in social and behavioral sciences as well as among researchers interested to understand human behaviors and functions (Ghauri & Grønhaug, 2005). Qualitative methods, indeed allow researchers to explore and probe deeply into attitudes towards research issue; hence it is quite suitable for studying organization, groups and individuals.

According to Myers (2009), qualitative research is good for exploratory research, when the particular topic is new and there is not much previously published research on that topic. Researcher also added that studying any specific subject in depth, qualitative research is the best. The most common forms of qualitative research methods include such as participant observation, interview, and focus group discussion used in the literature (Myers, 2009). According to Lincoln and Guba (1985), qualitative method is appropriate to gain a ‘rich’ understanding of a phenomenon. In the present study, researcher used interview method because this technique allows participants to describe their perceptions, and also allow the researcher to question the participants directly about how they understand their decision. Salkind (1997) argued that interviews are helpful to get information that might otherwise be difficult to come by, including first-hand knowledge of people’s feelings and perceptions. Thus, this study has been designed as library research approach to understand the importance of total quality management and leadership communication to enhance islamic quality at Malaysian Civil Service.

5.0 Findings

5.1 Importance of Leadership at Malaysian Civil Service

Leaders understand that people is the most important component in an organization at Malaysian Civil Service. To make people feel as though they are accomplishing something and not just “putting in time”, a leader must work with people and not against them. A leader needs to create an image which excites people and which inspires excitement at work [Goble, 1972]. Delegating responsibility is as important a gift to followers as it is central to employee participation [DePree, 1992]. Since the beginning of time, people have been trying to determine whether one best approach to leadership exists. The best approach appears to vary by culture and environment, but agreement
exists on some basic concepts. Leadership is a major component of the nation’s economic system and its society. Quality leadership leads to greater productivity, which in turn produces a higher standard of living for the nation’s population.

What is really managed in an organization is people! Leadership is the ability to inspire people to work together as a team to achieve common objectives. Explores on several approaches to leadership include the trait approach, the style approach, the effectiveness versus efficiency approach, the contingency approach, the power approach, the function approach, the competence approach, and the TQM approach. In addition, the role of leadership in behaviour and attitude modification and the different leadership tasks of upper-level, middle-level, and lower level leaders are looked at in Malaysian Civil Service.

5.2 Approaches to Leadership at Malaysian Civil Service

Although organizational communication consists of issuing orders and giving instructions, to some extent, people must not think of leadership as “driving” employees to perform given tasks at Malaysian Civil Service. In today’s world, successful executives inspire, not force, their employees. Quality communication is the avenue by which leaders clarify their visions and foster participative management within the organization [DePree, 1992]. Some approaches to describing leadership are [Well and Spinks, 1992]: the trait approach; the style approach; and the effectiveness versus efficiency approach; (1) the contingency approach; (2) the power approach; (3) the function approach; (4) the competence approach; (5) the total quality management approach.

5.2.1 Trait Approach

The trait approach explaining leadership assumes that leaders are born, not made. Some people, because of their charisma and other personality traits, seem to be natural born leaders whom others will follow automatically. People possessing charismatic traits need to learn to use and develop those leadership traits consciously. Attempts to isolate leadership traits, however, have established that many successful leaders do not possess a common body of personality traits which explain their leadership abilities at Malaysian Civil Service. In fact, many great leaders of the past seem to have had different personality traits. Quality leadership depends neither on charisma nor on personality traits. Dwight Eisenhower, George Marshall (originator of the Marshall Plan), and Harry Truman were quality leaders, yet none possessed charisma [Well and Spinks, 1992].

5.2.2 Style Approach

The style approach assumes use of leadership styles ranging from authoritarian to democratic, including several points in between. The authoritarian leader makes decisions and proclaims these downward to employees. However, the democratic leader encourages group decision making at Malaysian Civil Service. Between these two extremes can be found several leadership styles which use varying degrees of authority. All leaders, in actuality, use various styles under differing circumstances. One is simply dominant, or frequently used [Well and Spinks, 1992].

5.2.3 Effectiveness versus Efficiency Approach

Some authorities consider leadership from the standpoint of focusing on effectiveness as opposed to efficiency. The effective leader achieves desired results,
whereas the efficient leader produces a large output from a given input at Malaysian Civil Service. For example, a project manager concludes a project by delivering its product on time and on budget. A manager of an operating arm of a company might produce half again the raw product of a peer business unit elsewhere in the organization, thereby increasing profitability [Well and Spinks, 1992].

5.2.4 Contingency Approach

The contingency approach to explaining why some leaders emerge successful contends that the style of effective leadership is contingent on the nature of the situation at hand at Malaysian Civil Service. This theory assumes that when circumstances are highly favourable or highly unfavourable, an authoritarian leader is more successful. However, when circumstances are neither highly favourable nor highly unfavourable or when a mixture of favourable and unfavourable circumstances exists, a democratic leader tends to be more successful [Well and Spinks, 1992].

5.2.5 Power Approach

Leadership can also be described as the exercising of various kinds of power at Malaysian Civil Service. Reward power is the power of the leader to bestow tangible rewards on followers. Coercive power is the power to punish, such as the power to fire, demote, transfer, assign undesirable tasks, and withhold desirable outcomes. Legitimate power is the power associated with the individual’s position in the organizational hierarchy and not necessarily with the individual per se. Expert power refers to the extent to which followers perceive the leader to possess certain knowledge and abilities and to possess the capability to use these towards desired outcomes [Well and Spinks, 1992].

5.2.6 Function Approach

The function approach to explaining leadership views leadership as the cumulative performance of many functions, including motivating personnel, creating favorable public relations, or developing plans at Malaysian Civil Service. Leadership ability is assumed to be the capability to perform certain functions well. One leader may perform all the necessary leadership functions in a given situation, or many leaders may perform various functions [Well and Spinks, 1992].

5.2.7 Competence Approach

Another strategy to interpreting leadership is the competence approach, including a scribing the phenomenon of leadership to the exercise of competence at Malaysian Civil Service. Bennis [1989] conducted a two-year study to isolate the basic competences of leaders. He undertook the study of leadership assuming it is the central ingredient to the way progress is created and to the way organizations develop and survive. After interviewing 90 leaders, five major competences slowly emerged as significant. Management of attention is the ability of leaders to get others to listen to their intentions and to get others to focus on their visions and their agendas. This ability engenders reciprocity; that is, it also enables leaders to focus their attention on others. Management of meaning is the ability of leaders to convey their goals, desires, objectives to others clearly, effectively, and meaningfully using both words and symbols.

Management of trust requires that leaders remain constant in their views and that they have commitment, integrity, reliability, stability, and predictability as these qualities...
so strongly affect followers at Malaysian Civil Service. Trust is developed overtime through repeated interactions. A leader’s actions and a leader’s professed beliefs must be congruent, as consistency is necessary for trust to develop [Drucker, 1992]. Management of self recognizes that most leaders have strong egos, high self-regard, and high regard for others. At an early age these leaders knew their strengths, and throughout the years they continued to nurture these strengths. “The Wallenda factor” is a term used to mean that successful leaders always look for challenges; they concentrate on succeeding and not on failing; they enjoy taking calculated risks [Bennis, 1984].

5.2.8 Total Quality Management Approach

For TQM to be successful, its results should include delighted customers, empowered employees, higher revenues, and lower costs at Malaysian Civil Service. Rewards are structured to benefit quality performance rather than quantity of output [Well and Spinks, 1992]. What part does quality communication play in the overall quality picture? TQM clearly emphasizes quality of products and services [Thurow, 1992]; but, what about the quality of communication? Communication is the lubricant used to turn the wheels in any leadership role. Perhaps, the term “Big Q” could be a label for the enlarged scope of managing for quality, including quality of communication. If this were the case, benchmarking techniques could be used for measuring a company’s communication processes against those communication processes used at Malaysian Civil Service renowned as leaders in their own communication functions. In addition to the leadership approaches described above, other approaches to leadership have been described in management literature.

5.3 The Importance of Effective Communication Skills at Malaysian Civil Service

Managers are likely to spend most of their time engaged directly in some form of communication process. Diwan (1990) have done a research on how managers spend their time. It was established that on average the 160 managers in her sample spent two-thirds of their time working with other people. The rest of their time was mainly engaged in preparing information reports. It seems reasonable to assume that most managers spend the bulk of their working day in some type of communication activity at Malaysian Civil Service.

Even the 33 managers in the sample in "backroom"-type jobs spent about half of their time working with other people. This may be through attendance at meetings, the giving and receiving of instructions, discussions with colleagues and contact with customers or suppliers. Such contact may be face to face or over the telephone or a combination of both at Malaysian Civil Service. Obviously, communication is important to the business organization. According to one generally accepted estimate, between 40 and 60 percent of the work time spent in a typical manufacturing plant involves some phase of communication. Some employees spend much more of their time communicating. In fact, the higher up the organization structure the employee is, the more communicating he or she is likely to do. Typically, top executives spend from 75 to 95 percent of their time communicating (Diwan, 1990).

Communication is also important in the strategy implementation like quality management. For successful strategy implementation, employees should create an environment where open and honest dialogue and communication on strategies issues and changes can take place (Carpenter, 1986). Additionally, top management has to regularly
review with the departmental and divisional heads, the long-range plans and the resource requirements of these plans so as to avoid production delays at Malaysian Civil Service. This helps to improve the effectiveness of these plans being implemented. Alexander (1985) and Reed and Burkley (1988) recommended a two way communication feedback that permits questions from affected employees about the formulated strategy.

5.4 Quality in Islamic Management at Malaysian Civil Service

The implication of this concept is that work comprises the intention, prayer, profession, action, reaction and behaviour of the people performing it. However, the result comes from Allah. Being Muslim, one has to accept it whether positive or negative, because the will of Allah will prevail at the end (Khaliq, 1996). For Muslims, any work can be ibadah given that requirement such as good intention, permissible, profession, serious efforts, surrendering to Allah's will, be met during and after its performance at Malaysian Civil Service.

Islam considers quality as a process of bringing positive changes for excellent performance in daily life. Its final objective is to improve quality living of man. An organization without quality will perish. Every task should be done to the level of excellence at Malaysian Civil Service. This culture of excellence if we are able to practice in our daily life will bring a result in a quality society. The Prophet Muhammad SAW advised the Muslims to work hard. It was reported that the Prophet to have said:

"The best income is that which is earned honestly by the hard working labourer."

(Majma al-Zawaid)

He also reminded the Muslims to be confident in carrying out their work. It was reported that the Prophet to have said;

"Ask Allah to help you and not fell incapable, for nothing is impossible."

(Sahih Muslim)

In Islam, quality is more important than quantity. Small quantity of performance may be has a good quality in value or vice versa. In addition, poor quality performance may bring about adverse outcome at Malaysian Civil Service. For example, sawm or fasting has been made obligatory for Muslims (Al-Quran, 2:183). The sawm becomes useless when it is not of good in quality. It was reported that the Prophet to have said;

"Many fasting people get nothing from fasting except hunger and many of those who offer salah (prayer) by night get nothing from it except the discomfort of staying a wake."

(Ibn Majah)

Thus, in Islam, quality is more important than quantity. But it does not mean that quantity doesn't count at Malaysian Civil Service.

5.5 The Importance of Total Quality Management (TQM) at Malaysian Civil Service

TQM is customer and market driven. To ensure this, the most common practice under this system is the company registration. This has been done under the prevention based ISO 9000 Quality Assurance (QA) management systems. In the Japanese case, the Deming Prize, in the USA, the Malcolm Baldridge National Quality Award, are basically instituted to reward excellence in Quality Management. SIRIM's Mark of Quality and Quality Improvement Certificate also seek to reward Malaysians for excellence in
performance and Quality Management (Khaliq, 1996). In Malaysia, the Prime Minister's Quality Award, introduced on 9 November 1990, is designed to encourage progress in this direction. This award is intended to be the highest national award to recognize agencies in the private, public and social sectors for quality performance. Winning the award is a prestigious accomplishment, as the Prime Minister's Quality Award is a symbol of the highest achievement of quality, productivity and excellence at Malaysian Civil Service.

TQM emphasizes employee as the most important resource of the organization. It is a system that decentralized the power to all employees to take responsibility for improving quality within organization (Luthans, 1995). TQM practices improves the level of job involvement, job satisfaction and commitment to organization (Poister and Harris, 1997). The studies showed that TQM practices are producing changes in employee activities and attitude. Butler (1996) found that middle managers from organizations that practice some level of TQM feel less frustration in their work and closer to top management.

The purpose of TQM is to improve the performance of business. In order to achieve that purpose, TQM is broken down into eight critical components, namely, employee involvement, training, supplier quality management, customer focus, quality measurement, quality leadership, quality policies and process improvement (Anshutz, 1995).

Employees who dedicate their efforts to achieve a high level of quality products or service will be affected most directly and immediately after the implementation of TQM at Malaysian Civil Service. Purcell and Hutchinson (1996) found that middle managers from the organizations that implement TQM feel less frustration in their work and closer to top management.

5.6 The Importance of Leadership Communication at Malaysian Civil Service

Leadership communication is a style, communication strategy and method used by the leader in the organization such as meeting, supervision, advice, instruction and exhortation (Tubbs and Moss, 1980). Effective leadership by definition requires effective leadership communication. Effective leaders are those who inspire others to make a full and willing commitment to the organization's goals and the process of quality management. To accomplish this, managers must communicate with employees about the organization's goals and how accomplishing these goals will, in turn, help employees accomplish their own personal goals at Malaysian Civil Service.

To be effective leader, managers should be aware of both formal and informal communication systems within an organization. Formal communication involves a form of letters, meeting, report and conferences. While informal communication occurs when where people come together because they labor in the same organizational unit or division or because they are members of a project at Malaysian Civil Service. Sometimes it also occurs when people sit together in the cafeteria and attend the family day of the organization. Managers also should aware of both internal and external communication. External communication may include in press release and marketing strategies. In other side, internal communication is directed to the stakeholders in the organization (Harris, 1989).

Not surprisingly, leadership communications among the managers influence the productivity and job satisfaction of the employees. Based on the research done by Hain
and Widsery (1973) on an automobile company, found that the quality of communication of supervisors in this company has a high correlation with the employees’ performance. One of the elements of the effective leadership is leadership communication. Effective leadership has been linked with job satisfaction and employee performance. Employee will perform a job well if their managers have good leadership communication. Moreover, it is to ensure that the leadership communication adheres strongly to the Islamic perspective. It also to remind that the quality management will not achieve the objective without the effective leadership communication among the staff at Malaysian Civil Service.

Leadership communication among the staffs in organization has an influence on the implementation of quality management at Malaysian Civil Service. Thus, the effective leadership communication will be the result of effectiveness in quality management. On the other hand, ineffective leadership communication will make the quality management to break down. Those who are involved in quality management should have a good leadership communication. In addition, good leadership communication among the staffs will lead them to achieve the objective of quality management at Malaysian Civil Service. The good relationship between the top management and the staff will enhance the job satisfaction and leads the successful in implementation of TQM. Leadership communication message do one or more of the following (Baldoni, 2003):

i. Affirm organizational vision and mission. These messages let people know where the organization is headed and what it stands for.
ii. Drive transformational initiative (change). These messages get people prepared to do things differently and give the reasons why.
iii. Issue a call to action. These messages galvanize people to rally behind and be initiative. They tell people what to do and how to do it.
iv. Reinforce organizational capability. These messages underscore the company’s strengths and are designed to make people feel good about the organization for which the work.
v. Create an environment in which motivation can occur. These messages provide reasons why things are done and create a path of success, such as more competitive organization, more opportunities for promotion, or increased compensation.
vi. Promote a product or service (and affirm its link to the organization’s vision, mission, and values). These messages place what organization produces within the mission, culture, and values of the organization, like creating products that improve people’s life.

5.7 Behaviour and Attitude Modification at Malaysian Civil Service

In mastering the role of leadership, leaders must discern between behaviour modification and attitude modification at Malaysian Civil Service. Behaviour modification implies that people change their outward actions, while their attitudes, beliefs, feelings, and opinions remain the same. Attitude modification implies that followers change their inward thinking; hence, their attitudes, feelings, and opinions are brought into line with those of the leader. It is clear that attitude modification is more important to effect lasting change than behaviour modification [Well and Spinks, 1992].
5.7.1 Influence

Quality leadership results in influence at Malaysian Civil Service. What leaders are communicates influence perhaps more persuasively than what leaders say or do [Covey, 991]. Seldom are most leaders in today’s complex organizations in positions to exercise, by force, absolute controls over people or activities to achieve their goals and objectives. Instead, leaders exercise influence on the thinking of employees obtaining their co-operation in successful goal-oriented activities. This influence can only result from quality communication by leaders [Well and Spinks, 1992].

5.7.2 Motivation

The ability to motivate is a highly desirable quality in a leader at Malaysian Civil Service. What makes some people better motivators than others? Motivation requires an understanding of human behaviour and the components which form such behaviour, such as perception, attitude, and personality. Motivation is an understanding of why people behave as they do, coupled with a process of persuading or influencing individuals to behave in ways which will satisfy certain needs [Rosemblatt et.al, 1982]. Why are people motivated to accomplish tasks for the organization? The truth is that no one single factor motivates all the people all the time. In addition, different people are motivated by different things at any onetime [Cohen, 1990]. However, all behaviour is motivated, no matter what the factors are. Individuals need reasons for what they do and for how they do it. Quality leadership provides these reasons which motivate employees to behave in ways beneficial to the organization [Well and Spinks, 1992]. To motivate employees towards quality productivity, measurable goals must be set with input from employees. If no goals are set or if employees do not have input in formulating goals, employees are often not motivated to complete the tasks successfully. Perhaps, they do not realize the importance and value of the tasks [Well and Spinks, 1992].

A need for trust between leaders and employees is essential for continued quality performance [Bennis,1989]. Without trust, most motivational attempts will not be successful because these attempts will be perceived as manipulative. Leaders who use constructive criticism must first establish the respect and acceptance of their employees through teamwork. Trust is the conviction that leaders mean what they say. It is also the belief in something old-fashioned called “integrity” [Drucker, 1992]. Trust is built over a period of time through quality communication which is constant and reliable [Well and Spinks, 1992]. Trust is the emotional glue which binds followers and leaders together [Bennis and Nanus, 1985]; quality communication heralds trust.

The ability to listen is a quality communication tool employed in the motivational process at Malaysian Civil Service. A leader who listens encourages upward communication. Just as an open door policy fosters two-way communication, two way communication builds teamwork, encourages feedback, and promotes productivity [Well and Spinks, 1992]. Employees want to feel as though they are integral parts of the organization. For example, delegating responsibilities contributes to worker motivation, not because workers desire power, but because they enjoy the satisfaction which comes from successfully carrying out their responsibilities in the context of a larger community of fellow workers at Malaysian Civil Service.
5.8 Levels of Leadership Communication
What constitutes effective leadership communication differs somewhat depending on whether the leader is a part of upper, middle, or lower level management [Well and Spinks, 1992].

5.8.1 Upper Level Leadership Communication
Upper level leaders make decisions, and they make these quickly. These leaders must make sure they are receiving an adequate and accurate flow of upward communication, so that they see the organization’s operations as a whole and make plans and decisions accordingly. Upper-level leaders cannot concern themselves with every small detail and problem which arises; they involve their employees through empowerment. For example at Malaysian Civil Service, the upper-level leader who becomes excessively involved will be unduly busy.

Meanwhile, the organization wanders since no one is dealing with the larger issues of setting goals and charting a course for the enterprise at Malaysian Civil Service. The first communication imperative for upper level leadership is to develop sound policies, describe and carry out plans, and make decisions. The second imperative is to make sure that quality communication networks are functioning properly. An imperative less commonly discussed is to consider the non-verbal communicators which will accompany messages. Non-verbal communicators include everything from voice tone and facial expressions to the overall perception others develop of the organization. The effective leader uses this input to communicate the message, policy, or directive of doing what was planned. The final imperative of an effective leader is to evaluate the communication, to assess its effectiveness, and to make any necessary changes a base for further decisions at Malaysian Civil Service.

5.8.2 Middle Level Leadership Communication
Many middle level leaders state that they feel caught in the middle. On the one hand, they owe loyalty to upper level leaders, and they must work for the success of decisions, plans, and policies of those leaders at Malaysian Civil Service. On the other hand, middle level leaders are viewed by lower level employees as their sole representatives in dealing with the administration. In this dual role, middle level leaders must represent upper level administration by instituting, communicating, and carrying out policies, while keeping the best interests of lower level employees in mind. Middle level leaders gather information from lower level leaders and communicate this information upward. The gathering of good, valid information from below depends on a climate of trust and openness conducive to developing quality communication networks at Malaysian Civil Service.

5.8.3 Lower Level Leadership Communication
Lower level leaders face a situation similar to that faced by middle level leaders at Malaysian Civil Service. They also have a duty to carry out policies, strategies, orders, and instructions from above. Meanwhile, they have responsibilities to work for the best interests of the employees beneath them. Communication at this level, however, consists more of giving instructions and is suing orders than that at upper levels. The plans lower level leaders implement are tactical. Also, communication at this level is often directed towards employees who practice particular skills or crafts. These workers often view their
goals, objectives, and futures as being more closely aligned with performance of their crafts than with performance in their employer’s at Malaysian Civil Service context.

A unique feature of lower level leaders is that they truly comprise the front lines of management in creating an effective workplace at Malaysian Civil Service. They deal with workers, workers’ organizations, customers, and clients. Lowe level leaders even see the public on a day-today basis. Therefore, quality communication at this leadership level is crucial, as results of quality communication should deliver delighted customers and empowered employees to management’s bottom line at Malaysian Civil Service.

5.9 Leadership Communication from the Islamic Perspective

Communication is the important activity in the organization. According to Zaiko and Dance (1965), managers in the organizations in USA used about 85% to 90% from their working time to communicate. Barnard (1938) said the executive in the organization has to build and maintain the effective formal communication system.

Today, at Malaysian Civil Service, the executives have to attend training programs in order to make sure they can communicate effectively with their subordinates. Not surprisingly, skill in communication is one of the conditions for promotion in the organization. Dennis (1975) had identified several characteristics of good leadership communication. Among them are:

a. Executives give a chance to their subordinates to communicate with them.

b. Executives encourage their subordinates to inform to them if they are facing a problem and try to overcome the problem.

c. Executives give a lot of information needed by the subordinates.

d. Executives will be fair to any suggestions made by the subordinates.

Mohd. Yusuf (1998) said that communication is one of the important aspects in Islam especially in our daily life. Allah said;

"Read: In the name of thy Lord who create. Create man from a clot"

(Al-Alaq: 1-2)

"And there may spring from you a nation who invite to godness, and enjoin right conduct and forbid indecency. Such are they who are successful"

(Ali Imran: 104)

But, according to Islam, if someone is good in leadership communication but on the other side poor in akhlak, he or she cannot be considered as a good leader. Thus, Islam gives a guideline to be a good leader. A leader should maintain a good relationship with Allah s.w.t. Allah said;

"I created the jinn and humankind only that they might worship me"

(Al-Zhariyat: 56)

Islam also provides the principles of the communication. Islam encourages us to communicate with a gentle word.

Allah said;

"Go, thou and thy brother, with my tokens, and be not faint in remembrance of me. Go both of you, unto Pharaoh. Lo! He hath
transgressed (the bounds). And speak unto him a gentle word, that peradventure he may heed or fear.”

(Thoha: 42-43)

6.0 Conclusion

Communicating the leadership message over and over again in many different circumstances lets employees come to better understanding of what the leader wants, what the organization needs, and how they fit into the picture. In time, leader and followers form solidarity that is rooted in mutual respect at Malaysian Civil Service. When that occurs, leader and followers can pursue organizational goals united in purpose and bonded in mutual trust.

According Baldoni (2003), the chief aim of organizational communications is to ensure that everyone understands both the external and internal issues facing the organization and what individuals must do to contribute to the organizational success. Communication belongs to everyone in the organization and it is not a functional responsibility limited to marketing, public relations, or human resources. Communication must become a core competency and responsibility of everyone within the organization at Malaysian Civil Service.

Quality management provides the umbrella under which everyone in the organization can strive to create internal and external customer satisfaction. Its practices result in increased employees' job satisfaction, lead staff to improve their work performance and encourages employees' participation and commitment at Malaysian Civil Service. Employees' satisfaction is vital at current management and key to success for the particular organization. Staff are committed to their work. Accepting a position in organization is considered as involving oneself in a binding aqd (contract) to fulfill it to the best at ability and quality. To maintain the quality, staff usually makes a continuous improvement of their job.

Progress has been made in improving the quality of products and services in organizations, but this progress has been limited. As organizations strive to achieve quality in relationships, both inter- and intra-organizational, they increase their abilities to survive in a global economy at Malaysian Civil Service. The global economy contains most of the opportunities for the 2000 sand beyond. Leadership is the heart and soul of organizations, and quality communication is the avenue by which leaders clarify their visions and foster participative management within organizations, no matter which approach best describes their leadership styles. In mastering the role of leadership, leaders must strive for attitude modification in their followers to effect lasting change. Attitudes, feelings, and opinions of employees must be in sync with those of their leaders. To accomplish this lasting change, trust must be established between leaders and employees, and quality communication plays an important role in initiating and maintaining this trust. Quality leadership can be exercised only through quality communication at all levels –upper, middle, lower – in organizations. If quality communication is in place, the organization will achieve delighted customers, empowered employees, higher revenues, and lower costs at Malaysian Civil Service.

According to the Kaizen approach, staff are responsible for participating in Kaizen suggestions, engaging in continuous self improvement activities and continually enhancing job skills through education and training. Kaizen is the name given by the Japanese to the concept incremental improvement. The improvement aspect of Kaizen
refers to both people and process. The concept of empowerment allows staff to solve their own problems. They are free to use their own minds, creativity to solve a particular problems or in making a decisions. The rationale of empowerment is that it represents the way to bring the creativity and initiative of the best employees to bear on improving company's competitiveness. Creative thinking and initiative from as many as possible will increase the likelihood of better ideas, better decisions, better quality, better productivity and competitiveness at Malaysian Civil Service.

Johnson (1991) describes the rationale for teamwork as follows. First, two or more heads are better then one. Second, the whole (the team) is greater than the sum of its parts (individual members). Third, people in teams get to know each other, build trust, and as a result, want to help each other. Finally, teamwork promotes better communication. Information should be shared freely inside of the teamwork and outside of it at Malaysian Civil Service. Education and training are fundamental to quality management because they represent the best way to improve people on a continual basis. According to Scholtes (1992), in quality organization, everyone is constantly learning. Management encourages employees to constantly elevate their level of technical skill and professional expertise.

In Islam, quality management is not only to produce quality products or services, but also important in obligatory ibadah such as solat. Quality assurance in solat has to occur before, during and after the solat. All the conditions need to be fulfilled first before performing the solat. During the solat, concentration or solemnity will ensure all the pillars have been followed. Upon completion, the solat will be checked or evaluated as to whether all pillars and conditions had been observed. Thus, quality management is not practiced in the organization alone, but also in the daily life. Islam emphasizes very much on team spirit which is the element in teamwork at Malaysian Civil Service. To exemplify this from the Islamic perspective, is the congregational prayers. From this exercise, respect and obedience to leaders can be gleaned. Each person has various idea and opinion. Combined together, it will achieve what the organization aims to enhance Islamic quality at Malaysian Civil Service.
References


Nelda Spinks and Barron (1995). Quality communication: a key to quality leadership Wells Training for Quality. Volume 3 (2) · 14–19


Teacher's Questions and Students' Oral Production in Spoken English Classes at the University Level

Dr. Nemah Abdullah Ayash Ezzi
Department of English
Assistant Prof. in ELT (TEFL: TESL)
Faculty of Education, Hodeidah University
Cell no. +967-712451220
Email: nemahayash2000@yahoo.com

Abstract
This study investigates the types of questions asked by an experienced and highly-qualified English teacher, teaching Spoken English III to second-year students (two-groups) in the English Department, Faculty of Education at Hodeidah University (Yemen). It analyzes the audio-recorded transcripts of twelve classes (six classes for each group). A special emphasis is on exploring the effects of the types of questions a teacher asks on the students’ oral production. Some counting and categorization concerning types of questions, the number of the different questions asked in each class involved. Also, the lengths (in words) of students’ responses to the different questions are calculated. The findings of this study show that in all the classes, display questions are most-frequently asked and yes/no questions are less frequently asked while referential questions are rarely or even never asked by the teacher. None of these questions generate long answers. The study ends with some implications for English teachers.

Key Words: Display, referential questions, oral production, Spoken English, university.
1. Introduction

1.1 The Importance of Speaking Skills

Language is primarily speech. In our daily lives, we speak more than we write, "human beings are the only creatures endowed with the wonderful capacity to speak. Speech is a great blessing, but it can also be a great curse, for it helps us make our intentions and desires known to other fellows (Biswajit Das, 2009, p.201). Speaking is an interactive process of constructing meaning that involves producing and receiving and processing information (Brown, 1994; Burns & Joyce, 1997). It is the productive skill in the oral mode. It is often spontaneous, open-ended, and evolving. One should listen, understand then speak. Therefore, listening and speaking skills are inseparable. However, speech is not always unpredictable. For example, when someone asks a question, s/he expects an answer. It involves more than just pronouncing words. It is a crucial part of the language learning process The ability to speak a language is the product of language learning so speaking skills should be taught and practiced in classrooms. Pronunciation is one of the micro-skills of speaking. Speaking requires not only to know specific points of language i.e. how to pronounce sounds but also what ways to produce the language.

Students need speaking skills to interact with each other, inside and outside the classroom. In relation to this, Richards and Renandya (2002) assert that "A large percentage of the world's language learners study English in order to develop proficiency in speaking" (as cited in Gubaily 2012: 2). Also, in many cases, learners know their subject well but fail to communicate it properly. Therefore, they need to learn how to speak English to enable them communicate their ideas smoothly. Thus, The ability to speak English becomes inevitable for students.

1.2.1 How to Teach Speaking Skills Effectively

Nunan (2003) illustrates how to teach speaking to EFL learners:

- Produce the English speech sounds and sound patterns.
- Use word and sentence stress, intonation patterns and the rhythm of the foreign language.
- Select appropriate words and sentences according to the proper social setting, audience, situation and subject matter.
- Organize their thoughts in a meaningful and logical sequence.
- Use language as a means of expressing values and judgments.
- Use the language quickly and confidently with few unnatural pauses, which is called as fluency.

It is clear from Nunan's suggested teaching of speaking that the use of the target language is essential component to teach speaking so teachers should practice students to use the target language as a tool of expressing ideas.

Despite the importance of speaking, teaching speaking in FL classrooms has been undervalued and English language teachers have continued to teach speaking focusing on articulating/pronouncing isolated sounds. They practice their students by using repetition drills or memorization of dialogues. However, today’s world requires improving students’ speaking skills. Students can only negotiate, express them and communicate through communicative skills. FL teachers should provide maximum opportunity to students to speak the target language by providing a rich environment which contains various activities (e.g. role-play, discussions, storytelling, pictures narrating, interviews,
Students should be involved in speaking activities to practice different ways of students participation. Accordingly, teachers' speaking time should be reduced in class while students' speaking time should be increased.

1.3 English as a Foreign Language in Yemen

English is a foreign language in Yemen. It is taught from grade seven of the primary school to grade twelve of secondary school as a compulsory subject. Students of different levels use English exclusively inside the classrooms. However, the use of English outside the classroom is not totally absent but it is used for restricted purposes e.g. giving direction to a tourist. University students may need to use English more than those in the lower levels to understand and be understood by the non-Arabic speaking teachers as long as they study in different colleges. Later, they need to speak English to deal with their colleagues in offices, banks, factories and companies where they work with non-Arabic speakers. Also, Yemeni students who go abroad for higher studies and those who travel abroad for business or pleasure badly need oral skills, viz. listening and speaking. Ezzi (2006) avers that like other developing countries, Yemen has had a sustained move to build a 'language-competent society' including competence in English, the international language of today.

1.4 Teaching Speaking Skills to Yemeni Students

The series of "Crescent English for Yemen" course is used to teach English at primary and secondary schools. Speaking skills are taught and developed through various activities in the pupilbooks and workbooks. Activities such as 'Tell a Story', 'Talk about the Picture' and 'Sing a Song' are found in the Pupilbooks of 7-9 classes. Activities such as 'Ask and Answer', 'Look and Talk' and 'Talk and Do' are examples of those in the Workbooks of 7-9 classes. We find activities such as 'Ask your Partner Questions', 'Talk to a Partner', 'Make a Conversation' in the workbooks of 10-12 classes. However, Publicbooks of 10-12 classes don't have any particular speaking activities as there are many opportunities for students to speak in the classes.

At the university level, speaking skills of English students, who are undergoing B.Ed four-year programs, are taught in the series of Spoken English Course 1-4, which should involve teaching listening and speaking skills. Spoken English 1-2 are taught in the two semesters of the first year while spoken English 3-4 in the two semesters of the second year. Gubaily (2012) points out that there are a lot of misconceptions associated with teaching spoken English at the tertiary level. Teaching spoken English is thought of as a mere and isolated teaching of the segmental and suprasegmental aspects of phonology. Much emphasis is laid on teaching the consonant and vowel sounds of English, especially in the first year.

The courses of Spoken English 1-4 are structure-based. They focus on the phonetic symbols of English sounds to make students master them without creating situations to enable them using such structures in real life. They are based on traditional and monotonous methods of teaching spoken English like choral drills, dialogue memorization and minimal pairs etc, especially in the first-year. Hardly any attention is given to the listening and speaking skills together. However, the situation of teaching spoken English in second year is somehow better as some attention is given to the listening and speaking skills. Students are involved in some listening activities through
which it is supposed that students listen to recorded audio texts spoken by native speakers in order to understand, analyze, comment, negotiate the meaning and complete dialogues.

### 1.5 Teacher Talk and Students' Oral Production in FL Classrooms

Teacher talk has many definitions from different perspectives. Sinclair and Brazil (1982) define teacher talk as "the language in the classroom that takes up a major portion of class time employed to give directions, explain activities and check students' understanding" (as cited in Yanfen & Yuqin, 2010: 77). In FL classrooms, there is a big load on the language teachers who have to teach the content of the lessons, present the new language, explain, illustrate, practice students, evaluate students' understanding, ask and give answers. In other words, they are the resource of English and practice, motivators, assessors, organizers, facilitators and counselors. They are thus the controllers in the FL classrooms. Teachers carry out aforementioned teaching tasks by their talk as they usually do most of the talking in the classroom, select the topic of talk and initiate most of the questions and requests. As a result, students tend to be reduced to a very passive role of answering questions and carrying out the teachers' instructions.

Johnson (1995) assures that there is a tendency for teachers to control the patterns of communication. This control comes from their special status of teachers and from the way they use the language. That means they normally decide how, when, where and with whom language is to be used in the classroom. It is now generally recognized that such teachers' control behavior influence the extent to which students use L₂ during the lessons.

Teachers usually control students by using their talk. If teachers moderate their control by minimizing their talk time, the students will be encouraged to contribute more to the discourse. Therefore, excessive teacher talk should be avoided (Nunan, 1991) to give learners more opportunities for producing comprehensible output themselves.

FL teachers are bound by the firm conviction that they are the only model of the target language learners are exposed to. So, they should pay much attention to their language used as it affects students' learning directly. Studies in SLA have shown that the language used by the teacher affects the language produced by the learners, the interaction generated and hence the kind of learning that takes place. Ellis (1985) points out that teachers can influence the kind of interaction that occurs in their own classrooms. Successful outcomes may depend on the type of language used by the teacher and the type of interactions occurring in the classroom.

Questions are the main mechanism of teachers' control in FL classroom. Some evidence shows that teacher questions take up a very high percentage of teacher-talk and the interaction generated.

### 1.6 Types of Questions asked by the Teachers in Classrooms

Teacher questions, as a kind of input provided by a teacher (Hasan, 2006) form an integral part of classroom interaction (Ho, 2005). Dillon (1988) suggests that a question is the strongest point of effective teaching which can stimulate students’ motivation, focus their attention, help their learning and thinking, and also help the teacher know how well a student’s learning is. The use of questioning is widely spread as a contemporary teaching technique. Research indicates that questioning is second only to lecturing in popularity as a teaching method and teachers spend from thirty-five to fifty percent of their time asking students different questions in classrooms.
In classroom settings, teacher questions are defined as "instructional cues or stimuli that convey to students the content elements to be learned and directions for what they are to do and how they are to do it" (Cotton, 1988: 1).

Classroom interaction is mainly realized by a rigid pattern of Initiation-Response-Feedback (IRF), i.e. teachers initiate - students respond - teachers feedback, suggested by Sinclair and Coulthard (1975), during which student knowledge was displayed and evaluated. In this pattern, teachers often initiate interaction by asking different types of questions.

Nunan and Lamb (1996:80) suggest that teachers use questions "to elicit information, to check understanding and also to control behavior". Teachers’ questions not only can create more interaction activities but can prompt students to participate in all kinds of negotiation of meaning. Ellis (1985) suggests that negotiation makes input comprehensible and promotes SLA. The result of the negotiation of meaning is that particular types of input and interaction result

However, the common consequence in a traditional classroom is that open-ended questions are rarely asked because of the unpredictability of students’ responses. Students merely act as the receivers of knowledge and their responses are constrained by the types of questions asked by their teachers (Edwards & Westgate, 1994). Some types of the teacher-questions are likely to inhibit students’ opportunities to use language for communication.

Tsui (1995) explains how teacher questions have the effect on learners’ productions of the target language and on the types of learner response. It appears that depending on the types of questions, teachers can control more or less the content of the lesson. Tsui (1995) agrees with the fact that the type of question the teacher asks affects the kind of response the student produces. She distinguishes different kinds of questions depending on the type of information requested, the kind of response elicited and the nature of

Questions can be classified in a number of ways. According to Cotton (1988), when we look at the cognitive level of teachers’ questions, they can be divided into two broad categories under which we find different types of questions:

1. Lower cognitive questions are those which ask the student merely to recall verbatim or in his/her own words material previously read or taught by the teacher. Lower cognitive questions are also referred to in the literature as close-ended, direct, recall, and knowledge questions.

2. Higher cognitive questions are defined as those which ask the student to mentally manipulate bits of information previously learned to create an answer or to support an answer with logically reasoned evidence. Higher cognitive questions may be also called open-ended, interpretive, evaluative, inquiry, inferential, and synthesis questions (Cotton, 1988; p.3,4).

Also, teacher questions can be classified in another simplistic way:

1. Closed or open-ended questions, classified according to the kind of response elicited (Tsui, 1995). The former can accept only one answer while the latter can accept more than one acceptable answer.

2. Display and referential questions, relate to the nature of interaction generated (Tsui, 1995). For display questions, the teacher already knows the answers. They are asked in order to check whether the students know the answers. On
the other hand, the teacher does not know the answers for referential questions and the students answer the questions in order to give the teacher information (Tsui, 1995)

3. Yes/No questions is categorized by Thompson (1997: 10) according to "the grammatical form of the question".

It is believed that closed or display questions elicit "short, mechanical responses" while open or referential questions elicit "lengthy, often complex responses" (Ho, 2005: 298). They are lower cognitive questions, don't need students to think or infer the answer as there are specific answers. In other words, they aren't challenging.

However, open-ended and referential questions urge the students to think and find out acceptable answers, they are mind-engaging questions. Kerry (1982: 7) explains that open questions are questions which "allow for opinion, speculation, the generation of hypotheses, the putting up of an argument". Nunan & Lamb (1996) suggest that open questions are those which motivate students to extend their responses. They are more preferred on pedagogical grounds because they are the questions commonly asked in the 'real world' of students i.e. outside the classroom (Long & Sato, 1983). However, in a traditional language classroom, closed, factual, display (i.e. lower cognitive questions) are the most common while open questions are the least common (Myhill, Jones, & Hopper, 2006)

Much of the research findings indicate that during classroom interaction, lower cognitive questions, namely, yes/no, closed-ended, factual and display questions, are frequently asked by language teachers.

2. Review of Related Studies

As questioning is an important method of teaching and can be one of the ways for eliciting output (Wu 1993), it has received much research for many years. Some studies of ESL/EFL investigate the most-frequently types of questions used by teachers in language classes while some others focus on the effects of these questions on students' responses.

Most research on teacher questions has focused on open/referential and closed/display questions. Long & Sato’s, Pica & Long’s and Zhao’s studies, have found that teachers use more display than referential questions in the classroom. Therefore, Long & Sato (1983) have drawn a conclusion that the second language classroom offered very few opportunities for the learner to practice genuine communicative uses of the target language. Pica & Long (1986) have had a similar conclusion that there was less negotiation of meaning in classroom settings and suggested that as a result there was less target language output. Ernest's study (1994) has also discovered that when the teacher asked display questions, students’ responses were brief, with little elaboration.

Harrop and Swinson’s (2003) analysis of recorded teaching of ten infant school teachers, ten junior school teachers and ten secondary school teachers. They have found that many questions were asked by these three groups of teachers were closed questions (44.6%, 41.1% and 48.6% respectively) while open questions were rarely asked (7.1%, 7.4% and 9.8%).

Also, Burns and Myhill’s (2004) research in which episodes of fifteen minutes from 54 lessons have been drawn from Year 2 and Year 6 classes, the analyses have showed that the most common form of questions asked by the teachers is the factual
questions (64%). The effects of display questions on students’ discourse patterns are generally considered to be negative but positive for referential questions.

Focusing on referential questions, Brock (1986) has conducted a research study in which the effects of referential questions on adult ESL classroom discourse have been investigated. The results have showed that the student responses in the treatment-group classes, where referential questions were frequently asked, were significantly longer and syntactically more complex than those in the control-group classes. This suggests a positive correlation between asking referential questions and students’ production of target language. Also, Zhao (1998, as cited in Yang 2010) suggests teachers should use more referential questions because referential questions can offer more opportunity for learners to practice the target language. Yet, another recent study of Yang (2010), which has investigated the types of teachers’ questions asked in the whole class teaching portion of three lessons and addressed the effects of them on the students’ discourse patterns, has found out that Yes/No questions were most-frequently asked and elicited one-word responses only.

From a pedagogical point of view, it appears that asking display or factual questions will produce negative effects on students’ second language learning so they should be avoided.

However, Burns and Myhill’s (2004) study has showed that among the factual questions asked, 45% of them had a function of inviting more responses. McCarthy (1991) also claims that display questions and closed questions still have the function for the teacher to check the students’ state of knowledge and provide them with opportunities for practicing language forms.

3. Problem of the Study

Walsh (2002) illustrates that the most important factor within any effective language learning environment is that students are enabled to do most of the talking. However, in many language classrooms it is the teacher who does most of the talking whilst students remain silent.

Harmer (2000: 4) avers that

"getting students to speak - to use the language they are learning - is a vital part of a teacher’s job. Students are the people who need the practice, in other words, not the teacher"

Over-used teacher talk suggests that students' talk is neglected. The students have little opportunity to practice the target language and just learn passively.

In the Yemeni context, speaking skills are very essential for all students especially university students so the series of Spoken English course 1-4 are designed to be taught to the freshers and sophomores in the English departments at the universities. The main objective of these courses is to make students able to speak in English and use it communicatively. However, many teachers restrict their teaching of Spoken English to the focus on pronouncing the English sounds with their phonetic symbols providing students with isolated examples. Teachers don't create situations to enable students use the sounds in real life. They still follow the repetition drills to practice students pronounce sounds in chorus. Hardly any effective attention is given to the listening and speaking skills. However, if some attention is given to the listening and speaking skills, students are made to listen to aural texts spoken by the native speakers, then they are
asked some factual or display questions which they usually answer using monosyllabic words without any effort to analyze, comment or negotiate the meaning.

Students of lower levels are taught the prescribed textbooks, viz. Crescent English for Yemen, which contain some communicative activities to involve students in communication and encourage them to produce English using their own words, see 1.4. However, university students may hardly produce English in Spoken English classes as the teacher's questions obstruct their oral production and make their oral contribution limited. Also, they may be not given the opportunities to do communicative activities of speaking skill. Teachers maximize their talk in spoken English classes thinking that this talk is a beneficial input but it actually obstructs students' output of English.

Much research on classroom interaction suggests that the kinds of questions teachers ask do not encourage learners to communicate orally. And since questioning is one of the ways for eliciting students' output (Wu 1993) this study attempts to examine the types of the teacher's questions in spoken English classes and their effects on students' oral production.

4. Purpose of the Study

The present study investigates the types of questions asked by an experienced and highly-qualified teacher, teaching Spoken English III to two groups (A&B) of second-year students of the English Department the Faculty of Education at Hodeidah University, through analyzing the transcripts of their audio-recorded classes. It attempts to explore the effects of the types of questions which the teacher frequently asks on the students' oral production of English. Through this study, answers to the following questions are sought;

1. Which type of questions is most frequently asked by the teacher, i.e. the dominant one?
2. What is the number of each different type of the questions asked in each class?
3. What are the students' responses to the teacher's questions?
4. What are the effects of the teacher's most frequently questions on the students' oral production in the classes of Spoken English III?

5. Research Methodology

5.1 Participants and Context

The study involves the classes of Spoken English III given to two groups of second-year students, who are taught by an experienced highly-qualified teacher (a PhD holder). The teacher has taught English for more than 23 years and so much concerned with teaching Spoken English to the students of different levels in the English Department, Faculty of Education at Hodeidah University. She has used Hancock (2004) *English Pronunciation in Use* with 4 audio CDs to teach Spoken English III to second-year students. Each group of the two should be taught Spoken English three hours per week to complete 36 hours for each group in a semester.

5.2 Research Instruments

A total of twelve classes, six classes for each group, of Spoken English III which have been taught by an experienced teacher are audio-recorded. The transcripts of these classes are analyzed. Also, non-participatory observations of six classes (i.e. three classes
for each group - a total of nine hours for each group) are made to notice the extent to which students' participation takes place in the classroom.

5.3. Data Collection
The data clearly shows a teacher-fronted classes. It has been extracted from a real performance of an experienced teacher. Johnson (1995) points out that a good way to illustrate the ways in which teachers use language to control the patterns of communication in L₂ classes is by using transcripts of language lessons. In order to realize to what extent teacher questions can affect student’s oral production, the researcher has undertaken a detailed analysis of the transcripts to find out the following:

a. the number of the different types of the questions asked by the teacher each class,
b. the most-frequently type of questions asked by this experienced teacher in the classes of spoken English III and,
c. the length of students' responses.

Here, there is only one type of data that has been selected according to this study purposes viz. the questions asked by the teacher. Students talking are also shown.

5.4 Data Analysis and Results
This study involves quantitative analysis of teacher's questions. Some counting and categorization concerning types of questions, the number of the different questions asked in each class of every group. In addition, the lengths (in words) of students’ responses to the different questions are calculated to find out the differences of students’ responses in terms of length between display and referential questions and consequently the effects of the questions' types on students' oral production.

5.4.1 Analysis of the Recorded Transcriptions

5.4.1.1 Frequency of the questions asked by the teacher
Table nos. (1&2) show the Frequency of the teacher's questions asked in the classes of Spoken English III.

<table>
<thead>
<tr>
<th>Class no.</th>
<th>Duration of the class</th>
<th>Number of Display questions</th>
<th>Number of Yes/No questions</th>
<th>Number of Referential questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>40 minutes &amp; 25 seconds</td>
<td>44</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>70.96%</td>
<td>29.03%</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>49 minutes &amp; 9 seconds</td>
<td>43</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>78.18%</td>
<td>18.18%</td>
<td>3.63%</td>
</tr>
<tr>
<td>3.</td>
<td>52 minutes &amp;32 seconds</td>
<td>20</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>91 %</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>50 minutes &amp; 3 seconds</td>
<td>35</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>85.36%</td>
<td>12.19%</td>
<td>2.43%</td>
</tr>
<tr>
<td>5.</td>
<td>33 minutes &amp; 3 seconds</td>
<td>30</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>93.75%</td>
<td>6.25%</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>46 minutes &amp;24 seconds</td>
<td>35</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>87.5%</td>
<td>10</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
Tables nos.1&2 indicate that display questions were most frequently asked and Yes/No questions were less frequently asked while referential questions were rarely or even never asked by the teacher in Spoken English III. The display questions were asked mainly to elicit the students’ answers to the different exercises given in their handouts. Thus, they are the dominant type of questions are most frequently asked in Spoken English classes. The teacher asked few referential questions not because she didn't know the answers of the questions but because she expected students to think and use their own words that weren't more than twelve words for each answer.

5.4.1.2 The Length of the Students’ Answers

Table no. 3 showing the length of students’ responses to different types of questions asked.

Table no.4 presents some excerpts of the teacher's talk including different questions and students' answers.

(T.) stands for the teacher (S.) for a student and (Ss) for students.

<table>
<thead>
<tr>
<th>Class no.</th>
<th>Duration of the class</th>
<th>Number of Display questions</th>
<th>Number of Yes/No questions</th>
<th>Number of Referential questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>35 minutes &amp; 40 seconds</td>
<td>40</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>34 minutes &amp; 39 seconds</td>
<td>41</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>55 minutes &amp; 10 seconds</td>
<td>15</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>45 minutes &amp; 5 seconds</td>
<td>30</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>35 minutes &amp; 22 seconds</td>
<td>39</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6.</td>
<td>44 minutes &amp; 49 seconds</td>
<td>31</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of the questions asked</th>
<th>The average of students’ responses to the questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes/No</td>
<td>One word (either Yes or No)</td>
</tr>
<tr>
<td>Display</td>
<td>One – five words</td>
</tr>
<tr>
<td>Referential</td>
<td>Five – twelve words</td>
</tr>
</tbody>
</table>

Table no.4 presents some excerpts of the teacher's talk including different questions and students' answers.

(T.) stands for the teacher (S.) for a student and (Ss) for students.

<table>
<thead>
<tr>
<th>no.</th>
<th>Teacher's questions</th>
<th>Students' answers</th>
<th>Number of the words in each answer</th>
<th>Class no. Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>T. : Who can tell me about no.1? What's the answer for no.2? What about no. 3? So on</td>
<td>S₁: fly S₂: lie S₃: die</td>
<td>Monosyllabic One-word</td>
<td>Class 1 Group A</td>
</tr>
</tbody>
</table>
2. T.: We are supposed to add one of these sounds /r/, /l/, /t/ and /p/ to the words given to you.
1. What can we add to word no.1 {die}? 
2. What's the syllable structure of die? 
3. What is it for dry? 
4. What are we adding for back/ 
5. Is there any other possibility, can we add another Consonant to {back}? 

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>S1: /r/ becomes</th>
<th>S2: {C-V}</th>
<th>S3: {CCV}</th>
<th>S4: /l/ becomes</th>
<th>S5: (in chorus)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>dry</td>
<td></td>
<td></td>
<td>black</td>
<td>.No.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Three</td>
<td>Two</td>
<td>Two</td>
<td>Three</td>
<td>One</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. T. You're going to listen to the CD-player. Listen carefully please.
Now, listen to the words then repeat them after the recorder

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ss, listen to all the words in the CD player.</td>
<td>Ss: (repeat the words after the recorder) build –builder Send-sender mix-mixer cook-cooker.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two</td>
<td>Two</td>
<td>Two</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Two</td>
<td>Two</td>
<td>Two</td>
</tr>
</tbody>
</table>

4. T.: When I say {support},
1. What is the syllable structure of it?
2. Is your classmate's answer correct?
3. Who will correct it?
4. Why does it have three consonants though the word {support} contains five letters: s-u-p-o-r-t?
T.: Excellent

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>S1: {C-V-C-C}</th>
<th>NO</th>
<th>S3: {C-V-C-V-C}</th>
<th>S4: We count the sounds, not the letters.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Four</td>
<td>One</td>
<td>Five</td>
<td>Seven</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. T.: There are different ways of variations in our speech.
1. Why do you think we need some sort of variation in our speech?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1.Ss: ah….silence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.Ss: Yes</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td>S3: to not feel boring</td>
<td>Three</td>
</tr>
<tr>
<td></td>
<td>S4: to change the speech</td>
<td>Four</td>
</tr>
<tr>
<td></td>
<td>S5: to attract people's attention</td>
<td>Five</td>
</tr>
</tbody>
</table>

6. T. (before playing the CD-player) Let's suppose that there are no underlines in this sentence,
1. What do you think will be the words ?
2. Is the woman a native speaker?
3. How did you know?
T.: From her accent, it is different.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1.Ss: (in chorus) flight, tickets, passport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.Ss: NO</td>
<td>One</td>
</tr>
<tr>
<td></td>
<td>3.Ss: her speech ! Ss: accent…..!</td>
<td>Two</td>
</tr>
</tbody>
</table>
From table 3, it can be found that students’ responses were generally short when the teachers asked yes/no questions. Nearly all the yes/no questions asked elicited one-word responses only (i.e. monosyllabic words, either ‘Yes’ or ‘No’).

Also, all the display questions elicited brief responses less than five words, while when the referential questions were asked, the students’ responses tended to be longer though they were rarely asked in the classes.

In this study, none of the questions generated long answers and the average response length per question was less than five words. Almost all the referential questions asked by the teacher didn't elicit longer and creative answers here. Although few referential questions were asked by the teacher, students were not encouraged to be creative in the classes of Spoken English III. Yang (2010) avers this and suggests that the referential questions themselves will not make students produce longer responses unless the teachers encourage their students to elaborate further rather than just accepting those brief and syntactically less complex responses. In table 4, some examples of the teacher's questions and students' short responses are included to back up the statistics in table 3.

5.4.1.3 The way the Teacher Practice Students to Develop Oral Skills

The teacher usually asked the students to listen to the CD carefully to elicit the answers to the listening exercises. She played the CD-player twice then selected some students to give the answers. Students answers were so brief and up to each point of the exercises. The teacher also asked students to listen to the speech (e.g. a dialogue or extract of a conversation) by native speakers and repeat after them :a word by word or a statement by statement with the same stress and tone (repetition drills). For example, in class no.3 of each group (see tables 1&2) , the teacher spent more than 50 minutes practicing students listening to the CD and repeating all the time so she asked few questions not as in other classes.

Students were often asked to give some examples of separate words (e.g. words with strong stress and disyllabic or tri-syllabic words) or examples of rising / falling / level intonation statements and sentences with prominent words. Communicative activities (e.g. role-play and problem solving) weren't used. Thus, students didn't have sufficient chance to speak English in different contexts. Students weren't encouraged to speak on different real-life topics that may promote communication in English. Here, it is obviously clear that teacher's over-use of display questions and the nature of the listening and speaking exercises used (i.e. traditional) affected negatively on the students' oral production in the classes of Spoken English III.

5.4.2 Observations

To supplement the recordings, simple non-participatory observation were made. The researcher wrote down a simple observation sheet to make notes about the common features of classes of Spoken English, focusing on the teacher's talk (questions, instructions), students' responses (oral-production, participation in the classroom, questions to the teacher) and the exercises and practice given (the nature of them). Some of the information would not be picked up on the recordings, such as the number of learners putting their hands up following each question. The researcher summed her observation in the following:

- large chunks of teacher talk-time had very big space in the classes.
- Many clear imperatives a teacher used.
Many display and Yes/No questions were asked by the teacher.

Mind-engaging questions weren't preferred by the teacher in the observed classes of Spoken English.

Students enjoyed giving short answers to the teacher's questions.

Students' answers to the exercises were mostly restricted in one or two words.

Students rarely asked their teacher "why" or "why not".

Few students producing English using their own words, no much effort paid to produce English.

There were many periods of silence from students' side if they were asked referential questions.

Students' participation group wasn't large (i.e. students who raised their hands up were few and sitting in the front-seats)

Exercises, which required students to listen and repeat, were supposed to develop students' oral skills.

No space for students to select real-life topics and talk on them (i.e. students' talk-time was so minimized)

6. Discussion

Here, it is found that display questions are most-frequently asked while referential questions are rarely or even never asked by the teacher in the classes of Spoken English. Accordingly, students' responses to teacher's display questions are very brief so there is less output of English. This finding is consistent with the finding reached by much research (e.g. Long & Sato 1983, Pica & Long 1986, Ernest's study 1994, Harrop and Swinson 2003, Burns and Myhill 2004).

Different from many other studies, which have focused only on the effects of display and referential questions, this study has focused on the effect of Yes/No questions on the students' responses and this is the same focus of the Yang's study (2010). However, this study has found that Yes/No questions are less frequently asked by the teacher.

Yet, this study centers around the episodes of twelve Spoken English classes to examine the length of students' responses to the teacher's questions in order to find out the effects of the teachers' questions on students' oral production. However, many of the previous studies examined the teachers' questions in vocabulary, grammar and reading classes. For example, Yang's study (2010) investigates the effects of teachers' questions in vocabulary and grammar lessons and Ho (2005) investigates the reading comprehension questions.

Furthermore, this study is different from some studies, which concern with the effects of the teachers' questions in classes of lower-level students (i.e. primary or secondary levels) such as Harrop and Swinson’s study 2003, Burns and Myhill’s study2004 and Yang, 2010, it concerns with the Spoken English classes taught to students at the university level.

7. Limitations of the Study

The major limitations of the present study are summarized as follows;
firstly, the study applies only to the particular classes of Spoken English III, taught to second year English students (two groups) by an experienced highly-qualified teacher in the English Department at the Faculty of Education. Accordingly, the findings are only applicable to the similar situations to those which occurred in the twelve classes of Spoken English III and, thus, they may be adequate to draw conclusions on this topic.

Secondly, it mainly investigates the effects of the teacher's questions on the students' oral production in Spoken English classes which are supposed to be the formal environment where students should practice the skill of speaking in English. It never intends to evaluate the teacher's performance at all.

Lastly, the particular choices of the excerpts used in the analysis, which taken from the whole discourse patterns, are used to simply throw light on the most-frequently type of questions asked in Spoken English, not for any other syntactic purposes.

8. Conclusion

In this study, it is found that display questions are most-frequently asked and Yes/No questions are less frequently asked by the teacher in the exchanges of Spoken English classes. Accordingly, students generate short answers, which don't exceed four words, to these questions. However, referential questions are rarely or even never asked in Spoken English classes and this has its negative effects on the students' oral output as the average length of their responses to referential questions is five words.

None of all the types of questions generate long answers. Almost, all the referential questions asked by the teacher don't elicit longer and creative answers here. Actually, few referential questions are asked by the teacher so students are not encouraged to be creative, expressing their views freely, selecting their own words and practicing speaking English in the classes of Spoken English III.

Also, students don't have sufficient practice to develop their oral skill in Spoken English classes as the exercises used are traditional (e.g. ask-and-answer exercises and repetition drills) which focus on one aspect of the language that is pronunciation. Communicative activities are not used though students need them to promote real-life communication and practice speaking skill in different topics. This may not due to the teacher's teaching rather than due to the purposes of the teaching materials and the selection of exercises used.

9. Implications for Teachers

The findings of the present study imply the following:

- Teachers should encourage their students to elaborate further on their responses rather than just accepting short and syntactically simple answers, to ask questions, initiate talk and seek for meanings. Therefore, more referential and open questions should be asked in all various classes of English.
- Students' oral skills can be effectively developed if teachers practice students using the target language through contextualized practice in which students can give multiple, acceptable, meaningful and long answers. Also, Students need to be involved in communicative activities to promote real-life communication, so learning of the target language can be facilitated.
- To teach spoken English to university students, teachers should select effective teaching materials which sufficiently focus on the use of the target
language and on the different sub-skills of Speaking rather than focusing on one aspect of speaking skill (viz. pronunciation).

- University students are supposed to have high level of English therefore they should be encouraged to give longer and syntactically more complex responses (i.e. productive talk) in all the different classes, not only in the classes of Spoken English.

- In-service as well as pre-service teachers should be provided with essential training to develop their questioning techniques. Teachers' awareness of the types of questions they ask should be raised so that they may avoid asking too many factual questions which inhibit students’ opportunities to develop their oral skills.

- If teachers use teaching materials, which restrictedly focus on one aspect of the target language, to teach speaking skills as in this study, they may use supplementary materials rich in communicative activities (e.g. discussions, role-play) to use what students' have learnt. In this way, learning a FL will be speeded up.
References


Comparative Studies of Proximate and Mineral analysis of *Tetracarpidium conophorum*.

**Oluwole S.O**  
*Department of Botany Lagos State University Ojo*

**Osundiya M.O**  
*Chemistry Department Lagos State University, Ojo*

**Fajana O.O**  
*Biochemistry Department Lagos State University*

**Jinadu O**  
*Department of Botany Lagos State University Ojo*

**Abstract**

A study was carried out on the proximate analysis and Mineral composition of the raw, cooked and roasted seeds of *Tetracarpidium conophorum*, the proximate analysis results shows that it contains moisture content of 16.26% for raw, 21.37% for cooked and 13.53% for roasted. The roasted sample has the lowest moisture content and it can be kept for a long time without microbial spoilage. The samples analysed has crude fibre ranging from (6.745 - 9.28%), crude protein (4.93 - 5.75%). The cooked sample has the highest level of carbohydrate 40.69% and the raw sample has the lowest 37.85%. Energy value of the samples ranges from (378.74 - 434.68Kcal). studies from the mineral composition showed that the cooked sample contains the highest level of calcium (106mg/100g) and lowest level of iron (10.48mg/100g). From the results it is observed that *Tetracarpidium conophorum* seeds contains substantial nutrients that could meet the needs and requirements of the body thus safe for consumption.
Introduction

The African walnut (Tetracarpidium conophorum) a vascular plant is a perennial climbing shrub found in the moist forest zone of Sub Sahara Africa (Hedin, 1983). The leaves are simple and ovate with serrated margin. The stem can be up to 16cm in girth and become dark grey when old, but it is green and glabrous when young. It twines round any support especially trees in its vicinity and the root system is fibrous. (Oluwole and Okusanya, 1993) The plant is monoecious with separate male and female flowers on the same plant. The flowers are arranged alternately on the axis of raceme inflorescence. The male flowers are raceme-like panicle with one or two female flowers near the base. The fruit which is a capsule is generally four-seeded hence the name though fruits with 3, 2 or even 1 seed(s) are produced.(Oluwole and Okusanya,1993).Each seed lobules ends in a wing thereby creating ridge in between the wings. The seed is about 2.5cm in diameter. It has a dark brown shell known as testa and a yellowish kernel. (Olorede, 1984).

A typical walnut kernel consists of two bumpy lobes which is off white in color and covered by a thin, light brown skin attached to each other and enclosed in a round or oblong shell which could be brown or black in color and also hard. (Hutchinson and Dalziel, 2007). T. conophorum can be found in the rain forest of Nigeria like Badagry, Oyo, Ondo, Ogun, Ekiti, Delta, Imo, Abia, Edo, Akwa Ibom and Cross River. In nature, the germination of T. conophorum takes between 8-10 weeks; the seeds may exhibit seed dormancy. (Oluwole and Okusanya, 1993). T. conophorum popularly known as Asala/Awusa in Yoruba, Ukpa in Ibo, and Okwe/Okhue in Edo, Ekporo by the Efiks and Ibibios of Cross River and Akwa Ibom states and Arinsa in Igbira is cultivated particularly because of the nuts which are cooked and often consumed as snacks with boiled corns. The term ‘walnut’ has been derived from an old English name ‘wealthhnut’ which means foreign nut. (Oboh and Ekperigin, 2004).

A bitter after taste is usually observed upon drinking water immediately after eating walnut and this is attributed to the presence of alkaloids and other anti nutritional and toxic factors in it.(Chanow, 1997).

T. conophorum which grows from seed to maturity in 5-6 years but subsequent flowering and fruiting occurs almost annually and does not contain any milky juice like other members of Euphorbiaceae. (Oluwole and Okusanya, 1993).The economic importance of the specie lies in the edibility of the oil-rich seeds by Nigerians as well as by the people in the Lower Congo region and in Sierra Leone. The shells are used for fuelling fires and the deffated oil are used in composite flour for bread making because of its protein content.(Ogunsua and Adebona,1986).

Walnut also called Conophor nut is an excellent source of Omega 3 essential fatty acid, a special type of protective fat the body cannot manufacture. Conophor plant is useful in cardiovascular protection to the promotion of better cognitive function and anti inflammatory benefits for Asthma patients, Rheumatoid, Arthritis and inflammatory skin diseases such as Eczema and Psoriasis (Nwosu,2006).

Walnut also contains relatively high levels of L-arginine, an essential amino acid which becomes a special import in hypertensive persons.(Nwosu,2006). Prevention and control of high blood pressure is also one the benefits derived from eating walnut and also improves the cholesterol profile in person with type 2 diabetes. In patients with type 2 diabetes, a daily ounce of walnut in a diet in which 30% of calories came from fat. The nuts are found to reduce levels of several molecules that promote atherosclerosis. (Zubair, 2007). Preventing gall bladder diseases and gallstones in women is also one of the health
benefits of *T. conophorum*. Apart from the dietary benefits of walnuts, straw colored clear oil can be extracted from fresh walnuts which must be protected from light and oxidant agents because it becomes sour easily. This oil is used as tonic for children and aged people as well as dry agent for painting. It has been found useful also in the formulation of wood varnish, vulcanized oil for rubber and leather substitute. (Fadare, 2007).

This research work is carried out in order to compare the nutritive value of raw, cooked and roasted walnut (*T. conophorum*), also determine the proximate analysis of *T. conophorum* in raw, cooked and roasted and to analyze the levels of minerals and usefulness to man.

**Materials and Methods**

*T. conophorum* (African walnut) seed were obtained from Oyingbo market, Ebute metta in Lagos state, Nigeria. All these were washed to remove outer fibres and to get the shells to be smooth. The seeds were later divided into 3 parts:

i. The raw one was kept on one side

ii. The cooked sample which was boiled on an electric cooker for 2 hours and verifies that it was cooked.

iii. The roasted sample was kept in an oven for one hour forty five minutes (1 hr 45 mins.) at the temperature of 115°C. The various samples were authenticated in the department of Botany, Lagos State University, Ojo. All these samples were grinded in a mortar before taken to the laboratory for the proximate analysis and elemental composition.

**Sample Preparation:** The nuts were washed with demonized distilled water and wiped with kitchen tissue then cut into pieces using a knife with steel blade. Portions were taken for moisture content and the rest of the nut were dried in a hot air circulating oven to dry the samples in order not to go rancid quickly.

**Proximate analysis:** The Air Oven Method (AOM) was used for the moisture content determination. The walnut sample was ground into a fine mesh and mixed to obtain a homogeneous sample and increase the surface area. The fresh sample was dried to a constant weight with the acid of a standard analytical balance. Three representative samples, about 3g was oven dried at 100°C for 5 hours. After which the sample was cooled and the weight was determined. The percentage difference was then determined. The percentage difference in the weight of the fresh and the dried samples gave the moisture content. Protein: Fat, Ash, Carbohydrate and crude fibre were determined by the method of AOAC (1995).

**Macro Element and Heavy metal analyses:** The mineral and heavy metals analyzed were sodium, potassium, magnesium. Copper, zinc iron, cadmium, chromium and lead, according to the procedure of AOAC (1995) using Atomic absorption spectrophotometer (AAS).

**Determination of Mineral Content:** 10g of each walnut sample were incinerated to a white ash at 550°C in a muffle furnace for 4 hours, cooled and the ash was washed into 250ml beaker with 30ml of concentrated trioxonitrate(v)acid evaporated to dryness on steam bath, the residue was further heated for 30 minutes, thereafter the sample was dissolved in 40ml of hydrochloric acid(HCL) at ratio 1:1 and digested for about 2 hours on hot plate magnetic stirrer.1ml of dilute hydrochloric acid was further added to the
sample and boiled for about 1 hour, filtered while hot with Whatman No 4 filter paper, washed with HCL and the volume made up to 100ml with distilled water. The minerals (Sodium, Calcium, Magnesium, Manganese, Potassium, Iron, Zinc, Cobalt, Phosphorus) were determined using spectrometry method of Atomic Absorption Spectrophotometer (AAS) (Model Phillip Pu 9100x) with a hollow cathode lamp and a fuel rich flame (air acetylene). Samples were aspirated and the mean signal responses were recorded at each of the element respective wavelength.

**Calculation**

The concentration of each element was calculated as follows

Concentration (mg/100g)

\[
\text{Standard concentration} \times \text{Samples absorbance} \times 100
\]

Standard absorbance x weight of sample

**Results & Discussion**

**Table 1: Comparison of proximate analysis of raw, cooked and roasted *T. conophorum* results representing mean ± standard deviation**

<table>
<thead>
<tr>
<th>PARAMETER (%)</th>
<th>RAW</th>
<th>COOKED</th>
<th>ROASTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOISTURE</td>
<td>16.26±2.06</td>
<td>21.37±1.21*</td>
<td>13.53±0.828</td>
</tr>
<tr>
<td>ASH</td>
<td>3.87±0.48</td>
<td>3.88±0.14*</td>
<td>4.68±1.13*</td>
</tr>
<tr>
<td>FAT</td>
<td>28.85±2.12</td>
<td>21.88±0.69*</td>
<td>27.67±2.25*</td>
</tr>
<tr>
<td>PROTEIN</td>
<td>5.75±0.48</td>
<td>4.77±0.66</td>
<td>4.93±1.68*</td>
</tr>
<tr>
<td>CRUDE FIBRE</td>
<td>6.74±2.12</td>
<td>6.98±0.93*</td>
<td>9.28±0.79*</td>
</tr>
<tr>
<td>CARBONHYDRATE</td>
<td>37.85±0.34</td>
<td>40.69±0.23*</td>
<td>39.27±2.13*</td>
</tr>
<tr>
<td>ENERGY (K CAL)</td>
<td>434.68±19.79</td>
<td>378.74±4.47*</td>
<td>425.86±5.14*</td>
</tr>
</tbody>
</table>

Statistical analysis (Tables 1&2)

Results are represented Mean ± SEM, *P* < 0.05 when compared with the raw sample
Table 2: Comparison of mineral composition or raw, cooked and roasted *T. conophorum* showing the mean ± standard deviation.

<table>
<thead>
<tr>
<th>MINERALS (mg/100g)</th>
<th>RAW</th>
<th>COOKED</th>
<th>ROASTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Na</td>
<td>3.42±0.18</td>
<td>4.48±0.16*</td>
<td>3.18±0.15</td>
</tr>
<tr>
<td>K</td>
<td>25.67±0.16</td>
<td>31.13±0.14*</td>
<td>28.23±0.76*</td>
</tr>
<tr>
<td>Ca</td>
<td>61.31±0.88</td>
<td>106.58±1.46*</td>
<td>64.48±0.16*</td>
</tr>
<tr>
<td>Mg</td>
<td>35.70±0.11</td>
<td>66.33±0.83*</td>
<td>50.98±1.08*</td>
</tr>
<tr>
<td>Zn</td>
<td>3.92±0.16</td>
<td>3.18±0.15*</td>
<td>2.67±0.42*</td>
</tr>
<tr>
<td>Fe</td>
<td>10.48±0.20</td>
<td>17.63±0.40*</td>
<td>16.43±0.38*</td>
</tr>
<tr>
<td>Mn</td>
<td>17.55±0.48</td>
<td>16.02±0.28*</td>
<td>20.33±0.23*</td>
</tr>
<tr>
<td>Co</td>
<td>0.52±0.10</td>
<td>0.50±0.05*</td>
<td>0.50±0.05*</td>
</tr>
<tr>
<td>P</td>
<td>10.35±0.13</td>
<td>7.65±0.18</td>
<td>14.050.48*</td>
</tr>
</tbody>
</table>

Table 1 actually gave a comparison of the proximate compositions between raw, cooked and roasted sample of *T. conophorum*. The roasted sample of *T. conophorum* had the highest source of crude fibre (9.28%) compared to that of raw (6.74%) and cooked (6.98%) which has a slight difference to each other. The spongy mass of fibre helps to satisfy the appetite and it also assists moving food through the alimentary canal by aiding the muscular action of the intestine thus preventing constipation. (Dosunnu, Edem, Miranda, et al., 2009). The moisture content in the roasted sample is low which means that such seed can be stored for a fairly long time without microbial spoilage.

The ash content though quite low in the three samples is of significant importance in foods as they account for the mineral constituents (Edema and Okiemen, 2000)

It was observed that the fat content of the raw sample (28.85%) and the roasted sample (27.67%) is higher than the cooked (21.88%) which probably could be as a result of boiling. The significance of fats in foods cannot be over emphasized as they are used up by the cells of organs and glands to provide energy and in the synthesis of some of their secretions. (Okpero, 2001). Fats are building blocks of hormones and they insulate nervous system tissue in the body. They fuel the body and help absorb some vitamins. Proteins are complex nitrogenous organic substances that form an important part of living tissues. Functionally, proteins are important in food as they help in growth and development of the body. (Sundin, 2009). The crude protein content of sample shows a slight variation ranging from 4.77%-4.93%-5.75% for cooked, roasted and raw respectively.

Carbohydrate gives ready source of energy to the body. This shows that carbohydrate content of cooked *T. conophorum* is better concentrated (40.69%) than that of roasted sample (39.27%) and the raw (37.85%) samples.

Table 2 shows the mineral content of the 3 samples. It revealed that Calcium in the cooked sample with 106mg/100g is the highest and Cobalt is the least. According to Ogunsua and Adeboa, 1983, walnuts contain highest level of Potassium (390-700mg/10g), Magnesium (90-140mg/100g) and Calcium. Thus, in this present study of the comparison of raw, cooked and roasted samples of *T. conophorum*, it is observed that
the cooked sample contains most essential minerals followed by the roasted and the corresponding raw sample. Essential elements are needed in significant quantities to form part of the rigid structure, soft tissues and body fluids. They are needed for growth, formation of bones, teeth, blood and nerves.

The healthy functionality of nervous transmission, blood circulation, fluid regulation, cellular integrity, energy production and muscle contraction are influenced by essential elements like Calcium, Sodium, Potassium e.t.c. (Enujiugha and Agbede, 2000). However, trace element like Iron, Cobalt is found in walnut. Iron has been found to be involved in the formation of haemoglobin as insufficiency leads to anemia. Above threshold concentration of Cobalt in man could result in cardiac disease (Tapero et al., 2001).

Studies on the proximate and elemental composition of African walnut *T.conophorum* in raw, cooked and roasted samples were carried out. The study revealed that the sample has a high level of moisture, mineral, crude fibre, protein, fat and carbohydrate required for the growth and development of the body but a low level of ash. It is on the basis of the results obtained from this study that the following recommendations were made. Walnut should be consumed in order to meet the nutritional needs of man. Public awareness should also be carried out so as to enlighten the public of its nutritional benefits.
References


