

GLOBAL JOURNAL

OF MANAGEMENT & BUSINESS RESEARCH

DISCOVERING THOUGHTS AND INVENTING FUTURE

HIGHLIGHTS

Information Technology

Attributes Evaluation

Public Administration

Impact of Leadership

Volume 12

Issue 4

Version 1.0

ENG



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH

GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH

VOLUME 12 ISSUE 4 (VER. 1.0)

OPEN ASSOCIATION OF RESEARCH SOCIETY

© Global Journal of
Management and Business
Research. 2012.

All rights reserved.

This is a special issue published in version 1.0
of "Global Journal of Management And
Business Research." By Global Journals Inc.

All articles are open access articles distributed
under "Global Journal of Management And
Business Research"

Reading License, which permits restricted use.
Entire contents are copyright by of "Global
Journal of Management And Business
Research" unless otherwise noted on specific
articles.

No part of this publication may be reproduced
or transmitted in any form or by any means,
electronic or mechanical, including
photocopy, recording, or any information
storage and retrieval system, without written
permission.

The opinions and statements made in this
book are those of the authors concerned.
Ultraculture has not verified and neither
confirms nor denies any of the foregoing and
no warranty or fitness is implied.

Engage with the contents herein at your own
risk.

The use of this journal, and the terms and
conditions for our providing information, is
governed by our Disclaimer, Terms and
Conditions and Privacy Policy given on our
website [http://globaljournals.us/terms-and-condition/
menu-id-1463/](http://globaljournals.us/terms-and-condition/menu-id-1463/).

By referring / using / reading / any type of
association / referencing this journal, this
signifies and you acknowledge that you have
read them and that you accept and will be
bound by the terms thereof.

All information, journals, this journal,
activities undertaken, materials, services and
our website, terms and conditions, privacy
policy, and this journal is subject to change
anytime without any prior notice.

Incorporation No.: 0423089
License No.: 42125/022010/1186
Registration No.: 430374
Import-Export Code: 1109007027
Employer Identification Number (EIN):
USA Tax ID: 98-0673427

Global Journals Inc.

(A Delaware USA Incorporation with "Good Standing"; **Reg. Number: 0423089**)

Sponsors: *Open Association of Research Society*
Open Scientific Standards

Publisher's Headquarters office

Global Journals Inc., Headquarters Corporate Office,
Cambridge Office Center, II Canal Park, Floor No.
5th, **Cambridge (Massachusetts)**, Pin: MA 02141
United States

USA Toll Free: +001-888-839-7392

USA Toll Free Fax: +001-888-839-7392

Offset Typesetting

Open Association of Research Society, Marsh Road,
Rainham, Essex, London RM13 8EU
United Kingdom.

Packaging & Continental Dispatching

Global Journals, India

Find a correspondence nodal officer near you

To find nodal officer of your country, please
email us at local@globaljournals.org

eContacts

Press Inquiries: press@globaljournals.org

Investor Inquiries: investers@globaljournals.org

Technical Support: technology@globaljournals.org

Media & Releases: media@globaljournals.org

Pricing (Including by Air Parcel Charges):

For Authors:

22 USD (B/W) & 50 USD (Color)

Yearly Subscription (Personal & Institutional):

200 USD (B/W) & 250 USD (Color)

EDITORIAL BOARD MEMBERS (HON.)

John A. Hamilton, "Drew" Jr.,
Ph.D., Professor, Management
Computer Science and Software
Engineering
Director, Information Assurance
Laboratory
Auburn University

Dr. Henry Hexmoor
IEEE senior member since 2004
Ph.D. Computer Science, University at
Buffalo
Department of Computer Science
Southern Illinois University at Carbondale

Dr. Osman Balci, Professor
Department of Computer Science
Virginia Tech, Virginia University
Ph.D. and M.S. Syracuse University,
Syracuse, New York
M.S. and B.S. Bogazici University,
Istanbul, Turkey

Yogita Bajpai
M.Sc. (Computer Science), FICCT
U.S.A. Email:
yogita@computerresearch.org

Dr. T. David A. Forbes
Associate Professor and Range
Nutritionist
Ph.D. Edinburgh University - Animal
Nutrition
M.S. Aberdeen University - Animal
Nutrition
B.A. University of Dublin- Zoology

Dr. Wenying Feng
Professor, Department of Computing &
Information Systems
Department of Mathematics
Trent University, Peterborough,
ON Canada K9J 7B8

Dr. Thomas Wischgoll
Computer Science and Engineering,
Wright State University, Dayton, Ohio
B.S., M.S., Ph.D.
(University of Kaiserslautern)

Dr. Abdurrahman Arslanyilmaz
Computer Science & Information Systems
Department
Youngstown State University
Ph.D., Texas A&M University
University of Missouri, Columbia
Gazi University, Turkey

Dr. Xiaohong He
Professor of International Business
University of Quinnipiac
BS, Jilin Institute of Technology; MA, MS,
PhD,. (University of Texas-Dallas)

Burcin Becerik-Gerber
University of Southern California
Ph.D. in Civil Engineering
DDes from Harvard University
M.S. from University of California, Berkeley
& Istanbul University

Dr. Bart Lambrecht

Director of Research in Accounting and Finance
Professor of Finance
Lancaster University Management School
BA (Antwerp); MPhil, MA, PhD
(Cambridge)

Dr. Carlos García Pont

Associate Professor of Marketing
IESE Business School, University of Navarra
Doctor of Philosophy (Management),
Massachusetts Institute of Technology (MIT)
Master in Business Administration, IESE,
University of Navarra
Degree in Industrial Engineering,
Universitat Politècnica de Catalunya

Dr. Fotini Labropulu

Mathematics - Luther College
University of Regina
Ph.D., M.Sc. in Mathematics
B.A. (Honors) in Mathematics
University of Windsor

Dr. Lynn Lim

Reader in Business and Marketing
Roehampton University, London
BCom, PGDip, MBA (Distinction), PhD,
FHEA

Dr. Mihaly Mezei

ASSOCIATE PROFESSOR
Department of Structural and Chemical
Biology, Mount Sinai School of Medical
Center
Ph.D., Eötvös Loránd University
Postdoctoral Training,
New York University

Dr. Söhnke M. Bartram

Department of Accounting and Finance
Lancaster University Management School
Ph.D. (WHU Koblenz)
MBA/BBA (University of Saarbrücken)

Dr. Miguel Angel Ariño

Professor of Decision Sciences
IESE Business School
Barcelona, Spain (Universidad de Navarra)
CEIBS (China Europe International Business School).
Beijing, Shanghai and Shenzhen
Ph.D. in Mathematics
University of Barcelona
BA in Mathematics (Licenciatura)
University of Barcelona

Philip G. Moscoso

Technology and Operations Management
IESE Business School, University of Navarra
Ph.D in Industrial Engineering and
Management, ETH Zurich
M.Sc. in Chemical Engineering, ETH Zurich

Dr. Sanjay Dixit, M.D.

Director, EP Laboratories, Philadelphia VA
Medical Center
Cardiovascular Medicine - Cardiac
Arrhythmia
Univ of Penn School of Medicine

Dr. Han-Xiang Deng

MD., Ph.D
Associate Professor and Research
Department Division of Neuromuscular
Medicine
Davee Department of Neurology and Clinical
Neuroscience
Northwestern University
Feinberg School of Medicine

Dr. Pina C. Sanelli

Associate Professor of Public Health
Weill Cornell Medical College
Associate Attending Radiologist
NewYork-Presbyterian Hospital
MRI, MRA, CT, and CTA
Neuroradiology and Diagnostic
Radiology
M.D., State University of New York at
Buffalo, School of Medicine and
Biomedical Sciences

Dr. Roberto Sanchez

Associate Professor
Department of Structural and Chemical
Biology
Mount Sinai School of Medicine
Ph.D., The Rockefeller University

Dr. Wen-Yih Sun

Professor of Earth and Atmospheric
SciencesPurdue University Director
National Center for Typhoon and
Flooding Research, Taiwan
University Chair Professor
Department of Atmospheric Sciences,
National Central University, Chung-Li,
TaiwanUniversity Chair Professor
Institute of Environmental Engineering,
National Chiao Tung University, Hsin-
chu, Taiwan.Ph.D., MS The University of
Chicago, Geophysical Sciences
BS National Taiwan University,
Atmospheric Sciences
Associate Professor of Radiology

Dr. Michael R. Rudnick

M.D., FACP
Associate Professor of Medicine
Chief, Renal Electrolyte and
Hypertension Division (PMC)
Penn Medicine, University of
Pennsylvania
Presbyterian Medical Center,
Philadelphia
Nephrology and Internal Medicine
Certified by the American Board of
Internal Medicine

Dr. Bassey Benjamin Esu

B.Sc. Marketing; MBA Marketing; Ph.D
Marketing
Lecturer, Department of Marketing,
University of Calabar
Tourism Consultant, Cross River State
Tourism Development Department
Co-ordinator , Sustainable Tourism
Initiative, Calabar, Nigeria

Dr. Aziz M. Barbar, Ph.D.

IEEE Senior Member
Chairperson, Department of Computer
Science
AUST - American University of Science &
Technology
Alfred Naccash Avenue – Ashrafieh

PRESIDENT EDITOR (HON.)

Dr. George Perry, (Neuroscientist)

Dean and Professor, College of Sciences

Denham Harman Research Award (American Aging Association)

ISI Highly Cited Researcher, Iberoamerican Molecular Biology Organization

AAAS Fellow, Correspondent Member of Spanish Royal Academy of Sciences

University of Texas at San Antonio

Postdoctoral Fellow (Department of Cell Biology)

Baylor College of Medicine

Houston, Texas, United States

CHIEF AUTHOR (HON.)

Dr. R.K. Dixit

M.Sc., Ph.D., FICCT

Chief Author, India

Email: authorind@computerresearch.org

DEAN & EDITOR-IN-CHIEF (HON.)

Vivek Dubey(HON.)

MS (Industrial Engineering),

MS (Mechanical Engineering)

University of Wisconsin, FICCT

Editor-in-Chief, USA

editorusa@computerresearch.org

Sangita Dixit

M.Sc., FICCT

Dean & Chancellor (Asia Pacific)

deanind@computerresearch.org

Luis Galárraga

J!Research Project Leader

Saarbrücken, Germany

Er. Suyog Dixit

(M. Tech), BE (HONS. in CSE), FICCT

SAP Certified Consultant

CEO at IOSRD, GAOR & OSS

Technical Dean, Global Journals Inc. (US)

Website: www.suyogdixit.com

Email: suyog@suyogdixit.com

Pritesh Rajvaidya

(MS) Computer Science Department

California State University

BE (Computer Science), FICCT

Technical Dean, USA

Email: pritesh@computerresearch.org

CONTENTS OF THE VOLUME

- i. Copyright Notice
 - ii. Editorial Board Members
 - iii. Chief Author and Dean
 - iv. Table of Contents
 - v. From the Chief Editor's Desk
 - vi. Research and Review Papers
-
- 1. Studying Impact of Individual Factors in Information Technology Acceptance in Accounting Occupation by Use of TAM Model (Iranian Case Study). **1-6**
 - 2. Learning Organizations, the American Employee and Manager, and the Developmental Role of the Social Sciences. **7-10**
 - 3. Lagos State Subscribers' Trade-Offs Regarding Mobile Telephone Providers: An Analysis of Service Attributes Evaluation. **11-17**
 - 4. Bureaucracy and Rural Development; the Role of Public Administration in National Development: The Nigerian Perspective. **19-40**
 - 5. Multivariate Granger Causality between Economic Growth, Electricity Consumption, Exports and Remittance for the Panel of Three SAARC Countries. **41-54**
 - 6. "Impact of Leadership Style (Transformational & Transactional Leadership) On Employee Performance & Mediating Role of Job Satisfaction" Study of Private School (Educator) In Pakistan. **55-64**
 - 7. Financial Analysis of Energy Producing Companies in Pakistan (2001-2010). **65-73**
 - 8. An Experimental Use of Delphi Method for Understanding Chemists' Opinions Related To Medications for Swine Flu. **75-81**
 - 9. Attitude of Uninsured towards Life Insurance (A Study in East Godavari District, Andhra Pradesh). **83-96**
 - 10. Multiple Borrowing and Loan Repayment: A Study of Microfinance Clients at Iringa, Tanzania. **97-102**
-
- vii. Auxiliary Memberships
 - viii. Process of Submission of Research Paper
 - ix. Preferred Author Guidelines
 - x. Index



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Studying Impact of Individual Factors in Information Technology Acceptance in Accounting Occupation by Use of TAM Model (Iranian Case Study)

By Amir Ramazani, Morteza Ramazani & Susan Davirani

Payame Noor University

Abstract - Today Information technology as the most use fullness part of industry, economics and culture is considered. Accounting as profession that provides information for decision-making of users and in complicated world of organization must use information technology to present information to users in time. This research by purpose of studying the effect of individual factors in accepting information technology by using model TAM that is research methodology in studying descriptive- surveying method that research for richly to purposes of research is used inferential and descriptive statistic and the results of research is indicated lack of perceived ease by accountants the results and finding of research.

Keywords : *system usage, perceived usefulness, perceived ease of use, individual factors and Iranian accountants, Iran.*

GJMBR-A Classification : *FOR Code: 150102, 1501021 JEL Code: M41*



Strictly as per the compliance and regulations of:



Studying Impact of Individual Factors in Information Technology Acceptance in Accounting Occupation by Use of TAM Model (Iranian Case Study)

Amir Ramazani^α, Morteza Ramazani^σ & Susan Davirani^ρ

Abstract - Today Information technology as the most use fullness part of industry, economics and culture is considered. Accounting as profession that provides information for decision-making of users and in complicated world of organization must use information technology to present information to users in time. This research by purpose of studying the effect of individual factors in accepting information technology by using model TAM that is research methodology in studying descriptive- surveying method that research for richly to purposes of research is used inferential and descriptive statistic and the results of research is indicated lack of perceived ease by accountants the results and finding of research.

Keywords : *system usage, perceived usefulness, perceived ease of use, individual factors and Iranian accountants, Iran.*

1. INTRODUCTION

In today's global business environment, one of the major concerns that have to be pondered is the adaptation of Information technology (IT) due to the dynamic and comprehensive nature of it. There is little doubt that information and communication technology has contributed immensely to the magnitude, speed, and acceleration of change in business practice over the past three decades (Hunton, 2002) and new IT often results in multiple outputs such as improved decision making and timeliness of reporting, increased and broader information availability, increased productivity, and increased profitability (Dehning, 2002). However, along with all these advantages it brings challenging and competitive environment.

What factor or factors because that one person accept new technology? Is this factors simply dependant on its technology features? Or people characteristic impact on acceptance? If each one of these factors is important how and with what method they effect on technology acceptance? With regard to

rapid growth use of computer in organizations, in recent decades, information technology almost has connected with all aspects of our life. Almost each person and organization attaches special importance for skill and benefit of computers.

Computer in wide-spread range of districts such as education, business, entertainment, communication and daily life is used, for example, in district training computer, internet, multimedia tools and computer networks, and educational institutions and their instruction use technology tools for improvement of their quality performance. Overall, organizational use information technology for increasing job efficient, influential and improvement quality and mainly for his reason tend to use it that believe information technology could provide beneficial opportunity for organization and the fact that could have important role to help organization for increasing productivity and performance (Nunn and Quinet, 2002).

Of course, an always organization doesn't enjoy mentioned benefits in lieu of use of information technology because to obtain this benefit is relative to effective use of information technology system. Beradly and Rashel organizations haven't use computer systems appropriately. Although organization use financial sources for buying and placing computer system for improvement performance and its affection, but always their successes isn't guarantee. As people resist use of technology, objective benefits haven't obtained, organizations, therefore lose their money, time and other source (Nunn, 2001) we have studied in this research with patter of men articles (Hyo- Jeong kim, Micheal Mannino and Robert, Nieschwietz, 2009) effective Individual factors in information technology acceptance between Iranian accountants. Individual factors in this research are divided two bunches: job relevance, output quality and result demonstration that includes main variables of research.

a) Technology Acceptance Model

Technology Acceptance Model (TAM) is most influential model of testing information system. TAM posits that perceived usefulness and perceived ease of

Author α : Department of Management and Accounting, Payame Noor University, P.O BOX 19395-3697 Tehran, Iran.

*Author σ : Accounting and management Departement, Zanjan Branch, Islamic Azad University, Zanjan, Iran. (Corresponding Author)
E-mail: MortezaRamazani@ymail.com*

Author ρ : Computer Engineering Departement, Zanjan Branch, Islamic Azad University, Zanjan.

use technology (Davis et al.1989; Venkatesh and Morris 2000; Venkatesh, Morris and Davis 2003) determine an individual's intention to use a system with intention to use serving as a mediator of actual system use. TAM model is shown in Figure 1. Perceived usefulness is also seen as being directly impacted by perceived ease of use. Perceived usefulness is the extent to individual

believes that using an information system will enhance his/her productivity. Perceived ease of use technology is the extended to individual perceived that using an information system is free of effort (Davis et al. 1989). Moon and Kim (2001) stated perceived playfulness is the extent to an individual perceives attentions which are related on the interaction within information system.

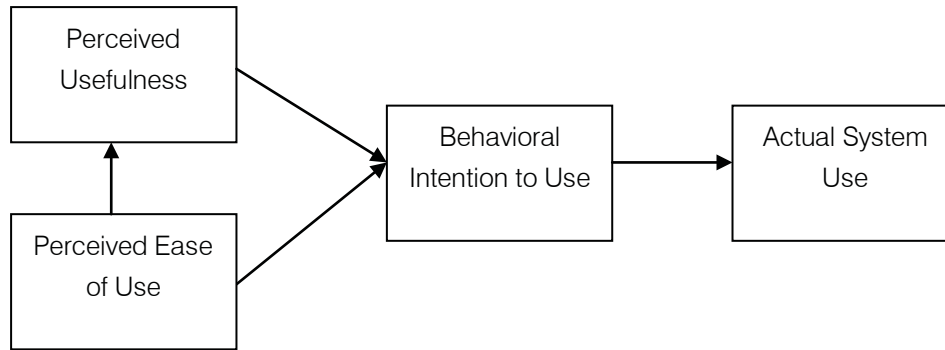


Fig.1.Technology Acceptance Model

b) The Use of ICT in Accounting Education

In the past years several researchers have studied the application of technology in the accounting classroom (Apostolou et al, 2001, Watson et al, 2003). Halibi et al (2002) surveyed introductory accounting trainees to determine trainee attitudes towards tele-teaching versus traditional in-class lectures. They found that most trainees preferred the traditional face-to-face approach of teaching. Moreover, Lane and Porch (2002) studied the impact of computer aided learning on performance of accounting undergraduates in the UK and found that computer-aided learning technology has negatively affected the trainees' perception of accounting as a subject. Peterson and Reider (2002) reported that trainees had an overall positive experience for the use of computers in certification in financial management. Crandall and Philips (2002) found that hypertext learning could be used in accounting classes to enhance case based instruction. Rudolph et al (2002) found that only 17% of the trainees would take another interactive television course when examining the impact of interactive television on learning. Mahoney and Welch (2002) reported that 96% of their accounting trainees sample indicated that the use of PC movies was very beneficial. These findings indicate that there is a variety of reactions towards the use of advanced and different information and communication technologies in teaching in general and in specific disciplines in particular.

The sample of accounting trainees studied by McCourt and Radcliff (2000) reported that computer based instruction made the material more interesting and stimulating from trainees in the UK. Moreover, Green, Reinstein, and McWilliams (2000) found that trainees' interest in accounting increased in the

interactive courseware group when compared with the traditional lecture problem solving group and that trainees generally found the interactive courseware to be easy to use and as effective as the traditional methods. Most of the research was conducted in developed nations. No present evidence indicates that such research and results can be applied to developing nations, especially with the varying environments and the role of different cultures that affects the introduction, diffusion and use of information and communication technology. The Technology Acceptance Model-TAM (Davis, 1989) is suitable for testing the application of information technology in accounting education in developing nations since it has shown robustness across the spectrum of information technology applications, has been well researched, and gives easily interpretable results (Rose and Straub, 1998). In other terms, TAM has been reported to be a consistently good predictor of the use of information technology in developed countries (Kamel and Assem, 2003, Rose and Straub 1998, Adams et al, 1992, Davis, 1989 and 1985).

Loch, Straub and Sevcik (2000) offer two main reasons why the transfer of information technology to developing nations is difficult and that relate to a) the cultural differences affecting systems development and implementation and b) the prevailing government policies and regulations that influence information technology transfer. Within the context of testing the effectiveness and reliability of using information and communication technology in teaching accounting, it is important to assess the role of culture in the technology transfer in light of the arguments made by Loch et al (2000). The impact of the role of culture represents a milestone in the successful diffusion of information

technology since it varies from one nation to another and is bound to a number of complex definitions and shared values amongst other aspects (Straub et al, 2002). It is important to note that research has proved in many contexts that culture impacts the acceptance of technology. Respectively, it is important to understand the impacts and role of culture to be able to project the likelihood of the success of the introduction of information technology (Loch et al, 2000). However, the role of culture is more or less localized and that is why it is important to study the role of culture within the environment of implementation because although the role of culture is powerful, cross cultural conflicts between different nations affects the information technology systems and processes (Straub et al, 2001).

II. RESEARCH OBJECTIVES

This research is followed these objectives:

1. Measurement the amount of impact on internal individual factors on technology acceptance.
2. Present appropriate method, for flowing technology acceptance by accountants.

3. Beneficial reorganization and perceived ease for technology acceptance by accountants.

III. RESEARCH HYPOTHESES

1. Perceived usefulness has positive impact on technology acceptance by Iranian accountants!
2. Perceived ease has positive impact on technology acceptance by Iranian accountants!
3. Perceived ease has positive impact on perceived usefulness!
4. Existence of individual factors has positive impact on perceived usefulness by Iranian accountants!
5. Existence of individual factors has positive impact on perceived ease by Iranian accountants!

IV. RESEARCH MODEL

This research model on the basis of TAM model and on the base of research that Mrs (Hypo- Jeong Kim, Michael Mannino and Robert, Mieschewitz, 2009) have performance about information technology acceptance in the internal audit profession in American 2009 has been figure.2 following from:

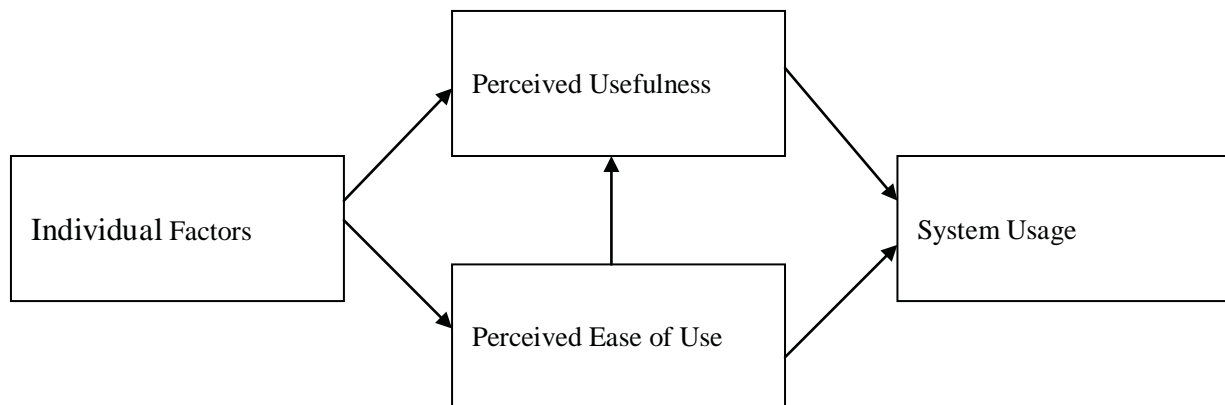


Fig.2 : The model of research

a) Conceptual Definition of Individual Factors

Individual Factors	Definition of Factors
Job Relevance	"Individual's perception regarding the degree to which the target system is applicable to his or her job (Venkatesh and Davis, 2000, 191).
Output Quality	"How well the system performs those tasks (Venkatesh and Davis, 2000, 191).
Result Demonstration	Result tangibility of the results of using the innovation (Moore and Benbasat, 1991, 203).

Individual factors are the third set of external variables. Individual factors are not standard in previous research as they have been also known as cognitive factors (Venkatesh and Davis, 2000) and personal factors in Social Cognitive Theory (Compeau and Higgins, 1995). Individual factors such as job relevance, output quality, and result demonstrability were demonstrated to be significant determinants of technology acceptance and influence the technology acceptance through perceived usefulness (Venkatesh and Davis, 2000) Result demonstrability positively influence perceived usefulness. Based on this relationship, we hypothesized a positive relationship between individual factors and perceived usefulness and also a positive relationship between individual factors and perceived ease of use.

V. RESEARCH METHODOLOGY

In this study, research methodology is descriptive- survey and in applied kind. In the direction of entrance to research district have also used field method. In the direction of gathering required information in research has been also driven profit two data primary and secondary bunches that in direction of secondary data, documents, evidences, books, articles, internet, searching motors and connected sites are collected circles. Techniques of interview and questionnaire have also used for gathering primary research data at statistical society simultaneously and questionnaire has used by likert five choices spectrums perfectly agree or disagree.

a) Statistical Society

Statistical society uses these study active accountants in profession that use information technology whether in case or continuously.

b) Method of decomposing and analyzing data

In process of data use method of descriptive and decomposing and analyzing statistic and interpreting information inferential statistics methods in respect testing present variables in research, correlation of independent variables on each other has been used Pearson correlation coefficient method.

c) Pearson correlation test

The determination of statistical tools correlation is for determination of sort and grade of quantitative variable with other quantitative variable. Beki's correlation coefficient is useable criterion in determining correlation of two variables. Correlation coefficient show intensity of connection and type relationship (direct and reverse). This coefficient is between 1 to -1 and is case of lack in existence of relationship between two variable is equal to zero.

Pearson correlation coefficient is counted by following formula:

$$r = \frac{\sum xy - \overline{nx}\overline{y}}{\sqrt{\sum x^2} \sqrt{\sum y^2 - ny^{-2}}}$$

VI. RESULT AND ANALYZE

With regard to the fact that a good test must has some desirable features such as objectivity, executive ease of use, practicable, is of interpretation and expression, validity and reliability. The most important mentioned cases in this features is validity and reliability. Researcher for research reliability has used Cranach's Alpha method that according to table No.1 counted Cranach's Alpha value by SPSS software is equal 0.828 bigger than 0.7. Thus test has acceptable

reliability and answers have suitable validity and for validity of test 10 used questionnaires again to the reader and uniting result of opinions is chronological period at one week has shown that indicate suitable validity of questionnaires.

Table No.1, Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha
0.828	0.828

a) Descriptive statistics of organizational factors

Table No.2, Frequencies of Individual Factors

Individual Factors	N	Mean	St. Deviation
Job Relevance	145	2.6379	0.90039
Output Quality	145	2.2276	0.99823
Result Demonstration	145	2.813	1.20177

VII. TESTING RESEARCH HYPOTHESES

With regard to the results of Pearson correlation test, research hypothesizes result is described in table No.2

a) First Hypothesis

With regard to correlation coefficient 0.368 and P-value = 0.00 hypothesis in the level of error 0.01 is accepted then could resulted that perceived usefulness has positive impact on technology acceptance by accountant.

b) Second Hypothesis

With regard to correlation coefficient -0.160 and P-value = 0.054 hypothesis in the level of error 0.01 is rejected then could resulted that perceived ease of use hasn't positive effect on technology acceptance by Iranian accountant.

c) Third Hypothesis

With regard to correlation coefficient 0.337 and P-value = 0.00 hypothesis in the level of error 0.01 is accepted then could resulted that perceived ease of use has positive impact on perceived use fullness.

Table No.2					
Factors			Perceived Usefulness	Perceived Ease of Use	Result
Hypotheses					
First Hypothesis	System Usage	Pearson Correlation	0.368		Accept
		Sig. (2-tailed)	0.000		
		N	145		
Second Hypothesis	System Usage	Pearson Correlation		-0.160	Reject
		Sig. (2-tailed)		0.054	
		N		145	
Third Hypothesis	Perceived Usefulness	Pearson Correlation		0.337	Accept
		Sig. (2-tailed)		0.000	
		N		145	
Forth Hypothesis	Individual Factors	Pearson Correlation	-0.067		Reject
		Sig. (2-tailed)	0.425		
		N	145		
Fifth Hypothesis	Individual Factors	Pearson Correlation		-0.080	Reject
		Sig. (2-tailed)		0.342	
		N		145	

d) Fourth Hypothesis

With regard to correlation coefficient -0.067 and P-value = 0.425 hypothesis in the level of error 0.01 is rejected then could resulted that existence of organizational factors has positive impact on perceived use fullness by Iranian accountant.

e) Fifth Hypothesis

With regard to correlation coefficient -0.080 and P-value = 0.342 hypothesis in the level of error 0.01 is rejected then could resulted that existence of individual factors hadn't positive impact on perceived ease of use by accountant.

VIII. RESEARCH FINDING AND RESULTS

The results of research indicate rejection of second by Hypothesis that show deficiency of accountant motivations for learning Information technology and on the other hand rejection of fourth and fifth hypothesizes indicate lack of positive effect of individual factors on perceived usefulness and perceived ease by accountants that indicate lowing and lack of usefulness on the quality of exit information and lack of result clearness in information technology.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Apostolou, B. Watson, S. Hassel, J. and Webber, S. (2001). Accounting Education Literature Review (1997-1999). Journal of Accounting Education 19(1), 1-61.
2. Crandall, D. and Philips, F. (2002). Using Hypertext in Instructional Material: Helping Students Link Accounting Concept Knowledge to Case Applications. Issues in Accounting Education 17(2), 163-183.
3. Davis F.D. (1989). Perceived usefulness, Perceived Ease of use and user acceptance technology. MIS Quality 13, 1, pp.319-339
4. Dehning B (2002). Discussion of Impact of Information Technology on Public Accounting Firm Productivity. J. Info. Syst., 16(2): pp. 223-226.
5. Halibi, A. Tuovein, J. and Maxfield, J. (2002). Tele Teaching Accounting Lectures Across a Multi Campus: A Students Perspective. Journal of Accounting Education 11(3), 257-270
6. Hunton JE (2002). Commentary - Blending Information and Communication Technology with Accounting Research. Am. Account. Assoc. Account. Horiz., 16(1): 55-67.
7. Kim, Mannino, Nieschwietz (2009), "information technology acceptance in the internal audit profession: impact of technology features and complexity", International Journal of Accounting Information System, PP. 214-228.
8. Lane, A. and Porch, M. (2002). Computer Aided Learning (CAL) and its Impact on the Performance of Non- Specialists Accounting Undergraduates. Accounting Education 11(3), 217-233.
9. Mahoney, L. and Welch, J. (2002). Teaching Accounting Information Systems Using Personal Computer Movies. Advances in Accounting Education 4(1), 119-138.
10. Moon, J. & Kim, Y. (2001). Extending the TAM for a world-wide0web context. Information & Management, 38,4, 217-230.

11. Nunn, S. & Quinet, K. (2002) Evaluating the Effects of Information Technology on Problem-Oriented Policing, *Evaluation Review*, 26, 81-108.
12. Nunn, S. (2001) Police Information Technology: Assessing the Effects of Computerization on Urban Police Functions, *Public Administration Review*, 61, 221-234.
13. Peterson, B. and Reider, B. (2002). Perceptions of Computer Based Testing: A Focus on CFM Examination. *Journal of Accounting Education* 20(3), 265-284.
14. Rudolph, H. Seay, R. and Milkman, M. (2002). Assessing the Effectiveness of Interactive Television Instruction in an Upper Division Accounting Course. *Advances in Accounting Education* 3(1), 151-168.
15. Venkatesh, V. & Morris, M. G. (2000). Why don't men ever stop to ask for direction? Gender, social influence, and their role in technology acceptance and usage behavior, *MIS Quarterly*, 24, 3, pp. 115-139.
16. Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27, 3, pp. 425-478.
17. Watson, S. Apostolou, B. Hassel, J. and Webber, S. (2003). Accounting Education Literature Review (2000-2002). *Journal of Accounting Education* 21(1), 267-325.





GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Learning Organizations, the American Employee and Manager, and the Developmental Role of the Social Sciences

By John Theodore

University of Nigeria

Abstract - The purpose of this article is to present the importance of the inclusion of the perspective of social sciences learning into the learning emanating from the training of the functional units and the three levels of the hierarchy in learning organizations in order for such organizations to acquire holistic learning that will satisfy both their internal and external environmental learning needs. Learning organizations are characterized by total employee involvement in a process of collaboratively conducted, collectively accountable change directed towards shared values or principles. The social sciences is the study dedicated to the social activities of individuals and groups. The branches of the social sciences included in this article are cultural anthropology, economics, history, communication, psychology, political sciences, geography, law, and sociology.

Keywords : *Learning organizations, organization learning, organization development, holistic learning, action orientation, social sciences, cultural anthropology, economics, history, communication, psychology, political sciences, geography, law, sociology.*

GJMBR-A Classification : *FOR Code:150312, 150305 JEL Code: O15, M12*



Strictly as per the compliance and regulations of:



Learning Organizations, the American Employee and Manager, and the Developmental Role of the Social Sciences

John Theodore

Abstract - The purpose of this article is to present the importance of the inclusion of the perspective of social sciences learning into the learning emanating from the training of the functional units and the three levels of the hierarchy in learning organizations in order for such organizations to acquire holistic learning that will satisfy both their internal and external environmental learning needs. Learning organizations are characterized by total employee involvement in a process of collaboratively conducted, collectively accountable change directed towards shared values or principles. The social sciences is the study dedicated to the social activities of individuals and groups. The branches of the social sciences included in this article are cultural anthropology, economics, history, communication, psychology, political sciences, geography, law, and sociology.

Keywords : Learning organizations, organization learning, organization development, holistic learning, action orientation, social sciences, cultural anthropology, economics, history, communication, psychology, political sciences, geography, law, sociology.

I. INTRODUCTION

Learning organizations are viable and vital means for developing a corporate culture of high performance learners who become transformed people much better adapted to get results that affect the bottom line and the quality of life in their organizations (Kline & Saunders, 1998). Learning organizations are of tremendous importance in nations with advanced social, technological, and economic systems because they possess all the factors of production in abundance and thus operate under economies of scale. This is especially true for American organizations that play a paramount economic and business role in today's global economy. Laconically stated, learning organizations are the most advanced structures because they learn and practice continuous organizational development on an action orientation basis.

II. LEARNING ORGANIZATIONS

Learning organizations are entities where people continually expand their capacities to create the

results they truly desire, environments where new and expansive patterns of thinking are nurtured, entities designed to set free collective aspirations and where people are continually learning to see the whole together (Senge, 1990). Learning organizations are characterized by total employee involvement in a process of collaboratively conducted, collectively accountable, and a planned and meaningful change is directed towards shared values or principles (Watkins & Marsick, 1992). A distinction needs to be made between learning organizations and organizational learning. Organizational learning indicates that organizations learn through employees' learning and knowledge and sharing that knowledge; organizations learn and learning takes place at an organizational level (Rebelo & Gomez, 2008). Furthermore, organizational learning is not the same as individual learning, even when the individuals who learn are members of the organization (Argyris & Schon, 1978). Organizational learning is not merely individual learning, yet organizations learn only through the experience and actions of individuals (Argyris & Schon, 1978). The importance of individual learning for organizational learning is widely recognized by management and organization behavior and also by development professors and consultants. Organizational learning cannot occur without individual learning (Seezik, Poel & Kirscher, 2010). The main difference between organizational and individual learning is the information storage process. Individuals store their learning in their memories, augmented by libraries, notes, and other aids to memory. Organizations store learning primarily in their cultures with a secondary backup in documentation (Kline & Saunders, 1998).

III. WHAT ORGANIZATIONS LEARN

The basic functional units of organizations are production and operations, finance and accounting, marketing and sales, and human resources. From these basic functional units numerous ramifications can be created based about the nature of the organization and the industry in which it belongs.

In addition, organizations have top, middle, and operational levels; therefore, the nature and purpose of learning has to do with increasing the performance of the functional units and hierarchical levels of the

*Author : Ph.D., D.B.A., Ph.D., CMC, JDT Management Consultants,
2578 Estancia Blvd, Clearwater, Florida 33761 USA.
E-mail : jdtheodore@tampabay.rr.com*

organization which then results in organizational development (Theodore, 2003) conducive to a more open and more adaptive organization through increases in capability and potential for it to continue planned change efforts on an action orientation basis (Schein, 1985). Therefore, learning is the result of training the managerial and non-managerial personnel in their functional units and in the three levels of the hierarchy in order to perform their tasks-- as specified in their respective job descriptions--more effectively and efficiently and to continue to improve their performance on an action orientations basis (Lewin, 1951). Learning that enhances the knowledge of the human factor to better understand the firm's external environment of the organization and how such organization is functioning within the micro and macro external environment on a domestic and global basis is rarely provided.

IV. THE AMERICAN EMPLOYEE AND MANAGER

Americans do not have sufficient knowledge about the social sciences because of their historic isolation from the rest of the world. King George III noticed that his subjects in the American colonies knew very little about civics and the social sciences in general because they had become Americans. Isolation from home, adaptation of a new environment, learning to cope with "native Indian peoples, exploitation of different resources, and the invention of new modes of travel and communication had made them so. Virginia was not the Netherlands or Ireland, and the Atlantic was not the English Channel" (Grosvenor, 1985, p. 533).

Today, the overall achievement of upper level high school students in the core subjects of the social sciences is dismal; "less than half of these students graduate from high school with in-depth knowledge and understanding of these core subjects—history, geography, civics, and economics" (Patrick, 1991, p. 5). Youths in the United States today "are less geographical culturally literate than are youths in many other industrialized countries" (Carano & Berson, 2007, p.65). Today's college graduates "know no more about politics than did high school graduates in 1950. Recent research indicated that levels of political sciences knowledge affect the acceptance of democratic principles, attitudes toward specific issues, and political participation" (Galston, 2001, p. 217).

V. LEARNING SOCIAL SCIENCES

By providing social sciences learning, which is intertwined with the learning emanating from the training of the functional units and the three levels of the hierarchy, the organization will acquire holistic learning that will satisfy both its internal and external environmental learning demands. For example, the enterprise will acquire basic knowledge of the world economy; global affairs like recession, inflation,

unemployment, taxation, investments and labor force; knowledge of the political systems, public policies, and domestic and international political affairs; and much more educational information which will elevate the organization's overall level of knowledge.

The primary focus of the social sciences is the study dedicated to investigating the social activities of individuals and groups. The social sciences include a wide variety of branches, such as history, anthropology, and related areas. For the purpose of this study the following branches of the social sciences will be utilized:

Cultural anthropology is the study of humankind everywhere throughout time, which produces knowledge about what makes people different from one another and what we all have in common (Haviland, Prins, Walrath, & McBride, 2011). The organization will learn why people are different around the world and how it can bridge such differences in order to interact harmoniously with them.

Economics is the study of how society manages its scarce resources (Mankiw, 2007). The organization will learn about the various economic systems and how they operate. For example, employees and managers will be able to understand how the economies of China and the European Union operate in comparison to the American economy; the causes of economic crises and prosperity around the world; and the meaning, benefits, and threats of globalization.

History is dedicated to describing and explaining past events. Herodotus, the Father of History, considered history as the discipline that described past events caused by humans, such as wars or expeditions, and that the knowledge of such events benefited humanity (Dewald & Waterfield, 2008). The organization will learn the history of nations and regions of the world and will be able to understand why social, political, and economic events are taking place, such as the revolts in the Arab World today.

Communication is the process by which people try to establish a common understanding between or among themselves (Krizan, Merrier, Logan, & Williams, 2008). This branch of the social sciences will enable the organization to communicate better with both the domestic external environment and its global counterpart. When communication knowledge is intertwined with the knowledge received from the other branches of the social sciences, the organization will communicate from the point of knowledge, not ignorance, about its operations that are impacted by national and international affairs.

Psychology is the study of the human mind. Psychology also inquires about how people use their mental abilities, or minds, to operate in the world around them (Butler & McManus, 2000). Education received from this branch of the social sciences will enable the organization to understand how people in the domestic

external environment (a competitor, for example) and the global counterpart (negotiating a business contract with a foreign firm) think, act, and react. Therefore, the organization will have the knowledge of interacting with the external environment from a position of knowledge and strength.

Political Sciences is the discipline dedicated to the examination of the study of politics within the political systems of the world (Heineman, 1996). The organization will learn how political systems under democracy, socialism, and communism operate and will be able to build bridges of understanding and interaction with them.

Geography. Ancient geography was often characterized as descriptions of faraway places, but modern geography has become much than writing about the earth. Many scientists describe geography as the bridge between the human and the natural sciences (Tucci & Rosenberg, 2009). The organization will learn where countries and regions are located around the world, the name of the countries and continents, climatic conditions, and related information that will enable the organization to act in a geopolitical and geo-economic environment. Not knowing that June is a winter month in the Southern Hemisphere, the organization would be embarrassed when interacting with Australian or Chilean customers.

Law is the body of enforceable rules governing relationships among individuals and between individuals and their society (Miller & Jentz, 2003). Here the organization will learn about the Common Law and the Civil Law in the Western World, Sharia in the Muslim World, and International Law that governs international economic, political and business transactions.

Sociology is the science dedicated to human association, its origin, development, forms, and functions (Ellwood, 2006). From this branch of the social sciences, the organization will learn how people live, act, and interact with persons in other countries and regions. They will learn about world religious, beliefs, customs, and related topics. The organization will be able to understand critical issues in sociology such as bribing, for example, which is an accepted and socially required practice in the Middle East due to the region's culture, but it is an unethical and illegal practice in the United States.

VI. THE WAY OF SOCIAL SCIENCES LEARNING

Well planned social studies learning will assist the organization to develop long-term understanding in the core content areas of the branches of the social sciences specified above.

The author of this work, who is profoundly aware of the time and money restrictions organizations have for training programs, advises his consulting

clients to divide social sciences learning into two parts. The first part is instruction by either internal or external specialists who insert such instruction in the training programs in the functional areas and the organizational hierarchy. Once this part is completed, then the trainees are requested to acquire printed and/or electronic current events information in the assigned social sciences branches and discuss such information in the training sessions.

There is a similar way of blended learning which is not related to this article but it is interesting to mention – *service learning*. Recently, the most rapid growth has occurred in a different form of civic education—called *service learning* “which is a curriculum-based community service that integrates classroom instruction with community service activities” (Galston, 2001, p.229)

VII. CONCLUSIONS AND RECOMMENDATIONS

A well planned infusion of social sciences learning into the learning emanating from the training of the functional units and the three levels of the hierarchy in learning organizations, such organizations will acquire holistic learning that will satisfy both their internal and external environmental learning demands.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Argyris, C., & Schon, D. (1978). *Organizational learning: A theory of action perspective*. Readings Massachusetts: Addison-Wesley Publishing Company.
2. Butler, G., & McManus, F. (2000). *Psychology: A very short introduction*. Oxford, England: Oxford University Press.
3. Carano, K. T. (2009). Passport to cultural enrichment: The Peace Corps world wise schools experience. *Social Studies*, 100(4), 187-192. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ846818&site=ehost-live>.
4. Carano, K. T., & Berson, M. J. (2007). Breaking stereotypes: Constructing geographic literacy and cultural awareness through technology. *Social Studies*, 98(2), 65-70. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ767651&site=ehost-live>
5. Dewald, C., & Waterfield, R. (2008). *Histories by Herodotus*. Oxford, England: Oxford University Press.
6. Ellwood, C. A. (2006). *Sociology and modern social problems*. Charleston, South Carolina: BiblioBazaar Publishing.
7. Galston, W. A. (2001). Political knowledge, political engagement, and civic education. *Annual Review of Political Science*, 4(1), 217. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=5367196>

8. Grosvenor, G. M. (1985). What happens when America flunks geography? *Vital Speeches of the Day*, 51(17), 533-535. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=ulh&AN=8500004706&site=ehost-live>
9. Haviland, W. A., Prins, H. E. L., Walrath, D., & McBride, B. (2011). *Cultural anthropology: The human challenge* (13th ed.). Belmont, CA: Wadsworth Publishing.
10. Heineman, R. A. (1996). *Political science: An introduction*. New York: McGraw-Hill Companies.
11. Kline, P., & Saunders, B. (1998). *Ten steps to a learning organization* (2nd ed.). Salt Lake City, UT: Great River Books.
12. Krizan, A.C., Merrier, P., Logan, J., & Williams, K. (2008). *Business communication* (7th ed.). Mason, OH: Thomson South-Western.
13. Lewin, K. (1951). *Field theory in social science*. New York: Harper & Row.
14. Mankiw, G. (2007). *Essentials of economics* (4th ed.). Mason, OH: Thomson South-Western.
15. Miller, R., & Jentz, G. (2003). *Business law today* (7th ed.). Mason, OH: Thomson South-Western.
16. Patrick, J. J., & ERIC Clearinghouse for Social Studies/Social Science Education, B. N. (1991). Achievement of knowledge by high school students in core subjects of the social studies. *ERIC Digest*. (ERIC Document Reproduction Service No. ED 329486). Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED329486&site=ehost-live>
17. Rebelo, T., & Gomes, A. (2008). Organizational learning and the learning organization: Reviewing evolution for prospecting the future. *Learning Organization*, 15(4), 294-308. doi: 10.1108/09696470810879556
18. Seezik, A., Poel, R., & Kirscher, P. (2010). SOAP in practice: Learning outcomes of a cross institutional innovation project conducted by teachers, student teachers, and teacher educators. *European Journal of Teacher Education*, 33(3), 229-243. doi:10.1080/02619768.2010.490911
19. Senge, P. M. (1990). *The Fifth discipline*. New York: Currency Doubleday Books.
20. Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco: Jossey- Bass.
21. Theodore, J. D. (2003). *Holistic management*. (Revista-Escuela de Administración de Negocios.) Escuela de Administración de Negocios Institución Universitaria.
22. Thornton, S. J. (2007). Geography in American history courses. *Phi Delta Kappan*, 88(7), 535-538. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=24257007&site=ehost-live>
23. Tucci, P.A., & Rosenberg, M.T. (2009). *The Handy geography answer book* (2nd ed.). Detroit, MI: Visible Ink Press.
24. Watkins, K., & Marsick, V. (1992). Building the learning organization: A new role for human resource developers. *Studies in Continuing Education*, 14(2), 115-29.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Lagos State Subscribers' Trade-Offs Regarding Mobile Telephone Providers: An Analysis of Service Attributes Evaluation

By Adamu, M.O. & Oladele M.F.

University of Lagos

Abstract - Consumers of mobile telephone services are faced with the task of choosing from among different service providers and services. This choice making is complex and it involves making some tradeoffs among the attributes of the various services before arriving at the services most desirable to them.

This study analyzed the process by which Lagos state subscribers of mobile telephone services select their desired services among some available telephone services in the market to meet their personal or corporate needs. Conjoint analysis was applied for analyzing the process which involved a trade-offs of several conflicting attributes of these telephone services by the subscribers before arriving at their choices. The respondents divided into two groups which are the private/personal calling plan (PPP) and the business/commercial calling plan (BCP). For each of the two calling plans twelve mobile telephone services attributes each with different levels were involved. The results show that for both calling plans, the subscribers have preference for MTN, followed by Zain and then Glo among the calling plan providers. They also show preference for the following service attributes, unlimited anytime minutes, unlimited free night calls, free weekend calls, international geographical coverage, complete control over credit usage and per second billings. Geographical coverage, control over credit usage and weekend minutes were three most important service attributes to them.

GJMBR-A Classification : FOR Code: 150505, 150501 JEL Code: M31



LAGOS STATE SUBSCRIBERSTRADE-OFFSREGARDINGMOBILETELEPHONEPROVIDERSANALYSISOF SERVICEATTRIBUTES EVALUATION

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Lagos State Subscribers' Trade-Offs Regarding Mobile Telephone Providers: An Analysis of Service Attributes Evaluation

Adamu, M.O.^a & Oladele M.F.^a

Abstract - Consumers of mobile telephone services are faced with the task of choosing from among different service providers and services. This choice making is complex and it involves making some tradeoffs among the attributes of the various services before arriving at the services most desirable to them.

This study analyzed the process by which Lagos state subscribers of mobile telephone services select their desired services among some available telephone services in the market to meet their personal or corporate needs. Conjoint analysis was applied for analyzing the process which involved a trade-offs of several conflicting attributes of these telephone services by the subscribers before arriving at their choices. The respondents divided into two groups which are the private/personal calling plan (PPP) and the business/commercial calling plan (BCP). For each of the two calling plans twelve mobile telephone services attributes each with different levels were involved. The results show that for both calling plans, the subscribers have preference for MTN, followed by Zain and then Glo among the calling plan providers. They also show preference for the following service attributes, unlimited anytime minutes, unlimited free night calls, free weekend calls, international geographical coverage, complete control over credit usage and per second billings. Geographical coverage, control over credit usage and weekend minutes were three most important service attributes to them.

1. INTRODUCTION

Nigerians formally joined the users of mobile telephone, popularly known as GSM in 1999 when MTN, the first mobile telephone service provider was licensed by the Obasanjo led civilian government to operate business in the country. Soon after, the market witnessed many Nigerian consumers subscribing into the few services being offered, which consisted mainly of communication via voice and text mail messages. At that time, the price of the few available services was very high. Despite that, many Nigerians subscribed into the services. With the favorable acceptance and high rate of adoption, more telephone service providers obtained their operation

licenses and joined the market. This led to the expansion in the range of services available. Competition among service providers increased, and the Nigerian mobile telephone services market witnessed varieties of service packages with different attributes designed and offered by the different networks of service providers to the consumer population as bait to attract them.

The decision about which service or service provider to choose among few was very simple at the initial stage. However, with increased number of service options being made available to the consumers as more companies were licensed to operate in the market, their decisions regarding their choice became complex, requiring serious evaluations based on many criteria and considerations.

There is need therefore to know the criteria upon which Lagosian consumer makes their choices of mobile telephone services and how they decide which service or service provider is better for them given the array of conflicting attributes associated with different service options available to them. This is the thrust of this research work.

Paul E. Green et al (2001) reported in their work on the thirty years history of Conjoint Analysis that Conjoint Analysis evolved from the seminal research of Luce and Tukey (1964) and that their theoretical contributions were put to use by a number of Psychometricians, including Carroll (1969) and Young (1969). These researchers developed a variety of nonmetric models for computing part-worths (attribute level values) from respondents' preference orderings across multiattributed stimuli, such as descriptions of products or services.

In the mid 80's, Johnson (1987) introduced his adaptive conjoint analysis programme that used graded paired comparisons as one set of input to the model. Hermen (1988) introduced a PC-based packaged that used full-profile stimuli based on orthogonal designs. The advent of PC-based conjoint packages opened a large and eager market for applying the methodology.

Conjoint analysis is one of the many techniques for handling situations in which a decision has to deal

Author a : Department of Mathematics, University of Lagos, Akoka, Lagos. E-mail: madamu@unilag.edu.ng

with options that simultaneously vary across two or more attributes.

This study considered the following networks: MTN, Glo-mobile, Zain, Etisalat, Multilinks, Visafone, Starcomms. The different mobile telephone service providers in Nigeria today have provided varieties of mobile telephone service plans for the Nigerian consumers to make their choice(s). Two important plans are the personal/private user plan (PPP) and the business/commercial plan (BCP). The personal/private plan is meant for subscribers to meet their personal needs while the business/commercial plan is used for business by people who retail or resell the services to other users for profit. These services have a number of attributes upon which the consumers make their choices based on the attractiveness of the attributes to them. There is need to know how Lagosian consumers make their choice between these mobile telephone services especially how they trade-off the different, mostly conflicting, service attributes before they finally arrive at their choice(s).

Some of the mobile telephone service attributes attached to the service plans mentioned above which are offered to the Lagos state subscribers are:

Name of company: This refers to the organization which provides the wireless plan.

Number of anytime minutes: This is the number of monthly minutes covered by each plan that can be used at any time.

Night minutes/free night calls: This describes an opportunity to make free calls to other users of the same network without any extra charges.

Weekend minutes: This is the number of monthly minutes covered during weekend. All weekend minutes are additional minutes that do not count against anytime minutes.

The geographical area that you can access: The network coverage in terms of number of states and countries covered by the network.

Mobile to mobile minutes: This is the number of monthly free minutes on calls placed to another mobile phone served by the same provider (that is, free minutes on calls between two users of the same provider).

Additional lines above two: This is the number of additional lines (above two) that a subscriber wish to include.

Price per month of additional lines: This is the cost of each additional line over the base of two wireless phones.

Control over credit usage: This is the opportunity to use the credit purchased by a subscriber at any time without any penalty.

Common charges for intra and inter network calls: This is the opportunity to pay the same tariffs for calling different networks.

Per second billings: This is the opportunity to pay for only the number of seconds used for calling.

For the marketing research work conducted for T-Mobile of the United States (Abba and Paul, 2003) applied conjoint analysis to analyze United States subscriber's trade-offs of mobile telephone service attributes. They evaluated two service plans namely single plan and family plan. Adamu et al (2009) applied conjoint analysis in the study of consumer preferences for choosing Nigerian GSM network provider services in Nigeria. The results of the conjoint analysis indicated that GSM network in Nigeria should focus more on how to improve their connectivity.

The remaining parts of the paper are as follows: section 2 presents the methodology. Section 3 involves the analysis of data and results. Discussion of the results is presented in section 4 and finally, section 5 concludes the study.

II. METHODOLOGY

In line with the methods applied by Abba and Paul (2003), several models of conjoint were used in this research work. The full Profile Conjoint was used, in which respondents receive a set of full profiles (based on orthogonal designs) and asked to respond by ranking and/or rating each profile on a likelihood of purchase scale. Also hybrid conjoint was used in which respondents were asked to carry out the following tasks. They were asked to evaluate the desirability of each attribute level on a (typically) 0 to 10, degree of desirability scale and then to rate the importance of each attribute on a 0-100 constant sum scale, and also to indicate their likelihood of purchasing a full profile on a 0-100 purchase scale. The hybrid model utilizes all three aspects of the rating process, individual level desirability, attribute importance and full profile evaluations. Each step contributes to the resultant set of part worth-one set of part worth for each respondent. Part worth is obtained by multiplying the importance weights with the associated attribute level's desirability rating. Choice-based Conjoint was equally used when the respondents were asked to choose their most favored profile out of the offered set of full profiles. Lastly, constant sum conjoint was used where respondents assigned 100 points across the full set of profiles to reflect their relative desirability of the profiles.

This study attempts to look at how the Lagosian mobile telephone service subscribers make trade-offs among the various service providers in the Lagos market. The study consists of two different telephone calling plans; these are the private/personal plan (PPP) and the business/commercial plan (BCP). The study population for this work consisted of telephone users in Lagos state. They are made up of both male and female users from across different parts of the state who are at least 18 years old and above. They were randomly selected from the local government areas in Lagos State.

The sample used in this study consisted of a total of 200 respondents randomly selected from the population of mobile telephone users in the Lagos state mobile telephone market. These 200 respondents were divided into two groups. The first group which is made up of 160 respondents was for the private/personal plan and the rest 40 respondents are for the business/commercial plan. There were two different set of questionnaires used for data collection; one was the questionnaire for the private/personal plan and the other was for the business/commercial plan. The questionnaires were administered on the respondents in a face to face interview. First, the researcher read and explained the questions on the questionnaires to the respondents after which they were allowed to answer the questions.

The research instruments used in this study consisted of two set of questionnaires. These are the questionnaire for the private/personal plan (QPPP) and the questionnaire for the business/commercial plan (QBCP). Each of the questionnaire consisted of sections for collecting information from respondents. Section one consisted of six questions for collecting information on respondents' background. Section two consisted of five parts. The first part which is made up of twelve questions was for collecting information on respondents' desirability of the calling plan's attributes. Each question under this part was structured after the method applied by professors Abba and Paul (2003) in their study of United states subscribers' trade-offs regarding mobile telephone providers in their analysis of service attributes evaluations in 2003, in which each mobile telephone service attribute was made to range from level zero which stands for completely unacceptable to level ten which stands for highly desirable.

The second part was for rating the attributes' importance. It consisted of a list of all the mobile telephone service attributes in this study. First, respondents were asked to look through the list of attributes and give a rating of zero to anyone that had no importance to them at all. Then they were asked to rate each attribute according to how important each attribute was to them. The higher the rating of an attribute, the more important the attribute was to the respondent. Respondents were to make sure that the ratings sum up to a total of 100, thus the ratings give the relative importance of each attribute to the respondents. The third part was for rating the importance of other mobile phone features thought to be equally of interest to the respondents. The fourth part was for evaluating alternate mobile phone calling plans and the fifth and concluding part was made up of further questions which probed into the mobile telephone carrier used by the respondents and their usage characteristics. In between the first and second sections, a portion titled "**glossary of terms**" was used to provide a detailed description of

each of the calling plan features that appeared in this study to the respondents for their consultation.

III. ANALYSIS OF DATA AND RESULTS

a) *Description of the private/personal plan and business/commercial plan*

The number of respondents for the private/personal plan questionnaire was 160 while the number of respondents for the business/commercial plan was 40. For each of these two plans, the results for the following were shown: average desirabilities, average importances and average part worths. Average desirability for each level of attribute was obtained by adding all the ratings together and divided by the total number of respondents (160 for private/personal calling plan and 40 for business/commercial calling plan). Average importance for each attribute was obtained by adding all the ratings for that attribute together and divided by the total number of respondents under each calling plan. Average part worth for each level of attribute was obtained by finding the product of importance weight and the associated level's desirability score. That is,

$$\text{AVG PARTWORTH} = \frac{\text{AVG IMPORTANCE}}{100} \times \frac{\text{AVG DESIRABILITY}}{10}$$

The above was derived from the method applied by Fishbein in 1967 when he defined part worth as the product of importance weight and the associated level's desirability score.

i. *Results for the private/personal plan*

Number of respondents: 160

Attribute: The calling plan provider

Average importance: 4.7500

Level	Avg Desirability	Avg Part Worth
MTN	7.5625	0.035922
Zain	7.0000	0.033250
Glo	6.8125	0.032359
Etisalat	6.2500	0.029688
Starcoms	4.6875	0.022266
Visafone	5.1250	0.024344
Multilinks	5.7500	0.027313

Attribute: Anytime minutes availability

Average importance: 8.8125

Level	Avg Desirability	Avg Part Worth
Unlimited	9.8125	0.086473
3000 mins	7.9375	0.069949
2000 mins	7.2500	0.063891
1000 mins	6.5625	0.057832
600 mins	4.9375	0.043512
100 mins	3.7500	0.033047
60 mins	2.9375	0.025887
10 mins	2.1875	0.019277

Attribute: Night minutes (free night calls)

Average importance: 8.1250

Level	Avg Desirability	Avg Part Worth
Unlimited	9.2500	0.075156
5000 mins	7.1878	0.058401
3000 mins	5.6875	0.046211
1000 mins	4.4375	0.036055
None	1.6875	0.013711

Attribute: Weekend minutes (free weekend calls)

Average importance: 9.0625

Level	Avg Desirability	Avg Part Worth
Unlimited	9.6875	0.087793
5000 mins	7.7500	0.070234
3000 mins	6.0000	0.054375
1000 mins	3.6250	0.032852
None	0.6875	0.006231

Attribute: Geographical coverage

Average importance: 17.0625

Level	Avg Desirability	Avg Part Worth
International	9.5625	0.163160
Nationwide	7.7500	0.132234
Regional	6.7500	0.115172
State	5.6875	0.097043
Local Govt.	3.4375	0.058652

Attribute: Mobile to mobile minute (within the same network)

Average importance: 7.5625

Level	Avg Desirability	Avg Part Worth
Unlimited	9.8125	0.074207
5000 mins	7.7500	0.058609
1000 mins	6.0000	0.045375
500 mins	3.50000	0.026468
None	0.1250	0.000945

Attribute: control over credit usage

Average importance: 13.3125

Level	Avg Desirability	Avg Part Worth
Complete	9.8125	0.130629
Partial	3.8125	0.050754
No control	0.4375	0.005824

Attribute: per second billings

Average importance: 7.3750

Level	Avg Desirability	Avg Part Worth
Yes	9.8125	0.072367
No	0.2500	0.001844

Attribute: Per minute billings

Average importance: 6.1250

Level	Avg Desirability	Avg Part Worth
Yes	0.1875	0.001148
No	9.6875	0.059336

Attribute: Innovations

Average importance: 8.3125

Level	Avg Desirability	Avg Part Worth
Family & friends	8.8750	0.073773
Please call me	7.8125	0.064941
Call waiting	5.3125	0.044160
Roaming	4.6250	0.038445

Attribute: Monthly cost of calling plan

Average importance: 4.3750

Level	Avg Desirability	Avg Part Worth
N500	9.6875	0.042383
N1000	7.9375	0.034727
N1500	5.8750	0.025703
N2000	5.0000	0.021875
N2500	3.8125	0.016680
N3000	2.9375	0.012852
N4000	2.1250	0.009297

Attribute: Types of credit purchase

Average importance: 5.1250

Level	Avg Desirability	Avg Part Worth
Wholesale	6.7500	0.034594
Retail	4.8125	0.02466

ii. Results for the business/commercial plan

Number of respondents: 40

Attribute: The calling plan provider

Average importance: 6.2500

Level	Avg Desirability	Avg Part Worth
MTN	8.2500	0.051563
Zain	6.5000	0.040625
Glo	6.5001	0.040625
Etisalat	7.2506	0.045316
Starcoms	6.2507	0.039067
Visafone	6.5004	0.040628
Multilinks	5.2520	0.032825

Attribute: Anytime minutes availability

Average importance: 8.7500

Level	Avg Desirability	Avg Part Worth
Unlimited	9.7509	0.085320
3000 mins	8.7500	0.076563
2000 mins	6.5002	0.056877
1000 mins	5.5004	0.048129
600 mins	4.7510	0.041571
100 mins	3.7502	0.032814
60 mins	3.0005	0.026254
10 mins	1.7510	0.015321

Attribute: Night minutes (free night calls)

Average importance: 3.7500

Level	Avg Desirability	Avg Part Worth
Unlimited	6.0240	0.022590
5000 mins	5.7500	0.021563
3000 mins	6.2500	0.023438
1000 mins	7.0030	0.026261
None	5.7511	0.021567

Attribute: Weekend minutes (free weekend calls)

Average importance: 10.0000

Level	Avg Desirability	Avg Part Worth
Unlimited	8.7508	0.087508
5000 mins	6.2510	0.062510
3000 mins	4.0008	0.040008
1000 mins	3.0040	0.030040
None	1.5009	0.015009

Attribute: Geographical coverage

Average importance: 12.5000

Level	Avg Desirability	Avg Part Worth
International	9.5080	0.11885
Nationwide	7.5070	0.093838
Regional	6.2504	0.078130
State	5.2510	0.065638
Local Govt.	4.2503	0.053129

Attribute: Mobile to mobile minute (within the same network)

Average importance: 7.5000

Level	Avg Desirability	Avg Part Worth
Unlimited	9.2504	0.069378
5000 mins	6.5009	0.048757
1000 mins	5.0130	0.037598
500 mins	4.0021	0.030016
None	0.7511	0.005633

Attribute: control over credit usage

Average importance: 17.5000

Level	Avg Desirability	Avg Part Worth
Complete	9.7503	0.170630
Partial	3.7510	0.065643
No control	0.2502	0.0004379

Attribute: per second billings

Average importance: 8.7500

Level	Avg Desirability	Avg Part Worth
Yes	9.7560	0.085365
No	0.2504	0.00219

Attribute: Per minute billings

Average importance: 5.0000

Level	Avg Desirability	Avg Part Worth
Yes	2.7500	0.013750
No	7.0200	0.035100

Attribute: Innovations

Average importance: 6.2500

Level	Avg Desirability	Avg Part Worth
Family & friends	9.5111	0.059444
Please call me	6.1021	0.038138
Call waiting	5.2503	0.032814
Roaming	3.5001	0.021876

Attribute: Monthly cost of calling plan

Average importance: 7.5000

Level	Avg Desirability	Avg Part Worth
N500	9.2500	0.069375
N1000	7.0271	0.052703
N1500	5.2521	0.039391
N2000	4.0112	0.030084
N2500	2.7533	0.1043
N3000	1.7514	0.0803
N4000	0.7500	0.0581

Attribute: Types of credit purchase

Average importance: 6.2500

Level	Avg Desirability	Avg Part Worth
Wholesale	8.7532	0.2162
Retail	2.7490	0.1542

Table 1: Summary of the Average Importance for Cluster 1 (private/personal calling plan)

The calling plan provider	4.7500
Anytime minutes availability	8.8125
Night Minutes(free night calls)	8.1250
Weekend minutes(free weekend calls)	9.0625
Geographical coverage	17.0625
Mobile-mobile minutes(within the same network)	7.5625
Control over credit usage	13.3125
Per second billings	7.3750
Per minute billings	6.1250
Innovations	8.3125
Monthly cost of calling plan	4.3750
Types of credit purchase	5.1250

Table 2: Summary of the Average Importance for Cluster 2 (business/commercial calling plan)

The calling plan provider	6.2500
Anytime minutes availability	8.7500
Night Minutes(free night calls)	3.7500
Weekend minutes(free weekend calls)	10.0000
Geographical coverage	12.5000

Mobile-mobile minutes(within the same network)	7.5000
Control over credit usage	17.5000
Per second billings	8.7500
Per minute billings	5.0000
Innovations	6.2500
Monthly cost of calling plan	7.5000
Types of credit purchase	6.2500

b) Clustering of the Respondents' Attributes Importance Data

The respondents were examined with conjoint analysis to find out if they form some market segments using clustering procedure. A market segment is a group within which respondents are similar to each other in their responses to various survey tasks and questions but are different from other segments. The results are shown for the segments whose members are similar within and different across segments with respect to their judgments of attributes importance. The groups, private/personal calling plan and the business/commercial calling plan were analyzed separated.

i. Results of the clustering for the private/personal calling plan

This group was made up of 160 respondents and the attributes of interest are: calling plan provider, anytime minute availability, night minutes (free night calls), Weekend minutes (free weekend calls), geographical coverage, mobile to mobile minutes (within network), control over credit usage, per second billings, per minute billings, innovations, Monthly cost of calling plan and type of credit purchase. Each respondent's importance score for each attribute was extracted from the original questionnaires for the 160 respondents in this group and analyzed to isolate clusters or segments which are similar internally. The outcome of the analysis yielded the following nine clusters.

Table 3 : Private/personal calling clusters

Clusters	Cluster Size	Cluster description
1	N=8	The calling plan provider, monthly cost of calling plan
2	N=12	Any minute availability, mobile to mobile minute (same network), per second billings
3	N=13	Night minutes (free night calls)
4	N=15	Weekend minutes (free weekend calls)
5	N=26	Geographical coverage
6	N=21	Control over credit usage

7	N=10	Per minute billings
8	N=14	Innovations
9	N=9	Types of Credit purchase

The cluster sizes show that there are two large clusters which are clusters 5 and 6, geographical coverage and control over credit usage. The smallest cluster is cluster 1, the calling plan provider and monthly cost of calling plan. The result shows that while geographical coverage and control over credit usage are the two largest clusters, the calling plan provider and monthly cost of calling plan are the smallest, in terms of attribute importance.

ii. Results of the clustering for the business/commercial calling plan

This group was made up of 40 respondents and the attributes of interest are the same as those of the private/personal calling plan.

Table 4 : Business/commercial calling plan clusters

Clusters	Cluster Size	Cluster description
1	N=2	The calling plan provider, per minute billings, type of credit purchase
2	N=3	Any minute availability, mobile to mobile minute (same network), per second billings, innovations, monthly cost of calling plan
3	N=1	Night minutes (free night calls)
4	N=4	Weekend minutes (free weekend calls)
5	N=5	Geographical coverage
6	N=9	Control over credit usage

The cluster sizes show that the largest cluster is 6, control over credit usage while the smallest is cluster 3, night minutes (free night calls). This result shows that while control over credit usage is the largest cluster, night minutes (free night calls) is the smallest in terms of attributes importance.

IV. DISCUSSION

This study analyzed the process by which Lagos state subscribers of mobile telephone services select their desired services among some available telephone services in the market to meet their personal or corporate needs. The results show that for both calling plans, the subscribers have preference for MTN and Zain among the calling plan providers. They also show preference for unlimited anytime minutes,

unlimited free night calls and free weekend calls, international geographical coverage and complete control over the way they use their credit. Preference was high for per second billings but low for per minute billings. Subscribers under the private /personal calling plan did not show preference for any of the two types of credit purchase namely wholesale and retail. However, the subscribers under the business/commercial calling plan preferred wholesale purchase of credit over purchasing on retail. Among the innovations, subscribers preferred family and friends above the rest. In terms of their relative importance, geographical coverage was the most important to the subscribers under the private /personal calling plan followed by control over credit usage, weekend minutes, anytime minutes, innovations, night minutes, mobile to mobile minutes and per second billings in that order. The calling plan provider had the least importance to this category of subscribers occupying the last position along with monthly cost of calling plan.

To Subscribers under the business/commercial calling plans, control over credit usage was the most important followed by geographical coverage and weekend minutes. Coming next are anytime minutes and per second billings with the same level of importance. After these are mobile to mobile minutes and monthly cost of calling plan also with the same level of importance. Innovations and calling plan providers are next in importance. The least important attribute to this category of subscribers is night minute, that is, free night calls. The result also aligns with Adamu et al (2009) that people are more concerned about the network coverage than other attributes. For the PPP plan the geographical coverage had the highest average importance while for the BCP plan, it was second behind the control over credit usage.

V. CONCLUSION

This work has considered Lagos State subscribers' trade-offs regarding telephone providers. The Lagos state subscribers show preferences for some mobile telephone services attributes in their choices among the available telephone services in the market. Mobile telephone services providers must include those subscribers' preferences in their service offerings which the results have shown for more satisfied subscribers and better profits. Also, emphasis must be placed on those attributes that are more important to the subscribers. This study should be replicated in the other states of Nigeria to be able to obtain a result that would show the preferences of Nigerian subscribers in terms of mobile telephone services attributes in the country.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Adamu, M.O., Adeyosoye E. A and Adewumi A (2009): Consumer preferences for GSM Network provider services in Nigeria, STCPMS, International

- Statistical Institute, Durban, South Africa, 1-6.
2. Carroll, (1969): "Categorical conjoint measurement" paper presented at the annual meeting of the Association of Mathematical Psychology, Ann Arbor, Michigan.
3. Green, P.E., Krieger, A.M. and Wind, Y. (2001). Thirty Years of Conjoint Analysis: Reflections and Prospects. *Interfaces* 31(3): S56-S73.
4. Hermen, S. (1988): Software for full-profile conjoint analysis, *Proceedings of the Sawtooth Software Conference on Perceptual Mapping, Conjoint Analysis, and Computer Interviewing*, Sawtooth Software, Ketchum, ID, pp. 117-130
5. Johnson, R.M (1987): Adaptive conjoint analysis, *Sawtooth Software Conference on Perceptual Mapping, Conjoint Analysis and Computer Interviewing*, Sawtooth Software, Ketchum, ID, pp.253-266
6. Luce R. D and Tukey J. W (1964): Simultaneous conjoint measurement: a new type of fundamental measurement, *Journal of Mathematical Psychology*, 1: pp. 1-12.
7. Paul E.G, and Abba M.K (1991), "Segmentation Markets with Conjoint Analysis", *Journal of Marketing*, vol 55, 121-135.
8. Paul E.G and Abba M.K (2003): US Subscribers Trade-offs regarding mobile Telephone Providers – An Analysis of Service Attributes Evaluation. Wharton School, University of Pennsylvania, Philadelphia PA.
9. Young, F. W (1969): "Polynomial conjoint analysis of similarities." Definitions for a special algorithm," Research paper No. 76, psychometric laboratory, University of North Carolina.



This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Bureaucracy and Rural Development; the Role of Public Administration in National Development: The Nigerian Perspective

By Eme, Okechukwu Innocent & Emeh, Ikechukwu Eke Jeffry

University Of Nigeria

Abstract - The relationship between Public Administration and National Development has lost its vigour, dynamism and interest because of criticisms that has trailed the role of the public bureaucracy in rural development in Nigeria. This is exasperated by the inadequacies of Public Bureaucracy in engendering Rural Development, justified by the enormous developmental policies and programmes that are deliberately rural-based in Nigeria yet these rural areas are still grossly unattractive to live in. This concern is insufferably disheartening because public bureaucracy exists in any society for the convenience of effective and efficient service delivery. The great and dire need for development especially in the rural areas amidst abundant human and material resources in Nigeria has occasioned the great tendency to blame politicians for the poverty, underdevelopment, and colossal leadership tragedy that best describes the contemporary Nigerian society. This is because from military dictatorship to 'democratic governments' all have conspired to reduce governance to the manipulation of public office to deceive and loot public funds for personal aggrandisement.

Keywords : *The State, Public Policy, Public Sector, Public Administration, civil service, Bureaucracy, development, National Development and Rural Development.*

GJMBR-A Classification : *FOR Code: 160509 , JEL Code: D73,H83*



Strictly as per the compliance and regulations of:



Bureaucracy and Rural Development; the Role of Public Administration in National Development: The Nigerian Perspective

Eme, Okechukwu Innocent^a & Emeh, Ikechukwu Eke Jeffry^a

Abstract - The relationship between Public Administration and National Development has lost its vigour, dynamism and interest because of criticisms that has trailed the role of the public bureaucracy in rural development in Nigeria. This is exasperated by the inadequacies of Public Bureaucracy in engendering Rural Development, justified by the enormous developmental policies and programmes that are deliberately rural-based in Nigeria yet these rural areas are still grossly unattractive to live in. This concern is insufferably disheartening because public bureaucracy exists in any society for the convenience of effective and efficient service delivery. The great and dire need for development especially in the rural areas amidst abundant human and material resources in Nigeria has occasioned the great tendency to blame politicians for the poverty, underdevelopment, and colossal leadership tragedy that best describes the contemporary Nigerian society. This is because from military dictatorship to 'democratic governments' all have conspired to reduce governance to the manipulation of public office to deceive and loot public funds for personal aggrandisement. But since these governments come and go, leaving the bureaucracy behind, who initiates, formulates and execute/implement these developmental policies, there seems no need to cast aspersions on the political office holders but the bureaucrats. This is why the bureaucracy cannot escape the rot that have characterised every aspect of Public Sector in Nigeria, for without the public sectors, development at all levels becomes a travesty. Public sector refers to all the organisations that exist as part of government machinery for implementing policy decisions of the government and delivering services that are valuable to citizens. Suleiman (2009) identified the civil service and public bureaucracy as the components of public sector in Nigeria, but for the purpose of this paper, both of them are regarded as public bureaucracy. Suffice it to say that Nigeria has a large public sector running into millions of bureaucrats whose major function is to implement government policies and programs. While it is true that some governments did not have any programs for the common good of the people, the public bureaucracy has not successfully implemented the policies and programmes of those governments that did. Instead, they prefer to align themselves with the government of the day and participate in treasury looting that has reduced Nigeria to an embarrassment among the comity of serious nations. It is on this basis that this paper seeks to x-ray the role of Public Administration in National Development vis-a-vis the public bureaucracy and rural development. In diagnosing this

dilemma, this paper examines the character of the state and its bureaucracy in achieving National development through the development of the rural areas. In doing so, the paper is divided into eleven segments. While the first segment gives a background of the problem in the form of an introduction, the second segment dwells on the fulcrum of developmental state. The third segment took a general overview of the concept of development. The fourth segment relays the relationship between the political and permanent executives. The fifth segments X-rays the concept of bureaucracy, while the sixth segment discusses the Nigerian Bureaucracy. The seventh segment dwells on the nexus between public administration, public Bureaucracy and National development; the eighth segment examines the concept of Rural Development and rural development in Nigeria. Segment nine deals with the role of Public Bureaucracy in Rural Development and tenth and eleventh segments deal with the findings and recommendations and conclusion respectively. Several findings were made among which is that delay in policy implementation by the bureaucracy owing to too many rules and outright neglect due, again to connivance with the politicians to loot the funds earmarked for rural development has made public Bureaucracy less viable.

Keywords : *The State, Public Policy, Public Sector, Public Administration, civil service, Bureaucracy, development, National Development and Rural Development.*

I. INTRODUCTION

The principle of social organization which characterizes the twentieth-century industrial societies is "rational coordination" otherwise known as 'Bureaucracy'. Under this form of organization, people are brought together in formal and complex settings run by professionals and experts. The professionals are called 'Bureaucrats' while the organizations they run are known as 'Bureaucracies'. The modern bureaucracy at all levels of government is powerful as bureaucrats interpret laws, make policies and enforce decisions and engage in a variety of other activities that have a direct impact on the lives of citizens. From the backdrop that public administration examines the practice of governance, responsibility and ethics in politics and administration have been debated since the inception of political and administrative theories. An attempt to define the terms as well as controlling behaviour to achieve the desired ends has been difficult in all democratic nations. This is because

*Author a: Department of Public Administration and Local Government, Faculty of the Social Sciences, University of Nigeria, Nsukka.
E-mails : okechukwunnncnt@yahoo.com, eljeff4u@yahoo.com*

elected officials are held responsible at least in theory, through periodic elections; but bureaucrats who are not elected, do not come under this control. It has been observed that non-elected bureaucrats are not neutral executors of legislative policies and do in fact, have enormous discretionary powers and responsibilities in decision making which also creates opportunity for irresponsible actions (Elekwa, 2004). While recognizing bureaucracy as the most efficient form of organization, and even indispensable for the modern state, Weber, unfortunately saw it as a threat to individual freedoms, and the ongoing bureaucratization as leading to a "polar night of icy darkness", in which increasing rationalization of human life traps individuals in the "iron cage" of bureaucratic, rule-based, rational control, yet the decisive reason for the advance of bureaucratic organization has always been its purely technical superiority over any other form of organization.

Incidentally, more and more spheres of life are being dominated by large organizations and increasing numbers of people are becoming employees of complex organizations. As a matter of speaking, quite a few aspects of modern society can be studied without reference to bureaucracy. Most obviously in the business world and in modern establishments, the coordination of specialists, in accordance with impersonal rules is highly developed and adopted. The same trend has also been observed to be the pattern in every other areas of the society. Wilmot (1985) and Applebaum and Chamblis (1995) argued that bureaucracy starts from birth (health bureaucracy) to family upbringing (social welfare), to school (educational) to work (civil service, military, commercial, industrial) to worship and death (religion): man is increasingly dominated by bureaucracy. Thus, every sphere of modern life has become very bureaucratic as people are born into bureaucracies; grow in it, live with it, and even die in it. It is bureaucracy all the way and all the time (Aluko and Adesop, 2004).

The bureaucracy, broadly defined, is that apparatus of government designed to implement the decisions of political leaders. Political leaders make policy, the public bureaucracy executes it. If bureaucracy lacks the capacity to implement the policies of the political leadership, those policies, however well intentioned, will not be implemented in an effective manner. This is because, it is one thing to promise development, and quite another to actualise it. Viewed in this light, the role of public bureaucracy in the process of economic, social, and political development looms large indeed. Irrespective of the fact its role is critical to all areas of the development process in Nigeria. Public bureaucracy is a very vital element of the development process in rural development. This is why we say that Bureaucratic capacity determines what will get done, when it will get done, and how well it will get done. The greater the capacity of the bureaucracy to

implement complex economic and social development plans, the higher the development potential of that society. This is not to suggest that bureaucracy is the only force in the development process but it is most assuredly a necessary condition (Okafor, 2009).

Concomitantly, many developmental policies, projects and programmes in Nigeria have been deliberately rural based. This is in consideration of the millions of Nigerians residing in the rural areas where they experience, on a daily basis, the stark realities of underdevelopment such as- Hunger, Curable Diseases, Sickness, Ignorance, lack, abject poverty, malnutrition, lack of social security, lack of portable water, lack of access to education and power, declining agricultural exports and food production; poor transportation and health-care delivery; rural-urban migration; lack of industrialization; and disorderly spatial development among others. This is more disheartening considering the fact that most rural areas are inhabited by the bulk of the nation's population; they serve as the base for the production of food and fibre. They are also the major sources of capital formation for the country, and a principal market for domestic manufactures. In general terms, the rural areas engage in primary activities that form the foundation for any economic development. The important role attached to these rural areas notwithstanding, they are not attractive to live in. This is because of the obvious absence of basic infrastructures and social amenities, which improve the quality of life. Usually, there is absence of potable water, electricity and good feeder roads. They have low purchasing power and standard of living. Attempts at solving these problems had been the concern of virtually all the governments over the years, necessitating the inauguration of laudable developmental programmes such as Operation Feed the Nation (OFN); the National Accelerated Food Production Programme (NAFPP) and the Directorate for Food, Roads and Rural Infrastructure (DFRRI) etc aimed at solving problems inherent in rural areas, all of which were divorced from the real issue of bringing development to the people in the rural areas.

However, the unabatedness of these problems despite these laudable policy programmes has been credited to non faithful implementation of these policies. This scenario is hardly at par with the arguments of the public policy makers that rural infrastructure, if and when adequately provided, can and will enhance the quality of life in the rural areas. It is of imminent concern to note that quality of life in the rural areas leave nothing to desire. Evidence has shown that the rural people have benefited very little from most rural development programmes resulting to the perennial underdevelopment of these areas and as such, the people living therein. The assumption which does not equilibrate the evidence has called to question the role of bureaucracy in rural development through their policy formulation and implementation responsibilities. To

better understand the relationship, the next section becomes indispensable.

II. GROWTH, DEVELOPMENT AND GOVERNANCE: THE FULCRUM OF DEVELOPMENTAL STATE

With the dawn of the 21st century came a realization that an emaciated state is not what delivered the phenomenal growth and development that was seen in the East Asian Tigers during a period when countries elsewhere struggled to sustain standards of living. On the contrary, what seemed to have delivered the success stories of East Asia was a strong state, supported by a highly competent professional and meritocratic public administration. In many instances these states did not prioritize being democratic, and individual human rights were often curbed in the interest of achieving other policy goals. In addition, well articulated and thought-through development strategies garnered all sectors of the society to cooperate in the fulfilment of societal goals.

If the East Asian formula for the developmental state is the only one existing, a fairly superficial analysis of the presence of necessary factors for constituting such developmental states in most of Africa is elusive. Times have changed, and the impetus for establishing democratic regimes is also such that a return to autocracy to achieve development is not an option. As Mkandawire wrote: "the first few examples of developmental states were authoritarian. The new ones will have to be democratic...." Furthermore, development can also not be seen in the aggregate, with the spoils concentrated at the elite level. The requirement now is for equitable distribution of growth, preferably while correcting any biases in distribution that might be the result of some historical developments.

State, in political science, is generally a group of people inhabiting a specific territory and living according to a common legal and political authority; a body politic or nation. In this definition, the term state includes government; in another usage, the two terms are synonymous. Among types of states that developed at various times in history were the city-states of ancient Greece, in which sovereignty rested with the free citizens of an independent city. During the Middle Ages, Europe was divided politically into many small principalities, the boundaries and sovereignties of which changed frequently. From this condition of political anarchy, the modern nation-state, which consists of a group of people with the same or similar nationality inhabiting a definite territory, emerged by a gradual process extending over centuries. The type of government has varied, first taking the form of absolute monarchies and later of constitutional monarchies or republics, some of them federations or unions of semi-independent states. In the 20th century totalitarian dictatorships, in which

one ruler assumes absolute power, have been established in some states. But at the wake of the 21st century was the concept of a democratic state. (Microsoft Encarta, 2009). Definitions of the developmental state abounds. The work of Edigheji (2008) is helpful to bring some structure to the conceptual discussion. He distinguishes three broad groups of definitions, each emphasizing another set of features i.e. (1) Where the ideological disposition of the political elites is emphasized, in that the political elite possesses primacy over the ideology of development (e.g. work of Manuel Castells); (2) Where the institutional and organizational structures are emphasized, e.g. "embedded autonomy" as in the work of Peter Evans; and (3) Political institutions that can sustain processes of public deliberation and that enables the broad citizenry to determine and influence the developmental agenda (Kothari, 2006).

Following these broad dimensions, the developmental state is one endowed with qualities of having the capacity to achieve what it sets out to do in terms of economic and societal goals – either through direct intervention particularly by using the regulatory capability of the state; through direct delivery of public goods and services or through more indirect means by mobilizing other resources and rewarding these to work towards the development goals as formulated through legitimate political processes and institutions. Fukuyama (2008) distinguishes between the economic, political and social dimensions of development. This is helpful since in their own rights, or in combination, these provide possible key levers for any development strategy. In order to be regarded as developmental, it follows that the state can focus its energies on only some of the levers, instead of trying to achieve them all simultaneously. The five levers are (i) economic growth; (ii) state building; (iii) rule of law; (iv) democracy and (v) social mobilization. Suffice it to say that these factors are encompassing in the concept of development. Fukuyama cautions, that particularly with respect to the political dimension, one has to note that although they all constitute "institutions" each of these three components of political development has different effects on growth. Relevant to the African context analysis points to the fact that state capacity would seem to be much more important than either rule of law or democracy, particularly at low levels of per capita GDP (i.e., below \$1000).⁵ (Fukuyama 2008: 27) Proceeding to the issue of democracy (i.e. accountability), Fukuyama finds that the actual impact of democratic institutions on growth is highly contextual. He cautions that in countries ruled by competent developmental states, greater political participation, particularly if introduced suddenly, may lead to increased demands for redistribution and rent-seeking, both of which may be detrimental to growth. He finds though, on the other hand, in countries with some

combination of predatory states, low capacity, and high levels of corruption like Nigeria, democratic accountability may be the only route available to institutional change and long-term growth.

With respect to social mobilisation, and drawing on the work of Samuel Huntington, Fukuyama points to an often manifested negative relationship between the mobilization of new social actors and development, especially when existing political institutions fail to accommodate their demands for participation and do not meet their newly articulated demands. Something like this scenario is unfolding today in Andean countries like Ecuador and Bolivia, where newly mobilized indigenous communities are demanding greater political participation in destabilizing ways. If the political system succeeds in incorporating these actors, it is positive for both political stability and long-term growth.⁷ This situation would be akin to the transition from limited access societies to open access societies as referred to by North et al. Notwithstanding our emerging consensus around what the developmental state is, or is not, how growth (as distinct from development) is to be achieved is still poorly understood. However, some issues are becoming clearer. The first of these being that the national context and the historical path of the country in which development is to take place are critical determining factors. This automatically rules out the idea of transplanting ideas that has worked in one society, as is, to another society with different dynamics. The work of Acemoglu (2008) with respect to open access orders and limited access orders/ natural states is very instructive in this regards. The second being that the absence of adequate provision by the state of public goods, including infrastructure, such as transport, roads, electricity, modern communications and technology infrastructure and public services, e.g. education and health are major impediments to bring about growth and development. Accordingly there seems to be a self-fulfilling prophecy for poor growth if the state cannot/ could not in the past fulfil its role in terms of the provisioning of public goods and services. The third set of factors relate to the issue of good governance in relation to economic growth and national development. The long-run association between good governance and high incomes is indisputable. The existence of a causal link from the former to the latter is widely accepted. However, there is no evidence that we can systematically rely upon improved governance to generate increased growth over periods of 10 to 20 years. Econometric evidence points to a relation between income levels and governance criteria, but not growth. Rodriks (2008) goes as far as to state that large-scale institutional transformation—of the type entailed by the governance agenda—is hardly ever a prerequisite for getting growth going. In this respect he points to many of the Asian fast growth economies, the

most notable being China, that does not do well on any assessment with respect to standard good governance criteria. He concludes for most countries the “good governance” and the “governance for development” agendas are likely to differ substantially. In the fourth instance, a rudimentary state with some minimum capacity is a precondition for growth and development.

III. THE CONCEPT OF DEVELOPMENT

The concept of development was initially viewed from the dictionary point of view which means ‘to change gradually, progressing through a number of stages towards some sort of state of expansion, improvement or completeness or a state in which the subjects true identity is revealed. But after the second World War, especially in the 1960s, development became described as ‘a high national income, accompanied by a market economy and a specialized society in which most people work not to meet their own immediate needs but to produce particular goods and services needed by others and purchased in cash (Onah, 2010). This was in line with W.W. Rostow’s description of society as ‘a high mass consumption society’. In such societies, development was seen in terms of structure and growth of the national economy; and the degree of development and underdevelopment was measured in terms of National Income whose two most common indicators are- per capita income and average annual rate of growth in National Income. This concept of development waxed unquestioned in both developing and developed nations until the mid 1960s when people began to ask whether the ‘high mass consumption society’ that developing nations are aspiring to is ideal. This point marked the departure from the economic concept of development to the new concept of development, whose most fundamental feature is their concern with mankind.

The concept of development has been variously discussed in literatures especially in the social sciences such that its definition has negated a single generally accepted definition. Okoli and Onah (2002) had asserted that development involves progression, movement and advance towards something better. It is improvement on the material and non-material aspects of life. It involves actions, reaction and motion. A developing community is thus a community on motion, a people in search of self improvement; and a group concerned with, and committed to, its advancement through its own efforts. He also observed that development goes beyond economic and social indicators to include the improvement of human resources and positive change in their behaviour. For us, development includes increase in citizens’ access to: food, water and shelter; information and means of communication; healthcare delivery; good motaorable road; good education, and justice.

When these are obtainable, there will be increase in the individual's dignity, happiness and patriotic values and quality of life. This is probably why Todaro (1982) defined development as a "multi-dimensional process involving the re-organization and re-orientation of the entire economic and social system. This involves in addition to improvement of income and output, radical changes in institutional, social and administrative structures as well as in popular attitudes, customs and beliefs". The main contention according to Ujo (1994) is that development is both a physical process and a state of mind. The transformation of institution is one aspect. The other aspect is that the thinking of the people must change. According to Emezi (1979), the actions, reactions and interactions which qualify for inclusion as elements of development' are products of rational thinking, conscious planning, and genuine citizens' involvement. They are not chance events or chance phenomena, as observed by Okoli and Onah. They relate first and foremost, to the economic system because they seek to raise living standards, widen extensively the scope of productive work at the community level and create and strengthen the necessary foundational infrastructure for higher, larger and more beneficial changes in the economy. Secondly, they relate to the social system because they affect education, health, housing, social ethic and justice and these are matters of both the body and the mind which jointly facilitate individual growths and development in the society. Thirdly, they relate to the political system because they seek to create better patterns of legitimacy patterns that create conditions which enable all or the most significant groups in the population to participate in the political process of making decisions and allocating scarce resources and values of their communities. According to Onah (2007), the most fundamental feature of what we may, for want of better term, call the 'new' concepts of development, is their concern with mankind as development is conceived as a state of human wellbeing rather than as the state of national economy. The conceptualization of development in the aspect of the state of national economy is referred to as the economic development but when it is mixed with another like socio-economic, it definitely should be looking at the totality of the well being of man hence the social or societal progression of man alongside his economic well-being completely defined a developed man. This concern was expressed in a statement known as the Cocoyoc Declaration, which was adopted by participants at a seminar organized by the United Nations Council on Trade and Development (UNCTAD) and the United Nations Environment Programme (UNEP) in Cocoyoc, Mexico, in 1974. The declaration states:

Our first concern is to redefine the whole purpose of development. This should not be to develop things but to develop man. Human beings have basic

needs: food, shelter, clothing, health, education. Any process of growth that does not lead to their fulfilment-or even worse, disrupt them is a travesty of the idea of development.

In line with the above assertion or declaration, Dudley seers (1969), one of the first economists in the developed world to emphasize this aspect of development, wrote:

The question to ask about country's development is therefore; what has been happening to poverty? What has been happening to unemployment? What has been happening to inequality? If all three of these have declined from high levels, then, beyond doubt, this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result "development" even if per capita income doubled.

Digging deep into what development means and what it is not, Okoli (2007) contended that development can and in fact, does encompass positive (functional) and negative (dysfunctional) aspects and consequences simultaneously. Accordingly, as a concept, development is the attainment of an ever-shifting but always higher level of equilibrium between the positive (functional) and the negative (dysfunctional) elements within the society and the individual. As a practice, it entails a simultaneous disruption and re-ordering of society to achieve material and non material abundance and eroding the socio-psychological balance of the individual.

However, as a strategy, development should aim at simultaneously disrupting and re-ordering society to achieve material and non material abundance and reinforcing and restructuring society to equilibrate the socio-psychological balance of the individual. As a societal phenomenon, it dwells in the realms of socio-psychological conversion. To achieve development of any sort, the pattern of relationship between the executive and the legislature is very important. It is in this regard that the next section dwells on the relationship between the political and permanent executives. This is in lieu of the fact that development packages are policy issues which emanates and get executed by the executive arm of government.

IV. RELATIONSHIP BETWEEN POLITICAL AND PERMANENT EXECUTIVES

Power is the most important variable in the study of bureaucracy. The control of bureaucracy by political leaders has of late diminished due to the growth in the size and discretionary powers of bureaucracies. The relationship between the political leaders and bureaucracy is very intricate and complex, symbiotic as far as the formation and implementation of policies is

concerned. Bureaucratic help, guidance and support are vital to the political leadership and bureaucrats have many assets: their permanence, freedom from electoral worries, their knowledge of the files, and their control of communication - which they can use to get their way in encounters with political masters. Relationship between the bureaucracy and the politicians shows that there is a general trend towards strengthening of bureaucracies vis-a-vis the political structures. But to generalize this is not easy, keeping in view the fact that the specific situation varies from country to country. In Britain, bureaucrats are recruited and trained to show political sensitivity, their influence will, therefore, be interpretative. But French political system, being characterised by greater political instability and the traditions of stronger political authority, makes too much use of bureaucracy. Bureaucratic power is concentrated in the two wings of the administrative system: Grand corps and the Polytechnicians. Due to their broad based education, highly elitist character, the bureaucrats are well equipped to exercise power and keep a grip over administrative machinery. In Nigeria, bureaucracy professionalism has not been successful even when there are many universities that offer the course public administration to train future bureaucrats and host of other institutes that are specialist in training bureaucrats such as ASCON yet It appears that bureaucracy occupies a relatively subordinate position vis-à-vis the political executives in the Nigeria. The political executives have all the power because there is a system of appointment of political executives on a very large scale at the will of the President, and these appointments are done in a hasty manner. To be significantly recognized, the permanent bureaucrats trade grounds with their political counterparts to get enriched. Both the political and permanent executives connive to bastardize the system. As a result, the permanent executives emerge more powerful and influential. This is why this paper takes a paradigm shift in the issue of development to see the role of the state in its provision of development or otherwise. To do, the concept of bureaucracy will be examined.

a) *Bureaucracy: The Meaning, Definitions, The Good And Bad Sides*

The term bureaucracy is derived from the French word 'bureau' which means 'office'. Literally, bureaucracy means that power is in the hand of officials. Sociologists use the term to designate a certain type of structure, a particular organization of rationally coordinated unequal, and reject the term which equates bureaucracy with "red tape", inefficiency and the likes. But in Public Administration, Redtapism is brought to fore because of the below expectations level of policy implementation and execution the government offers to the people. Howbeit, most social scientists define bureaucracy in a more neutral way as the formal

organization of administrative tasks. In defining bureaucracy as the formal organization of administrative officials, social scientists have tried to avoid prejudgments. A bureaucracy is not necessarily rigid, insensitive or power striving. Nevertheless, the idea of bureaucracy, as it is used in social science theory does carry special connotations. Hence bureaucracy is a kind of formal administrative structure that has distinctive characteristics and problems.

Max Weber has been credited with having made the most thorough analysis of bureaucracy. Accordingly, he is ranked as the greatest exponent of bureaucracy as his work in this area is treated in academic discourse as a classical piece. Consequently, Weber's conception of bureaucracy becomes crucial to this paper. Max Weber (1946) conceived bureaucracy thus:

The fully developed bureaucratic mechanism compares with other organizations exactly as does the machine with the non-mechanical modes of production. Precision, speed, unambiguity, knowledge of the files, continuity, discretion, unity, strict subordination, reduction of friction and of material and personal costs - these are raised to the optimum point in the strictly bureaucratic administration ... Its specific nature develops the more perfectly the more bureaucracy is 'dehumanized', the more completely it succeeds in eliminating from official business, love, hatred, and all purely personal irrational and emotional elements which escape calculation.

Complementarily, Webster's Third International Dictionary (1971) defined bureaucracy as a system of administration marked by constant striving for increased functions and power, by lack of initiative and flexibility, by indifference of human needs or public opinion, and by a tendency to defer decisions to superior or to impede action with red tape... the body of officials that gives effect to such a system.

Coser and Rosenberg (1976) defined bureaucracy as that type of hierarchical organization which is designed rationally to coordinate the work of many individuals in the pursuit of large-scale administrative tasks; an administrative organization based on a hierarchical structure and governed by written rules and established procedures; The authority attached to an official and the position of an official within the hierarchy depends on the office held, rather than the personal attributes and status of the incumbent. A type of organization marked by a clear hierarchy of authority, the existence of written rules of procedure, and staffed by full-time, salaried officials, often held to be one of the characteristics of an early state or civilization. It is the administration of a government

chiefly through bureaus or departments staffed with nonelected officials. Simply put, Bureaucracy is Government by permanent office-holders. It is a professional corps of officials organized in a pyramidal hierarchy and functioning under impersonal, uniform rules and procedures. Its characteristics were first formulated systematically by Max Weber, who saw in the bureaucratic organization a highly developed division of labour, authority based on administrative rules rather than personal allegiance or social custom, and a "rational" and impersonal institution whose members function more as "offices" than as individuals. For Weber, bureaucracy was a form of legalistic "domination" inevitable under capitalism. Later writers saw in bureaucracy a tendency to concentrate power at the top and become dictatorial, as occurred in the Soviet Union. Robert K. Merton emphasized its red tape and inefficiency due to blind conformity to procedures, as initiatives are forbidden and laws are obeyed to the last letter. This is why more recent theories have stressed the role of managerial cliques, occupational interest groups, or individual power-seekers in creating politicized organizations characterized by internal conflict.

Nobbs (1984), Olugbile (1997) and Mullins (1999) summarized the main features of Weber's ideal bureaucracy. These are: (1) appointment of officials according to technical qualifications and merit as officials are not elected; (2) rules and regulations govern official's specialized work as officials work impersonally showing neither fear nor favour to anyone; (3) promotion allows efficient officials to climb higher in the hierarchical power structure as officials enter a career and do not expect preferential treatment, or property rights related to the office; (4) fulltime officials devote themselves to the work of the organization as officials are expected to carry out their duties impersonally and completely; (5) continuous business is carried on faithfully by the officials as the office does not come to an end with the death of the holder; (6) written documents are used to conduct official business as everyone is subject to formal equality before the rules; (7) public and private life are divided by the segregation of organizational activity from the official's private life as public monies and property are separated from the official's private property; and (8) limited compulsion by officials is allowed but without hatred or passion, and hence without affection or enthusiasm.

Highlighting the good sides Laski (1931), emphasized the fact that since the work is professionalized; nepotism is guarded against and the conditions of work operate in favour of economic morality and against corruption. In his own submissions, Gouldner (1954); Bovee et al. (1993) and Giddens (1996) argued that rules in bureaucracy act as substitutes for orders, since they comprise an explicit

body of standing obligations. They narrow workers' areas of discretion. They remove some of the personal friction associated with strict surveillance while one works. They alleviate the problem of repeatedly choosing specific individuals for unpleasant aspects of jobs since those aspects become a routine part of certain jobs. They remove alibis for not acting as management wishes. The public character of the rules allows deviation to be detected by large number of people and makes punishments legitimate, since correct behaviour and penalties for deviation are known in advance. Victimization is less likely to be alleged or suspected. The rules specify a minimum level of acceptable performance. Bureaucracy allows individuals to work without emotional commitment, if they wish so. Moore (1962) stated that bureaucracies have the virtue of securing cooperation between the numbers of people without those people necessarily feeling cooperative. No matter what they feel about each other, or about their tasks, sheer discharge of their stated functions ensures that the total bureaucracy is working. In another instance, Wilmot (1985) claimed that on the positive side, bureaucracy is economical. According to him:

Like other social structures and pattern of routine such as habits, norms and culture, it regulates behaviour, lays the basis for reciprocal expectations, and reduces arbitrariness, unpredictability and potential disorder. The criterion of expertise, as a basis for recruitment makes the ideal of the "right man for the right job" possible. This together with the division and specialization of labour, hierarchical control and accountability from above theoretically increases the probability of performing the set objectives of complex, large-scale tasks. The assurance of a fixed salary and the existence of public, rational criteria for assessing performance and conduct, allow the ideal bureaucrat to concentrate on the specific task he has been assigned and for which he is qualified.

In spite of these numerous positive connotations of bureaucracy, there still exist some negative connotations from the standpoint of modern management. With the exception of Max Weber, other sociologists and Philosophers have been very critical of bureaucracies. Karl Marx believed that bureaucracies were used by the dominant capitalist class to control the working class. From the Marxists' point of view, bureaucracies are characterized by strict hierarchy and discipline, veneration of authority, incompetent officials, lack of initiative or imagination, fear of responsibility and a process of self aggrandizement. For the Marxists therefore bureaucracy only exists to benefit the capitalists and helps to subdue the working class and in the process the workers become alienated. Laski (1931) however averred that in public bureaucracies, the

concentration of power in the hands of bureaucrats can jeopardize the liberties of individual citizens. The bureaucracies become the exclusive preserve of oligarchies of specialists. It becomes uneasy and sometimes difficult to control the expert, with his specialized knowledge, skill and data. Because the bureaucrats are often called upon to justify or rationalize their actions, some of them fear to take some necessary initiatives, risks and experiments thereby introducing timidity and conservatism into the system. As a result of their openness to public criticisms, the bureaucrats are usually trying to ensure accuracy and insisting on rehearsing every possible criticism. This again leads to timidity and undue and prolonged delays in taking actions and decisions. Merton (1957) suggested that bureaucracies are usually characterized by red tape, formalism and rigid rules. Merton argued that behaviour becomes stereotyped in ways that are not necessarily appropriate to the specific set of circumstances currently confronting the bureaucrats. He also identified the tendency for goals to become displaced on to procedures and rituals in some bureaucracies. Merton went further by saying that the system can easily breed over conformity, timidity and conservatism.

Discipline and seniority adherence can become overemphasized, with great importance placed on people doing as they are told whether or not they have been told to do the right thing. The experts tend to become narrow-minded and blinkered, developing ways of not seeing circumstances that do not fit easily with their pre-programmed behaviour. In bureaucracies, Merton argued that a defensive 'esprit de corps' can develop among colleagues, who combine to protect persons and procedures rather than concentrating on problem-solving. Finally, Merton concluded by saying that the emphasis placed on precision and reliability in administration have self-defeating consequences in that rules designed to be means to ends become ends in themselves. In cases where officials are to serve the public, the very norms of impersonality which govern their behaviour run them into trouble with the public in relation to their environment.

Corroborating Laski and Merton's submission, Sofer (1973) argued that bureaucracy generates forms of professionalism and specialization that result in conservatism, timidity, rigidity and dependence on seniors and may divert attention from the need to adaptability in the face of changing circumstances. Juniors lean on the rules to protect their rights, and seniors may easily become trapped in cage of prescription. With growth in the use of scientists and professionals, bureaucratic structures and prescriptions are challenged and modified by staff whose training, dispositions and affiliations incline them to discipline that is derived from outside the organization.

There is also the size effect. Bureaucracies can be disadvantageous when it becomes too large to deal

adequately with individual or personal situations. The larger the bureaucracy the bigger its problems as there comes a time when size (bigness) becomes a problem, what economists call limit to scale. Wilmot (1985) argued that routinisation is opposed to man's freedom, his spontaneity, the very notion of intentionality. This is so, because bureaucracy replaces decision-making activity with routine procedures, thus negating the principle of accountability which is an essential component of the system. This displacement of accountability where the superior rather than the actor is held accountable for his action, allows the bureaucrat who has committed crimes in the name of procedure to excuse himself by saying that he was only obeying orders. Wilmot went further by saying that the hierarchical structure of appointment, control and accountability, without any element of consensus runs counter to the notion that decisions should be taken with the consent of the workers or subordinates. Wilmot finally stated that the division and specialization of labour without a conscious effort to educate bureaucrats about their roles in relation to the overall structure of the bureaucracy are likely to cause anomalies. Warren Bennis (1968) perhaps best summarized the many deficiencies of bureaucracy when he listed the following:- (1) bureaucracy does not adequately allow for personal growth and the development of mature personality; (2) bureaucracy develops conformity and 'group-think'; (3) bureaucracy does not take into account the informal organization and the emergent and unanticipated problems; (4) its systems of control and authority are hopelessly outdated; (5) bureaucracy does not possess nor prescribe adequate means of resolving differences and conflicts between ranks and most particularly between functional groups in the organization; (6) communication and innovative ideas are frustrated or distorted due to hierarchical divisions; (7) the full human resources of bureaucracy are not being utilized due to mistrust and fear to reprisals; (8) bureaucracy cannot assimilate the influx of new technologists or scientists entering the organization; and (9) it modifies personality structure so that people become the dull, gray, conditioned "organization man". These and more are the foundational problems of bureaucracy in all societies, which can be seen as threats to bureaucracy. The basic threats are outlined below.

b) Threats to Bureaucracy

There are identifiable four relevant threats to bureaucracy, such as:

1. Rapid and unexpected change: Bureaucracy with its nicely defined chain of command, its rules and rigidities, is ill-adapted to the rapid change, the environment in most cases, demands in contemporary times.
2. Growth in size: This happens where the volume of an organization's traditional activities is not enough

to sustain growth. A number of factors are at work here, these include: (i) Bureaucratic overhead; (ii) tighter controls and impersonality due to bureaucratic sprawls; and (iii) outmoded rules and organisational structures.

3. Complexity of modern technology where integration between activities and persons of very diverse, highly specialized competence is required. Today's activities require persons of very diverse, highly specialized competence. Hurried growth, rapid change and increase in specialization - all these put together against bureaucracy will make it to begin crumbling.
4. A basically psychological threat springing from a change in managerial behaviour. This rests on: (i) a new concept of man, based on increased knowledge of his complex and shifting needs, which replaces an over simplified, innocent, push-button idea of man; (ii) a new concept of power, based on collaboration and reason, which replaces a model of power based on coercion and threat; and (iii) a new concept of organizational values based on humanistic democratic ideals, which replaces the depersonalized mechanistic-value system of bureaucracy.

These threats of bureaucracy notwithstanding, modern organizations have had needs to clinch on it and as such make a high case for the need of bureaucracy (Warren Bennis, cited in Aluko and Adeposo, 2004).

c) *Need For Bureaucracy*

There are four historical conditions which have helped to promote the development of bureaucracy in the contemporary society vis-a-vis its need. These are:

1. Large Size: This is undoubtedly the single most important and popular factor that led to Bureaucratization. For the most part, the existence of bureaucracy in any sense is associated with large organizations. Dimock and Hyde (1940) stated that "The broadest structural cause of bureaucracy, whether in business or in government is the tremendous size of the organization". Bureaucracy is therefore seen as the inevitable and product of increased size and complexity of organizations. All the characteristics of bureaucracy are built around the framework of large system water ways in ancient Egypt, the maintenance of a far reaching network of roads in Roman Empire, the control over millions of people's religious life by the Roman Catholic Church would probably not have been possible without bureaucracy (Stoner and Wankel, 1988). To Weber, bureaucracy is an inevitable feature and the outcome of modernization and the increasing complexities of human Institutions. He saw bureaucracy as the decisive feature of modernity, the key to change in economics, politics, law and

even cultural life. It is the effort to run large organizations with greater effectiveness that brought bureaucracy (Warren Bennis, cited in Aluko and Adeposo, 2004). The running of bureaucracy entails large money in the economy hence complexity revolves around money economy.

2. Development of Money Economy: This promoted the development of bureaucratic organizations in the sense that payment of money for services rendered creates a proper degree of commitment among bureaucrats and the work force. A money economy brings into association people who have no other interactions. Their relations may be limited to the exchange of goods or services for money without further involvement. According to Simmel (1955) the growth of money economy contributes to impersonality in social relations. When compensation is based strictly on money, people tend to restrict their relations with one another and to ignore personal considerations. In contrast, a slave or volunteer economy cannot foster bureaucratic development. A slave is too dependent on his master and would not want to assume responsibility or exercise any personal initiative. Unpaid voluntary workers are too independent and will necessarily refuse to follow bureaucratic procedures. In such a situation rigid discipline cannot be strictly enforced. Payment of services rendition brings out the need for bureaucracy because the complexity of the economy rotates around money economy.
3. Capitalism: It is conceptually difficult to separate a money economy from capitalism as both go hand in hand in promoting bureaucracy. History has shown that it is under capitalism that formal and complex organization emerges to ensure that governmental operations succeed. Bureaucracy thus understood, is fully developed in the private economy, only in the most advanced institutions of capitalism. To Weber the distinguishing characteristic of modern capitalism was the "rational organization of free labour".
4. Protestant Ethic: Weber's main thesis is that the 'Protestant ethic' which strongly emphasized hard work and other individualistic values gave rise to capitalism and capitalism in turn gave rise to bureaucracy. One important sociological dimension of the 'protestant ethic' is that attitudes towards work changed and there are strict adherence to ethics to ensure control and payment.

d) *Bureaucracy in Developing Societies*

Recent trends indicate that in the emerging developing societies, bureaucracy has come to acquire the following features: Bureaucracy has been regarded as an important instrument for modernisation, growth and development. But experiences generally in third

bureaucracy had discerned. In fact, the structural and behavioural characteristics of bureaucracy proved to be instrumental in impeding development. Secondly, unlike the developed countries there is less differentiation of functions in the developing countries as a result of which the powers and importance of bureaucracy crossed its legitimate limits. Thirdly, appointments are done on the ground of merit, which is judged through a public competitive examination comprising both written and personality tests. But the intervention of primordial factors such as personal, caste, tribal, ethnic or religious considerations is still a tragic reality. Favours are bestowed on the basis of non-merit factors to those who qualify the written tests. Appointment to important posts is done mainly on the non-merit considerations. Ethnic considerations have emerged as a strong basis for public appointments. In states like India, there is a system of reservation of seats to the members of most and other backward castes and classes in the matters of public appointments. This is done with a view to make bureaucracy a representative bureaucracy. Such practices tend to limit the ability of states to make effective rules for the society. There is absence of uniform procedures regarding the selection and recruitment of bureaucrats. This adversely affects bureaucratic efficiency which results in administrative inefficiency. Fourthly, the politicisation of bureaucracy is another characteristic in the developing countries like Nigeria. The concept of "committed bureaucracy" was mooted by Gandhi in the late 1960s implying that bureaucrats should be committed to the party in power. But due to great public cry, Mrs. Gandhi had to later revise her stance clarifying that what she wanted was commitment to the basic law of the land rather than the government. But the fact is that there has been erosion of the principle of bureaucratic neutrality in India. The appointment to top officials both at the centre and the states are done on the basis of personal, ethnic, caste and party considerations. The reshuffling and transfers of civil servants before and after the elections have become a common phenomenon. The situation in African states is still worse than the situation in Asia. In Kenya, Tanzania, Zambia, Nigeria, and Uganda as the policy of political mobilisation became an established feature of political systems, the political parties felt it necessary to look for the support of the bureaucratic machinery. As a result, a variety of pattern of links between the political parties and the bureaucracy came into play in these nations. Owing to these relationships, the bureaucracies in these states appear to function in a subservient status vis-a-vis the office of the Presidency within the framework of African socialist ideology and benevolent welfare capitalism. The enmity between the political parties and the state bureaucracies have at times become quite intensive, giving more impetus to the office of Presidency and to the institutionalization of

patrimonialism and personal rulership. Such phenomenon is present in the Latin American countries also. Fifthly and finally another feature of bureaucracy in developing countries is the existence of large scale corruption within its ranks. It is only but obvious to state that corruption rocks in Nigeria to the extent that some scholars refer to it as endemic and pandemic, and as such affects development adversely, especially in the underdeveloped and developing countries.

e) Development and the role of bureaucracy in third world countries

After 1945 War, the former colonies were to attempt a mammoth exercise to bring about development in their respective countries. The goals of the rapid economic development were to be combined with the democratic political development. Development meant nation-building, growth, equity, democracy, stability and autonomy. These countries had inherited colonial bureaucracy. The characteristics of colonial bureaucracy included centralization of authority, hierarchical, generalist administrators, neutrality, etc. Such a bureaucracy was clearly elitist, authoritarian and paternalistic. Any organization of such characteristics as colonial bureaucracy cannot be effective in playing a role in the development process. Therefore the task of policing and revenue collection came to be doubted as the effective tool for development and growth.

But some scholars made a plea to these countries to attempt to strengthen the centralized, efficient and strong bureaucracies, if they were to achieve the task of economic, social and political development. La Palombara argued that a powerful bureaucracy is essential if one is to override the disintegrating influences of artificial political boundaries, the competitive forces of familial and tribal structures, the difficulty for organising and financing political parties, the low energy output of the population and the tendency of the population to want to expand funds on consumer gadgets rather than on capital formation. In developing states, powerful bureaucracies are simply necessary evils that one must learn to tolerate, hoping for the best from a democratic standpoint. It can be concluded with these discussions that despite the serious criticism and the dysfunctionalities with which bureaucracy suffers, it has come to stay as a vital and effective institution of governance. No political regime of whatever nature and ideology can do without it. However, there are considerable differences about the way the bureaucracy functions and the kind of role it performs in different political regimes depending upon the way its members are recruited trained and inducted in the political system. Its specific role in governance would also depend upon the relationship with other political institutions and the political leadership in the country concerned. In the past two decades, the emergence of new public management movement in

most countries has sought to downsize the role and apparatus of bureaucracy in most political regimes; but nowhere in the world has bureaucracy come to be completely abolished, which reinforces its continued importance in shaping the activities of modern political regimes, particularly economic development, efficient administration and stability.

In fact, the success of the plan formulation and implementation, effectiveness and efficiency of governmental operations, achievement of targets and organisational goals largely depend upon the functional efficiency of the administrative and technical personnel at all levels. The top level administrators, however, should be able to relate the accelerating rate of technological change to present and projected programmes. They should be aware of economic and social forces which have an import on governmental business. The civil service by and large claims to be responsive. It is apparent that the single most important motivating factor for staff is the opportunity to be of service to the public. It seems almost miraculous that the desire to genuinely serve the public should be born, should survive and should flourish amidst all the politics, tensions and impersonal imperatives of modern bureaucracy. The concept of service has thus remained conspicuous in spite of the many changes which might have been expected to erode it. This calls to question the functions of Bureaucracy in Modern times.

f) Functions of Bureaucracy in Modern Times

In modern democratic political nations, bureaucracy is entrusted with the function to implement the rules and policies made by the legislature. Rule implementation is considered to be 'mechanical' and a 'quasi-automatic process'. But this view is 'oversimplified' as administrators help their ministers to prepare the decisions as they cannot draft all the rules and regulations without the help of the bureaucrats. Therefore, the help given by the administrators to their ministers is of great magnitude in view of the fact that even rule-making has become a very complex function. The political regimes are involved in the preparation of both short and long-term socio-economic development plans and policies. Hence it would be ironical to say that the administrators just play a role in the implementation of the rules and programmes formulated by the state from time to time, instead, their contribution in the field of formulation of the rules, regulations, policies, and programmes is very important and of far reaching consequences. But, even the process of implementation should not be considered as "automatic and mechanical". Rule implementation is also a decision making process as the administrators have to choose one path from among various alternatives available to them (J. Blondel, in Kothari, 2006).

V. THE NIGERIAN BUREAUCRACY

It is not everywhere and in all society that one finds all the Weberian attributes and characteristics of bureaucracy. This is because Bureaucracies are products of the specific settings from where they originate. For instance, Weber's bureaucracy is associated with the 'protestant ethic' and the German tradition and as such has a complete Western perspective and orientation. It is therefore interesting to note that bureaucracy has its socio-cultural dimensions. That is, there are certain ways in which culture of a society determines the type of bureaucracy that emerges within the society. This has been aptly demonstrated in Crozier's (1964) study of the French bureaucracy. In essence therefore, we can talk of British, American, Japanese or even Nigerian bureaucracy.

By a hair's breadth conception, the Nigerian bureaucracy includes the administrative machinery, personnel of government and the corpus of rules and regulations that govern their behaviour. A broader and more elastic conception of the Nigerian bureaucracy has been provided here to include the following: (1) Civil services of all the thirty-six state governments and the seven hundred and seventy-four local governments that constitute the Federal republic of Nigeria presently; (2) Parastatal and public enterprise bureaucracies; (3) Armed forces Bureaucracy; (4) Internal security or policy bureaucracy; (5) Higher education bureaucracy; (6) Teaching service bureaucracy; (7) Public media bureaucracy; (8) Judicial service bureaucracy; (9) Political party bureaucracy; and (10) Private sector bureaucracy (Anise cited in Aluko and Adeposo, 2004).

a) Problems of the Nigerian Bureaucracy

There are ways in which the cultures of societies determine the functioning and the operations of the bureaucracies in such societies. Nigeria is not an exception to this rule. Ekpo (1979) observed that the Nigerian bureaucracies are corrupt, inefficient and overstaffed. Complementing this is the Udoji Report of 1974 which charged the bureaucracies with nepotism, ethnic loyalties, corruption, elitism, inability of superiors to delegate responsibilities: unreliability of junior staff in executing delegated tasks: failure of all to apply specialized knowledge and training skills in the management of the public service and failure to appreciate the importance of timeliness or efficiency in the performance of tasks. The report concluded by saying that the entire Nigerian bureaucracy was not results-oriented. Too bad it seems.

In some other instances, Amucheazi (1980), Anise (1986) among others have observed how politics enters into the spheres of administration and in the process the whole bureaucratic apparatus is disrupted and put into dismay. The whole political bureaucracy

which ought to be a non-partisan and neutral body with no permanent loyalties to any group has had to take sides in many instances. This was aptly reflected in the Western Region crises between 1962 and 1963 when the government bureaucracy became partisan. During the Nigerian civil war (1967-1970) the federal bureaucracy as a whole were openly partisan and strongly in the defence of the federal case. As a result of the inefficiency and ineffectiveness and lack of public accountability of those in the executive arm of government, the band wagon effect has been transferred to bureaucracies that served them. By the same token and in the same manner, the bureaucracies have grown inefficient and unaccountable to the people in the delivery of goods and services. Anise (1986) argued that what has grown in the Nigerian bureaucracies is the awareness of institutional, elite class interests preserved and nourished through an interconnected chain of internal bureaucratic networks of influence and shared self-protectionism. Over the years, routine bureaucratic services have been slowly converted into an intricate network of favours provided only in exchange for some other kinds of favours given or expected. Because the Nigerian society has been excessively corrupt, the bureaucrats too have grown corruptible and corrupt. Thus in Nigeria, corruption is seen as a permanent integral feature of bureaucracy, necessitating what is known as bureaucratic corruption. It is therefore not unusual to find the bureaucrats bending rules and jumping official procedures and protocols in order to achieve selfish ends.

In pursuit of private goals, several officials in the Nigerian bureaucracies form cliques and informal groups in order to maximize their benefits: all at the expense of the attainment of institutional goals. In effect, bureaucracies which are corrupt and steadily suffer goal displacement can hardly be expected to be efficient. If the bureaucracies are efficient at all in any way, it is in the special role of protecting its class interests rather than serving the masses whose interests it was created to serve. Like the human relations school would argue, to understand bureaucracy, one has to transcend its formal structure into interest groups and other social groups' activities that impinge on the individual role within a bureaucratic set up.

There are also allegations of favouritism and nepotism in the Nigerian bureaucracies. The power of the bureaucrat is stretched to the limit or even beyond limit. The bureaucrat is made to do things beyond the realms of his power and office as he is made to do things which he is not competent or qualified to do. There is a lack of compartmentalization of roles. We thus have a bureaucracy that is functioning on other criteria other than the Weberian model. Coupled with the above is the 'collectivistic' tradition in Nigeria. Like in most African societies the individual does not exist for himself but for his nuclear, and the extended families as well as

his town and the immediate environment. In many instances rules are bent in order to assist a kin, a closer relation, someone from the same clan, village or town. This is a thing that disrupts rather than support bureaucracy and in the end what you have is an inefficient system. This is what Okoli (2003) called Cognitive Melodrama at the Micro Level.

The impact of the ethnic factor on the Nigerian bureaucracies cannot be overlooked. Both in the public and the private sectors, personnel selections and appointments are based on non-bureaucratic criteria such as the state of origin, home town, ethnic group that reflect the peculiar problem of the Nigerian nation as against objectively measurable criteria like qualifications, professional competence, intelligent quotient and the likes. As a matter of fact, the ethnic factor has been entrenched in the 1979 Constitution and the subsequent ones under the name 'Federal Character'. Presently a 'Federal Character Commission' has been establishment to monitor both public and private bureaucracies and ensure that this clause is implemented. The use of subjective criteria like ethnicity in deciding who is to be employed is a negation of bureaucratic ideals any day. Invariably the best applicants from the South are kept out of the bureaucracies for the worst from the North. Okoli calls it Cognitive Melodrama at the Macro level. No wonder the Nigerian bureaucracies are grossly inefficient. While one can sympathize with the reasons for adopting the Federal character concept, there is also the inherent danger that the adoption can become an obsession and consequently become demoralizing, demotivating and counter-productive. In many instances, it had been a source of acrimony and resentment thus leading to general paralysis of the bureaucracies. Anise (1986) stated that there have been complaints from serving bureaucrats in Nigeria against the frustration which the Federal character concept poses to serving bureaucrats from states which are not favoured by its implementation. According to Olugbile (1997) nepotism had shaded into ethnicity. The favoured bureaucrat is selected over his peers (and sometimes even over his seniors). He is advanced preferentially.

He is moved to strategically preferred positions in the bureaucracy and he is more likely to be let off with infractions of the bureaucratic rules. Olugbile concluded by saying that something needs to be done about this culturally ingrained habit and tendency, which everyone knows from theory is supposed to be deleterious to the harmonious functioning of the bureaucracies. This is because it destroys trust, creates suspicion and insecurity, and puts people in bureaucracies to suffer later on.

The issue of discipline has also been identified as a problem having its toll on the Nigerian bureaucracies. There are factors within the Nigerian culture which makes the enforcement of discipline a

problematic task in the Nigerian bureaucracies. The procedures stipulated for enforcing discipline in the ideal bureaucracy does not conform with the traditional procedures for enforcing discipline. Why is this so? Olugbile (1997) argued that there is a traditional approach to discipline which on one hand recognizes that a worker should be punished, but insists that when elders intervene to plead on behalf of the offender, the boss is duty bound to take the elder's pleas. A contrary or counter approach is the logic that justice must be done irrespective of the status of the worker or his connections. The bureaucrat owes a duty to the bureaucracy to act equitably without fear or favour at all times. If he derelicts in this duty, ultimately it is the bureaucracy that bears the brunt. Our tradition and culture is one that stipulates that the counsel of the elders must not be discarded or jettisoned; otherwise the bureaucrat can be ostracized or treated as a social misfit. Most top bureaucrats always face this dilemma, and sometimes discover that there will be situations in which he cannot strictly enforce the code of conduct stipulated by bureaucracy to the letter. For instance, what does a permanent secretary do when he suspends an accountant in his ministry for fraud and the erring accountant brings a letter from the king of the permanent secretary's town pleading that the accountant should be pardoned. To disregard the King's letter will amount to insult and disrespect for tradition while to pardon the erring accountant brings a bad precedence and amounts to injustice and betrayal of trust. What does the Permanent Secretary do then? He is quite in a fix and a big dilemma. This is a typical example of what happens in the Nigerian bureaucracies most especially public ones. From all indications, there are several problems confronting the Nigerian bureaucracies in general but some can be conveniently traced to the culture of the people as shown in the foregoing discussions in this paper. However, there are some structural impediments to bureaucracy.

b) The Structural Impediments to Public Bureaucracy in Nigeria

Identifiably, the structural problems besetting the civil service in Nigeria fall roughly into four basic categories, namely: Personnel regulations, Personnel qualifications, Organisational structure, and Work environment. Each plays its role in diminishing the administrative capacity in public bureaucracy. The personnel regulations state requirements for entry into the bureaucracy as well as procedures for promotion and dismissal. Public service in Nigeria stipulates a long list of requirements for entry, including federal character (Nnoli 1980). Theoretically, positions are supposed to be filled on the basis of merit. However, political, family, ethnic, and religious factors are important considerations in attending to bureaucratic

appointments (Mohr 1987; Adebayo 2001; Yesufu 1992). Recruitment, however, is only part of the problem. Once ensconced in a bureaucratic position, officials are promoted primarily on the basis of seniority. Rules for promotion fail to distinguish between productive and non-productive workers. Dismissal is rare except during the mass purge of Muritala /Obasanjo Administration in 1975-1976. It is hard to lose a government job in Nigeria (Adebayo, 2001). As regards personnel qualifications, employees entering the public and civil services through the use of political or family influence may lack the required technical skills for their positions. Moreover, on-the-job training programmes are weak and ineffective (Otobo 1992). Poorly trained individuals remain poorly trained. Also complicating the skills problem is the emphasis on filling slots rather than matching employee skills with the needs of the position. Thus, many of the skills that public bureaucrats possess are wasted (Okafor and Bode-Okunade). The public service tends to be overstaffed with individuals who lack the requisite skills for their positions (Jike 2003; Otobo 1992; Nwachukwu 1988). In addition to the above factors, most public bureaucrats are poorly paid. Most public servants earn just a little in the face of rising inflation brought about by deregulation policies of government (Onyeonoru 2004). Accordingly, most have resorted to multiple job-holding in the informal sector thereby impacting negatively on their attitude and commitment to work. The energies expended in a second job are lost to the places of their primary assignments (Okafor 1998). Besides poor salaries, there are other factors in the workplace that impinge on the effectiveness and efficiency of public bureaucrats, including poor and outdated equipment, lack of office space and poor filing systems etc. (Okoh 1998).

c) Reasons for the Deviation from Weber's Ideal Bureaucratic Principles

Couple of reasons do suffice but the few below takes precedence. First it is argued that the Weberian bureaucracy is completely westernized and very prescriptive. It does not coincide with reality as it does not prescribe the way things work in reality or real life situations. Secondly, it is argued that the Weberian bureaucratic model does not take enough cognizance of the ways in which culture determines or influences organizational behaviour vis a vis work relationships, values, norms and ethics. Cultural variation dominates social life. Thirdly, the Nigerian society is built on the "we or the collective tradition" which negates the "I or the individualistic tradition" specified in the Weberian model. Fourthly, in the Weberian bureaucracy there is strong emphasis on formal relationship whereas the Nigerian culture recognizes the informal aspects of social life as revealed by the Hawthorne studies. Fifthly, unlike in the Western bureaucracies where particular importance is

not attached to face-to-face interactions in formalized settings, in the Nigerian culture there is demand for face-to-face interactions in every sphere of social life.

In situations where a bureaucracy deals with the public, the common requests or the questions are - 'Who is the boss, I like to see him?' who will treat this case, let me have a discussion with him. This is reflected in some local Yoruba slogans such as "Oju loro wa" and "Ka foju rin ju" all which literally means desire for face-to-face interaction. Generally, there is this act of "who do you know. In Igbo parlance, it is called Ima Mmadu or ima onye or ndi ma mmadu. This is what Okoli (2003) referred to as cognitive melodrama. These scenarios have contributed significantly to the departure from the real bureaucratic ideals in Nigerian bureaucracy. Finally, the Nigerian tradition demands for both vertical and horizontal communication as against the adoption of vertical communication channels only as stipulated and specified in the Weberian model. The submission here is that even though information goes up and down it must also spread horizontally, that is, from one department to another or to colleagues and peers at work.

VI. PUBLIC ADMINISTRATION, PUBLIC BUREAUCRACY AND NATIONAL DEVELOPMENT: THE NEXUS

Administration is a universal practice and also of universal importance. It exists whenever people cooperate to achieve the goals of their groups and such achievements require planning, organization, command, cooperation and control. It involves the mobilization, deployment and direction of human and material resources to attain specified objectives. Public Administration may be considered as both a field of action and a field of study. As a field of action, Public Administration refers to the mechanics and structures through which government policies are implemented. As a field of study, Public Administration refers to the academic discipline which studies the mechanics and structures through which government implement its programmes. According to Woodrow Wilson, Public Administration is a detailed and systematic application of law. Hence every particular application of law is an act of administration. In the words of Dwight Waldo, "Public Administration is the art and science of management as applied to the affairs of the states...." Luther Gullrich, sees "Public Administration as that part of science of administration which has to do with the government and thus concerns itself primarily with the executive branch of government where the work of government is done." According to Wikipedia (2011), Public administration houses the implementation of government policies and an academic discipline that studies this implementation and prepares civil servants for this work. As a "field of inquiry with a diverse scope" its "fundamental goal... is to advance management and

policies so that government can function." Some of the various definitions which have been offered for the term are: "the management of public programs"; the "translation of politics into the reality that citizens see every day"; and "the study of government decision making, the analysis of the policies themselves, the various inputs that have produced them, and the inputs necessary to produce alternative policies." Public administration is "centrally concerned with the organization of government policies and programmes as well as the behaviour of officials (usually non-elected) formally responsible for their conduct". Many unelected public servants can be considered to be public administrators, including police officers, municipal budget analysts. Public administrators are public servants working in public departments and agencies, at all levels of government.

Public Administration, as an aspect of governmental activity is very old. It is as old as human history. In European languages, the term Public Administration began to creep in during the seventeenth century to separate the absolute monarch's administration of public affairs from his management of his private household. It was a period in which the church was separated from the state and the government was superimposed on all other societal institutions within a definite territory. In every society there are some activities like maintenance of law and order and defence which have to be undertaken in public interest. Public Administration as a system of organization is mainly concerned with the performance of these activities. Political decision makers set the goals for the political system. It is the business of Public Administration to work for the realization of these goals. At the present stage of man's evolution, Public administration has proved to be indispensable. The scope of Public Administration has expanded with the rise of the modern administrative state. Its growing importance in the conduct of human affairs is evident in the birth of numerous public laws, growth of public profession, accumulation of huge arms and increasing coverage of taxes and public expenditure. The domain of state functions is almost all-comprehensive in socialist countries. Even the capitalist states have expanded their functions under compulsions of welfare considerations. The post-colonial 'third-world' countries have embarked upon Development Administration to speedily bring about state sponsored socio-economic reconstruction, thereby necessitating the need for public administration.

Public Administration is a specialized academic field. It deals essentially with the machinery and procedures of government activities. Administration has been defined as a cooperative human effort towards achieving some common goals. Thus defined, administration can be found in various institutional

settings such as a business firm, a hospital, a university, a government department and so on. As an aspect of this more generic concept, Public Administration is that species of administration which operates within a specific political setting. It is a means by which the policy decisions made by the political decision makers are carried out. Public Administration is decision making, planning the work to be done, formulating objectives and goals, working with the legislature and citizen organizations to gain public support and funds for governmental programmes, establishing and revising organization, directing and supervising employees, providing leadership, communicating and receiving communications, determining work methods and procedures, appraising performance, exercising controls and other functions performed by government executives and supervisors. It is the action part of the government, the means by which the purposes and goals of the government are realized.

The 'Public' aspect of Public Administration gives the discipline a special character. It can be looked at formally to mean government'. So, Public Administration is government administration, the focus being specifically on public bureaucracy. This is the meaning commonly used in discussing Public Administration.

Public Administration is the complex of governmental activities that are undertaken in public interest at different levels such as the central, state and local government levels. The discipline of Public Administration aims at a systematic study of these activities. Government, as political authority, is the major regulator of social life. With the emergence of democracy and the concept of welfare state, the governmental activities have increased by leaps and bounds. The historical movement has thus been from regulation to service and welfare. The police state has gradually given place to popular governance in the interest of widest possible public welfare in close association with the people themselves. Expanding governmental activities have resulted in expansion of the bureaucracy, creation of different forms of public and semi-public organizations, raising public expenditure, and overall control over public life. Since government has come to have such widespread influence and control over public life, its organisation, basis of authority, functions, finances and impact on society have been subjected to intellectual examination. The area chosen by Public Administration has generally been "executive action" or the activities of the executive organ of the government. 'This means really a study of the bureaucracy: its structure, functions and behaviour. But the other organs of government such as the Legislature and the Judiciary have' also been found useful in public Administration analysis.

It is widely acknowledged that the scope of Public Administration has to be wide enough to respond

to the complex social realities of today. Major concerns of the discipline are:

Promoting (Publicness): In a democratic society, Public Administration has to be explicitly 'public' in terms of democratic values, power-sharing and openness. This calls for a new climate in the bureaucracy. Public Administration in practice has to absorb the principles of democracy as an overarching form of the government.

Policy Sensitivity: As governments are called upon to play increasingly active roles in times of rapid changes and social crisis, innovative and timely policy formulation becomes 'a prime necessity in the government. This would necessitate a new preparedness within the administrative set-up that had hardly any precedence in the past.

Implementation Capability: Effective policy implementation is going to test the coping capacity of the governments in today's complex situations. Goals have to be clearly set; planning, programming and projections have to be followed step by step; and project management in all its ramifications has to have top priority in government. The strength of administration and the legitimacy of the government itself would depend more and more on the administration's capacity to deliver the goods in time and in response to the demands of the citizens.

Shared understanding of social reality: The capacity to cope with social and administrative complexity can be enhanced by a deliberate policy of organizational openness. The underlying assumption here is that administration needs to understand the diverse interests and influences. In today's complex administrative world, construction of administrative reality has to be based on the shared understanding of its actors such as the men at the top, the middle managers, the employees and the citizens. The centralised, insular bureaucracy does not fit in with the contemporaneous socio-administrative realities.

Administration as a learning experience: Shifting social reality and complex environmental conditions impose certain rigours on Public Administration today. Rusted 'principles' of the past or the administrative recipes of bureaucratic routine are no longer appropriate tools for analysis and problem solving. Public Administration in modern time has to be proactive, innovative, risk-taking, and often adventurous. This new, entrepreneurial zeal is expected to transform 'bureaucracy' into a new kind of learning organization, more adaptable to changes, more open to new insights and innovations, and more accessible to the clientele.

These are the major concerns of government in all democratic countries. In the developing countries, these have added significance, as Public Administration has a pivotal role to play in the socio-economic reconstruction of post-colonial societies. The discipline of Public - Administration cannot live in isolation. It has to develop in close association with the dynamic social

changes. As a body of knowledge, it must develop explanatory strength to analyse socio-economic complexity and assist in the ushering in of a new society free from exploitation and human misery, poverty and deprivation of the past era.

Public Administration is a collective caring process for the welfare and well-being of all. It, therefore, involves the harmonization of personal and group goals. This act is achieved by the bureaucrats and bureaucracy.

The bureaucracy, broadly defined, is that apparatus of government designed to implement the decisions of political leaders. Political leaders make policies, and the public bureaucracy executes it. If the bureaucracy lacks the capacity to implement the policies of the political leadership, those policies, however well intentioned, will not be implemented in an effective manner (Anise 1984). It is one thing to promise development, it is quite another to actualize it. Viewed in this light, the role of public bureaucracy in the process of economic, social, and political development looms large indeed. However, the role of bureaucracy is critical to all areas of the development process in Nigeria. Public bureaucracy is a very vital element of the development process in Nigeria especially in the rural areas. Bureaucratic capacity determines what will get done, when it will get done, and how well it will get done. The greater the capacity of the bureaucracy to implement complex economic and social development plans, the higher the development potential of that society. This is not to suggest that bureaucracy is the only force in the development process, as bureaucratic capacity is not a sufficient condition for development, but it is most assuredly a necessary condition. By definition and for the purpose of this paper, public bureaucracy is used to refer to the administrative machinery, personnel of government at the federal, state and local levels and the corpus of rules and regulations that govern their behaviour (Okafor, 2005). The ability and capacity of the bureaucracy to administer the policies of the state determines the state of development in Nigeria. The need for rural development in Nigeria implies that Nigerian public Bureaucracy has been incapable of formulating and implementing good policies capable of changing the living conditions of the Nigerian citizens especially those in the rural areas. This call to question how the decadence in Nigerian public bureaucracy was evolved? In answering this question, Okafor, (2005) asserted ...when Nigeria achieved her independence in 1960, the shortage of qualified administrators was critical. Most colonial administrators departed with independence, creating a huge void that could only be filled by pressing poorly trained and inexperienced native officials into senior positions. Further aggravating the shortage of trained personnel was the desire of Nigeria to nationalise their

public bureaucracy (Yesufu 1969; Adu 1969; Palmer 1988). The departure of the colonial administrators was severely aggravated by a variety of additional problems. The rank and file of the nationalists who agitated for independence became the rank and file of the public bureaucracy. A government job was their reward for agitating for independence. In much the same vein, the political leaders of various regions in Nigeria felt an urgent need to reinforce their popular support by providing jobs for the unemployed. As most regions had little or no industry to absorb the people, mass employment meant government employment. The bureaucracy became a welfare agency (Ejiofor and Anagolu 1984).

In the years following Nigerian independence, the inherent weaknesses of public bureaucracies were perpetuated by the urgency of the development process following the oil boom. Hence, many agencies were duplicated for similar duties. If existing agencies faltered in the execution of development policies, new agencies were created to expedite matters (Nwosu 1977). The decades of independence and the post-Civil War era have been described as the decades of public bureaucratic inflation and decay in Nigeria (Ademolekan and Gboyega, 1979). The rots and decay in services rendered by the public bureaucracy over the years are evidenced in the speech made by President Obasanjo while launching initiative to reform public bureaucracy service delivery in which he said: 'Nigerians have for too long been short-changed by the quality of public service... We shall ensure they get what is better' (New Age, June 17, 2005). Hence, the need to critically understand what led to the decay and rots in the services delivered by public bureaucracy in Nigeria. These service deliveries are core responsibilities of the Nigerian Civil Service.

Contemporaneously, one of the major problems that grossly characterized the Nigerian civil service is gross irregularities that are politically based. The importance of civil service cannot be over-emphasized, and its restructuring cannot therefore be underestimated. For government plans and policies to succeed, the fingerprint and input of civil service is very necessary. This is because the civil service provides the policy framework and institutional mechanism that implements government policies. It is therefore, necessary to ensure political neutrality of the civil service as the civil service is important in the life of every nation because it is a body or a department in the executive arm of the government responsible for the execution of the policies and programmes of the government. The civil service and civil servants perform purely administrative and executive functions, which entail formulation and implementation of government policies (Suleiman, 2009).

VII. THE CONCEPT OF RURAL DEVELOPMENT AND RURAL DEVELOPMENT IN NIGERIA

Although policy makers and the development community have widely used the phrase "rural development," what constitutes rural development seems to have changed significantly over time, especially during the last three decades. Until the 1970s, rural development was synonymous with agricultural development and, hence, focused on increasing agricultural production. This focus seems to have been driven primarily by the interests of industrialization to extract surpluses from the agriculture sector to reinforce industrialization. With the focus on increasing agricultural production, the stated objective of most countries was to promote smallholder agriculture. This is why Adelemo (1987) sees the concept of rural development to include resettling displaced communities or adopting new types of housing unit. He continues that rural development should include alongside land-use development, economic factors such as land carrying capacity for each area, its farm land, irrigation improved farming method and finance. From the above, it is obvious that scholars tilt the concept of rural development toward their area of specialization and perhaps, interest hence the assertion that the concept lacks a unified definition. However, if the opinion of Simon (2004) about development is worth anything, it means there is the possibility for the level of rural development to be reversible as poverty levels, life expectancy and educational attainment etc. can all decline as a result of inappropriate policies, corruption and bad governance, natural disaster or human-induced disasters, war and civil conflicts in the rural area.

Over time, this smallholder agriculture-centric concept of rural development underwent changes. In the early 1980s, the World Bank defined rural development as "...a strategy designed to improve the economic and social life of a specific group of people-the rural poor." Four major factors appear to have influenced the change: increased concerns about the persistent and deepening of rural poverty; changing views on the meaning of the concept of development itself; emergence of a more diversified rural economy in which rural non-farm enterprises play an increasingly important role; and increased recognition of the importance of reducing the non-income dimensions of poverty to achieve sustainable improvements in the socioeconomic well-being of the poor.

The general and broad objective of Rural Development according to Koinyan (1990) is; to enable the people of the rural areas realise their full potential, build self-confidence, dignity and fulfilment. It should free people from the evil of want, ignorance, deprivation and exploitations; and correct the existing imbalances and injustices in the society. The World bank refer to it as the modernisation and monetisation of the rural

societies as well as its transition from the traditional isolation to the national development, hence it seeks to equip the rural people with skills and knowledge which will enable them to have full control of their environment and exploit everything in the environment to their advantage in their production process.

However, the concept of rural development in Nigeria lacks a unified definition as different scholars tend to view it from varying perspective. Some scholars look at rural development from the aspect of education/training like Haddad (1990), and Hinzen (2000). Obinne (1991) perceived rural development to involve creating and widening opportunities for (rural) individuals to realize full potential through education and share in decision and action which affect their lives. He views rural development as efforts to increase rural output and create employment opportunities and root out fundamental (or extreme) cases of poverty, diseases and ignorance. Others like Olayide, Ogunfowora, Essang and Idachaba (1981) viewed rural development as means for the provision of basic amenities, infrastructure, improved agriculture productivity and extension services and employment generation for rural dwellers. An understanding of the concept of development will give a clearer picture of rural development. Hornby (2000) defines development as the gradual growth of something so that it becomes more advanced, stronger, etc; the process of producing or creating something new. This definition implies that development involves a gradual or advancement through progressive changes. Umebali (2006) sees the changes to be multi-dimensional involving changes in structures, attitude and institutions as well as the acceleration of economic growth; the reduction of inequality and eradication of absolute poverty. He asserts that development involves economic growth component, equality or social justice component, and socio-economic transformational component which are all on a self sustaining basis. Viewing the concept differently, Simon (2004) sees development as an improvement in quality of life (not just material standard of living) in both quantitative and qualitative terms. He opines that development must be seen as actually and temporally relative, needing to be appropriate to time, space, society, and culture. From the foregoing, it is obvious that rural development is not a one-off thing or an immediate and snap phenomenon. Rather, it is a gradual and progressive towards perfection having a set standard in mind. Olayide et al (1981) see rural development as a process whereby concerted efforts are made in order to facilitate significant increase in rural resources productivity with the central objective of enhancing rural income and creating employment opportunity in rural communities for rural dwellers to remain in the area. It is also an integrated approach to food production, provision of physical, social and institutional infrastructures with an ultimate goal of

bringing about good healthcare delivery system, affordable and quality education, improved and sustainable agriculture etc. As it is today, rural development needs to be given priority attention. Several reasons for such urgency include high and unacceptable rate of poverty, poor access to social and economic infrastructure and services such as access to safe drinking water supply and sanitation, higher rate of health indicator such as infant mortality rate, malnutrition and disease prevalence and lower enrolment of children in school. Obot (1987) suggests that rural development achievement could be measured in the areas of roads, water supply, housing, electricity, building of model communities, access to quality education, improved health care delivery and availability of food and agricultural products for the rural settlers. The objective of the National Policy on Rural Development as outlined by Ogbazi (1992) encapsulates an ideal situation of an acceptable level of development in the rural area. These objectives can be paraphrased to include:

- ❖ Promotion of the social, cultural, educational and economic well being of the rural population
- ❖ promotion of sustained and orderly development of the vast resources in the rural areas for the benefit of the rural people,
- ❖ increase in and diversification of job opportunities and improvement of income in the rural areas,
- ❖ mobilization of the rural population for self-help and self-sustaining programme of development, and
- ❖ up-lifting of the technological based industries in the rural area.

The establishment of the Millennium Development Goals has significantly reinforced the concerns about non-income poverty. With the paradigm shifts in economic development from growth to broadly defined "development", the concept of rural development is now used in a broader sense. It is also more specific "in the sense that it focuses, in its rhetoric and in principle, particularly on poverty and inequality." In more recent years, increased concerns on the environmental aspects of economic growth have also influenced the changes. Today's concept of rural development is fundamentally different from that used about three or four decades ago. The concept now encompasses "concerns that go well beyond improvements in growth, income, and output. The concerns include an assessment of changes in the quality of life, broadly defined to include improvement in health and nutrition, education, environmentally safe living conditions, and reduction in gender and income inequalities." Today, there seems to be a universal consensus that the ultimate objective of rural development is to improve the quality of life of rural people. This makes it essential to go beyond the income-related factors such as prices, production, and productivity to a range of non-income factor that

influence quality of life and hence inclusiveness of rural development. Inclusive rural development is a more specific concept than the concept of rural development. In broad terms, inclusive rural development is about improving the quality of life of all members of rural society. More specifically, inclusive rural development covers three different but interrelated dimensions. The first is the economic dimension that encompasses the provision of both capacity and opportunities for the poor and low-income rural households in particular to benefit from the economic growth process in such a way that their average incomes grow at a higher rate than the growth of average incomes in the sector as a whole. The economic dimension also includes measures to reduce intra- and inter-sectoral income inequalities to reasonable levels. Second is the social dimension of supporting social development of poor and low-income households and disadvantaged groups, eliminating inequalities in social indicators, promoting gender equality and women's empowerment, and providing social safety nets for vulnerable groups. Third is the political dimension of improving opportunities for the poor and low-income people in rural areas, including women and ethnic minorities, to effectively and equally participate in the political processes at the village level and beyond compared with any other categories of the population within and outside rural areas.

Overtime, successive government have embarked on several programmes targeted at rural development. Other approaches have been by Non-Governmental Organizations (NGOs), cooperatives, individuals through private initiatives, corporate bodies as well as International Organizations. The various programmes initiated and chiefly targeted at the rural sector by government include the following:

- 🚧 National Accelerated Food Production Programme (NAFPP)
- 🚧 River-Basin Development Authority (RBDA)
- 🚧 Agricultural Development Programme (ADP)
- 🚧 Operation Feed the Nation (OFN)
- 🚧 The Green Revolution (GR)
- 🚧 Agricultural Credit Guarantee Scheme (ACGS)
- 🚧 Directorate for Food, Road and Rural Infrastructure (DFFRI)
- 🚧 Better Life for Rural Dwellers (BETTER LIFE)
- 🚧 National Agricultural Insurance Corporation (NAIC)
- 🚧 National Directorate of Employment (NDE)
- 🚧 National Agricultural Land Development Authority (NALDA)
- 🚧 National Poverty Eradication Programme (NAPEP)
- 🚧 National Rural Roads Development Fund (NRRDF)
- 🚧 Rural Banking Scheme (RBS)
- 🚧 Family Support Programme (FSP)
- 🚧 Universal Basic Education (UBE)
- 🚧 Rural Infrastructure Development Scheme (RIDS)

A cursory look at the introduction, establishment, implementation and the objectives of majority of the above programmes will reveal that they were mainly targeted at rural development in an attempt to better the lives of rural dwellers, stimulate and enhance economic growth, as well as get the rural sector to contribute meaningfully to the national economic and social development. These programmes have direct or indirect impact on rural development and can broadly be grouped into specific and multi-specific programmes. The specific programmes are those directed mainly at agriculture, health, education, housing, transport, infrastructure, finance and manufacturing. These programmes and projects were made possible only by the efforts of the bureaucracy. However, one will be correct to argue that the rate of rural-underdevelopment in Nigeria, in spite of a handful of rural development related policies and programmes, is significantly related to the ineffectiveness and inefficiency of the Nigeria public bureaucracy, which of course is the core of the Public Administration.

VIII. THE ROLE OF PUBLIC BUREAUCRACY IN RURAL DEVELOPMENT

The Civil Service in Nigerian and that of many countries is regarded as a bureaucracy. But Public Bureaucracy is more than the civil Service hence Public Service. This is because bureaucracy is a large organization that is controlled and funded by the government. The civil service comprises all servants of the state other than holders of political or judicial offices who are employed in a civil capacity and whose remunerations are paid wholly and directly out of the money voted by the parliament. The civil service is part of the machinery of the executive branch of the government and exists to put into effect government policies. The effectiveness of government, especially in relation to rural development therefore, depends on the efficiency of the civil service and its ability to respond in practical terms, to its policy decisions. It is for these reasons that the civil service is often described as the custodian of the government's reputation, for if it is unable to carry out the policies faithfully and efficiently, it does not only frustrate the government, but it might seriously undermine the government's position and stability in power. This is why it is called the core of public administration.

Public Administration is often referred to as the action part of Government. Civil servants are often referred to as public administrators and, therefore, are identified by several functions they perform. These functions are regarded as the role of public administration in national development as they represent the relationship between the public bureaucracy and rural development. These roles are as follows:

Assisting in Policy Formulation: Policy formulation is the

exclusive preserve of politicians and political office holders. But they may not be able to do this without the assistance of civil servants, who usually provide the necessary data and information which will guide policy choices by political masters. Civil servants go to the field to collect data, analyse them and provide policy alternatives with supportive arguments on each. The final policy choice and decision are not the responsibilities of civil servants but they reserve administrative discretions on certain matters of public policy urgency, especially at the implementation stage.

Policy Execution: The primary function of civil servants is to carry out government's order and directives without complaints. Official policies are practically implanted by civil servants. They are expected to perform such function to the best of their administrative and technical ability. When this particular function is performed religiously, rural development is ensured as they are nothing but policy decisions taken which awaits implementation by the bureaucrats. This is the core role of public bureaucracy in achieving rural development though it is not exhaustive.

Assisting in Law Making: The executive, under a democratic regime, presents bills to the parliament for legislation. Conventionally, it is the duty of civil servants to draft the bill and fleshed it up with the necessary details before presentation to parliament for debate. After becoming law with the assent of the president, it is also the duty of civil servants to work out modalities for its operations. Therefore, the bureaucrats are inexorable in the law-making of the administration. Little wonder the saying that Public administration is the administration of "law", simply put, law in application.

Provision of Social Amenities and Services: Civil servants engage in the provision of some social services as their official assignment. Therefore whoever has, as his official assignment, the provision of social amenities has the sole responsibility of ensuring rural development. Therefore, the Public Bureaucracy has the responsibility of providing social services to the rural populace.

Continuity of Government: Civil servants in the past, especially during the numerous military regimes Nigeria has witnessed, had always played prominent roles in maintaining the continuity of government. Civil servants often provided continuity in government by ensuring provision of social services in all its ramifications. This responsibility leads them to playing a major role in rural development because government exist to provide development and so whoever keeps the government going, keeps development going, especially in the rural areas.

IX. FINDINGS AND RECOMMENDATIONS

The paper made some findings among which are the following:

1. The rapid unending expansion of developmental activities has created complex problems and the greatest single obstacle to progress is the shortage of trained manpower. This problem can be surmounted only by instituting right type of personnel policy with the objective of producing, as rapidly as possible, the skilled and knowledgeable personnel needed in modern administration. This is because in scientific management, efficiency is understood to be synonymous with economy in progress. Therefore, the untrained staffs should be trained and the trained matched with their acquired skill to avoid underutilisation. We should therefore, stop filling the vacancies in the public bureaucracy but match vacancy with skill.
2. Emerging trend from recent studies has shown that higher civil servants form a 'distant social group' or to serve as the 'representative' of the upper classes as Karl Max foretold, and this trend encourages Mediocrity in Public Administration than Meritocracy, sufficing favouritisms, nepotisms, clientelism and even prebendalism as recruitment into public bureaucracies are seen as political compensations and an avenue to score political points to the detriment of rural and national development because an unqualified labour is a big liability and a destructive force in the whole machinery of development. This is what Federal Character Principle has bequeathed to Nigeria. To solve it means to revert to Weber's Merit principle as the basis of recruitment and promotion in the Bureaucracy.
3. Numerous problems are connected with the administration of development plans and specific development. These includes long delays in execution of the plan, increased costs over the projected costs because of delays and inflation and because of bloated contract price and kick-backs, inferior construction, low yields on investments, unnecessary disposal of resources among a number of small and uncoordinated job. They are called Administrative problems. There are three other sources of administrative confusion and incompetence such as a. The lack of trained experts to administer the complex programme and projects so vital to economic development. b. Lack of political support for civil servants and bureaucrats; and c. The casual way in which third world bureaucrats manipulate or alter statistical data to conform to political requirements. The solution is employment of skilled and qualified staffs on the basis of merit and not mediocre and depoliticisation of the system.

4. Political and economic constraints in the third world countries have altered the quality of lives in many ways. When government makes laws, however, it turns round to aid and abet the noncompliance of such laws by the public. Corruption has been traced to the administrative styles of these countries and Nigeria has been identified in the forefront. For example, the ridiculously low salary of civil servant makes them easily vulnerable to receiving bribes. Added to this is the highly unequal distribution of political power or lopsidedness of political power, which is often the case in plural societies. This is known as Political constraints. Its solution is political will to serve and deliver the goods to the people and a change in their parochial rationality.

X. CONCLUSION

Inexplicably, in most rural areas, says Okoli and Onah (2002), there are no motorable roads to link one community to another, thus leaving many of these communities in dreary isolation to one another. Where any exists at all, it is characterised by innumerable potholes, deep enough to snap a car's shock absorber or give the rim a terminal damage. The state of our roads is most horrible in the Riverine areas with their marshy and difficult terrain. There is also deplorable lack of potable water in Nigerian rural areas. While some communities are lucky to have rivers, streams and springs, others are not fortunate, as some have shallow ponds as the only sources of water for man and animals. In such circumstance, people are bound to drink dirty and contaminated water. Such a source of water supply undoubtedly, constitutes breeding grounds for parasites that cause diseases. Agriculture is the primary occupation and major source of livelihood in rural areas, as large segment of the population lives in rural areas as peasant farmers. The farming system is predominantly traditional, using the hoe and the cutlass. The farmers practices shifting cultivation, thus planting on a small piece of land for two or three years and move to another site some distance away. Nevertheless, a majority of our rural people suffer from malnutrition and hunger. In and around the villages, one readily comes across children with distended tummies and spindly legs who are oblivious of a better milieu. These "living that are better dead" infants, toddlers, youths etc are malnourished. Poor education is another feature of Nigerian rural areas. The privilege of education which for instance, is supposed to be a birth right of every Nigerian child is an illusion to many poor rural dwellers. In some places, there are no schools at all, while in some others, the schools are shabby, ill-equipped and poorly staffed. Though most rural communities have now struggled to get primary schools established in their areas, no matter how dilapidated some of them may look, this cannot be said of secondary schools and

technical colleges which are either non-existent or are located in places very far from some communities, mostly private-owned commercial schools. The fees generally charged in these schools are very high and the costs of books are beyond the means of parents. Hence, because of poverty and other problems, many parents cannot afford to give educational opportunities to their children. Furthermore, rural areas in Nigeria also lack health institutions. There are hardly any well-equipped hospitals, health centres, clinics and maternity homes in rural areas. In some places, no medical institutions of any sort exists at all. And where they exist, the people have to travel between 5 to 35 Kilometres or more to reach the nearest one available. In such a situation, health care of such rural dwellers is left squarely to fate and practically in the hands of rural quacks and traditional medicine.

To reduce poverty and avert rural underdevelopment, we have to review the nation's approach to the implementation of poverty reduction and other human wellbeing related policies and programmes and which, historically, have been a top-down approach – with government developing programmes for the people rather than programmes designed, implemented, monitored and evaluated by the government of all levels in collaboration with the people themselves, hence Nigeria's NV20:2020 recommendation of a decentralised approach to the development and implementation of pro-poor programmes. Again, the administrators who have the responsibility of converting these policies to projects and programmes and its realisation must be proactive this time if the rural areas must cease to fit the description which Okoli & Onah (2002) gave them. According to them, "rural areas in Nigeria are characterised by oppression, degradation and deprivation. The rural people have fewer opportunities for education, employment and good living. They lack economic and social amenities such as good roads, electricity, pipe-borne water, hospitals, bridges, banks, industries, telephone, etc. Generally, the rural communities are poor and economically underdeveloped. Its inhabitants are mainly farmers who maintain small holdings and practise seasonal farming; their production is mainly on subsistence level and food crops productivity and standard of living are low. They are certified victims of preventable diseases, which derive from malnutrition. Inside the rural dwelling place, man, woman and children are herded together under conditions which defy all rules of hygiene, a condition of life so poor that it prevents the realisation of man's total potential.

To ensure the improvement of the living standards of the low-income people living in the rural areas through transformation of the socio-spatial structures of their productive activities, vis-a-vis the

reorganisation and mobilisation of the rural masses and resources, so as to enhance the capacity of the rural populace to cope effectively with the daily tasks of their lives and with the changes consequent upon this, the Nigerian bureaucracy must rise to the occasion and face the challenges of rural development head-on, if any meaningful National Development is intended.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Adalemo, I. A. (1987) "Rural Development – New Imperative" Journal of the Institute of Town Planners. Vols. VII and ix.
2. Adebayo, A., (2001) Principles and Practice of Public Administration in Nigeria, Ibadan: Spectrum Books.
3. Ademolekan, L., and Gboyega, A., (1979), (eds), Leading Issues in Nigeria Public Service, Ile-Ife: University of Ife Press.
4. Adu, A.C., (1969), The Civil Service in Commonwealth Africa, London: Allen and Unwin.
5. Anise, L., (1984), 'Bureaucracy and Modernization', in Afonja, S., and Pearce, T., (eds.), Social Change in Nigeria, London: Longman.
6. Asolo, A. A. A. (2000) "Development Issues in Nigeria: The challenge of NGO in the New Millennium" Africa Journal of Social Policy Studies, Vol 1, No 2, 152-158
7. Crozier, M. (1964) The Bureaucratic Phenomenon. An Examination of Bureaucracy in Modern Organizations and its Cultural Setting in France. Chicago: University of Chicago Press.
8. Dimock, M.E. and H. Hyde. (1940), Bureaucracy and Trusteeship in Large Corporations. Temporary National Economic Committee (TNEC) Monograph No. 1 P. 36. Washington D.C.
9. Chilokwu, I. (2006) "Corporate & Rural Community Programmes." Readings in Cooperative Economics & Management: Computer Edge Publishers, Lagos.
10. Ekpo, M.U. (1979). Bureaucratic Corruption in Sub-Saharan Africa. Washington: University Press of America Washington, D.C.
11. Egbo, E.A et al (2009) eds. Rural and Community Development: Critical Issues and Challenges. Onitsha; Austino Publishers
12. Ejiofor, P.N., (1987), Management in Nigeria: Theories and Issues, Onitsha: Africana-Feb.
13. Ejiofor, P. N., and Anagolu, V., eds., (1984), Managing the Nigerian Workers, Ibadan: Longman Nigeria Limited.
14. Elekwa, N.N, (2004) Responsibility and Ethics in Local Government Services. Nsukka. Great AP Express Publishers Ltd, Nigerian Journal of Public Administration and Local Government (NJPALG), Vol. XII. No. I, May 2004: 49-64

15. Haddad, W. D. (1990) Education and Development, Evidence for New Priorities. Division Paper 95, the World Bank: Washington D.C.
16. Jike, V.T., (2003), 'Organizational behaviour and negative attitude in Nigeria's Public Employment Sector: The Empirical analysis. <http://www.emeraldinsight.com/journals.htm?articleid=1853182&show=pdf>
17. Kettel, D. and James F. (2009). The Politics of the Administrative Process. Washington D.C.: CQ Press.
18. Kothari, N (2006) Human Resource Management and Development: The Role of Bureaucracy. A paper presented at the EROPA Conference in Brunei.
19. MaboJune, A.L (1980) the development process; a spatial perspective. London: Hutchinson and co. Publishers Limited
20. Mohr, J., (2005), the Nigeria in Industry: The Sociological Sketches, Bonn: Waehrre. New Age, June 17.
21. Nnoli, O., (1980), Ethnic Politics in Nigeria, Enugu: Fourth Dimension Publishers.
22. Nwachukwu, C. C., (1988), Management: Theory and Practice, Onitsha: African FEP Publishers Ltd.
23. Nwakoby, C. N. O. (2007) Impact of the NEPAD Programme in the Nigerian Economy: Journal of the Management Sciences, Vol. vii, No 2, Amazing Grace: Enugu.
24. Nwosu, H.N., (1977), Political Authority and the Nigerian Civil Service, Enugu: Fourth Dimension.
25. Obadan, M. T. (2002) "Integrated Approach to Rural poverty Reduction in Nigeria" Nigerian Tribune Tuesday 12, and 19, pages 40 and 26 respectively.
26. Obiajalu, A.O., (2000), Executive Corruption in Nigeria: Its Evolution, Dimensions and Impact on Nigeria International Relations, in Tile, W.S., (ed.), Towards A Corruption Free Democratic Society, Enugu: Vougasen Ltd.
27. Obinne, C. P. (1991) "Culture of Poverty: Implication on Nigeria's Socio-Economic Transformation" Journal of Extension System Vol 7.
28. Obot I. D. (1989) "Rural Development Programme of the DFRRI in Cross River: A Pessimistic View" Journal of the Institute of Town Planners Vols. Viii and ix.
29. Odigbo, P.C. and Adediran, k. T. (2009) "Promoting Cooperative Effectiveness for Rural Development in Nigeria" Africa Journal of Social Policy Studies Vols. 1, No.2.
30. Ogbazi, N. J. (1992) "The Role of Agricultural Education in Rural Development in Umebali E. E. and Akuibilo, C. J. C. (2006) Readings in Cooperative Economics and Management: Computer Edge Publishers Lagos.
31. Okafor, E. E., and Bode-Okunade, A.S., (2005), An Introduction of Industrial and Labour Relations, Ibadan : Mubak Printers.
32. Okafor ,E. E.(2005) Public Bureaucracy and Development in Nigeria : A Critical Overview of Impediments to Public Service Delivery; Ibadan, CODESRIA Bulletin, Nos 3 & 4, 2005 Page 69
33. Okoli, F.C and Onah, F.O (2002)' Public Administration in Nigeria: Nature, Principles and Application. Enugu; JohnJacob's Classic Publishers Ltd.
34. Olatunbosun, D (1975) Nigerians neglect rural majority. Ibadan, Oxford University Press.
35. Olayide, S. O.; Ogunfowura, O.; Essang, S. M. and Idachaba, F. S. (1981) "Elements of Rural Economics, University Press: Ibadan.
36. Onibokun, A. G. (1987) "Rural Development Policy Planning and Implementation in Nigeria" Journal of the Nigeria Institute of Town Planners Vols. Vii and ix.
37. Arowolo, A (2010) The State, Bureaucracy And Corruption In Nigeria, Volume 8 Issue 3 Summer 2010 Posted On Wed, Sep 01 2010 15:05:00.
38. Osaloye J.I. (2008) "Poverty Alleviation in Nigeria: a Pragmatic Approach" Journal of Office Technology and Management. Vol. 1 no. 2, June.
39. Palmer, M., (1988), 'Dilemmas of Political Development: An Introduction to Politics of the developing Areas', 4th Edition, Illinois: Peacock Publishers, Inc.
40. Robert and Janet Denhardt. (2009) Public Administration: An Action Orientation. 6th Ed.: Thomson Wadsworth, Belmont CA.
41. Smith, K.B. and Licari, M.J. (1990) Public Administration — Power and Politics in the Fourth Branch of Government, ISBN 1-933220-04-X
42. Simon, D. (2004) "Recent Trends in Development Theory and Policy: Implication for Democratization and Government" Governance-Nigeria and the World, CENCOD: Ikeja.
43. Umebali, E. E. (2006), Rural Resources Farm Business Management and Rural Development: Computer Edge Publishers: Lagos.
44. Umebali, E. E. and Akubailo, C. J. C. (2006) "Principles of Rural Development" Readings in Cooperative Economics and Management, Computer Edge Publishers: Lagos.
45. Uwakah, T.C. (1978) the role of African Universities in Rural Development Bulletin, No.2/76, April, 1976



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Multivariate Granger Causality between Economic Growth, Electricity Consumption, Exports and Remittance for the Panel of Three SAARC Countries

By Md. Sharif Hossain

Kyushu University

Abstract - This paper empirically examines the dynamic causal relationship between economic growth, electricity consumption, export values and remittance for the panel of three SAARC countries using the time series data for the period 1976- 2009. Using four different panel unit root tests it is found that all the panel variables are integrated of order 1. From the Johansen Fisher panel cointegration and Kao tests it is found that all the panel variables are cointegrated. The panel Granger F test results support that there is only bidirectional short-run causal relationship between economic growth and export values but there is no evidence of long-run causal relationship. It is found that the long-run elasticity of economic growth with respect to electricity consumption and remittance are higher than short run elasticity. This means that over time higher electricity consumption and higher remittance from manpower supply in the panel of SAARC countries give rise to more economic growth.

Keywords : Panel unit root tests, Panel cointegration tests, Panel Granger causality tests, Short-run and longrun elasticities.

GJMBR Classification : JEL Code: C23, C32, C33, O50, O57, Q40



Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

Multivariate Granger Causality between Economic Growth, Electricity Consumption, Exports and Remittance for the Panel of Three SAARC Countries

Md. Sharif Hossain

Abstract - This paper empirically examines the dynamic causal relationship between economic growth, electricity consumption, export values and remittance for the panel of three SAARC countries using the time series data for the period 1976- 2009. Using four different panel unit root tests it is found that all the panel variables are integrated of order 1. From the Johansen Fisher panel cointegration and Kao tests it is found that all the panel variables are cointegrated. The panel Granger F test results support that there is only bidirectional short-run causal relationship between economic growth and export values but there is no evidence of long-run causal relationship. It is found that the long-run elasticity of economic growth with respect to electricity consumption and remittance are higher than short run elasticity. This means that over time higher electricity consumption and higher remittance from manpower supply in the panel of SAARC countries give rise to more economic growth.

Keywords : Panel unit root tests, Panel cointegration tests, Panel Granger causality tests, Short-run and long-run elasticities.

1. INTRODUCTION

Economic growth of the SAARC countries especially Bangladesh, India, Pakistan and Sri-Lanka, is closely related to its energy consumption, export values, and remittance receipts from manpower supply. However this does not necessarily imply a causal relationship between them. The direction, strength and stability of the relationship between economic growth, energy consumption, export values and remittance play a significant role in designing different policies that are associated with economic growth and energy consumption. The direction and policy implications for the causal relationship between economic growth, electricity consumption, export values and workers' remittance can be classified as follows. If unidirectional causal relationship from electricity consumption, and export values to economic growth is found, indicates that any restriction on the use of energy

which negatively affects the export values leads to a reduction of economic growth. Thus about this negative effect on economic growth that caused by a policy of restriction of energy use in order to slow down the rate of climate change grows by reducing GHG's, many SAARC countries specially India as a rising country will be worried. On the other hand if unidirectional causal relationship from economic growth to electricity consumption or from economic growth to export values is found, any restriction on the use of electricity has very little or no adverse impacts on economic growth. A bi-directional causal relationship implies that both the variables are jointly determined and will affect at the same time. If no causal relationship between these variables is found, the hypothesis of neutrality holds indicates that any restriction on energy use will not work as a barrier for economic development of the panel.

It is well known to us political crises are going on in Libya, Egypt, Tunisia and some Middle East countries namely Syria, Iraq, Iran etc. Due to the political crises the workers' remittance receipt will be declined in different SAARC countries. If unidirectional causality is found from remittance to economic growth in the panel of SAARC countries, indicates that the political crises negatively affect the economic growth of SAARC countries. If unidirectional causality is found from economic growth to remittance, economic growth will not be negatively affected due to the political crisis. If bi-directional causal relationship between economic growth and remittance is found implies that both the variables are jointly determined and will affect at the same time due to the political crises. Now-a-days, energy efficiency measures will play a vital role as energy savings as a result most of the rising countries including India all over the world fear that such policy measure will harm their economic development. Also a major part of the GDP of different SAARC countries including Bangladesh, India, and Pakistan comes from the manpower supply in Middle East and other countries. Thus the most import question arises whether the new energy policy and policy for reducing the GHG's emissions and also political crises in Libya, Egypt, Tunisia, and Middle East will strike the economic

Author : (Ph. D.); Associate Professor of Econometrics; Department of Economic Engineering, Faculty of Economics, Kyushu University, 6-19-1, Hakozaki, Higashi-ku, Fukuoka 812-8581, JAPAN. Phone: 81-92-642-4293

E-mail : sharif@en.kyushu-u.ac.jp, sharif_hossain04@yahoo.com

growth of SAARC countries. One of the best known methods is to investigate the short-run and long-run causal relationships between economic growth, energy consumption, export values and workers' remittance for a panel of SAARC countries using the time series data.

That is why in this paper the principal purpose is made to investigate the dynamic causal relationships between economic growth, electricity consumption, export values and workers' remittance for a panel of three SAARC countries namely Bangladesh India and Pakistan using the time series data from 1976 to 2009. Due to the data problem other SAARC countries cannot be included for this empirical study. On the basis of the modern econometrics techniques, the dynamic causal relationships between electricity consumption and economic growth are examined. The organizational structure of the paper is as: Section 2 discusses the literature review; Section 3 discusses data sources and descriptive statistics; Section 4 provides econometric modeling framework with empirical analysis and finally section 5 concludes with a summary of the main findings and policy implications.

II. LITERATURE REVIEW

The causal relationships between two variables economic growth and energy consumption are investigated widely in economic literature. The

enormous amount of empirical literatures to examine the causal relationship between economic growth and energy consumption fall into four categories; (i) no causal relationship between economic growth and energy consumption (ii) unidirectional causality from economic growth to energy consumption, (iii) unidirectional causality from energy consumption to economic growth and (iii) bidirectional causality between economic growth and energy consumption. In applied econometrics most recent causality studies have tended to focus by using panel data and employing panel cointegration and panel-base VAR and VEC models which provide more powerful tests compared to a time series approach to investigate causal relationship between two variables X and Y. The panel estimation can take heterogeneous country effect into account in a single estimation by allowing for individuals specific variable. Moreover, the model estimation allows greater degrees of freedom. As far it is known that a few panel causality studies are conducted in the fields of economics, finance and energy. The direction of causality between economic growth and energy/electricity consumption of different time series and panel studies are summarized below in Table 1.

Table 1: Summary of literature review on causality between energy consumption and economic growth

Previous Studies	Countries	Time Period	Variables	Methodology	Results
Time Series and Panel Studies					
Yang (2000)	Taiwan	1954-1997	E, Y	Hsiao's Granger (B)	$E \leftrightarrow Y$
Asafu & Adjaye (2000)	Thailand	1971-1995	E, Y, P	Cointegration (M)	$E \leftrightarrow Y$
Aqueel & Butt (2001)	akistan	1955-1996	E, Y	Hsiao's Granger (B)	$E \rightarrow Y$
Ghosh (2002)	India	1950-1997	E, Y	Cointegration (B)	$Y \rightarrow E$
Soytas and Sari (2003)	G-7 :Argentina, Turkey France, German, Japan Italy, South Korea,	1960-1995	E, Y	Cointegration Granger(B)	$E \leftrightarrow Y$ $E \rightarrow Y$ $Y \rightarrow E$
Morimoto & Hope(2004)	Sri Lanka	1960-1998	E, Y	Granger (B)	$E \rightarrow Y$
Wolde-Rufael (2004)	Shanghai	1952-1999	E, Y	Toda & Yamamoto's Granger (B)	$E \rightarrow Y$
Jumbe (2004)	Malawi	1970-1999	E, Y	Cointegration (B)	$E \leftrightarrow Y$
Altinay & Karagol (2005)	Turkey	1950-2000	E, Y	Dolado-Lukepohl's Granger (B)	$E \rightarrow Y$
Narayan & Smyth (2005)	Australia	1966-1999	E, Y, EM	Cointegration (M)	$Y \rightarrow E$
Lee (2005)	Panel of 18Countries,	1971-2002	E, Y	Panel Unit Root (LLC, IPS, Hadri) Panel cointegration FMOLS (Pedroni) Panel Causality (Granger)	$Y \rightarrow E$

				(B), GMM)	
Lee & Chang (2007)	Taiwan	1954-2003	E, Y	Cointegration (B)	E→Y
Yoo (2005)	South Korea	1970-2002	E, Y	Cointegration (B)	E↔Y
Al-Iriani (2006)	Panel of 6 GCC countries ₂	1971-2002	E, Y	Panel unit root (IPS), Panel cointegration (Pedroni), Panel causality Granger , GMM (B).	Y→E
Wolde-Rufael (2006):	16 African Countries: Algeria ,Congo RP, Kenya , Sudan Benin, Congo,Tunisia Cameroon, Ghana, Nigeria , Senegal, Zambia , Zimbabwe Egypt , Gabon , Morocco	1971-2001	E, Y	Toda & Yamamoto's Granger (B)	E↔Y E↔Y E→Y E↔Y E↔Y E↔Y E↔Y E↔Y
Yoo (2006)	4 Asian Countries Indonesia, Thailand Malaysia, Singapore	1971-2002	E, Y	Hsiao's Granger (B)	Y→E E↔Y
Chen et al. (2007)	10 Asian countries: China, Hong Kong Taiwan, Thailand Indonesia India, Malaysia Philippines Korea, Singapore	1971-2001	E, Y	Cointegration, Granger causality (B)	E↔Y E↔Y E→Y Y→E Y→E E↔Y
Chontanawat et al (2007)	Panel of 30 OECD ₃ Panel of 78 non-OECD ₄	1971-2003	E, Y	Panel unit root (LLC, IPS), Panel cointegration, FMOLS (Pedroni), Panel causality (Granger, EG). (B)	E↔Y E↔Y
Chontanawat et al (2007)	Panel of G7 Countries ₅ Panel of 12 Asian Developing Countries ₆	1960-2003 1971-2003	E, Y	Panel unit root (LLC, IPS), Panel cointegration, FMOLS (Pedroni), Panel causality (Granger,EG). (B)	Y→E E↔Y
Chen et al. (2007)	Panel of 7 Asian countries ₇	1971-2002	E, Y	Cointegration, Granger causality (B)	Y→E
Halicioglu (2007)	Turkey	1968-2005	E, Y	Bounds testing approach and Granger causality(B)	E→Y
Joyeux and Ripple (2007)	Panel of 7 East Indian Ocean Countries ₈	1971-2001	E, Y	Panel Unit root and cointegration (B)	Elec↔Y
Lee & Chang (2007)	Panel of 22 DCs ₉ Panel of 18 LDCs ₁₀	1965-2002 1971-2002	E, Y	Panel causality (Granger,GMM).(B)	E↔Y Y→E
Mehrara (2007)	Panel of 11 Oil exporting countries ₁₁	1971-2002	E, Y	Panel unit root (LLC, IPS), Panel cointegration, FMOLS (Pedroni), Panel causality (Granger,EG). (B)	Y→E
Narayan and Singh (2007)	Fiji	1971-2002	E, Y	Bounds testing approach to cointegration (B)	E→Y
Squalli (2007)	OPEC:Algeria, Iraq, Kuwait Libya Iran,	1980-2003	E, Y	Bounds testing approach, Toda & Yamamoto's	Y→E

	Qatar, Saudi Arabia Indonesia, Nigeria, UAE			Granger (B)	Y→E Y→E E↔Y E↔Y E→Y
Naranyan et al. (2008)	G7 countries USA The rest	1970-2002 1960-2002	E, Y	Structural vector autoregressive (SVAR), (B)	E→Y E↔Y
Huang et al. (2008)	Panel of 19 low income Countries ₁₂ Panel of 23 lower middle income countries ₁₃ Panel of 15 upper middle income countries ₁₄ Panel of 20 high income countries ₁₅	1972-2002		GMM-system approach (B)	E↔Y Y→E Y→E Y→E
Narayan & Smyth (2009)	Panel of 6 Middle Eastern Countries ₁₆	1974-2002	E, Y, EX	Panel unit root (Breitung), FMOLS(Westerlund), Panel causality (Granger, EG). (M)	E↔Y
Hossain (2011)	Panel of 9 NIC ₁₇	1971-2007	E, Y, CO2, UR, OPEN	Panel unit root (LLC, IPS, MW, Choi) Panel cointegration, Panel causality (Granger, EG, GMM). (M)	Y→E
Hossain & Saeki (2011)	Panel of 6 South Asian countries ₁₈	1971-2007	E, Y	Panel unit root (IPS, MW, Choi) Panel cointegration, Panel causality (Granger, EG, GMM). (B)	E→Y

Note: \diamond refers to 'no causality'; \rightarrow refers to 'unidirectional causality'; \leftrightarrow refers to 'bi-directional causality'; B denotes bivariate model, M denotes multivariate model.

- 1: This includes South Korea, Singapore, Hungary, Argentina, Chile, Colombia, Mexico, Peru, Venezuela, Indonesia, Malaysia, India, Philippines, Thailand, Pakistan, Sri Lanka, Ghana and Kenya.
- 2: This panel includes Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE).
- 3: This includes Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States.
- 4: This includes Albania, Algeria, Angola, Argentina, Bahrain, Bangladesh, Benin, Bolivia, Brazil, Brunei, Bulgaria, Cameroon, Chile, Colombia, China, Congo, Congo Rep., Costa Rica, Cote d'Ivoire, Cuba, Cyprus, Dominican rep., Ecuador, Egypt, El Salvador, Ethiopia, Gabon, Ghana, Gibraltar, Guatemala, Haiti, Honduras, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Jamaica, Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, Malta, Morocco, Mozambique, Myanmar, Nepal, Nicaragua, Nigeria, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Qatar, Romania, Saudi Arabia, Senegal, Singapore, Sri Lanka, Sudan, Taiwan, Tanzania, Thailand, Togo, Trinidad Tobago, Tunisia, United Arab Emirates, Uruguay, Venezuela, Vietnam, Yemen, Zambia, Zimbabwe.
- 5: This refers to Canada, France, Germany, Italy, Japan, United Kingdom and United States.

- 6: These countries are Bangladesh, India, Indonesia, Malaysia, Myanmar, Nepal, Pakistan, China, Philippines, Sri-Lanka, Thailand and Vietnam
- 7: This includes Hong Kong, Korea, Indonesia, India, Singapore, Taiwan and Thailand.
- 8: This refers to India, Indonesia, Burma, Bangladesh, Malaysia, Thailand and Singapore.
- 9: This includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States.
- 10: This includes Argentina, Chile, Colombia, Ghana, India, Indonesia, Kenya, Malaysia, Mexico, Nigeria, Pakistan, Peru, Philippines, Singapore, Sri Lanka, Thailand, Turkey and Venezuela.
- 11: This includes Iran, Kuwait, Saudi Arabia, United Arab Emirates, Bahrain, Oman, Algeria, Nigeria, Mexico, Venezuela and Ecuador.
- 12: Low income group means Congo rep., Nepal, Nigeria, Togo, Zambia, Ghana, Kenya, Bangladesh, Benin, Zimbabwe, India, Pakistan, Senegal, Haiti, Congo rep., Cameroon, Indonesia, Cote d'Ivoire and Nicaragua.
- 13: Lower middle income group means China, Sri Lanka, Honduras, Syria, Bolivia, Philippines, Morocco, Ecuador, Egypt, Arab rep., Paraguay, Algeria, Guatemala, Thailand, El Salvador, Colombia, Peru, Tunisia, Dominican rep., Jamaica, Turkey, South Africa and Gabon.
- 14: Upper middle income group means Malaysia, Brazil, Costa Rica, Panama, Venezuela, Hungary, Chile, Mexico, Trinidad and Tobago, Uruguay, Oman, Argentina, Saudi Arabia, Malta and Korea rep.

- 15: High income group means Portugal, Greece, New Zealand, Spain, Israel, Australia, Italy, Canada, Singapore, Ireland, France, Belgium, Finland, Germany, Netherlands, UK, Austria, HK, China and Sweden.
 16: This includes Iran, Israel, Kuwait, Oman, Saudi Arabia and Syria.
 17: This includes Brazil, China, India, Malaysia, Mexico, Philippines, South Africa, Thailand, and Turkey
 18: This includes Bangladesh, India, Nepal, Pakistan and Sri-Lanka.

The existing literature reveals that due to the application of different econometric methodologies and different sample sizes the empirical results are very mixed and even vary for the same country and same panel and are not conclusive to present policy formulation that can be applied over the countries. Thus this study tries to overcome the shortcoming literature related with the linkage between electricity consumption and economic growth for the panel of SAARC countries. Also this empirical study will be important to formulate policy recommendation from the point of view of

electricity consumption and economic growth, export values and remittance for the panel of SAARC countries.

III. DATA SOURCES AND DESCRIPTIVE STATISTICS

Annual data for per capita real GDP (PGDP) (constant 2000 USD), per capita electricity consumption (EC) (kWh), export values of goods and services (EX) (constant 2000 USD) and workers' remittance receipt (RE) (in USD) are downloaded from the World Bank's Development Indicators. The data is for the period from 1976 to 2009. Due to the data problem only three SAARC countries namely Bangladesh, India and Pakistan are considered for the panel analysis. Some descriptive statistics of all variables for individuals and also for panel are given below in Table (2)

Table 2 : Descriptive statistics for individuals and also for panel

	Descriptive Statistics	PGDP	EC	EX	RE
Bangladesh	Min	216.6887	15.5288	768645026.3	18761275.1
	Max	482.6105	214.4	15649927542.0	10510108316.0
	Mean	296.8801	71.3234	4793708947.2	1987328497.8
	Std. Dev.	76.6714	53.5847	4520743859.7	2493240816.4
	CV.	25.8257%	75.1292%	94.3058%	125.4569%
India	Min	218.8990	126.0977	9044664320	641780814.4
	Max	766.3755	778.7100	302812652359	49179627878.0
	Mean	384.1765	320.9439	55594385824	10541613422.7
	Std. Dev.	154.2683	153.0350	71798335694	12981427922.8
	CV.	40.1556%	47.6828%	129.1467%	123.1446%
Pakistan	Min	290.1789	101.3298	1920244102.0	411736924.6
	Max	656.8739	479.6571	19099569944.0	9960000000.0
	Mean	473.5847	293.7112	8800785985.5	2842223483.69
	Std. Dev.	107.4918	119.4579	5316245965.9	2202974790.20
	CV.	22.6975%	40.6719	60.4065	77.5089%
Panel	Min	216.6887	15.5288	768645026	18761275.1
	Max	766.3755	778.7100	302812652359	49179627878.0
	Mean	384.8804	228.6595	23062960252	5123721801.4
	Std. Dev.	136.8488	160.8644	47300185190	8580325420.9
	CV.	35.5562%	70.3511%	205.0916%	167.4627%

Min: indicates minimum value, Max: indicates maximum value, Std. Dev.: indicates standard deviation, CV: indicates coefficient of variation

The reported mean per capita GDP in Table (2) is highest for Pakistan followed by India and Bangladesh and the mean per capita GDP for the panel is greater than Bangladesh and India but less than Pakistan. In respect of economic growth it is found that the volatility is highest for India followed by Bangladesh and Pakistan indicates that Indian economy among SAARC countries is growing at a faster rate. The coefficient of variation for the panel variable economic growth is 35.5562% which indicates the existence of huge differential among the SAARC countries. The range of per capita GDP for panel is 549.6868 USD which indicates the significant

differential among SAARC countries. The per capita mean electricity consumption recorded is highest for India and followed by Pakistan and Bangladesh. In respect of electricity consumption the low income countries are more volatile than high income countries indicates that high income countries are consuming more electricity consumption. The mean electricity consumption for this panel is 228.6595 kwh, which is lower than India and Pakistan but higher than Bangladesh. The volatility for this panel in respect of electricity consumption is 70.3511% which indicates the existence of huge differences in respect of per capita

electricity consumption among SAARC countries. It is found that the export values of goods and services and workers' remittance are higher for high income and lower for low income SAARC countries. The volatility of export values of goods and services is highest for India followed by Pakistan and Bangladesh and also the volatility of remittance is highest for Bangladesh followed by India and Bangladesh which indicate that the export values of high income countries higher than low income countries.

The volatility of export values and remittance for the panel indicate that the existence of huge differential among high income and low income SAARC countries. Since the average electricity consumption, export values and workers' remittance of high income countries are relatively higher among SAARC countries thus a general question arises in our mind whether these variables cause economic growth for the panel of SAARC countries. Thus to give the answer of the question, the principal purpose of this study is made to investigate empirically the dynamic causality relationship between economic growth, electricity consumption, export values of goods and services and workers' remittance for the panel of three SAARC countries based on the modern econometric techniques.

IV. EMPIRICAL MODEL

In order to find the relationship between economic growth, electricity consumption, export values and remittance for the panel of three SAARC countries the following model is proposed;

$$PGDP_{it} = A_0 EC_{it}^{\alpha_{1i}} EX_{it}^{\alpha_{2i}} RE_{it}^{\alpha_{3i}} e^{\varepsilon_{it}} \quad (1)$$

The logarithmic transformation of equation (1) is given by;

$$\ln(PGDP_{it}) = \alpha_0 + \alpha_{1i} \ln(EC_{it}) + \alpha_{2i} \ln(EX_{it}) + \alpha_{3i} \ln(RE_{it}) + \varepsilon_{it} \quad (2)$$

where, $\alpha_0 = \ln(A_0)$, the subscript i represents i th country and t represents time period for each country. PGDP indicates per capital real GDP, EC indicates per capita electricity consumption, EX indicates total export values of goods and services and RE indicates workers' remittance. Here α_1 , α_2 , and α_3 represents the long-run elasticities of economic growth with respect to EC, EX, and RE respectively.

V. ECONOMETRIC METHODOLOGY

The empirical investigation of the dynamic causal relationship between economic growth, electricity consumption, export values, and remittance using modern econometrics techniques involves the following

three steps. At the first step whether each panel variable contains a unit root is examined. If the variables contain a unit root, the second step is to test whether there is a long run-cointegration relationship between the panel variables. If a long-run relationship between the variables is found, the final step is to estimate panel vector error correction model in order to infer the Granger causal relationship between the variables. Finally using the GMM technique the long-run and short-run elasticities of economic growth with respect to electricity consumption, export values and remittance are estimated for the panel. In this paper the software RATS, EViews and STATA are used for empirical analyses.

a) Panel unit root tests

Since none of the panel unit root test is free from some statistical shortcomings in terms of size and power properties, so it is better for us to perform several unit root tests to infer an overwhelming evidence to determine the order of integration of the panel variables. In this paper four panel unit root tests: Levin, Lin and Chu (LLC, 2002), Im, Peasaran and Shin (IPS, 2003), Maddala and Wu (MW, 1999), and Choi (2006) tests are applied.

The LLC test is based on the assumption that the persistence parameters are common across cross-sections so that $\rho_i = \rho$ for all i , but this assumption is not true for several variables. The second and third tests assume cross-sectional independence. This assumption is likely to be violated for the income variable. It has been found by Banerjee, Cockerill and Russell (2001) that these tests have poor size properties and have a tendency to over-reject the null hypothesis of unit root if the assumption of cross-section independence is not satisfied. Peasaran (2003) and Choi (2006) are derived other tests statistics to solve this problem.

Levin, Lin and Chu (LLC, 2002) considered the following regression equation

$$\Delta y_{it} = \alpha y_{it-1} + \sum_{j=1}^{p_i} \gamma_{ij} \Delta y_{it-j} + X'_{it} \delta + \varepsilon_{it} \quad (3)$$

where, $\Delta y_{it} = y_{it} - y_{it-1}$, here the assumption is $\alpha = \rho - 1$ i.e. $\rho_i = \rho$ for all i , but allow the lag order for the difference terms p_i , to vary across cross-sections. Here the null hypothesis to be tested is $H_0 : \alpha = 0$; against the alternative hypothesis is that $H_1 : \alpha < 0$. The null hypothesis indicates that there is a unit root while the alternative hypothesis indicates that there is no unit root. To perform the test statistic at first they regress Δy_{it} and y_{it-1} on the lag terms Δy_{it-j} ($j = 1, 2, \dots, p_i$) and the exogenous variables X_{it} which are given by;

$$\Delta y_{it} = \sum_{j=1}^{p_i} \gamma_{ij} \Delta y_{it-j} + X'_{it} \delta + u_{it} \quad (4)$$

$$y_{it-1} = \sum_{j=1}^{p_i} \beta_{ij} \Delta y_{it-j} + X'_{it} \lambda + v_{it} \quad (5)$$

The estimated equations are given by;

$$\Delta \hat{y}_{it} = \sum_{j=1}^{p_i} \hat{\gamma}_{ij} \Delta y_{it-j} + X'_{it} \hat{\delta} \quad (6)$$

$$\hat{y}_{it-1} = \sum_{j=1}^{p_i} \hat{\beta}_{ij} \Delta y_{it-j} + X'_{it} \hat{\lambda} \quad (7)$$

Then they define $\Delta \bar{y}_{it}$ by taking Δy_{it} and removing the autocorrelations and deterministic components using the first set of auxiliary estimates:

$$\Delta \bar{y}_{it} = \Delta y_{it} - \sum_{j=1}^{p_i} \hat{\gamma}_{ij} \Delta y_{it-j} - X'_{it} \hat{\delta} \quad (8)$$

Analogously they also define

$$\bar{y}_{it-1} = y_{it-1} - \sum_{j=1}^{p_i} \hat{\beta}_{ij} \Delta y_{it-j} - X'_{it} \hat{\lambda} \quad (9)$$

The proxies are obtained by standardizing both $\Delta \bar{y}_{it}$ and \bar{y}_{it-1} dividing by the regression standard error i.e. $\Delta \tilde{y}_{it} = \frac{\Delta \bar{y}_{it}}{s_i}$; and $\tilde{y}_{it-1} = \frac{\bar{y}_{it-1}}{s_i}$; where s_i are estimated the standard errors from estimating each ADF in equation (3). Finally an estimate of the coefficient α may be obtained from the pooled proxy equation

$$\Delta \tilde{y}_{it} = \alpha \tilde{y}_{it-1} + \eta_{it} \quad (10)$$

LLC show that under the null hypothesis, a modified t-statistic for the resulting $\hat{\alpha}$ is asymptotically normally distributed which is given by;

$$t_{\alpha}^* = \frac{t_{\alpha} - (n\tilde{T})S_n \hat{\sigma}^2 \text{se}(\hat{\alpha}) \mu_{m\tilde{T}}^*}{\sigma_{m\tilde{T}}^*} \sim N(0, 1) \quad (11)$$

Where t_{α} is the standard t-statistic for $H_0: \alpha = 0$, $\hat{\sigma}^2$ is the estimate variance of the error term η , $\text{se}(\hat{\alpha})$ is the standard error of $\hat{\alpha}$, S_n is the mean of the ratios of the long-run standard deviation to the innovation standard deviation for each individual. Its estimate is derived using kernel-based techniques

$$\tilde{T} = T - \frac{\sum_{i=1}^n p_i}{n} - 1 \quad (12)$$

$\mu_{m\tilde{T}}^*$ and $\sigma_{m\tilde{T}}^*$ are the two adjusted factors for the mean and standard deviation.

Im, Pesaran and Shin (IPS, 2003) proposed the test statistic using the following model;

$$\Delta y_{it} = \alpha_i y_{it-1} + \sum_{j=1}^{p_i} \gamma_{ij} \Delta y_{it-j} + X'_{it} \delta + \varepsilon_{it} \quad (13)$$

where, $\Delta y_{it} = y_{it} - y_{it-1}$, y_{it} ($i = 1, 2, \dots, n$; $t = 1, 2, \dots, T$) is the series under investigation for country i over period t , p_i is the number of lags in the ADF regression and the ε_{it} errors are assumed to be independently and normally distributed random variables for all i 's and t 's with zero mean and finite heterogeneous variance σ_i^2 . Both α_i and p_i in equation (13) are allowed to vary across countries. The null hypothesis to be tested is that each series in the panel contains a unit root, i. e. $H_0: \alpha_i = 0 \forall i$. Against the alternative hypothesis that some of the individual series to have unit root but not all

$$H_1: \begin{cases} \alpha_i = 0; \text{ for some } i\text{'s} \\ \alpha_i < 0; \text{ for at least one } i \end{cases}$$

There are two stages for constructing the t-bar statistic which is proposed by Im, Pesaran and Shin (2003). At the first stage the average value of the individual ADF t-statistic for each of the countries in the sample is calculated which is given by

$$\bar{t}_{nT} = \frac{1}{n} \sum_{i=1}^n t_{iT_i}(p_i) \quad (14)$$

where $t_{iT_i}(p_i)$ is the calculated ADF test statistic for country i of the panel ($i = 1, 2, \dots, n$). The second step is to calculate the standardized t-bar statistic which is given by;

$$Z_{\bar{t}_{nT}} = \frac{\sqrt{n} \left[\bar{t}_{nT} - \frac{1}{n} \sum_{i=1}^n E(\bar{t}_{iT_i}(p_i)) \right]}{\sqrt{\frac{1}{n} \sum_{i=1}^n \text{var}(\bar{t}_{iT_i}(p_i))}} \sim N(0, 1) \quad (15)$$

where n is the size of the panel, which indicates the no. of countries, $E(\bar{t}_{IT}(p_i))$ and $\text{var}(\bar{t}_{IT}(p_i))$ are provided by IPS for various values of T and p . However, Im, et al. (2003) suggested that in the presence of cross-sectional dependence, the data can be adjusted by demeaning and that the standardized demeaned t -bar statistic converges to the standard normal in the limit.

Maddala and Wu (MW, 1999) proposed a Fisher-type test which combines the p -values from unit root tests for each cross-section i . The test is non-parametric and has a chi-square distribution with $2n$ degrees of freedom, where n is the number of countries in the panel. The test statistic is given by;

$$\lambda = -2 \sum_{i=1}^n \log_e(p_i) \sim \chi^2_{2n(d.f.)} \quad (16)$$

Where p_i is the p -value from the ADF unit root tests for unit i . The Maddala and Wu (1999) test has the advantage over the IPS (2003) test that it does not

depend on different lag lengths in the individual ADF regressions.

In addition Choi (2006) derived another test statistic which is given by;

$$Z = \frac{1}{\sqrt{n}} \sum_{i=1}^n \Phi^{-1}(p_i) \sim N(0, 1) \quad (17)$$

where, Φ^{-1} is the inverse of the standard normal cumulative distribution function.

We know macroeconomic variables tend to exhibit a trend over time, thus it is more appropriate to consider the regression equation with constant and trend terms at level form. Thus for panel unit root tests, in the paper two cases are considered in level form. In case one both constant and trend terms are included in the equation and in case two only constant term is included in the equation. Since first differencing is likely to remove any deterministic trends in the variable, regression should include only constant term. The ADF test results for individuals and also the tests results for panel are given below in Table (3) and (4) respectively.

Table 3 : ADF unit root test results for the individuals

	lnPGDP	lnEC	lnEX	lnRE
Case 1: Model with constant and trend terms [Level form]				
Bangladesh	1.18047	-3.16457	-1.81564	-2.11814
India	-0.83406	-1.23936	0.27128	-1.33020
Pakistan	-2.09580	-0.75828	-2.09923	-2.53095
Case 2: Model with only constant term [Level form]				
Bangladesh	3.51189	0.72764	1.42222	-0.59181
India	3.24760	0.77323	3.81261	0.14687
Pakistan	-2.33388	-2.93351	-1.94144	-1.93318
Model with only constant term [First differenced]				
	$\Delta \ln \text{PGDP}$	$\Delta \ln \text{EC}$	$\Delta \ln \text{EX}$	$\Delta \ln \text{RE}$
Bangladesh	-2.95197*	-5.65153**	-3.34448*	-3.51876*
India	-2.95804*	-2.97630*	-4.66677**	-3.57036*
Pakistan	-2.59738	-0.73597	-3.75593**	-6.69558**

*: indicates significant at 5% level, **: indicates significant at 1% level

Table 4 : LLC, IPS, MW and Choi panel unit root tests results

Case 1: Model with constant and trend terms [Level form]								
	LLC Test	Prob.	IPS Test	Prob.	MW Test	Prob.	Choi Test	Prob.
lnPGDP	0.98638	0.8380	3.0526	0.9989	1.3755	0.9673	2.9836	0.9986
lnEC	0.82305	0.7948	0.5693	0.7154	6.8588	0.3341	0.6749	0.7501
lnEX	-0.0325	0.4870	1.1669	0.8784	2.1850	0.9019	1.2234	0.8894
lnRE	3.1616	0.9992	0.3565	0.6393	3.9803	0.6793	0.3573	0.6396
Case 2: Model with only Constant Term [Level form]								
lnPGDP	3.8851	0.9999	6.1057	1.0000	3.5669	0.735	5.0312	1.000
lnEC	-1.0822	0.1396	1.5095	0.944	7.9128	0.2446	1.3924	0.9181
lnEX	1.8347	0.9667	3.7070	0.9999	2.3457	0.8853	3.3710	0.9996
lnRE	0.9750	0.8352	1.3850	0.9170	2.6959	0.8459	1.3825	0.9166

	Model with only constant term [First differenced form]							
$\Delta \ln \text{PGDP}$	-0.2487	0.4018	-1.6466*	0.0498	12.0049**	0.0619	-1.7150*	0.0432
$\Delta \ln \text{EC}$	-0.8648	0.1926	-2.8384*	0.0023	24.7577*	0.0004	-2.4572*	0.0070
$\Delta \ln \text{EX}$	-2.9907*	0.0014	-4.5740*	0.0000	31.7422*	0.0000	-4.3945*	0.0000
$\Delta \ln \text{RE}$	-2.0168*	0.0219	-5.9574*	0.0000	43.1814*	0.0000	-5.2413*	0.0000

The ADF test results for individuals support that all the variables are integrated of order 1 for Bangladesh and India but for Pakistan the variables economic growth and electricity consumption are integrated of order two and the variables export values and remittance are integrated of order 1. The panel unit root tests results support that all the panel variables are integrated of order 1.

b) Panel cointegration

From the panel unit root tests results it is found that all the panel variables are integrated of order (1). Therefore the cointegration analysis is conducted to examine whether there is a long-run relationship among the variables using the Kao (1999) ADF type test and Johansen Fisher panel cointegration test proposed by Maddala and Wu (1999).

The Kao (1999) ADF type test can be computed from the following regression equation

$$e_{it} = \rho e_{it-1} + \sum_{j=1}^p \gamma_{ij} \Delta e_{it-j} + v_{it} \quad (18)$$

Where e_{it} 's are the estimated residuals from the panel static regression equation;

$$y_{it} = \mu_i + x'_{it} \beta + u_{it}; i = 1, 2, \dots, n; t = 1, 2, \dots, T; \quad (19)$$

Where β : (m, 1) vector of the slope parameters

μ_i : intercepts, u_{it} : stationary disturbance terms. Here x_{it} is a (m, 1) integrated process of order 1 for all i, i.e. $x_{it} \sim I(1) \forall i, \Rightarrow x_{it} = x_{it-1} + \varepsilon_{it}$, $\{y_{it}, x_{it}\}$ are independent across cross-sectional units and $\omega_{it} = (u_{it}, \varepsilon'_{it})'$ is a linear process. Then, the long-run covariance matrix of $\{\omega_{it}\}$ is denoted by Ω and is

$$\text{given by; } \Omega = \sum_{j=-\infty}^{\infty} E(\omega_{ij}, \omega'_{i0}) = \begin{pmatrix} \Omega_u & \Omega_{u\varepsilon} \\ \Omega_{\varepsilon u} & \Omega_{\varepsilon} \end{pmatrix} \text{ and}$$

$$\Sigma = E(\omega_{i0} \omega'_{i0}) = \begin{pmatrix} \Sigma_u & \Sigma_{u\varepsilon} \\ \Sigma_{\varepsilon u} & \Sigma_{\varepsilon} \end{pmatrix}$$

The null hypothesis of no cointegration can be written as

$$H_0: \rho = 1$$

Against the alternative hypothesis is

$$H_1: \rho < 1$$

With the null hypothesis of no cointegration, the Kao (1999) ADF test statistics can be constructed as follows;

$$ADF = \frac{t_{\hat{\rho}} + \sqrt{6n} \hat{\sigma}_v / 2 \hat{\sigma}_{0v}}{2 \hat{\sigma}_{0v}} \sim N(0,1) \quad (20)$$

$$\sqrt{\frac{\hat{\sigma}_{0v}^2}{2 \hat{\sigma}_v^2} + (3 \hat{\sigma}_v^2 / 10 \hat{\sigma}_{0v}^2)}$$

$$\text{where, } \hat{\sigma}_v^2 = \hat{\Sigma}_u - \hat{\Sigma}_{u\varepsilon} \hat{\Sigma}_{\varepsilon}^{-1} \text{ and } \hat{\sigma}_{0v}^2 = \hat{\Omega}_u - \hat{\Omega}_{u\varepsilon} \hat{\Omega}_{\varepsilon}^{-1}$$

The Johansen Fisher panel cointegration test is based on the aggregates of the p-values of the individual Johansen maximum eigenvalues and trace statistic. If p_i is the p-value from an individual cointegration test for cross-section i, under the null hypothesis the test statistic for the panel is given by;

$$-2 \sum_{i=1}^n \log(p_i) \sim \chi^2_{2n} \quad (21)$$

In the Johansen type panel cointegration tests results heavily depends on the number of lags of the VAR system. The results are obtained here use one lag and are given below in Table (4) for individuals and in Table (5) for panel.

Table 4: Results of the individuals cointegration tests Hypothesis :

Hypothesis :	Model 1				Model 2			
No cointegration								
Country	Trace Test	Prob.	Max-Eigen Test	Prob.	Trace Test	Prob.	Max-Eigen Test	Prob.
Bangladesh	76.3021*	0.0000	31.7416*	0.0039	88.0784*	0.0000	34.4052*	0.0080
India	53.5980*	0.0013	24.7300*	0.0418	75.6313*	0.0002	35.7767*	0.0051
Pakistan	55.8481*	0.0007	29.5387*	0.0085	65.4300*	0.0035	29.5627*	0.0374
Hypothesis: At most one cointegration equation					Hypothesis: At most one cointegration equation			
Bangladesh	44.5605*	0.0000	24.9843*	0.0035	53.6732*	0.0002	27.1754*	0.00096
India	28.8688*	0.0123	18.4258*	0.0402	39.8545*	0.0146	18.4446	0.1586
Pakistan	26.3094	0.0273	20.0422*	0.0226	35.8673*	0.0422	23.1833*	0.0376
Hypothesis: At most two cointegration equation					Hypothesis: At most two cointegration equation			
Bangladesh	19.5762*	0.0026	19.4758*	0.0015	26.4978*	0.0060	20.2721*	0.0096
India	10.4422	0.1012	9.3859	0.1035	21.4100*	0.0346	14.8768**	0.0716
Pakistan	6.2671	0.4042	4.550	0.5429	12.6839	0.3896	10.5882	0.2838
Hypothesis: At most three cointegration equation					Hypothesis: At most three cointegration equation			
Bangladesh	0.1004	0.7944	0.1004	0.7944	6.2257	0.1740	6.2257	0.1740
India	1.0552	0.3534	1.0562	0.3534	6.5332	0.1534	6.5332	0.1534
Pakistan	1.7171	0.2234	1.7171	0.2234	2.0957	0.7586	2.0957	0.7586

Model 1: No intercept or trend in cointegration equation and VAR, Model 2: Intercept (no trend) in cointegration equation no intercept in VAR

Table 5 : Results of the Johansen based panel cointegration test

	Model 1				Model 2			
Number of Coint. Eqn.	Trace Test	Prob.	Max-Eigen Value Test	Prob.	Trace Test	Prob.	Max-Eigen Value Test	Prob.
None	55.22*	0.0000	26.99*	0.0001	53.17*	0.0000	26.80*	0.0002
At Most 1	35.93*	0.0000	25.31*	0.0003	31.79*	0.0000	19.53*	0.0034
At Most 2	18.31*	0.0055	18.81*	0.0045	18.33*	0.0045	17.09*	0.0090
At Most 3	5.539	0.4768	5.539	0.4768	7.800	0.2531	7.800	0.2531
Kao cointegration Test Statistic					Probability			
-2.9985*					0.0014			

Model 1: No intercept or trend in cointegration equation and VAR, Model 2: Intercept (no trend) in cointegration equation no intercept in VAR

The results of the individual cointegration tests in Table (5) indicate that all the variables are cointegrated for Bangladesh, India and Pakistan. The Kao and Johansen Fisher panel cointegration tests results confirmed that there is a long-run cointegration relationship among the panel variables.

c) Granger causality

The cointegration relationship indicates the existence of causal relationship but it does not indicate the direction of causal relationship between variables. Therefore it is common to test for detecting the causal

relationship between variables using the Engle and Granger test procedure. In the presence of cointegration relationship the application of Engle and Granger (1987) causality test in the first differenced variables by means of a VAR will misleading the results, therefore an inclusion of an additional variable to the VAR system such as the error correction term (ECM) would help us to capture the long-run relationship. The augmented form of the Granger causality test involving the ECM is formulated in a multivariate p th order vector error correction (VEC) model given below;

$$\begin{bmatrix} \Delta \ln PGDP_{it} \\ \Delta \ln EC_{it} \\ \Delta \ln EX_{it} \\ \Delta \ln RE_{it} \end{bmatrix} = \begin{bmatrix} C_1 \\ C_2 \\ C_3 \\ C_4 \end{bmatrix} + \sum_{k=1}^p \begin{bmatrix} \beta_{11k} & \beta_{12k} & \beta_{13k} & \beta_{14k} \\ \beta_{21k} & \beta_{22k} & \beta_{23k} & \beta_{24k} \\ \beta_{31k} & \beta_{32k} & \beta_{33k} & \beta_{34k} \\ \beta_{41k} & \beta_{42k} & \beta_{43k} & \beta_{44k} \end{bmatrix} \begin{bmatrix} \Delta \ln PGDP_{it-k} \\ \Delta \ln EC_{it-k} \\ \Delta \ln EX_{it-k} \\ \Delta \ln RE_{it-k} \end{bmatrix} + \begin{bmatrix} \lambda_1 \\ \lambda_2 \\ \lambda_3 \\ \lambda_4 \end{bmatrix} ECM_{it-1} + \begin{bmatrix} \varepsilon_{1it} \\ \varepsilon_{2it} \\ \varepsilon_{3it} \\ \varepsilon_{4it} \end{bmatrix} \quad (22)$$

where $i = 1, 2, \dots, n$; $t = p+1, p+2, p+3, \dots, T$; The C 's, β 's and λ 's are the parameters to be estimated. Δ stands for first difference, ECM_{t-1} represents the one period lagged error-term derived from the cointegration vector and the ε 's are serially independent with mean zero and finite covariance matrix. From the equation (22) given the use of a VEC structure, all variables are treated as endogenous variables.

The F test is applied here to examine the direction of any causal relationship between the variables. The electricity consumption does not Granger cause economic growth in the short run, if and only if all

the coefficients β_{12k} 's $\forall k$ are not significantly different from zero in equation (22). Similarly the economic growth does not Granger cause electricity consumption in the short run if and only if all the coefficients β_{21k} 's $\forall k$ are not significantly different from zero in the equation (22). They are referred to as the short-run Granger causality test. The coefficients on the ECM represent how fast deviations from the long-run equilibrium are eliminated. Another channel of causality can be studied by testing the significance of ECM's. This test is referred to as the long run causality test. The short-run and long-run Granger causality tests results are reported below in Table (6) for individuals and in Table (7) for panel

Table 6: Granger F-test results for individuals Bangladesh

Bangladesh					
	$\Delta \ln PGDP$	$\Delta \ln EC$	$\Delta \ln EX$	$\Delta \ln RE$	ECM
$\Delta \ln PGDP$		2.1162 (0.1454)	2.9579** (0.0738)	2.6579** (0.09867)	-0.14769 (0.8839)
$\Delta \ln EC$	0.3150 (0.7332)		0.8602 (0.4374)	0.7068 (0.5045)	0.55035 (0.5878)
$\Delta \ln EX$	0.0101 (0.990)	1.2326 (0.3117)		0.0567 (0.9451)	0.45856 (0.65126)
$\Delta \ln RE$	1.6185 (0.2219)	0.2219 (0.9953)	0.6300 (0.5423)		0.62609 (0.5380)
India					
$\Delta \ln PGDP$		0.3221 (0.5752)	0.9240 (0.3452)	0.1371 (0.7142)	-0.47816 (0.6365)
$\Delta \ln EC$	0.0327 (0.8578)		0.6514 (0.4269)	0.8444 (0.3665)	-0.52912 (0.6012)
$\Delta \ln EX$	0.0230 (0.8805)	0.0560 (0.8148)		1.2844 (0.2674)	3.2366* (0.0032)
$\Delta \ln RE$	1.7754 (0.1942)	2.3844 (0.1346)	2.3108 (0.1523)	2.5325 (0.1236)	0.83988 (0.4086)
Pakistan					
$\Delta \ln PGDP$		0.7770 (0.3864)	0.6094 (0.4423)	0.0347 (0.8536)	-3.0826* (0.0049)
$\Delta \ln EC$	3.3572** (0.0788)	0.6506 (0.4275)		2.1974 (0.1507)	1.5330 (0.13783)
$\Delta \ln EX$	1.3419 (0.2576)	0.0932 (0.7627)	0.0044 (0.9474)		-0.08391 (0.9337)
$\Delta \ln RE$	0.0021 (0.9634)	2.2391 (0.1471)	0.0224 (0.8821)		0.16906 (0.8671)

*: indicates significant at 5% level and **: indicates significant at 10% level.

Table 7: Panel Granger F-test results

	$\Delta \ln PGDP$	$\Delta \ln EC$	$\Delta \ln EX$	$\Delta \ln RE$	ECM
$\Delta \ln PGDP$		0.0189 (0.8910)	3.2289** (0.0757)	2.1737 (0.1438)	-0.72673 (0.4692)
$\Delta \ln EC$	0.0179 (0.8937)		0.89377 (0.1835)	1.4314 (0.2346)	-0.06127 (0.95127)

$\Delta \ln EX$	8.2109* (0.0051)	0.0671 (0.7961)		0.8640 (0.3551)	-0.21695 0.82873
$\Delta \ln EX$	1.2043 (1.2043)	1.4655 (0.2292)	0.2701 (0.6045)		1.2183 (0.2262)

The reported values in parentheses are the p-values of the test. * : indicates significant at 5% level, ** : indicates significant at 10% level

The findings in Table (6) indicate that there is only short-run causality running from export values and remittance to economic growth in Bangladesh, only long-run causality from economic growth to export values in India, only unidirectional short-run causality from economic growth to electricity consumption in Pakistan. The findings in Table (7) indicate that there is panel short-run bidirectional causality between economic growth and export values but there is no evidence of long-run causal relationship.

$$\Delta \ln PGDP_{it} = \alpha_1 \Delta \ln EC_{it} + \alpha_2 \Delta \ln EX_{it} + \alpha_3 \Delta \ln RE_{it} + \lambda ECM_{it-1} + \varepsilon_{it} \quad (23)$$

where ε_{it} is the random error terms, $\alpha_1, \alpha_2, \alpha_3$, and λ are the parameters to be estimated. The parameter λ represents speed of adjustment for short-run to reach in the long-run equilibrium.

The long-run elasticity can be obtained by estimating the following regression equation

d) Short-run and long-run elasticity

The short run elasticity can be obtained by estimating the following error correction model

$$\ln PGDP_{it} = \mu_i + \beta_1 \ln EC_{it} + \beta_2 \ln EX_{it} + \beta_3 \ln RE_{it} + \sum_{j=-k_1}^{k_1} \gamma_{ij} \Delta \ln EC_{it-j} + \sum_{j=-p_1}^{p_1} \lambda_{ij} \Delta \ln EX_{it-j} + \sum_{j=-p_1}^{p_1} \delta_{ij} \Delta \ln RE_{it-j} + u_{it} \quad (24)$$

The GMM is applied to estimate both equation which control the problem of endogeneity and serial correlation of regressors. The estimated results are given below in Table (8)

Table 8 : Individuals and panel short-run and long-run elasticities

Short-run elasticity [$\Delta \ln PGDP$ is the dependent variable]								
	$\Delta \ln EC$		$\Delta \ln EX$		$\Delta \ln RE$		ECM	
	Coeff.	t-Test	Coeff.	t-Test	Coeff.	t-Test	Coeff.	t-Test
Bangladesh	0.0878	2.8575*	0.11647	3.3922*	0.0027	0.1947	-0.2641	-3.1941*
India	0.3032	4.5646*	0.14254	4.0873*	0.0257	1.0300	-0.2243	-1.2019
Pakistan	0.4263	7.1861*	0.00824	0.29404	0.0028	0.00284	-0.3169	-1.7204
Panel	0.1845	4.9564*	0.1049	5.7950*	0.01033	2.3843*	-0.0551	-4.0048*
Long-run elasticity [$\ln PGDP$ is the dependent variable]								
	$\ln EC$		$\ln EX$		$\ln RE$			
	Coeff.	t-Test	Coeff.	t-Test	Coeff.	t-Test		
Bangladesh	0.0493	1.3507	0.08677	2.5018*	0.16564	15.693*		
India	0.00224	0.0304	0.07246	1.3473	0.00919	0.4362		
Pakistan	0.09205	1.655**	0.01348	0.5361	0.01296	3.4739*		
Panel	0.30020	6.4132*	0.09350	1.59817	0.09852	1.78017**		

*: indicates significant at 5% level, **: indicates significant at 10% level.

From the estimated results in Table (8) it is found that the variable electricity consumption has short-run positive significant impact on economic growth for Bangladesh, India and Pakistan. The range of short-run elasticity is 0.4263 for India to 0.0878 for Bangladesh. The variable export values have short-run significant positive impact on economic growth for Bangladesh and India. The impacts of the variable remittance are not statistically significant for Bangladesh, India and Pakistan. It is found that it takes about 3.79 years for Bangladesh, 4.46 years for India and 3.16 years for Pakistan to reach in the long-run

equilibrium and statistically significant only for Bangladesh.

For panel analysis, it is found that the short-run elasticities of economic growth with respect to electricity consumption, export values and remittance are positively significant also for panel estimation the ECM is statistically significant.

For long-run, it is found that the variables export values and remittance have significant positive impacts on economic growth in Bangladesh, none of the variable has significant impact one economic growth in the long-run for India, the variables electricity consumption and

remittance have significant positive impacts on economic growth for Pakistan.

For panel estimation the variables electricity consumption and remittance have significant positive impact on economic growth and the export values have positive impact in the long-run but not significant. It is found that the long-run elasticity of economic growth with respect electricity consumption and remittance are higher than short run elasticity. This means that over time higher electricity consumption and remittance from manpower supply in the panel of SAARC countries give rise to more economic growth.

VI. CONCLUSIONS AND POLICY IMPLICATIONS

This paper attempts to empirically examine the short-run and long-run causal relationship between economic growth, energy consumption, export values and workers' remittance receipt for the panel of three SAARC countries using the time series data for the period 1971- 2009 on the basis of modern econometric techniques. Also this study attempts to examine the new approach which is proposed by Narayan and Narayan (2010). Before testing for any causal relationship among the variables within a VAR model structure at the first stage panel unit root tests and at the second stage panel cointegration analysis are done. Four different panel unit root tests, Levin, Lin and Chu (LLC, 2002), Im, Peasaran and Shin (IPS, 2003), Maddala and Wu (1999), and Choi (2006) tests are applied. The tests results support that all the panel variables are integrated of order one. The ADF test results support that all the variables are integrated of order 1 for Bangladesh and India but the variable economic growth and electricity consumption are integrated of order 2 for Pakistan.

The Kao and the Johansen Fisher panel cointegration tests results support that all the panel variables are cointegrated. Also the individual cointegration tests results support that all the variables are cointegrated for Bangladesh, India and Pakistan.

From the individual Granger F-test results, only short-run causality running from export values and remittance to economic growth at 10% level in Bangladesh, long-run causality from economic growth to export values in India, and unidirectional short-run causality from economic growth to electricity consumption in Pakistan. The panel Granger F-test results support the bidirectional short-run causal relationship between economic growth and export values but there is no evidence of long-run panel causal relationship among the variables. This evidence indicates that there are inter-dependencies between exports and economic growth in the panel of SAARC countries. The main reason for this, economic growth causes expansion in the commercial and industrial sectors and vice versa.

It is found that the long-run elasticity of economic growth with respect to electricity consumption

(0.30020) and remittance (0.09852) are higher than short run elasticity of (0.1845) and (0.01033). This means that over time higher electricity consumption and higher remittance from manpower supply in the panel of SAARC countries gives rise to more economic growth. It is found that it takes about 3.79 years for Bangladesh, 4.46 years for India and 3.16 years for Pakistan to reach in the long-run equilibrium position and statistically significant only for Bangladesh. Thus it can be said that a policy to increase investment in the electricity supply is likely to stimulate economic growth for SAARC countries.

From the analytical results it can be concluded that due to any restriction on energy use, the economic growth of SAARC countries will not be affected directly but due to restriction on energy use, if the export values declined both the variables will be affected simultaneously. From the analytical results it can be concluded that policies to increase investment in commercial and industrial sectors to construct large, medium and small scale factories to accelerate output should be implemented to keep pace with economic expansion in SAARC countries.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Al-Irmani, M. A., 2006. Energy-GDP relationship revisited: an example from GCC countries using panel causality. *Energy Policy* 34, 3342-3350.
2. Altinay, G., Karagol, E., 2005. Electricity consumption and economic growth: evidence from Turkey. *Energy Economics* 27, 849-856.
3. Aqueel, A., Butt, M. S., 2001. The relationship between energy consumption and economic growth in Pakistan. *Asia-Pacific Development Journal* 8, 101-109.
4. Asafu-Adjaye, J., 2000. The relationship between energy consumption, energy prices and economic growth: Time series evidence from Asian developing countries. *Energy Economics* 22, 615-625.
5. Banerjee, A., Cockerill, L., Russell, B., 2001. An I(2) analysis of inflation and the markup. *Journal of Applied Econometrics* 16, 221-240.
6. Chen, S.-T., Kuo, H.-I., Chen, C.-C., 2007. The relationship between GDP and electricity consumption in 10 Asian countries. *Energy Policy* 35, 2611-2621.
7. Chontanawat, Hunt, L.C., Pierse, R.G. (2006). "Causality between Energy Consumption and Economic Growth: Evidence from 30 OECD and 78 non- OECD Countries." Discussion paper 113, Surrey Energy Economic Centre (SEEC), Department of Economics, University of Surrey, UK.
8. Chontanawat, J., Hunt, L.C., Pierse, R.G., 2007a. Causality between energy consumption and economic growth in OECD and non-OECD countries: a panel cointegration approach. Proceeding paper at the 27th USAEE/IAEE North



- American Conference on 'Developing & Delivering Affordable Energy in the 21st Century', Houston, Texas, USA, 16-19 September.
9. Chontanawat, J., Hunt, L.C., Pierse, R.G., 2007b. Exploring the relationship between energy second International Association for Energy Economics (IAEE) Asian Conference: Energy Security and Economic Development under Environmental Constraints in the Asia-Pacific Region
10. Chontanawat, J., Hunt, L. C., Pierse, R. G., 2008. Does energy consumption cause economic growth? : evidence from a systematic study of over 100 countries." *Journal of Policy Modeling* 30(2), 209-220.
11. Engel, R.F., Granger, C.W.J., 1987. Cointegration and error correction: representation, estimation and testing. *Econometrica* 55, 251-276.
12. Ghosh, S., 2002. Electricity consumption and economic growth in India. *Energy Policy* 30, 125-129.
13. Halicioglu, F., 2007. Residential electricity demand dynamics in Turkey. *Energy Economics* 29, 199-210.
14. Huang, B-N., Hwang, M. J., Yang, C.W., 2008. Causal relationship between energy consumption and GDP growth revisited: a dynamic panel data approach. *Ecological Economics* 67, 41-54.
15. Hossain, Md. S., Saeki, C., 2011. Does electricity consumption panel Granger cause economic growth in South Asia? evidence from Bangladesh, India, Iran, Nepal, Pakistan and Sri-Lanka. *European Journal of Social Sciences* 25(3), 316-328.
16. Hossain, Md., S., 2011. Panel estimation for emissions, energy consumption, economic growth, trade openness and urbanization of newly industrialized countries. *Energy Policy* 39 (11), 6991-6999.
17. Im, K.S., Pesaran, M.H., Shin, Y., 2003. Testing for unit roots in heterogeneous panels. *Journal of Econometrics* 115, 53-74.
18. Joyeux, R., Ripple, R.D., 2007. Household energy consumption versus income and relative standard of living: a panel approach. *Energy Policy* 35, 50-60.
19. Jumbe, C.B.L., 2004. Cointegration and causality between electricity consumption and GDP: empirical evidence from Malawi. *Energy Economics* 26, 61-68.
20. Lee, C. C., 2005. Energy consumption and GDP in developing countries: a cointegrated panel analysis. *Energy Economics* 27, 415-427.
21. Lee, C. C., Chang, C.P., 2007. Energy consumption and GDP revisited: a panel analysis of developed and developing countries. *Energy Economics* 29, 1206-1223.
22. Levin, A., Lin, C.F., Chu, C.S., 2002. Unit root tests in panel data: asymptotic and finite sample properties. *Journal of Econometrics* 108, 1-24.
23. Maddala, G.S., Wu, S., 1999. A Comparative study of unit root tests with panel data and a new simple test. *Oxford Bulletin of Economics and Statistics* 61, 631-652.
24. Mehrara, M., 2007. Energy consumption and economic growth: The case of oil exporting countries. *Energy Policy* 35, 2939-2945.
25. Morimoto, R., Hope, C., 2004. The impact of electricity supply on economic growth in Sri Lanka. *Energy Economics* 26, 77-85.
26. Narayan, P. K., Prasad, A., 2008. Electricity consumption-real GDP causality nexus: evidence from a Bootstrapped causality test for 30 OECD countries. *Energy Policy* 36, 910-918.
27. Narayan, P. K., Smyth, R., 2005. Electricity consumption, employment and real income in Australia: evidence from multivariate Granger causality tests. *Energy Policy* 33, 1109-1116.
28. Narayan, P.K., Smyth, R., 2009. A multivariate Granger causality between electricity consumption, exports and GDP: evidence from a panel of Middle Eastern countries. *Energy Policy* 37, 229-236
29. Narayan, P.K., Smyth, R., Prasad, A., 2007. Electricity consumption in the G7 countries: a panel cointegration analysis of residential demand elasticities. *Energy Policy* 35, 4485-4494.
30. Narayan, P.K., Smyth, R., Prasad, A., 2008. A structural VAR analysis of electricity consumption and real GDP: evidence from the G7 countries. *Energy Policy* 36, 2765-2769.
31. Narayan, P.K., Singh, B., 2007. The electricity consumption and GDP nexus for the Fiji Islands. *Energy Economics* 29: 1141-1150.
32. Soytaş, U., Sari, R. 2003. Energy consumption and GDP: causality relationship in G-7 countries and emerging markets. *Energy Economics* 25, 33-37.
33. Squalli, J., 2007. Electricity consumption and economic growth: bounds and causality analysis of OPEC countries. *Energy Economics* 29, 1192-1205.
34. Wolde-Rufael, Y., 2004. Disaggregated industrial energy consumption and GDP: The case of Shanghai, 1952-1999." *Energy Economics* 26, 69-75.
35. Wolde-Rufael, Y., 2006. Electricity consumption and economic growth: a time series experience for 17 African countries." *Energy Policy* 34, 1106-1114.
36. Yang, H.Y., 2000. A note on the causal relationship between energy and GDP in Taiwan. *Energy Economics* 22 (3), 309-317.
37. Yoo, S., 2005. Electricity consumption and economic growth: evidence from Korea. *Energy Policy* 33, 1627-1632.
38. Yoo, S., 2006. The causal relationship between electricity consumption and economic growth in ASEAN countries." *Energy Policy* 34, 3573-3582.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

“Impact of Leadership Style (Transformational & Transactional Leadership) On Employee Performance & Mediating Role of Job Satisfaction” Study of Private School (Educator) In Pakistan

By M. Umer Paracha, Adnan Qamar, Anam Mirza, Inam-ul-Hassan
& Hamid Waqas

Muhamad Ali Jinnah University

Abstract - The purpose of this research is to determine that does leadership styles that is Transformational leadership style and transactional leadership style has an impact on employee performance. Also we wish to see that if job satisfaction has a mediating effect or not. For this purpose data was collected from 6 schools working in Rawalpindi and Islamabad. Result shows that transactional and transformational both are significantly positive associated with Employee performance however transactional leadership was more significant then transformational. Another important discovery made was there is no mediating role of Job satisfaction between transactional leadership. But it mediates with transformation leadership and employee performance.

Keywords : Leadership style, Transformational Leadership, Transactional Leadership, Job satisfaction, Employee performance.

GJMBR-A Classification : FOR Code: 130304, 150305 JEL Code: O15, M31



Strictly as per the compliance and regulations of:



© 2012 . M. Umer Paracha, Adnan Qamar, Anam Mirza, Inam-ul-Hassan & Hamid Waqas. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License <http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

“Impact of Leadership Style (Transformational & Transactional Leadership) On Employee Performance & Mediating Role of Job Satisfaction” Study of Private School (Educator) In Pakistan

M. Umer Paracha^α, Adnan Qamar^σ, Anam Mirza^ρ, Inam-ul-Hassan^ω & Hamid Waqas[¥]

Abstract - The purpose of this research is to determine that does leadership styles that is Transformational leadership style and transactional leadership style has an impact on employee performance. Also we wish to see that if job satisfaction has a mediating effect or not. For this purpose data was collected from 6 schools working in Rawalpindi and Islamabad. Result shows that transactional and transformational both are significantly positive associated with Employee performance however transactional leadership was more significant then transformational. Another important discovery made was there is no mediating role of Job satisfaction between transactional leadership. But it mediates with transformation leadership and employee performance.

Keywords : Leadership style, Transformational Leadership, Transactional Leadership, Job satisfaction, Employee performance.

I. INTRODUCTION

In today's competitive environment, organizations expand globally and face a lot of challenges to meet their objectives and chased to be more successful from others. Leaders play essential role in accomplishment of these goals and boost employee's performance by satisfying them with their jobs therefore, it grasps the attention of researchers from many years, yet we are unable to focus on one definition. Many researchers have studied different aspects of leadership. According to Mintzberg (2010) Leadership is the key of trust that comes from the respect of others. Jamaludin (2011) conducted their research on the leadership and their styles and suggested that effective

leaders are those who use their powers for betterment of the followers and organization as well. Leaders are one of the major key drivers in enhancing the production and innovations (Lievens et al, 1997). According to Raelin (2011) Leadership is directly connected to the practices to which people are dedicated. The most substantial of leaders is their influential personality that has positive relation with the follower's job satisfaction and the performance (Lian et al, 2011).

Although different theoretical approaches being study leadership but most renowned frame-work is transformational and transactional leadership. (Hambley et al, 2007). Transactional leadership is used when organizations give appraisals by recognition, pay increases and career advancement for well performers and punishment for poor performers (Bass, 1998). Transactional leadership exchange agreements rewards effort, promises of rewards for better performance and recognizes the achievements, in contrary, transformational leadership gives vision and sense of mission, instills pride and gain, respect and trust (Bass, 1990). Mulla & Krishnan (2011) proposed that transformational leadership is associated with subordinate's moral values.

Most of the researchers emphasized on transformational leadership but some also gave importance to transactional leadership. Egan, Sarros & Santore (1995) articulate, transformational style is more effective then transactional style, regardless of organizational type, method adopted by the leaders is based on his personal ability, preferences and experiences. But organization's output is negatively affected by the transactional leadership, (Bass, 1999). When the situation is unapparent, a leader must follow the transformational style to identify the key factors of the situation and choose the right style to situation appropriately (Somech & Wenderow, 2006). The positive effect of transformational leadership is that it enhances self knowledge, increasing the performance expectation value to the financial performance of the teams (Avolio, Waldman & Einstein, 1988). Afolabi, Obude, Okediji, &

Author α : MS (Management Sciences) Muhammad Ali Jinnah University Islamabad Campus. Tel:0334-95633699

(Corresponding author) E-mail : umar.cr_maju@yahoo.com

Author σ : MS (Management Sciences) Muhammad Ali Jinnah University Islamabad Campus. (Corresponding author)

E-mail : adnanqamar3@gmail.com

Author ρ : MS (Management Sciences) Muhammad Ali Jinnah University Islamabad Campus. E-mail : anamcapricorn5@yahoo.com

Author ω : MS (Management Sciences) Muhammad Ali Jinnah University Islamabad Campus. E-mail : inamhq2005@yahoo.com

Author ¥ : MS (Management Sciences) Muhammad Ali Jinnah University Islamabad Campus. E-mail : hamid_wqs@hotmail.com

Ezeh (2008) did analysis and give evidence in the favor of transactional leadership, they observed that transactional leadership is more effective when organization desire to achieve their aims and objectives. Supervisors play a vital role in job satisfaction of the and gives a new direction of thinking, but on other side transformer leaders can some time exploit workers by using their power to achieve personal goals (Franke & Felfe, 2011). Transformational leadership also adds employees. Moyes (2007) carry out research on determinants of job satisfaction and resulted that loyalty to one's employer and job longevity are more important as compared to compensation, benefits and supervisors for Mexican-American and vice versa for the Non-Hispanic. There is a strongest correlation between the leadership style and the job satisfaction (Lok, 1999). But the result demonstrated that transformational leadership has a higher correlation with job satisfaction. (Charles et al, 2007). Employees' perception about their job occupation is considered to be imperative element in measuring job satisfaction, their perception refers to occupational prestige, career development and employees self esteem, transformational leadership focuses on all dimensions (Bogler, 2001).

Most of the researcher follows the transformational leadership, but in the context of Pakistan, very narrow research has been done on the leadership style adopted in the education sector. The purpose of our research is to identify effective leadership style in Education sector of Pakistan, as Pakistani culture is based on the power distance and gives priority to the autocratic decision making style. In Pakistani culture there is high power distance but low individualism (Routamaa & Hautala, 2008). Jeger (1986) manifested that transactional leadership is more successful in variety of countries outside North America including India, Nigeria, Japan and Pakistan. Pakistan is bureaucratic state where command and control rules (Ahmed, 1996). Therefore transactional leadership can be more effective in this specified culture, yet the main objective of our research is to identify the true leadership styles in education sector that will leads towards increasing job satisfaction and ultimately resulted in higher employee performance.

II. LITERATURE REVIEW

a) *Transactional leadership*

To promise the success of organization it is important to adopt the appropriate leadership style. Examining, praising and assessing a leader do not truly assure the followers' honesty in this case transformational leadership becomes inapplicable (Parry & Thomson, 2002). Leaders can than practice transactional style of leadership. Transaction literally means "exchange" therefore, transactional leadership deals with the exchange between leader and his

followers. Kuhnert & Lewis, (1987) Stated that transactional leadership is an exchange between followers and leaders desired outcomes by fulfilling the leader's interest and followers' expectations, which involves promises or commitments embedded by respect and trust. Jung, (2000–2001) also defines transactional leadership as leader aptitude towards identification of followers needs and aspirations and clearly demonstrate the ways to fulfill these needs in exchange for performance of followers. Bass (2000) reported that effective leaders accommodate the interests of their subordinates by giving contingent incentives, honor and promises for those who auspiciously succeeded in fulfilling the commitments of the leaders or the organization

Transactional leadership is in focus of researcher from many years and premeditated in numerous ways with different variables. (Howell & Merenda, 1999) conducted his research on association between leader-member exchange, transactional and transformational leadership in forecasting employees performance and concluded that transactional leadership style is a positive predictor of follower's performance. (Bass, Avolio, Jung, & Berson, 2003) carry out their research for military platoon which was an organization, working in an unstable environment and it proves that transactional leadership increases performance among the soldiers. Transactional leadership style is relatively weakly associated with performance and is optimistically related to perception of organizational politics (Gadot, 2007). Rejas, Ponce, Almonte, & Ponce, (2006) Indicated that there is a dominance of the transactional leadership style over transformational and laissez faire styles. Personality factors, agreeableness and conscientiousness are positively related to transactional leadership which is moderated by perceived dynamic working atmosphere (Hoogh, Hartog, & Koopman, 2005). While investigating the effect of leadership on organizational performance in Russian companies, (Elenkov, 2002) observed that in Russia managers who adopt transactional leadership behavior positively correlates with organizational performance and innovation.

From last few decades there has been an explosion of speculative and empirical work conducted on leadership styles. Transactional leadership is also measured in terms of job satisfaction and employee performance. (Bass, 1998) defines that transactional leadership occurs when the leader's incentive and control are depending on the adequacy of follower's performance. Research conducted by (Burke, Stagl, Klein, Goodwin, Salas, & Halpin, 2006) on leadership behaviors and team performance outcomes revealed that transactional leadership behavior is significantly related to team performance. The relationship of transactional leadership and performance was also

investigated by (Rowold & Schlotz, 2009) in their study they explain that transactional leadership is the trade of explicit transactions, in result of these transactions leaders' rewards amplifies the performance of their followers. Transactional leadership is based on tentative support and subordinates are motivated through recognition or else corrected through punishment due to this exchange relationship, the expected performance achievement leads towards follower's promotion (Munaf, 2011). In other words, transactional leadership encourages followers to perform according to the leader's expectation and get rewards and promotion. Ample support is available in the leadership literature according to (Avolio, Bass, & Jung, 1999), to make transactional leadership more effective, appropriate usage of contingent reward is an important feedback to assemble expectations with followers in term of their performance. Facilitating the followers to be familiar with job obligations and recognized objectives to achieve estimated degree of performance is an important aspect of transactional leadership style (Lo, Ramayah, & Min, 2009). (Janssen & Yperen, 2004) acknowledged that transactional leadership assists the efficiency by enhancing innovative job performance and job satisfaction. Hence, the study shows that transactional leadership has significant impact on employee performance and job satisfaction.

Culture is an imperative distinguished characteristic of every country. Researchers studied the current phenomenon in different cultures which changes the impact of one variable on another due to variation in cultural ethics. The significance of culture on leadership is reported by (Bass, Avolio, & Suny, 1993) as culture influences the leadership as much as leadership influences the culture. The concept of culture is commonly used in literature in field of global management, human resource development, and organization behavior to gauge the effects that can differentiate between countries and work-related or ethnic groups (Kuchinke, 1999). He compared leadership style of German and US telecommunication employees and proposed that the rank of US respondents on two dimension of transformational leadership(charisma and inspirational motivation) are higher than of German managers. (Ardichvili & Kuchinke, 2002) in his comparison of leadership styles and cultural values among leaders and followers in four different countries, has found that, with reference to four dimensions of transformational leadership style, there is a higher level in Republic of Georgia than other countries and also found higher level of transactional leaderships styles in four states of former USSR. Cultural differences between the countries are commonly determined by Geert Hofstede cultural dimension comprises of power distance, individualism, masculinity Uncertainty avoidance and long-term orientation. In Pakistan there is a high power distance and strong

uncertainty avoidance high power distance and followed those practice that produces centralization, fraud, discrimination and gender differences in administrative position (Islam,2004) shows that culture is based on autocratic style and the person hold the power is always right and more respectful with having privileges and more centralization whereas strong uncertainty avoidance reflects the High stress, Aggression, obedience of rules and regulation and leads towards fear and threat of unambiguous situations (Hofstede, 1991). While conducting research on different style of leadership in an organization, a researcher must keep in mind the cultural variations in different countries.

H1: transactional leadership is associated with employee's performance

b) Transformational leadership

Leadership has two main dimensions i.e. transactional and transformational leadership (Adnan & Mubarak, 2010). Leadership that creates valuable and positive change in the followers is Transformational Leadership. Such a leader focuses on "transforming" others to help each other, to look out for each other, to encourage and be harmonious, and to pay attention towards organization as a whole. Lievens, Geit & Coetsier (1997) and Berson, Shamir, Avolio & Popper (2001) articulate that transformational leadership is helpful for innovation implemented by the organization in the era of competition. Transformational Leader can smooth the progress of these changes by placing value on the enlargement of a vision and by encouraging subordinates to pursue that vision. It notifies four leadership scales, namely charisma, inspiration, individual consideration, and intellectual stimulation.

Employees can easily share their knowledge among them when organization used transformational leadership style (Behery, 2008). Zafr, Retamero & Landa (2008) wrap up that transformational leader have high emotional intelligence and they emerge as leader during group cohesiveness, it also uplifts the morale, motivation, and morals of their followers (Bass, 1999). It also focuses on more sensitive side of organizational interactions like vision, culture, values, development, teamwork, and service (Fairholm, 2001). By emphasizing the symbolic and expressive aspects of task goal efforts and the important values involved, the transformational leader makes the difference (Bass, 1998). Transformational leadership has been chosen due to its innovative as well as productive and supportive nature (Fatima & Ahmad & Usman, 2011). One can observe the combination of three mechanisms in Transformational Leadership: Leaders give values to their subordinates, motivate their subordinates and persuade in mounting or varying followers' needs (William, Richards, Steers & James, 1995).

Majority of the researchers had associated transformational leadership with employee's

performance and job satisfaction and argued that transformational leadership can be the best predictor of employee performance (Raja & Palanichamy, 2011). Transformational culture boosts both the organization and the employee's performance (Bass & avolio 1993) without enforcing extra burden (Schlotz, 2009). The transformational leadership condition was connected with high task performance, higher collective support acuity, greater efficacy beliefs, lower harmful effect, and lower threat assessment compared to the transactional conditions. (Lyons & Schneider, 2009) and also provide guidance to their followers towards organizational objectives (Metcalf & Metcalf, 2005). Prior researcher has demonstrated that followers who work under transformational leaders are motivated and committed which facilitates their satisfaction with jobs (Givens, 2008). Khan, Ramzan, Ahmed and Nawaz have made their research on Transformational, Transactional, and Laissez-Faire Styles of teaching faculty as predictors of satisfaction, which direct towards extra effort among the students and summarized that teacher faculty, must have to adopt transformational style because it brings higher satisfaction among their students, but the transformational leadership does not keep the check and balance of democratic dissertation and deals with emotions instead of facts. So the transformational leaders are going against the principles of organizational development (Bass & Steidlmeier, 2006). Transformational leadership is proved to be more useful in variety of businesses, military, engineering, hospital, and educational conditions than transactional leadership (Bass 1998). Masi & cook (2000) also have the same thoughts and believed that transformational leadership style is only the factor of increasing employee productivity but transactional leadership is now useless.

Culture plays an important role in describing leadership style adopted in every country as the cultures distinguishes the members of one group from another. We can say that culture and leadership style interrelate to each other. Dickson, Hartog & Mitchelson (2003) and Byrne, Bradley (2007) have described the importance of culture and suggested that only the societal cultures point out the best leadership style. Hofstede (1980) have made their research on Pakistani culture and notify that there is high power distance and uncertainty avoidance. Power distance is a level where less powerful members of the society with in a nation agree to its unequal distribution. Whereas uncertainty avoidance can be explained, the extent to which the members of the culture always feel insecure by any unknown situation (Hofstede, 1997). Lok (2003) suggested; where power distance and bureaucratic culture exists, firms provide strong autocratic style of leadership. Bass, avolio (1993) clearly indicated that culture gives the direction to organization whether transactional or transformational leadership is effective.

H2: transformational leadership is associated with employee's performance

c) Job Satisfaction

From decades, researchers take considerable attention on job satisfaction. Researchers discussed different aspects and determinants of job satisfaction in their own ways. Job satisfaction was first presented by Hoppock (1935) in his book as theoretical construct (Young & Tsu, 2010). McNamara (1999) defines job satisfaction as: "one's feelings or state of mind regarding the nature of their work. Job satisfaction can be influenced by a variety of factors, e.g. the quality of one's relationship with their supervisor, the quality of the physical environment in which they work, degree of the fulfillment of their work, etc". Employee explores the things by job satisfaction that is important to him (Commander and Dinesh, 2011) and feels a level of satisfaction (Bekele & G.M, 2011). Good relations with co- workers increase the job satisfaction (Nazir, 1988). For an organization to compete international market, one of the key factors is that its employees are satisfied with their jobs and leaders have amusing relationship with their subordinates and as result employees are pioneer and innovative that helps to grow up the business (Fatima, Bushra & Usman, 2011). An increasing aid provided by peers cause decrease in role ambiguity and role conflict which increases job satisfaction (Goldstein, Rockart, 1984).

Job satisfaction is a very important aspect for modern organization and much research work has been performed to increase job satisfaction. (Hungra, Chuni, Aslam, Azam and Rehman, 2005) conclude that there is a positive relationship between autonomy, leadership behavior, team work environment and job satisfaction. Voon, Ngui and Ayob (2011) show the stronger relationship between transformational leadership and job satisfaction. If the organization has to enhance job satisfaction among their workers and to increases commitment, researcher viewed that they must follow transformational leaders (Koh, Steers & Terborc, 1995). Krishnan (2005) express transformational leadership as a key factor of high job satisfaction and thus increased employee performance. Schaubroeck, Lam (2007) is of view that there is positive relationship between transformational leadership and employee performance and it creates a positive impact on team performance. Transformational leadership is effective in two ways, 1st it builds enthusiasm, secondly, instills sense of vision that lead to higher job satisfaction, due to this, employers performance takes a positive slope (Kennedy, Anderson, 2002).

Janssen, Yperen (2004) says that transactional leadership entertains employee performance by increasing the follower's job satisfaction. Participative leadership style or directive both can become the element of increasing employee's participation, and in

turn enlarged performance (Kahai, Sosik & Avolio, 2004). Liang, Chan, Lin and Huang (2011) take job satisfaction as mediator between transactional and transformational leadership style and articulate that these styles create strong correlation between employee's performance. Nemanich and Keller (2007) also have made a linkage between leadership style, job satisfaction and employee performance. Though researchers have conducted research on different aspects of leadership styles, their impact on job satisfaction and employee performance, however momentous thrust in context to the Pakistani culture yet to imparted (Adnan & Mubarak, 2010).

H3a: job satisfaction is mediator between transformational leadership style and employee performance.

H3b: job satisfaction is mediator between transactional leadership style and employee performance.

d) Employee Performance

From the initiation of globalization, the foremost confront for manager is to expertise different strategies to boost firm's performance (Habib, Khurram & Idress, 2010). For the strength of an organization job satisfaction plays a vital role which has significant effect on employee performance. And the word performance we used to pass on the individual aptitude to be inspired, stirring, pioneering and to determinant to achieving the goals on an organization (Walumbwa & Hartnell, 2011). Previous study has examined that a positive relation is found between satisfied employees and organization, as the performance of the satisfied employees are more productive for the organization then less satisfied employees (Ostroff, 1992). Leadership is associated with employee performance (Ogbonna & Harris 2000). The relationship between Leadership and performance is established considerable attention (Gadot, 2006). The main theme of the every organization is to enhance employee performance. Howell, Merenda (1999) suggested that transformational leadership will play an imperative role in increasing job satisfaction as well as role play to achieve organization's goal and employees acts (Goodwin, 2001). Walumbwa, Avolio & Zhu (2008) expressed, transformational leadership correlated with subordinate skills with work worth to asses employees performance. They trained their workers, arranged meeting with their subordinates and take feedback from their subordinates and in end result employee productivity added. Firm mostly increase employee's performance by giving empowerment to their team members (Ozaralli, 2002). Researchers have also studied the employee performance with extraverted leadership and gave very interested results, employee performance are increased under the extraverted leadership when employees are passive. And if employees are proactive, result will be opposite (Grant, Gino & Hofmann, 2011).

Researchers have studied employee's performance with variety of variables. One of the researcher observed that, satisfied employees not only be the cause of increasing employee performance but also they don't think to leave organization (Opren, 1986). Firms also arranging training secession for their employees, in order to enhance job satisfaction, because firms know, satisfied employees will give more performance (Jones, Jones, Latreille & Sloane, 2004). Su, Baird and Blair (2009) feels, major involvement to give up any organization by satisfied employees, how much they are satisfied the level of productivity will be high as much. Karatepe and Kilic (2009) indicate that work-family conflict and work-family facilitation affect employee's performance and find out that work-family facilitation enhances job satisfaction. According to Biswas (2009), organizational communication act in way to fastening workforce by transmitting cultural norms from an organizational framework to an individual's way of life in the organization and by supporting style of manager also plays incredible role for increasing employee's performance.

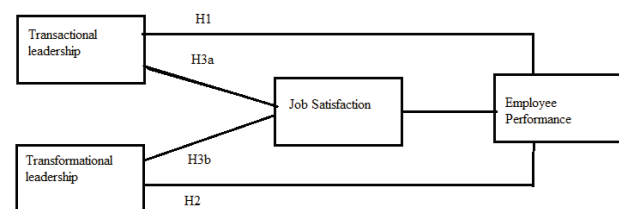
III. RESEARCH METHODOLOGY

Measures : Data was collected For leadership style by using a multifactor leadership questionnaire, adopted from (Avolio & Bass 2004) for transformational leader ship style having three question and two question from LMX-7 (Graen and Uhl-Bien,1995). Transactional leadership style was also measured by using multifactor leadership questionnaire, developed by (Avolio & Bass 2004), having 2 items. While Job satisfaction questions were adopted from (Brayfield and Rothe,1951) and employee performance questions.

A five point likert scale was used with 1 representing strongly agree and 5 representing strongly disagree. The questionnaires were personally distributed to respondents working in private schools.

Participants: A total of 250 questionnaires were distributed from the employees of private Educator school, out of which 124 were received back making response rate of 49.6%.

a) Research model



Sample: Respondents included employees working in private schools located in Rawalpindi, Islamabad. The following table describes the sample composition.

Description	Frequency	Percentage
Gender		
Male	97	79
Female	25	21
Age		
18 – 25	27	22
25 – 30	34	28
30 – 35	39	32
35- 40	13	11
40 above	9	7
Tenure		
1	24	20
2 -3	36	30
3 – 6	42	34
6 – 9	14	11
9 – 12	6	5
Qualification		
Matric	8	7
Fsc	21	17
Bachelor	53	43
Master	40	33

IV. RESULTS

Table 1: Correlation coefficient matrix

Correlations				
	LDTR	LDTs	JS	EP
LDTR	1	.200*	.103	.274**
LDTs	.200*	1	.738**	.184*
JS	.103	.738**	1	.139
EP	.274**	.184*	.139	1

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

**. Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed). n=122

The correlation matrix indicates that employee performance is strongly correlated with the transactional leadership style that is .274** similarly the transformational leadership is also positively correlated with team performance that is .184*

Table 2 : Regression analysis

model	t	Sig
LDTR	3.121	.001
LDTs	2.039	.044

Dependent Variable: Employee performance

R²

Transformational Leadership 34%

Transactional leadership 55%

Regression analysis indicates that the value of R square is .88% which indicates that it is significant,

which means that 88% creates an impact on dependent variable is used in this study. While only 12% variation remained UN explained due to some unknown variables.

Result of the mediating regression approach for JS

Model	Beta In t	Sig.
1	LDTR .264 ^a	2.990 .003
	LDTs .161 ^a	1.202 .232

Dependent variable EP

a) Analysis

H1: transactional leadership is associated with employee performance

The result clearly indicates that transactional leadership is highly correlated with employee performance as above table of correlation analysis shows that transactional leadership is positively connected with employee performance and in regression analysis value of t is also greater than 2 (i.e. 3.121) it is lump sum that

Transactional leadership is positively associated with employee performance (H1- Accepted)

H2: transformational leadership is associated with employee performance

The result clearly indicates that transformational leadership is correlated with employee performance but less than transactional leadership

Above table of correlation analysis shows that transformational leadership is weakly connected with employee performance but in regression analysis value of t is greater than 2 (i.e. 2.039) it is lump sum that

Transformational leadership is positively but weakly associated with employee performance (H2- Accepted)

H3a: Job satisfaction is mediating between transactional leadership and employee performance.

The result shows that Job satisfaction is not creating a role of mediating variable between transactional leadership and employee performance because by controlling job satisfaction value of t become greater than 2 which indicates that job satisfaction is not a cause of employee performance if transformational leadership is adopted. (H3a-Rejected)

H3b: Job satisfaction is mediating between transformational leadership and employee performance.

The result shows that Job satisfaction is playing a role of mediating variable between transformational leadership and employee performance because by controlling job satisfaction value of t become less than 2 and job satisfaction is mediator between transformational leadership and employee performance. (H4-Accepted)

V. DISCUSSION

This study was based to determine whether which leadership style i.e. Transactional or Transformational leadership style can increase the performance of Employees of private school (educators) working in Pakistan. The results indicate that hypothesis1 (H1) has strongly positive relationship with Employee performance with .27** The level of significance of transformational was positive but weak i.e. .18* then transactional leadership with respects to employee performance, in our Pakistani culture where power distance and uncertainty is high, transactional leadership is more suited in order to achieve targets, in a bureaucratic nation where one man show rules and autocratic leadership follows through out the whole history, Ahmed (1996) also indicated that Pakistan is bureaucratic state where command and control rules ,so employees are also habitual of transactional leadership style and they assume themselves that their leader will be strict and follows rules and regulation so most of the private organization prefers to motivate their employees by using Transactional rewards such as promotion, bonuses and punishments etc. Now with the passage of time, the trend is slowing changing and moving towards the transformational leadership style as above mentioned that .18* correlation exists between transformational leadership style and employees performance, but the performance level is low as compared to transactional leadership because employees are feel relaxed when they come to know that their leader will not be going to punish them.

However the third Hypothesis (H3a) is not accepted because there was no mediating role of Job satisfaction, this is due to organization's basic purpose is to achieve their targets without caring about the satisfaction of the employees. Results clearly indicating that employees are not satisfied with their jobs yet their productivity level is increased because of the fear that they will be punished if their tasks will not be completed. Or another reason is might be employees are hoping for promotions or bonuses

The hypothesis (H3b) indicates that job satisfaction is mediating between transformational leadership and employees performance as 0.73** is showing relationship between transformational leadership and job satisfaction. And if we excluded job satisfaction between them, value of t becomes decline to 2, that is the sign of importance of job satisfaction between transformational and employee performance. If we explained this results, it shows that employees are satisfied with transformational leader but they did not give high performance, this results showing that when employees feels that their leader is supportive and always encouraged them, employees take them light and in result productivity level is low.

Another important observation deducted from the result was the of R square value of transactional

leadership is showing 55%, which indicates that education sector (educators) we have selected for our research emphasize heavily on transactional leadership while only 34% rely on transformational leadership and just 12% are the other factors that create an impact on employees performance. These results also informed that employee performance is heavily relying on leadership and it can play a vital role in determining the performance of employees, so organization must carefully analyze, what kind of leadership they should adopt if they want to increase employee performance and the result suggests us organization must opt Transactional leadership style so that employee performance can be increased but some other practices should be introduced so that Job satisfaction also can be increased.

VI. IMPLICATIONS

This research is extremely important for managers of private school owners or institutions while monitoring or supervising the employees or subordinates because it may help them to understand and to implement a right leadership style to increase the performance of the followers. It is suggested that organization should implement the mix of both transactional and transformational leadership style according to the certain situation and nature of task assigned to employees. After analyzing the data, it is recommended that for routine task organization should adopt transactional style of leadership and transformational leadership style should be used when there is complexity in job and interrelated tasks. But in context of Pakistani culture, it is suggested for new entrants or running educational sector to put their major focus on transactional leadership in order to take high level of performance level from their employees.

VII. LIMITATION AND FUTURE RESEARCH

Beyond the distinctive condemnations of survey measures, there are several important limitations to the current study which illustrates that this research is not fully conclusive. First, current research only covers and focuses on private institutions or organizations although there are many Government organizations currently operating in Pakistan which may demonstrate different results due to difference in their environment. The dissimilarity between private and government owned organization may effect differently on leadership style and there may be some important variables missing which have positive impact on employee performance. So, while conducting a future research these aspects should be kept in mind by doing so this can give more valuable results. Secondly, since all samples included were collected by employees of private organization through questionnaires, there was no control over the consistency in the method employed for survey administration. There may be some reasons of

inconsistent data i.e. non-serious attitude of respondents, busyness with work or fear of information leakage leads to biasness, while filling the questionnaires. The lack of consistency or biases in sampling may have increased measurement error in data analysis.

Nevertheless, considering these limitations, the current study endow with some guidance to carry out future research in different directions for assessing or studying different leadership styles which will increase employee performance in an organization. Our investigation covers only two types of leadership styles i.e. transactional and transformational, researchers can also study other leadership styles like laissez-faire style, servant style and can find appropriate leadership style which plays an essential role for enhancing employee performance.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Afolabi, O., Obude, O., Okediji, A., & Ezeh, L. (2008). Influence of gender and leadership style on career commitment and job performance of subordinates. *Global Journal of Humanities*, 7(1&2), 1-8.
2. Ahmed, F. (1996). Ethnicity, Class and State in Pakistan. *Economic and Political Weekly*, 31(47), 3050-3053.
3. Ardichvili, A., & Kuchinke, K. P. (2002). Leadership styles and cultural values among managers and subordinates: a comparative study of four countries of the former Soviet Union, Germany, and the US. *Human Resource Development International*, 5(1), 99-117.
4. Avolio, B., Waldman, D., & Einstein, W. (1988). Transformational Leadership in a Management Game Simulation: Impacting the Bottom Line. *Group & Organization Management*, 13(1), 59-80.
5. Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441-462.
6. Bass, B. M. (2000). The Future of Leadership in Learning Organizations. *Journal of Leadership & Organizational Studies*, 7(3), 18-40.
7. Bass, B. M., Avolio, B. J., & Suny. (1993). Transformational Leadership and Organizational Culture. *Public Administration Quarterly*, 113-121.
8. Bass, B. M., Avolio, B. J., Jung, D. I., & Berson, Y. (2003). Predicting Unit Performance by Assessing Transformational and Transactional Leadership. *Journal of Applied Psychology*, 88(2), 207-
9. Bass, B. (1998). From transactional to transformational Leadership: Learning to share the vision. 19- 31.
10. Bass, B. (1999). Two Decades of Research and Development in Transformational Leadership. *European Journal of Work and Organizational Psychology*, 8 (1), 9-32.
11. Bass, B.M. (1990). Bass and Stogdill's handbook of leadership: Theory, research, and applications (3rd ed.). New York: Free Press.
12. Behery, M. (2008). Leadership behaviors that really count in an organization's performance in the Middle East. *Journal of Leadership Studies*, 2(2), 6-21.
13. Berson, Y., Shamir, B., Avolio, B., & Popper, M. (2001). The relationship between vision strength, leadership style, and context. *The Leadership Quarterly*, 12, 53-73.
14. Bogler, R. (2001). The Influence of Leadership Style on Teacher Job Satisfaction. *Educational Administration Quarterly*, 37(5), 662-683.
15. Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E., & Halpin, S. M. (2006). What types of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, 17, 288 - 307
16. Bushra, F., Usman, A., & Naveed, A. (2011). Effect of Transformational Leadership on Employees' Job Satisfaction and Organizational Commitment in Banking Sector of Lahore (Pakistan). *International Journal of Business and Social Science*, 2(18), 261-267.
17. Egan, R., Sarros, J., & Santora, J. (1995). Putting transactional and transformational leadership into practice. *Journal of leadership & organizational studies*, 2(3), 100-123.
18. Elenkov, D. S. (2002). Effects of leadership on organizational performance in Russian companies. *Journal of Business Research*, 55, 467 - 480.
19. Emery, C., College, E., Barker, K., & Fredonia, S. (2007). The effect of transactional and transformational leadership styles on the organizational commitment and job satisfaction of customer contact personnel. *Journal of Organizational Culture, Communications and Conflict*, 11(1), 77-90.
20. Franke, F., & Felfe, J. (2011). How does transformational leadership impact employees' psychological strain?: Examining differentiated effects and the moderating role of affective organizational commitment. *Leadership*, 7(3), 295-316.
21. Gadot, E. (2006). Leadership style, organizational politics, and employees' performance An empirical examination of two competing models, *Leadership style*, 36(5), 661-683.
22. Gadot, E. V. (2007). Leadership style, organizational politics, and employees' performance. *Leadership Style*, 36(5), 661-683.

23. Hambley, L., Neill, T., & Kline, T. (2007). Virtual team leadership: The effects of leadership style and communication medium on team interaction styles and outcomes. *Organizational Behavior and Human Decision Processes*, 103, 1-20.
24. Hofstede, G. (1980). *Motivation, Leadership, and Organization: Do American Theories Apply Abroad?*. *Organizational Dynamics*, 42-63.
25. Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. London: McGraw Hill, 1-29.
26. Hoogh, A. H., Hartog, D. N., & Koopman, p. L. (2005). Linking the Big Five-Factors of personality to charismatic and transactional leadership; perceived dynamic work environment as a moderator. *Journal of Organizational Behavior*, 26, 839-865.
27. Howell, J. M., & Merenda, K. E. (1999). The Ties That Bind: The Impact of Leader-Member Exchange, Transformational and Transactional Leadership, and Distance on Predicting Follower Performance. *Journal of Applied Psychology*, 84(5), 680-694.
28. Islam, N. (2004). Sifarish, sycophants, power and collectivism: administrative culture in Pakistan. *International Review of Administrative Sciences*, 70(2), 311-330.
29. Jaeger, A. (1986). Organization Development and National Culture: Where's the Fit?. *The Academy of Management Review*, 11(1), 178-190.
30. Jamaludin, Z. (2011). Do transactional, transformational and spiritual leadership styles distinct? A conceptual insight. *Journal of Global Business and Economics*, 2(1), 73-85.
31. Janssen, O., & Yperen, N. W. (2004). Employees' goal orientations, the quality of Leader-member exchange, and the outcomes of job Performance and job satisfaction. *Academy of Management Journal*, 47(3), 368-384.
32. Jung, D. I. (2000-2001). Transformational and Transactional Leadership and their Effects on Creativity in Groups. *Creativity Research Journal*, 13(2), 185-195.
33. Kuchinke, K. P. (1999). Leadership and culture: Work-related values and leadership styles among~~one company's U.S. and German telecommunication employees. *Human Resource Development Quarterly*, 10(2).
34. Kuhnert, K. W., & Lewis, P. (1987). Transactional and Transformational Leadership: A Constructive/ Developmental Analysis. *Academy of Management Review*, 12(4), 648-657.
35. Lian, H., Brown, D., Tanzer, N., & Che, H. (2011). Distal charismatic leadership and follower effects: An examination of Conger and Kanungo's conceptualization of charisma in China. *Leadership*, 7(3), 251-273.
36. Lievens, F., Geit, P., & Coetsier, P. (1997). Identification of transformational leadership qualities: An examination of potential biases. *European Journal of Work and Organizational Psychology*, 6 (4), 415-430.
37. Lok, P., & Crawford, J. (1999). The relationship between commitment and organizational culture, subculture, leadership style and job satisfaction in organizational change and development. *Leadership & Organization Development Journal*, 20(7), 365-373.
38. Lo, M. C., Ramayah, T., & Min, H. W. (2009). Leadership styles and organizational commitment: a test on Malaysia manufacturing industry. *African Journal of Marketing Management*, 1(6), 133-139.
39. Masi, R., & Cooke, R. (2000). Effects of transformational leadership on subordinate motivation, empowering norms, and organizational productivity. *The international Journal of Organizational Analysis*, 8(1), 16-47.
40. Mintzberg, H. (2010). Shifting the trajectory of civilization. *Oxford Leadership Journal*, 1(2).
41. Metcalfe, B., & Metcalfe, J. (2005). Leadership: Time for a New Direction?. *Leadership*, 1(1), 51-71.
42. Moyes, G. (2007). Determinants of Job Satisfaction and retention of Mexican-American accounting professionals. *Journal of Business & Economics Research*, 5(5), 77-88.
43. Mulla, Z., & Krishnan, V. (2011). Transformational Leadership: Do the Leader's Morals Matter and Do the Follower's Morals Change?. *Journal of Human Values*, 17(2), 129-143.
44. Munaf, S. (2011). Relationship of Transformational, Transactional and Passive/Avoidant Management Style with Achievement Motivation of Teaching Faculties of Selected Educational Institutions of Pakistan. *International Conference on E-business, Management and Economics*, 3, 93-96.
45. Ostroff, C. (1992) the relationship between satisfaction, attitudes, and performance: An organizational Level Analysis. *Journal of Applied Psychology*, 77(6), 963-974.
46. Ozaralli, N. (2002). Effects of transformational leadership on empowerment and team effectiveness. *Leadership and organization development Journal*, 24(6), 335-344.
47. Parry, K. W., & Thomson, S. P. (2002). Perceived Integrity of Transformational Leaders in Organizational Settings. *Journal of Business Ethics*, 35, 75-96.
48. Raelin, J. (2011). From leadership-as-practice to leaderful practice. *Leadership*, 7(2), 195-211.
49. Raja, A., & Palanichamy, P. (2011). leadership styles and its impact on organizational commitment. *The Journal of Commerce*, 3(4), 15-23.

50. Rejas, L. P., Ponce, E. R., Almonte, M. D., & Ponce, J. R. (2006). Transformational and transactional leadership: A study of their influence in small companies. 14(2), 159-166.
51. Riaz, A., & Haider, M. (2010). Role of transformational and transactional leadership on job satisfaction and career satisfaction. Business and Economic Horizons, 1(1), 29-38.
52. Routamaa, V., & Hautala, T. (2008). Understanding Cultural Differences the Values in a Cross- Cultural Context. International Review of Business Research Papers, 4(5), 129-137.
53. Rowold, J., & Schlotz, W. (2009). Transformational and Transactional Leadership and Followers' Chronic Stress. Leadership Review, 9, 35-48.
54. Somech, A., & Wenderow, M. (2006). The Impact of Participative and Directive Leadership on Teachers' Performance: The Intervening Effects of Job Structuring, Decision Domain, and Leader-Member Exchange. Educational Administration Quarterly, 42(5), 746-772.
55. Zafra, E., Retamero, R., & Landa, J. (2008). The role of transformational leadership, emotional intelligence, and group cohesiveness on leadership emergence. Journal of Leadership Studies, 2(3), 37-49. 135-154.





GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Financial Analysis of Energy Producing Companies in Pakistan (2001-2010)

By Yasir Hassan, Kashif-ud-Din, Ali Ashfaq, Zouraiz Akhtar, Adeel Shafique,
Usman Ali, Iqra Habib, Aatka Zafar, Faiza Ahmed & Javaid Khan

University of Lahore, Pakistan

Abstract - This research study analyzes the performance of one of the most important industrial sector of Pakistan's economy i.e. energy producing companies including oil, gas, coal and electricity. The study portrays the financial data of the energy producing companies in Pakistan over the last decade. As the energy sector is one of the most significant sector of a country especially the oil prices which are determinant of worldwide currency prices, so this study is worthy in respect to many issues. The analysis of these companies will also highlight the economy of Pakistan. It shows how profit after tax of a company will change if bank charges. Owners' equity, total assets, paid up capital and value of shares changes. On the other hand we determine how sales relate to paid up capital, no of shares, total assets and bank/financial charges.

Keywords : Million tons of oil equivalent (MTOE), hydropower, commercial energy.

GJMBR-A Classification : FOR Code: 150202 JEL Code: O12, G17, G30



Strictly as per the compliance and regulations of:



Financial Analysis of Energy Producing Companies in Pakistan (2001-2010)

Yasir Hassan^a, Kashif-ud-Din^σ, Ali Ashfaq^p, Zouraz Akhtar^p, Adeel Shafique^p, Usman Ali^p, Iqra Habib^p, Aatka Zafar^p, Faiza Ahmed^p & Javaid Khan^p

Abstract - This research study analyzes the performance of one of the most important industrial sector of Pakistan's economy i.e. energy producing companies including oil, gas, coal and electricity. The study portrays the financial data of the energy producing companies in Pakistan over the last decade. As the energy sector is one of the most significant sector of a country especially the oil prices which are determinant of worldwide currency prices, so this study is worthy in respect to many issues. The analysis of these companies will also highlight the economy of Pakistan. It shows how profit after tax of a company will change if bank charges. Owners' equity, total assets, paid up capital and value of shares changes. On the other hand we determine how sales relate to paid up capital, no of shares, total assets and bank/financial charges.

Keywords : Million tons of oil equivalent (MTOE), hydropower, commercial energy.

1. INTRODUCTION

There are many different ways in which the abundance of energy around us can be stored, converted, and amplified for our use. Energy is basically derived from petrol, gas, and coal which are fossil fuels. Another major form is energy is electricity which is produces using above energy resources.

a) Fossil Fuels

Fossil fuels come from fossils which are the remains of organisms that lived million of years ago. As mentioned before that fossil fuel consists of coal, crude oil and gas.

b) Renewable Energy

Renewable energy is derived directly from sunlight, wind, tides, and geothermal heat. These energy resources will not run out in long term. They are hence known as renewable energy resources.

The main forms of renewable energy are given below:

- Solar energy
- Hydropower
- Biofuel
- Biomass
- Wind power
- Geothermal energy

Author ^a : Lecturer: Lahore Business School, the University of Lahore, Pakistan. E-mail : Yasir.uol@hotmail.com

Author ^σ : Dean: Lahore Business School, the University of Lahore, Pakistan.

Author ^p : Students: Lahore Business School, the University of Lahore, Pakistan.

c) Organizations involved in Energy Sector of Pakistan

i. Oil

The oil sector is regulated by Pakistan's Ministry of Petroleum and Natural Resources. There are 3 large national oil companies (NOCs):

- Oil and Gas Development Corporation limited (OGDCL)
- Pakistan Petroleum Limited (PPL)
- Pakistan State Oil (PSO)

The international oil companies (IOCs) in Pakistan are:

- BP (UK)
- Eni (Italy)
- OMV (Australia)
- Orient Petroleum Inc (INC Canada)
- Petronas (Malaysia)
- Tullow (Ireland)

The Pakistan state oil company has 3800 retail outlets across the country, as do many major international oil companies, such as shell.

ii. Gas

The two largest gas producers in the country are

- PPL
- OGDCL

The largest gas producing international company is OMV.

iii. Electricity

Electric power in Pakistan comes from a variety of sources; thermal, hydro-electricity and nuclear. The two main companies generating electricity in Pakistan are

- Water and Power Development Authority (WAPDA)
- Karachi Electricity Supply Corporation (KESC).

WAPDA supplies electric power to all of Pakistan except for Karachi, which is supplied by KESC. More than two-thirds of the electricity generated comes from thermal stations powered by oil, natural gas and coal. In recent years, an increase in thermal power generation has come from new independent power producers (IPPs), some of which have been funded by foreign investors; fifteen IPPs currently operate in Pakistan.

II. LITERATURE REVIEW

a) *Conventional Energy Resources*

i. *Oil*

Oil accounts for 40% of Pakistan's commercial energy use. The country imports almost 90% of its oil requirements, and despite domestic oil production having increased four-fold, roughly three-quarters of Pakistan's oil requirement is still imported. This dependence on imports left Pakistan extremely vulnerable during the Gulf crisis; before August 1990, more than half of the country's imported oil came from Kuwait.

Since the mid-1970s, the government has encouraged the development of oil and gas reserves through its pricing policy, which raised local crude prices above international prices effective in early 1987, and by allowing joint exploratory efforts under production-sharing agreements between the government and private companies. Thirteen private-sector oil companies and the state-owned Oil and Gas Development Corporation (OGDC) are engaged in oil exploration and development in Pakistan (Economic Survey, 1988-89) [1], and most of the crude produced in Pakistan now comes from fields operated by foreign firms. Considerable reserves have been found. The prospects for future discoveries remain reasonably good since more than 85% of the country has sedimentary rocks, and off-shore geological conditions in the Indus Basin are similar to those of the Bombay High where India produces most of its oil and gas.

Bureaucratic, technical, and geological problems have impeded rapid progress. The bureaucracy has been slow in processing applications for concessions, emigration of technical personnel limits the human capital available to the OGDC (Abu Mohammad IzharulHaque)[2], investment in oil exploration carries a high risk and is very capital-intensive, and the paucity of foreign exchange reserves to finance the import of drilling equipment contributes to the difficulty of searching for oil in Pakistan's rugged terrain.

There are three oil refineries in Pakistan, two near Karachi and one in the north at Attock that is designed to process the heavy crude produced locally. The quantity of oil recently produced in the south exceeds the amount that can be handled at the Karachi refineries, which were designed for lighter imported crude, and an inadequate transportation infrastructure makes it impossible to ship the surplus local crude to Attock for refining. Hence, because of its limited refining capacity and inadequate infrastructure, Pakistan, an importer of large quantities of oil, has to rely on exporting to balance oil production with refinery capacity.

Of the oil consumed in Pakistan, 60% is used by the transportation sector where the substitution of other

fuels is not economically feasible. The agricultural sector, in contrast, responded to the oil crisis of the late 1970s by substituting electricity for oil on a large scale. Oil's share in total residential energy use has fallen in the past two decades because of increased rural electrification and the substitution of wood, biogas, and other noncommercial and nontraditional energy sources for expensive kerosene oil. The industrial use of oil has increased steadily and 14% of the total energy consumption by industry comes from oil.

ii. *Natural gas*

Pakistan produces all of its natural gas supplies domestically. The large Sui natural gas field was discovered in Baluchistan shortly after independence, additional fields have continued to be found, and associated natural gas is often recovered from crude oil production.

Policies affecting natural gas development and consumption took several swings. The wellhead price for producers was kept low in the 1970s, providing little incentive for new exploration. The price of natural gas to consumers was significantly below the rising price of fuel oil, causing a rapid rise in natural gas utilization. In the early 1980s, the government responded to natural gas shortages by restricting its use in power plants and industries such as cement where furnace oil could be used. To encourage more natural gas production, the government has agreed to increase the price it pays to producing companies, and clear formulas for the pricing of gases associated with oil extraction have reduced the time lost in lengthy rate negotiations. Prices of associated gases are increased when international oil prices decrease and decreased when oil prices increase, thus guaranteeing profits to companies producing crude oil along with associated gases. Consumer prices for natural gas are being increased gradually and are likely to reach parity with petroleum product substitutes.

iii. *Coal*

Pakistan is endowed with an abundance of coal, but the sector is plagued by a number of production problems. As a result, coal has met less than 10% of the country's total energy requirements during the past two to three decades. Most coal is produced in Baluchistan, the sole coal-based power plant is located in Quetta and Sindh where its contribution to employment is as important as its energy contribution (Charles K. Ebinger) [3].

The coal industry also exhibits a fragmented institutional structure. Most of the mines are small and privately owned, and the mine owners often do not have adequate capital, machinery, or technical personnel to increase production. In addition, coal is distributed mainly by rail, which limits the locations that can be served.

Efforts are being made to expand the production of coal because of its abundance and potential to reduce reliance on more scarce resources. The Pakistan Mineral Development Corporation (PMDC) is contemplating a plant to mold smokeless coal briquettes to replace kerosene as fuel for domestic heating, and plans are underway to set up three new coal-based power plants, two in Baluchistan and one in Punjab.

iv. *Hydro, thermal, and nuclear*

Over one-half of the electric power generated in Pakistan comes from hydroelectric plants. The remainder is provided by thermal power plants, except for the 2% provided by the Karachi Nuclear Power Plant (KANUPP). There has been much bureaucratic controversy over the generating facilities to be constructed in the future. First, many existing plants are operating well below capacity, raising the question of whether attention should be focused on improving the efficiency of power production rather than on new construction. In the long run it is risky to depend on large future discoveries of oil and natural gas, and while there is much potential for increasing hydroelectric capacity, this avenue leads to environmental and water-distribution problems. The controversy over the advantages and disadvantages of nuclear power development parallels that in many other countries. Large gains could be realized by redirecting efforts toward improving power transmission and distribution facilities and reducing corruption.

Transmission and distribution losses are at least 20%, and bribes are offered and accepted in exchange for the reduction of electricity charges (Economic Survey, 1989-90) [4]. A large amount of power is lost due to the low voltage capacity of distribution lines as well as to theft and inefficient metering. Difficulties in policy planning are compounded by the rapid growth of electricity demand. Official reports indicate demand is growing at 11% annually, but it may be up to twice this rate (Majid Sheikh, 1989)[5]. Droughts, large seasonal fluctuations in the flows of rivers, and the priority given to irrigation make hydroelectric power generation unreliable, and hydroelectric installations must be backed up with thermal or nuclear capacity. The high siltation rates of the Indus and its major tributaries, largely caused by deforestation, present another problem. There are many sites in the mountainous north with hydroelectric potential that have not been exploited because of their remote location and the cost of transmission to the south.

Shortages of electricity that result from transmission losses, growth in demand, and weather conditions are threatening Pakistan's development. The Water and Power Development Authority (WAPDA) adopted a policy of load-shedding to handle the shortages in 1983 and this is likely to continue to the end of the century (Majid Sheikh, 1989) [6], even though

unprecedented load-shedding in 1989 caused large production losses. Some large firms have started using their own generators. Rural electrification has progressed. Over half of Pakistan's villages had been electrified by June 1987: 49% in Punjab, 82% in the North-West Frontier Province (NWFP) and the Federally Administered Tribal Areas, 86% in Sindh, and 23% in Baluchistan. These numbers can be deceiving, however, since on average, only one-quarter of the population in Pakistan's electrified villages has access to electricity (Asit K. Biswas, 1987-88) [7].

III. ALTERNATIVE AND TRADITIONAL ENERGY RESOURCES

Alternative resources have the potential to improve energy availability in isolated areas and to offset the pressures on nonrenewable resources. Noncommercial resources account for more than half of Pakistan's total energy consumption and in rural areas this share is much higher (Charles K. Ebinger, 1981) [8]. The traditional, noncommercial resources used in Pakistan are predominantly biofuels, that is, fuelwood and animal and vegetable waste. Alternative ways of providing energy include biogas plants, small hydroelectric facilities, and solar- and wind-powered units.

a) *Fuelwood*

In spite of Pakistan's limited forest resources, wood provides an important source of energy, particularly in rural areas where four-fifths of all households use fuelwood for cooking. Wood is also vital for domestic heating in certain areas. Population pressures, expansion of cultivation, and overgrazing have caused much deforestation, affecting those who rely on wood for energy. River siltation results from deforestation and reduces the useful life span of hydroelectric and irrigation projects. Wood is primarily a noncommercial fuel source but it is sold on the market with increasing frequency (Biswas, 1987) [9].

b) *Biogas*

Animal, human, and vegetable waste can be converted into biogas to provide both a decentralized electricity source and a fuel for cooking, heating, and lighting. Animal waste is already in wide use in the rural areas of Pakistan. As oil prices rose, there was an abrupt shift toward use of dung instead of kerosene for cooking fuel. The increasing scarcity of wood is also leading farmers to use more dung for fuel, which reduces fertilizer supplies and lowers crop yields (Charles K. Ebinger, 1981)[10]. The government has been helping villagers utilize dung more efficiently since 1974 by constructing family and community biogas plants, and over 4,000 biogas units have been installed [11]. The largest, which is operating at Hillock near Lahore, was set up as a joint venture between a private firm and the Appropriate Technology Development

Corporation, an auxiliary of the Ministry of Science and Technology. This unit was expected to generate 10 kilowatts of power to run tube wells and provide 900 kilograms of fertilizer daily.

Biogas has considerable potential for use in cooking, heating, lighting, and operating irrigation pumps, allowing savings in other energy sources. It is cleaner and more healthful for cooking than dung cakes, and the energy yield from biogas is greater than that obtained from burning the original dung (Wallace E. Tyner, 1978) [12]

Further, the fertilizer value is not lost when dung is converted to biogas as biogas plants can produce both fuel and fertilizer supplies. One study suggests that the initial investment for a family biogas plant can be recovered in three to four years (M. M. Qurashi, 1984) [13].

c) *Small hydroelectric projects*

Small hydroelectric plants for local power production are an attractive alternative method of producing energy because they utilize a renewable resource and the technology involved is well proven and simple enough to allow use of domestic inputs and local participation in the construction process (Mark Gellerson, 1985) [14].

Further, such units are workable where streams provide hydroelectric potential in remote hilly areas not easily reached by the national electricity grid.

d) *Solar and wind energy*

The potential advantages of solar energy deserve close attention as solar systems may be viable for use at household and community levels in areas not reached by transmission lines. The solar cell method is not practical for Pakistan due to its cost and other factors, but solar collectors could be used economically for crop drying, room heating and cooling, and water heating, distillation, and pumping. A recent report said that 18 solar village electrification systems have been installed [15]. Harnessing wind energy is a realistic possibility for raising underground well water and for small-scale irrigation projects in some regions, especially near the coast; overall wind velocity is not adequate to produce substantial quantities of electric power. The greatest problem with wind energy is storage. Using it for work that has an inherent storage capability such as water pumping, water heating, and refrigeration is one solution, and WAPDA has experimented with windmill irrigation pumps [16].

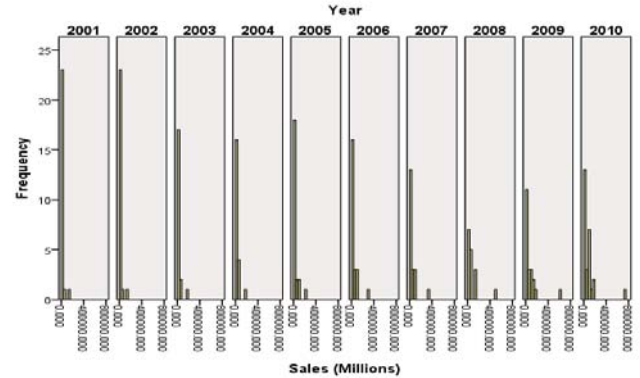
IV. METHODOLOGY

To determine the progress of fuel and energy sector of Pakistan, we have taken some financial data of different companies related to this sector. Sales and Profit before tax are taken as dependent variables while paid up capital, total assets, no of shares, equity and

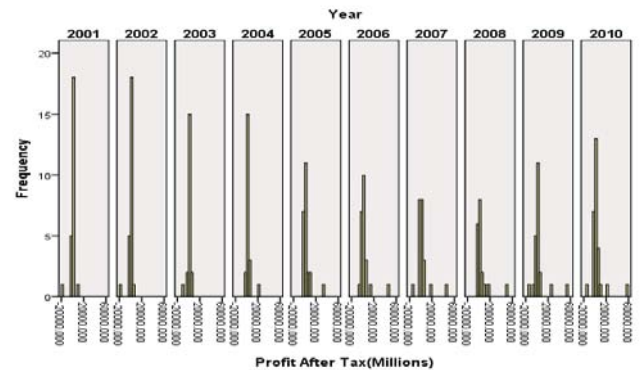
bank/financial charges are taken as explanatory variables. We have used the ANOVA test to compare the means of different variable from 2001-2010. We have used multiple regression to predict sales and profit before tax (both are dependent variables), that are depending on the explanatory variables mentioned above.

a) *Empirical results*

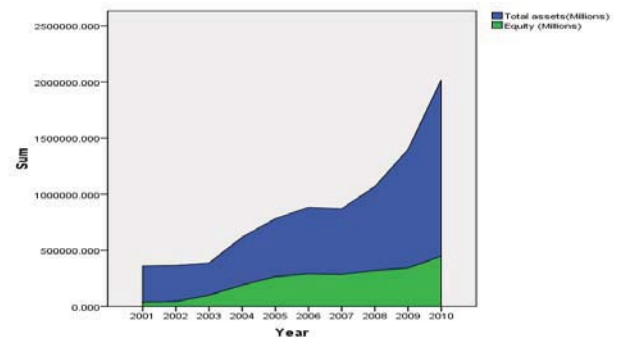
Histogram is used to determine the progress of variables as the time passes, histogram of sales and profit after tax is shown in the histograms below.



The sales is showing a decreasing trend initially as shown in the histogram, but after decreasing up to year 2007, its starts increasing again and increases till end.

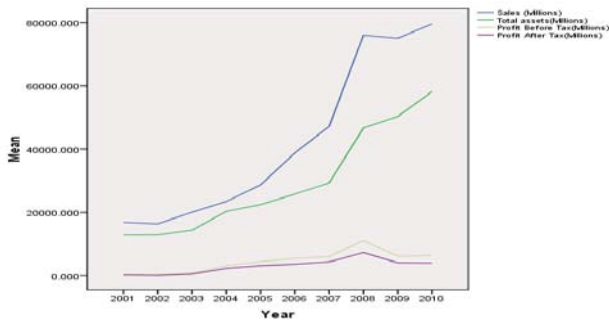


The histogram shows that the profit after tax decreasing in the first seven years, but after then it increases up to year 2010.



The area graph shows that equity starts increasing from year 2001 and it is continuously

increasing till 2010, total assets also shows the same trend as we can see that's it is much higher in 2010 as compared to other years.



The line chart is showing that sales mean value in 2001 is almost near 19000 and it kept on increasing and goes over 80000 in 2010. Total assets also increases but its mean values are comparatively lesser than that of sales. The lines representing profit before and after tax have shown the same trend also.

	Years	Means	S.D	C.V
Paid up capital (Rs. In millions)	2001	199.541	229.5886	115.0584
	2002	2269.454	4999.429	220.2921
	2003	3139.308	7129.381	227.1004
	2004	5380.165	11074.36	205.8368
	2005	5739.333	12376.75	215.6479
	2006	6014.727	12584.13	209.222
	2007	5935.482	12314.59	207.4741
	2008	4852.745	9594.009	197.7027
	2009	6298.925	12513.77	198.6652
	2010	6741.848	15699.31	232.8636
No of shares	2001			
	2002	226.9454	499.9428	220.2921
	2003	599.9404	1951.894	325.348
	2004	810.4065	2058.8	254.0453
	2005	930.5415	2754.364	295.9958
	2006	933.0196	2753.663	295.1345
	2007	950.1564	2748.922	289.3126
	2008	421.9778	907.1151	214.9675
	2009	921.8451	2696.18	292.4765
	2010	1131.015	3985.444	352.3776
Equity (Rs. In millions)	2001	1569.909	10070.4	641.4636
	2002	1768.713	10024.05	566.7425
	2003	5002.253	7164.081	143.2171
	2004	9135.866	16017.43	175.3247
	2005	11574.01	18887.43	163.1883
	2006	12622.74	20805.14	164.8226
	2007	14244.47	23191.57	162.811
	2008	20119.15	27032.8	134.3635
	2009	16306.56	29580.83	181.4044
	2010	16602.8	32962.51	198.5358

Total Assets (Rs. In millions)	2001	12873.09	19561.61	151.9574
	2002	12908.19	19363.79	150.0117
	2003	14370.91	20336.84	141.5139
	2004	20351.61	26813.72	131.7523
	2005	22475.85	29306.51	130.3911
	2006	25812.09	32442.42	125.6869
	2007	29314.94	35433.13	120.8705
	2008	46748.41	46632.46	99.75197
	2009	50360.04	57466.19	114.1107
	2010	58210.88	68594.28	117.8376
Sales (Rs. In millions)	2001	16890.58	31319.04	185.4231
	2002	16414.84	29774.89	181.3901
	2003	20063.86	41286.66	205.7763
	2004	23462.07	39841.18	169.811
	2005	28698.97	49714.76	173.2283
	2006	38823.3	67271.84	173.277
	2007	47243.11	81245.48	171.9732
	2008	76037.48	121580.6	159.8956
	2009	75080.06	135200	180.0745
	2010	79600.35	144680	181.758
Profit before tax (Rs. In millions)	2001	388.3318	4148.986	1068.413
	2002	310.0959	4171.497	1345.228
	2003	842.9967	2905.449	344.6573
	2004	3118.196	6758.235	216.7355
	2005	4444.71	10380.9	233.5564
	2006	5423.367	14248.87	262.7311
	2007	4947.431	14036.5	283.713
	2008	8943.367	19256.45	215.3155
	2009	5854.921	19645.67	335.5411
	2010	6146.035	18084.78	294.2511
Profit after tax (Rs.in millions)	2001	182.9786	4086.55	2233.348
	2002	72.33056	4062.43	5616.479
	2003	534.5539	2634.107	492.7673
	2004	2323.374	4987.239	214.655
	2005	3155.75	7033.52	222.8795
	2006	3634.104	9995.687	275.0523
	2007	3409.206	10604.81	311.0638
	2008	5821.579	11611.66	199.4589
	2009	3884.751	13637.62	351.0551
	2010	3843.664	12332.18	320.8444

Coefficient of variance of all the variables shows that they were most consistent in 2008 except for paid up capital, which is most consistent in 2001.

	ANOVA					Sig.
		Sum of Squares	df	Mean Square	F	
Sales (Millions)	Between Groups	133447999501.17	9.00	14827555500.13	2.06	0.035
	Within Groups	1519851309799.99	211.00	7203086776.30		
	Total	1653299309301.16	220.00			
Paid up capital(Millions)	Between Groups	990490149.72	9.00	110054461.08	0.93	0.499
	Within Groups	26363365420.21	223.00	118221369.60		
	Total	27353855569.93	232.00			
No of shares(Millions)	Between Groups	17139575.65	8.00	2142446.96	0.33	0.592
	Within Groups	1323165558.39	206.00	6423133.78		
	Total	1340305134.04	214.00			
Total assets(Millions)	Between Groups	57698293361.46	9.00	6410921484.61	4.13	0.000
	Within Groups	327325998939.48	211.00	1551308051.85		
	Total	385024292300.94	220.00			
Equity (Millions)	Between Groups	8147445787.67	9.00	905271754.19	2.01	0.040
	Within Groups	95253658594.21	211.00	451439140.26		
	Total	103401104381.89	220.00			
Bank/financial charges(Millions)	Between Groups	160384360.37	9.00	17820484.49	1.20	0.296
	Within Groups	3130518705.49	211.00	14836581.54		
	Total	3290903065.86	220.00			
Profit Before Tax(Millions)	Between Groups	1646429808.86	9.00	182936645.43	1.09	0.373
	Within Groups	36860590875.84	219.00	168313200.35		
	Total	38507020684.69	228.00			
Profit After Tax(Millions)	Between Groups	725459851.81	9.00	80606650.20	1.00	0.441
	Within Groups	17648000465.77	219.00	80584477.01		
	Total	18373460317.58	228.00			

b) Sales

$H_0: \mu_{2001} = \mu_{2002} = \mu_{2003} = \mu_{2004} = \mu_{2005} = \mu_{2006} = \mu_{2007} = \mu_{2008} = \mu_{2009}$

H_1 : At least one mean is significantly different

before tax and profit after tax, they all are greater than 0.05 that is why we accept null hypothesis i.e. all the means are significantly different.

c) Profit after Tax

$H_0: \mu_{2001} = \mu_{2002} = \mu_{2003} = \mu_{2004} = \mu_{2005} = \mu_{2006} = \mu_{2007} = \mu_{2008} = \mu_{2009}$

H_1 : At least Two means are significantly different

The values of sales, total assets and equity are less than 0.05 that is why we rejected our null hypothesis and accept alternative, which is at least one mean is significantly different for these variables.

The other variables that includes paid up capital, number of share bank/financial charges, profit

ANOVA^d

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17327521771.792	6	2887920295.299	3109.467	.000 ^a
	Residual	175533914.877	189	928750.872		
	Total	17503055686.669	195			
2	Regression	17327394896.236	5	3465478979.247	3748.366	.000 ^b
	Residual	175660790.432	190	924530.476		
	Total	17503055686.669	195			
3	Regression	17326731000.638	4	4331682750.160	4692.204	.000 ^c
	Residual	176324686.030	191	923165.895		
	Total	17503055686.669	195			

a. Predictors: (Constant), Profit Before Tax(Millions), Bank/financial charges(Millions), Sales (Millions), No of shares(Millions), Total assets(Millions), Paid up capital(Millions)

b. Predictors: (Constant), Profit Before Tax(Millions), Bank/financial charges(Millions), Sales (Millions), No of shares(Millions), Paid up capital(Millions)

c. Predictors: (Constant), Profit Before Tax(Millions), Sales (Millions), No of shares(Millions), Paid up capital(Millions)

d. Dependent Variable: Profit After Tax(Millions)

Profit after Tax = $b_0 + b_1$ Bank / Financial Charges + B_2 Equity + B_3 Sales + B_4 Total Asset + B_5 Paid-Up Capital + B_6 No. Of Share that include bank/financial charges, equity, sales, total assets, paid up capital and no of shares.

Profit after tax is considered as dependent variable while all the others are independent variables

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1326.164	4511.995		-.294	.769
	Paid up capital(Millions)	-7.789	.893	-.967	-8.727	.000
	No of shares(Millions)	10.509	3.597	.284	2.922	.004
	Total assets(Millions)	2.439	.126	1.166	19.426	.000
	Bank/financial charges(Millions)	2.439	1.024	.109	2.381	.018

a. Dependent Variable: Sales (Millions)

Profit after tax is dependent while paid up capital, no of shares, sales, profit before tax, total assets, and bank/financial charge are explanatory variables. By using backward method we have found out that profit can be best explained using paid up capital, no of shares, sales and profit before tax.

We can rewrite the model as

Profit after tax (PAT) = $b_0 + b_1$ (paid up capital) + b_2 (no of shares) + b_3 (sales) + b_4 (Profit before tax)

Profit after tax (PAT) = 106.838 + 0.043 (paid up capital) + -0.346(no of shares) + -0.02(sales) + 0.674(Profit before tax)

Model shows that paid up capital and profit before tax have positive impact on profit after tax, while no of shares and sales have negative impact.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-1326.164	4511.995		-.294	.769
Paid up capital(Millions)	-7.789	.893	-.967	-8.727	.000
No of shares(Millions)	10.509	3.597	.284	2.922	.004
Total assets(Millions)	2.439	.126	1.166	19.426	.000
Bank/financial charges(Millions)	2.439	1.024	.109	2.381	.018

a. Dependent Variable: Sales (Millions)

Here sales is dependent variable while paid up capital, no of shares, total assets, bank/financial charges are explanatory variables. We have used the backward method and it's clear that all the variables have some impact on sales.

Sales = $b_0 + b_1(\text{paid up capital}) + b_2(\text{no of shares}) + b_3(\text{total assets}) + b_4(\text{bank/financial charges})$
 Sales = $-1326.164 + -7.789(\text{paid up capital}) + 10.509(\text{no of shares}) + 2.439(\text{total assets}) + 2.439(\text{bank/financial charges})$

IV. CONCLUSION

The results overviews the Profit of a company directly depends on paid up capital. There exist an inverse relation between no. of shares, sales and profit after tax. Sales have positive relation with total assets and bank financial charges. Number of shares significantly relate to sales. While paid up capital has ordinary impact on sales.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Economic Adviser's Wing, Ministry of Finance, Economic Survey 1988-89 (Islamabad: Government of Pakistan, 1989), p. 45.
2. Abu Mohammad IzharulHaque, "Energy Planning in Pakistan: Problems and Prospects," in United Nations, Energy Planning in Developing Countries (New York: Oxford University Press, 1984), p. 262.
3. Charles K. Ebinger, Pakistan: Energy Planning in a Strategic Vortex (Bloomington: Indiana University Press, 1981), p. 18.
4. Economic Survey 1989-90, p. 85, and Emma Duncan, Breaking the Curfew: A Political Journey through Pakistan (London: Penguin Group, 1989), p. 42.
5. Majid Sheikh, "Demand and Power Supply," Pakistan and Gulf Economist, June 3-9, 1989, p. 12.
6. Ibid. Economic Survey 1987-88, p. 137; Asit K. Biswas, "Environmental Concerns in Pakistan, with Special Reference to Water and Forests,"

Environmental Conservation 14:4 (Winter 1987), p. 324.

7. Ebinger, Energy Planning in Strategic Vortex, p. 125.
8. Biswas, "Environmental Concerns," pp. 324-25.
9. Ebinger, Energy Planning in Strategic Vortex, p. 125.
10. Biswas, "Environmental Concerns," pp. 324-25.
11. Wallace E. Tyner, Energy Resources and Economic Development in India (Leiden, Netherlands: Martinus Nijhoff, 1978), pp. 120-21.
12. M. M. Qurashi, "Renewable Sources of Energy in Pakistan," The Pakistan Development Review 23:2 and 3 (Summer-Autumn 1984), p. 465.
13. Mark Gellerson, "The Economics of Small Hydro Power," Pakistan Economic and Social Review 23:1 (Summer 1985), p. 26.
14. Rafique Akhtar, Pakistan Year Book, 17th ed., 1989-90 (Karachi: East and West Publishing Company, 1989), p. 667. 23.
15. Qurashi, "Renewable Sources," p. 469.



This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

An Experimental Use of Delphi Method for Understanding Chemists' Opinions Related To Medications for Swine Flu

By Dr. Harishchandra Singh Rathod & Dr. Mamta Brahmabhatt

Gujarat Technological University

Abstract - This paper critically evaluates the Delphi Technique as a qualitative research tool and its application in an unexplored topic. The aim to select the Delphi Technique as a research tool is because of its limited use in Indian research methodologies. Researchers aimed to explore this technique and critically evaluate it because of its accuracy of getting results for the desired problems. In order to critically evaluate, assess and implement Delphi technique, researchers had undertaken an experimental study in 2010 during the outbreak of Swine Flu in India. Study was conducted in Gujarat, a coastal state situated in western India.

The paper states that Delphi method recognizes human judgment as a legitimate and useful input in generating forecasts and therefore highlights that the use of experts, carefully selected, can lead to reliable and valid results. In addition, the research paper tries to overcome the weaknesses implicit in other methods such as relying on a single expert, a group average, or a round table discussion. This study will help future researchers apply the qualitative research tools in practical life and understand how useful and feasible they are in solving the issues. By using this technique, researchers could get valuable insights on what actually is the process of acquiring the license for swine flu medications and business implications for companies engaged in manufacturing of these medicines.

Keywords : Chemists, Delphi, Expert Panel, License, Swine Flu, Tamiflu.

GJMBR-A Classification : FOR Code: 150202 JEL Code: O12, G17, G30



Strictly as per the compliance and regulations of:



An Experimental Use of Delphi Method for Understanding Chemists' Opinions Related To Medications for Swine Flu

Dr. Harishchandra Singh Rathod^a & Dr. Mamta Brahmabhatt^c

Abstract - This paper critically evaluates the Delphi Technique as a qualitative research tool and its application in an unexplored topic. The aim to select the Delphi Technique as a research tool is because of its limited use in Indian research methodologies. Researchers aimed to explore this technique and critically evaluate it because of its accuracy of getting results for the desired problems. In order to critically evaluate, assess and implement Delphi technique, researchers had undertaken an experimental study in 2010 during the outbreak of Swine Flu in India. Study was conducted in Gujarat, a coastal state situated in western India.

The paper states that Delphi method recognizes human judgment as a legitimate and useful input in generating forecasts and therefore highlights that the use of experts, carefully selected, can lead to reliable and valid results. In addition, the research paper tries to overcome the weaknesses implicit in other methods such as relying on a single expert, a group average, or a round table discussion. This study will help future researchers apply the qualitative research tools in practical life and understand how useful and feasible they are in solving the issues. By using this technique, researchers could get valuable insights on what actually is the process of acquiring the license for swine flu medications and business implications for companies engaged in manufacturing of these medicines.

Keywords : Chemists, Delphi, Expert Panel, License, Swine Flu, Tamiflu.

I. INTRODUCTION

The Delphi technique had its origin at the Rand Corporation in the early 1950s as a forecasting tool for the forces. Its purpose is to importune reliable responses from a panel of experts regarding a particular problem or dilemma.

This research tool permits researchers to combine the reports or testimony of a group of experts into one, useful statement.

Adler and Ziglio (1996) described the Delphi method as a communication process that is structured to produce a detailed examination of a topic/problem

and discussion from the participating group, but not one that forces a quick compromise. Thus, the structuring of group communications is an essential component of the Delphi.

Lintone and Turoff (1975) stated that this research technique allows educators, to communicate and effectively develop trends, needs, or other factors relative to a particular area of education.

Linstone and Turoff indicated that Delphi undergoes four distinct phases. The first phase is characterized by exploration of the subject under discussion, wherein each individual contributes additional information he feels is pertinent to the issue. The second phase involves the process of reaching an understanding of how the group views the issue (i.e., where the members agree or disagree and what they mean by relative terms such as importance, desirability, or feasibility). If there is significant disagreement, then that disagreement is explored in the third phase to bring out the underlying reasons for the differences and possibly to evaluate them. The last phase, a final evaluation, occurs when all previously gathered information has been initially analysed and the evaluations have been fed back for consideration

II. STEPS IN DELPHI

The basic Delphi Method begins with a series of first round questions asked individually of experts on the subject. The experts submit their judgments. The results of the first round judgments are then tabulated and the results sent back to the experts for modification. In real meaning, the experts are asked in the second round to reevaluate their original judgments in light of the average estimates calculated in the first round. This procedure of reevaluation is continued for several rounds until a fairly high degree of consensus is reached, or until the experts no longer modify their previous estimates.

Another technique for administering a Delphi survey is through a modified focus group. Here, the experts are allowed to interact face-to-face in the combined focus group sessions where the issues and answers to surveys are discussed. However, even with this technique, the actual survey questions should be answered by the experts in private. Delphi surveys can also be conducted through internet or bulletin boards for

Author ^a : Associate Professor at Shri Jairambhai Patel Institute of Business Management and Computer Applications (NICM Campus), Gandhinagar-382 007 (Gujarat, India) (Contact no: +91-23213043, 37 - 38 - 39) E-mail: drhsrathod@gmail.com

Author ^c : Associate Professor at Shri Jairambhai Patel Institute of Business Management and Computer Applications (NICM Campus), Gandhinagar-382 007 (Gujarat, India) (Contact no: +91-23213043, 37 - 38 - 39) E-mail: mamtanicm.brahmbhatt@gmail.com

expert discussion. For near-real-time Delphi surveys, researchers can use spreadsheet software to immediately evaluate Internet answers and provide immediate feedback to live discussion chat rooms.

The process for each type of Delphi is essentially the same; however, the purpose of a study determines the type of Delphi used. The Delphi's process is similar to the nominal group technique (NGT), except Delphi does not require the physical presence of group members (Mitchell & Larson, 1987). An interaction process takes place between the members of the group (Delphi panel) and the researcher.

One more literary work on Delphi technique has the following steps as suggested by Pfeiffer (1968)

1. The first questionnaire is sent to the panel of experts. Here a list of opinions involving experiences and judgements and a list of predictions and recommended activities are asked.
2. On the second round, a copy of the collective list is sent to each expert and experts are asked to rate or evaluate each item by some criterion of importance.
3. The third questionnaire includes the list, the ratings indicated, and the consensus, if any. The experts are asked to either revise their opinions or discuss their reasons for not coming to consensus with the group.

Brooks (1979) included an additional step prior to beginning the Delphi process: i.e.. Assess whether the panel members are willing to participate in the study or not. Brooks (1979) advised to use the following step in Delphi:

1. Identifying the panel of experts.
2. Determining the willingness of individuals to serve on the panel.
3. Gathering individual input on the specific issue and then compiling it into basic statements.
4. Analyzing data from the panel.
5. Compiling information on a new questionnaire and sending to each panel member for review.
6. Analyzing the new input and returning to the panel members the distribution of the responses.
7. Asking each panel member to study the data and evaluate their own position based on the responses from the group. When individual responses vary significantly from that of the group norm, the individual is asked to provide a rationale for their differing viewpoint while limitations are placed on the length of the remarks in order to keep responses brief.
8. Analyzing the input and sharing the minority supporting statements with the panel. Panel members are again asked to review their position and if not within a specified range, to justify the position with a brief statement.

III. SELECTION OF THE TOPIC: SWINE FLU MEDICATION- A BUSINESS PERSPECTIVE

The clarity on the topic of swine flu medications was very less. The sale of these medicines generated ample profit for the chemists during the outbreak of swine flu. The objective of carrying out Delphi Technique on this topic was to understand the business perspective of these medicine businesses. How have the chemists benefited by applying for license for sale of these medicines and is it a profitable business to enter into? How can the new stores acquire the Schedule X license? All these and various other questions were asked to the expert panel so that if a chemist wants to start trading in swine flu drugs then is it profitable to him, or an invitation to a long term hard work of documentation and proof maintenance?

The clarity lacked on the topic of swine flu during its outbreak. Now with various MNCs entering into manufacturing of generic versions of Tamiflu, the swine flu medicines did offer a more profit margin to the chemists. Delhi Technique helped to determine what the chemists' opinions were in foraying into the market of swine flu vaccinations.

IV. BRIEF HISTORY OF SWINE FLU IN INDIA

The first case of the flu in India was found on the Hyderabad airport on 13 May 2009, when a man travelling from US to India was found H1N1 positive. Subsequently, more confirmed cases were reported and as the rate of transmission of the flu increased in the beginning of August 2009, with the first death due to swine flu in India in Pune (Maharashtra) panic began to spread. The only known drug to work against H1N1(Tamiflu) was not sold in general medical stores, to prevent the virus from developing antibiotic resistance due to excessive use. The government feared that people would pop in pills for no reason, thereby making the virus resistant to its only known cure. The problem facing the state machinery was the fact that flu infected cases was coming from across the country.

The generic versions of Tamiflu were available in India under the name of Oseltamivir, Natflu and Starflu. The period from September 2009 to January 2010 saw a considerable rise in the sale of these medications from the time they were introduced in the Indian markets. Hetero Drugs Ltd, a Hyderabad-based drug-manufacturer, was the first Oseltamivir manufacturer to bag the million-dose Oseltamivir order from the government of India. The Oseltamivir order placed by the Ministry of Health, Government of India, on Hetero is estimated to worth between Rs 35-36 crore. Hetero is the only one Indian company that was licensed to produce Oseltamivir generic by Roche to be supplied

in India and other developing countries following a patent dispute with Cipla. Cipla Limited's version of Oseltamivir has recently been included in WHO's pre-qualification list. Besides Cipla, other companies including Ranbaxy, Natco, Strides etc also have developed capabilities to manufacture Oseltamivir.

V. METHODOLOGY USED

The widespread of the disease posed questions to the researchers -how can chemists be benefited by trading in the swine flu medicines? Is it easy to get the license especially when the government has decided to sell the medicines and not go for a retail format? And what future do these medicines hold for the chemists? Questionnaires could have generated a quantitative analysis but the opinions mattered a lot. The whole topic of swine flu medicines was very vague and so the best pathway to gather the perfect information was by conducting a Delphi Technique. Researchers conducted a focus group interview of the expert panel comprising of 5 chemists in Ahmedabad (Gujarat State) who dealt with the swine flu medicines.

The whole process and evaluation of the technique has been covered in the subsequent pages.

A valid Delphi process consists of minimum of 2 rounds, although the decision about the number of rounds is largely pragmatic. The purpose of initial iteration was to identify the broad issues related to the topic. Open ended questions were asked to the expert panel and analyzed qualitatively. The second round was more specific, with the questionnaire sought ratings on a five-point scale and a qualitative analysis. There happened to a convergence of opinions after the feedback.

VI. DELPHI PANEL SELECTION

Careful selection of the panel of experts is the keystone to a successful Delphi study. Key aspects include panel selection (including experts' qualifications) and size and participant commitment. Jairath and Weinstein (1994) suggested that study participants be experts who are knowledgeable about current information and perceptions regarding the topic under investigation but are open-minded to the findings. To motivate participants to remain active and complete all the rounds in a Delphi study, it is important they understand the goal of the study and feel they are a part of the group. Anonymity is an important Delphi technique characteristic. Without the identification of those contributing information or making specific judgments, candor may be increased.

a) *Size of the panel*

A variety of perspectives exist regarding the number of participants needed. Many support the opinion that the more the participants, the better (Murphy-Black, et al., 1998). However, Powell (2003)

also stated that, "There is very little actual empirical evidence on the effect of the number of participants on the reliability or validity of consensus processes". The number of participants in a Delphi study depends not only on the purpose of the study, but the variety of the targeted population. Ten to fifteen participants may be an adequate number for a Delphi study that is focused and where the participants do not vary a great deal.

There are no hard and fast rules. Linstone suggested a suitable panel size is even, but panel size varies from 4 to 3000. Therefore the decision of panel size is empirical and realistic, taking into consideration factors such as time and expense. Representation is assessed by qualities of the panel and not the numbers.

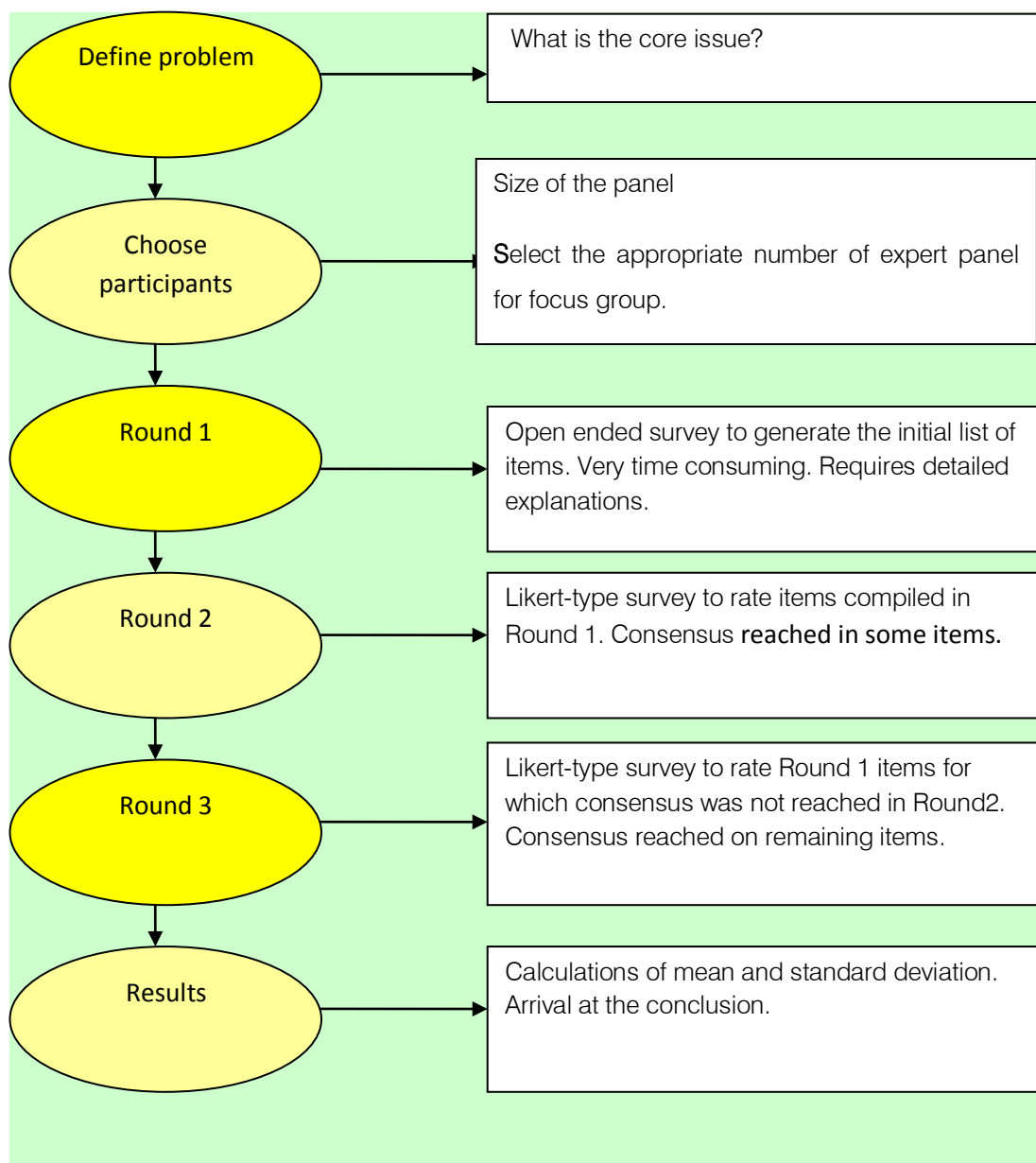


Exhibit 1: Methodology Adopted for Delphi

Round 1

The panelists were asked open-ended questions so as to have a brief introduction about the topic of swine flu medicines. The process was as follows...

1. How long have you been in the business of medicines?

A	-	10 years
B	-	25 years
C	-	18 years
D	-	8 years
E	-	20 years

2. The first case of swine flu was reported in India on 13th May, 2009. What was your reaction after seeing the death toll rise at a speedy rate?

- | | |
|-----|---|
| A-- | Panic, saw constant updates on the new virus that was claiming lives, asked his friends in the similar business as to what immediate solution is available to curb this disease |
| B-- | Immediately called up his son in USA who is also in the similar business and enquired about the available medicines. The death toll was rising and there was lot of panicky amongst the localities. The government of India did not have any immediate cure to it and there was nothing that the doctors could do about it. |
| C-- | Took time to take a grasp of the situation as everything was vague and people were asking for more of influenza medicines. The sales of normal flu medicines took a rise. |
| D-- | Since there was no vaccine available and it was highly communicable disease, we started stocking more of masks. Apart from that no reaction. |

E—There was no doubt a lot of fear amongst the people. The sale of flu medicines rose. The government contacts also did not help in getting the required medicine i.e Tamiflu, which was available in USA.

3. The government released the vaccination in form of generic versions of TAMILFLU, the patented swine flu medicine of Roche Company, under the name of Oseltamivir, Natflu and Starflu. Yet its sales were not allowed at the chemists shops. Why?

A—That is because the medicine was very expensive.

B—The versions were freely distributed in the hospitals and being an expensive medicine, the government took charge of distributing it amongst the victims and their relatives.

C—Maybe apart from the above reasons, fear of black market was there. The sale of drugs by chemists would have triggered the black marketing, soaring the price rates.

D—Same as what A said.

E—The stringent laws prevented the sale of Tamiflu generic versions. Furthermore compulsory licensing would have been thought of before selling these vaccines.

4. Do you think compulsory licensing for sale of swine flu medicines is an effective step taken by the government?

A—Yes as contents are subject to selected use.

B—Definitely yes. The sale of patented drug by the government does not have any risks of being sued for infringement if used for public non-commercial use.

C—No. Any chemist can sell them in near future.

D—I don't agree with C because the patients are required to bring 3 copies of prescription which is compulsory for issuing the medicine.

E—I agree with D. Also by just going for selected stores, black marketing can be prevented.

5. What is the current sale status of these medicines?

A—Dipped to all time low as even cases have reduced.

B—Sale was maximum between September to December-2009. After February-2010, sales have dipped.

C—Too low demand and stock has piled up in the stores.

D—Profit margin has reduced as sales have reduced.

E—Agree with the panel.

Round 2 And Round 3

After Round 1 which involved the discussions amongst the panel members, researchers could get valuable insights on what actually is the process of acquiring the license for swine flu medicines and how these medicines entered the Indian market.

In Round 2, researchers narrowed down the whole focus group by going for specific questions on a

rating scale. Hence spreadsheet was used to conduct the 2nd round of Delphi. Same process was repeated for Round 3, till consensus was arrived.

Here the panel members were required to rate the given criteria on scale of 1 to 5 on basis of agreement or importance they gave to that particular criterion. The concept of using spreadsheet was to allow the panel members to answer specific questions which were of interest to the researchers. After the rating, the panel members were allowed to discuss amongst themselves each criterion for 15 minutes. In case they wanted to change their ratings after the discussions, they were allowed to do so and then the spreadsheet was quantitatively analyzed.

The spreadsheet method of conducting Delphi is given as under:-

Criterion	Min	Max	Mean	Std Deviation
TamiFlu is the only available cure for swine flu	2	5	3.2	1.3038
Getting license is an easy task	1	4	2.6	1.1402
Reporting to the FDA staff	1	2	1.8	0.4472
Surprise audits happen by the Health deptt of Govt. of Gujarat.	1	3	2.2	0.8366
License is cheap	1	2	1.4	0.5477
Supply > Demand after March	1	2	1.4	0.5477
Schedule X certificate maintenance for 2 years is a compulsion and tedious task	2	3	2.2	0.1907
Profits were high during outbreak of swine flu	2	4	2.8	0.8366
Chemists get commission on sale of these medicines	4	5	4.6	0.5477
Patients given these drugs without prescription	4	5	4.4	0.5477
Lucrative business for new chemists	2	5	3.4	1.1402
Future sales will be high	2	4	3.4	0.8944

Exhibit 2 : Round 2

Criterion	Min	Max	Mean	Std Deviation
License is cheap	1	2	1.4	0.5477
Supply > Demand after March	1	2	1.4	0.5477
Reporting to the FDA staff	1	2	1.8	0.4472
Schedule X certificate maintenance for 2 years is a compulsion and tedious task	2	3	2.2	0.1907
Getting license is an easy task	1	4	2.6	1.1402
Profits were high during outbreak of swine flu	2	4	2.8	0.8366
TamiFlu is the only available cure for swine flu	2	5	3.2	1.3038
Lucrative business for new chemists	2	5	3.4	1.1402
Future sales will be high	2	4	3.4	0.8944
Patients given these drugs without prescription	4	5	4.4	0.5477
Chemists get commission on sale of these medicines	4	5	4.6	0.5477

Exhibit 3: Round 3

After this process, consensus was arrived on the criteria that:

- Trading in swine flu medicines is not so lucrative business as perceived.
- The future sales are not expected to be high.
- Patients are by no means given the drugs without the valid prescription. 3 copies need to be submitted to the chemist.
- Chemists do not get commission on sale of these medicines.

VII. BUSINESS IMPLICATIONS

- The results from the Delphi technique highlighted that the market for swine flu medicines did not pick up as per expectations of the chemists. Chemists did not gain anything by storing these medicines and lot of stock remains unsold.
- Swine Flu, declared as an epidemic for the said time period, Indian government hospitals provided these medicines for free so the inflow of patients buying these medicines from the chemists became very less. Hence, stocking the swine flu medicines is not so attractive venture for the chemists even for future.
- The license does not cost much, but the maintenance part of the documents is a very tedious work, which the chemists do not prefer much.
- Chemists can get first mover advantage by storing these kinds of medicines, but the profits are short lived. Once the epidemic gets over, there is nothing much to sell and demand decreases. So the contribution to the net turnover of the business of these medicines is not attractive.
- The players in these medicines business can benefit if they are in the market for quite a few years. The ways to acquire becomes easier for them and their existent customer base helps attract new customers in times of such viral outburst.
- The makers of these medicines have benefited after the government of India took the patent rights from Roche Company for manufacturing of generic versions of TamiFlu. Upcoming pharmaceutical companies can start ventures in exclusive manufacturing of swine flu medicines which they can export to other countries. Global market can prove profitable in countries where swine flu vaccines haven't been discovered and imported medicines cost an elephant.

VIII. CONCLUSION AND FUTURE SCOPE

This research technique allows educators and researchers communicate and effectively develop trends, needs, or other factors relative to a particular area under consideration. In selecting the most appropriate research tool, a researcher should ask the following questions, Who should communicate about the problem what alternative mechanisms are available for that communication, and what can we expect to obtain with these alternatives?" Depending on the answers to these questions, one may then choose the Delphi as the most effective research tool for the study at hand.

By applying Delphi Technique to the issue of Swine Flu Medication, researchers wanted to focus on the usage of Delphi to bring out useful inferences for future researchers. Moreover, researchers foresee a

great scope of effective usage of Delphi if used for addressing the following issues:

- Gathering information about historical events where exact or accurate information is missing.
- Evaluating the proper allocation of financial and budgetary resources
- Suggesting new plans and schemes for urban and rural development.
- Planning course curriculum and new teaching methodologies at Educational Institutes.
- Putting together an educational model.
- Outlining potential policy issues and available policy execution alternatives
- Distinguishing and illustrating real and perceived human behavior related to new product adaptation, usage and disposal.
- Discovering priorities of ethics at workplace, social goals, etc.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Adler, M. and Ziglio, E., eds., (1996) *Gazing into the Oracle: The Delphi Method and its Application to Social Policy and Public Health*, Jessica Kingsley Publishers, London.
2. Basheer Shamnad and Tahir Amin, (2006) 'Taming of the TamiFlu: Working through the TamiFlu patents in India', *Journal of Intellectual Property Rights*, Vol-11. pp 113-124.
3. Brooks, K. W. (1979). Delphi technique: Expanding applications. *North Central Association Quarterly*, 53, 377-385.
4. Dalkey NC, Helmer (1963) 'An experimental application of the Delphi method to the use of experts'. Vol-9. pp 458-67.
5. Delbecq, Andre, Andrew Van de Ven, David Gustafson (1975) *Group techniques for program planning*, Scott, Foresman
6. Hader and Hader, Sabine (1995), 'Delphi Method' Vol-37. P-12
7. Helmer O, Linstone HA, Turoff M, (1975) 'Delphi Methods: Technique and Applications'.
8. Jairath, N., & Weinstein, J. (1994). The Delphi methodology: a useful administrative approach. *Canadian Journal of Nursing Administration*, 7, 29-42. Available on < <http://scholar.lib.vt.edu/ejournals/JCTE/v20n2/stitt.html> > Accessed on November 21,2010
10. Linstone, H. A., & Turoff, M. (Eds.). (1975). *The Delphi method: Techniques and applications*. London: Addison-Wesley.
11. Mitchell, T. R., & Larson, J. R., Jr. (Eds.). (1987). *People in organizations: An introduction to organizational behavior*. New York: McGraw-Hill Book Company.
12. Murphy-Black, T., Lamping, D., McKee, M., Sanderson, C., Askham, J., & Marteau, T. (1998). CEM and their use in clinical guideline development - Factors which influence the process and outcome of CDMs. *Health Technology Assessment*, 2 (3).
13. Pfeiffer, J. (1968). *New look at education*. Poughkeepsie, NY: Odyssey Press.
14. Powell C, (2003) 'The Delphi Technique: myths and realities'. Vol-4. pp 376-382.
15. Rowe, G. & Wright, G. (1999). The Delphi technique as a forecasting tool: Issues and analysis. *International Journal of Forecasting*, Vol-4. pp 353 - 375.
16. Sackman H. (1975) 'Delphi Critique' Boston: Lexington Books.
17. Schneider, J. B. (1972). The policy Delphi: a regional planning application. *Technological Forecasting and Social Change*, 3.
18. Strauss, H. J. & Zeigler, H. (1974). 'Delphi, political philosophy and the future'. *Institute of Policy Studies*, University of Oregon.
19. Turoff, M. (1970). The design of a policy Delphi. *Technological Forecasting and Social Change*, 2.
20. Worthen B R, Sanders J R (1987) *Educational Evaluation: Alternative Approaches and Practical Guide-lines*. Longman, New York
21. Woudenberg, F. (1991): An Evaluation of Delphi, in: *Technological Forecasting and Social Change*, vol. 40, pp. 131 – 150
22. Zahorik, A.J. and Rust, R.T. (1992) 'Modelling the impact of service quality on profitability: a review', in Swartz, T.A., Bowen, D.E. and Brown, S.W. (Eds): *Advances in Services Marketing and Management*, JA Press, Greenwich, CT, pp.49–64.





This page is intentionally left blank



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Attitude of Uninsured towards Life Insurance (A Study in East Godavari District, Andhra Pradesh)

By Dr. Pulidindi Venugopal

VIT University

Abstract - Life Insurance is intangible in its nature hence majority of the Indian population cannot understand its meaning. After history of more than two hundred years of life insurance sector history in India it is still under penetrated with 27 to 27 percent. Almost all the insurers knows that it is not bought and it has to be sold, even still there are lot of misconceptions in the minds of Indians towards the concept of insurance hence it caused complications in marketing its products. In reality making the uneducated, rural and economically backward people to understand the insurance concept is a challenging task. Insurers may succeed if they know the attitude of uninsured and develop separate strategies for them. Marketing activities of life insurance companies is all about to inform, bringing awareness, develop belief, to form positive attitude, to reinforce trust etc. in the minds of the consumers by using tools such as advertising, public relations, displays, word of mouth, sales promotion, personal selling etc. Insurers may form positive attitude or may cause negative attitude so knowing the feelings of respondents found essential. Today customers are more informed with number of options; even still majority of the population in India is still uninsured or in some cases trusts only LIC. Therefore it is the duty of all insurers is to study the attitudes of people towards life insurance to reinforce trust and to change the attitude in the customers.

Keywords : Attitude, Uninsured, Life Insurance.

GJMBR-B Classification : FOR Code: 150204 JEL Code: G22



Strictly as per the compliance and regulations of:



Attitude of Uninsured towards Life Insurance (A Study in East Godavari District, Andhra Pradesh)

Dr. Pulidindi Venugopal

Abstract - Life Insurance is intangible in its nature hence majority of the Indian population cannot understand its meaning. After history of more than two hundred years of life insurance sector history in India it is still under penetrated with 27 to 27 percent. Almost all the insurers knows that it is not bought and it has to be sold, even still there are lot of misconceptions in the minds of Indians towards the concept of insurance hence it caused complications in marketing its products. In reality making the uneducated, rural and economically backward people to understand the insurance concept is a challenging task. Insurers may succeed if they know the attitude of uninsured and develop separate strategies for them. Marketing activities of life insurance companies is all about to inform, bringing awareness, develop belief, to form positive attitude, to reinforce trust etc. in the minds of the consumers by using tools such as advertising, public relations, displays, word of mouth, sales promotion, personal selling etc. Insurers may form positive attitude or may cause negative attitude so knowing the feelings of respondents found essential. Today customers are more informed with number of options; even still majority of the population in India is still uninsured or in some cases trusts only LIC. Therefore it is the duty of all insurers is to study the attitudes of people towards life insurance to reinforce trust and to change the attitude in the customers.

Keywords : Attitude, Uninsured, Life Insurance.

I. INTRODUCTION

Every punter has a massive number of attitudes towards products and services. It is a imaginary erect that represents an individual's like or dislike for an item.

Attitudes are positive, negative or neutral views of an "attitude object": i.e. a person, behaviour or event. We are being asked to convey our attitudes i.e. whether we like it or not. Within the framework of consumer behaviour a positive reception of prevailing attitudes has substantial strategic merit. In order to get the heart of what is driving consumer behaviour; attitude research has been used to study a wide range of strategic marketing questions. Consumer researchers judge attitudes by asking questions or making inferences from behaviour. Populace can also be "ambivalent" towards a target, meaning that they simultaneously possess a positive and a negative bias towards the attitude in question.

Author : Professor, VIT Business School, VIT University, Vellore – 632 014, Tamil Nadu, India. Telephone:09025555062
E-mail : pulidindi_2002@yahoo.com)

The expedition for security has been a foremost motivating force in the development of mankind. The early societies looked up to their families and tribes for providing the security, which resulted in consistent units. Gradually life style has distorted and man progressed into a more up to date industrialized setup, as a consequence this cohesiveness of the family nowhere to be found. One had to give the impression of being for other ways of providing economic security and for that led to the invention of "insurance". The drive towards globalization in the insurance industry shows no symbols of slowing. Faster growth in budding markets when compared to industrialized countries shows a decline in protectionism world wide and the privatization of pension plans are surrounded by the factors leading insurance companies to invest internationally. Modern day insurance has evolved into a versatile and difficult industry involving a collection of different products and services. The contemporary insurance industry landscape is characteristically mixture in nature, offering the whole thing from health and life insurance to property and casualty. Life insurance is one of the most admired savings/ investment vehicles but still it is dryly the least understood too. An insurance policy offers a great deal more than just tax planning and investment returns. Once a company sells a Life insurance then the company residue legally entitled to make payment to the beneficiary/recipient subsequent to the passing away of the policy holder and also it offers the ability to plan for unexpected events that could affect the policyholders' family's financial problem adversely.

II. LIFE INSURANCE

Insurance is as old as human civilization and thousands of years ago people in a community pooled a part of their resources to be used by the member who suffered loss. Moses told the people of Israel to contribute periodically for "The alien resident and the fatherless child and the widows" much before Moses, the code of Hammurabi of Babylonia talked about a form of insurance for ship owners who took loans to finance their voyages. The first known welfare programs with elements of life insurance are the Roman Collegia which dates back to 133 AD. In 12 AD Century the basic concept of insurance was born in the marine class in Italy, so the origin of personal insurance is mostly

attributes to the Greek societies. In 1660 AD London met with a great fire accident and it was named as 'The Great Fire of London' from the ashes the concept of insurance was born in London. In 17th century the concept of insurance began in US. Where as, in India the British company named 'The Oriental Life Insurance Company' setup in 1818 AD. Before insurance act there were three types of insurance players:

- a) Indian insurance companies operating in India.
- b) Foreign insurance companies operating in India and
- c) Indian insurance companies operating in foreign countries.

In 1912 the Indian Life Insurance Company Act was formed and only Indian insurance companies remained. All life insurance companies were merged and nationalized in 1956 and named as 'Life Insurance Corporation'. In 1993 Malhotra committee conducted a study and suggested IRA, which passed a Bill in parliament on December 1999, and renamed it as IRDA. In April 2000, IRDA body was incorporated. Again from 2001 private insurance players started selling its policies. India is having a history of more than 180 years. Only from few years 'term' policies are available. Still the companies are not promoting this product and even agents also not preferring to sell these products as it is not giving high commission when compared to endowment and money back policies. Before privatization Indian market penetrated by 5 per cent and by 2005-2006 it is under penetrated by 25-27 percent and now it is in between 27-29 percent. In the 2009 GDP the share of life insurance sector is 4.1 percent.

III. LIFE INSURANCE CONTEMPORARY STRATEGIES OF LIFE INSURANCE COMPANIES

Life insurance industry in India is now growing at a fast pace from the last decade. Out of 22 players in the life insurance industry 18 players have taken the path of strategic alliance to achieve competitive superiority and to retain the gained competitive advantage. Even though all the companies are coming with innovative product strategies, pricing strategies, promotional strategies, distribution strategies and services still they are grappling with the right marketing strategies for reaching potential customers. Some of the contemporary strategies of Indian life insurance companies are Price Bundling and Product Bundling, Product Advertisement, Channels, Service etc. among which Price Bundling and Product Bundling are prominent among different sales strategies. Price Bundling offers multiple related products at a price less than the combined price offering price advantage to the consumer. Product Bundling offers increased value to the base component. Inseparable and dependent supplementary benefits such as accelerated death benefit or premium waiver represent Product Bundling,

whereas additional Riders like accidental death benefit and critical illness are that of Price Bundling. Individual companies are designing composite products within broad parameters and branding as micro-insurance products. A single agency system can sell these packaged composite products. To meet the varying needs of various individuals, the insurance players have a vast variety of products in their bouquet. Almost all the companies are combining features of a number of products together and offering to customers to choose the most suitable product for themselves. Thus the products are customized to suit the customer as per their needs.

The promotional activities of life insurance companies are classified as Institutional Advertisements and Insurance Advertisements. The success of sales communication depends on public confidence and the faith. All the insurers are trying to adopt honest and fair practices in the market-place and avoid practices that tend to impair the confidence of the public. The concept of insurance and various insurance products are very difficult for the public to understand and evaluate. Hence they are trying to use transparent, fair and relevant publicity material in their advertising. The code of conduct of life insurance companies is prescribed by the Advertisement Standards Council of India.

The distinction of channels in the developed markets is: personal distribution systems and direct response systems. Personal distribution systems include all channels like agencies of different models and brokerages, bancassurance, and work site marketing. Direct response distribution systems are the method whereby the client purchases the insurance directly. This segment, which utilizes various media such as the Internet, telemarketing, direct mail, call centers, etc., is just beginning to grow. To reach out to the consumers, the companies in the industry today have widened their distribution channels by approaching prospective customers through agents, brokers and bancassurance. With Information Technology revolutionizing the financial sector, another channel has been made available for selling which is the internet. ICICI Prudential offers Insta-insurance through which a client can chose an insurance policy in mere 10 minutes. Similarly other players have also been pushing their products through the internet.

IV. NEED FOR THE STUDY

Even though insurance industry was privatized and with the immense competition around, the Indian market remains under penetrated with 27-29 per cent. It shows that the uninsured population in India is still 71-73 per cent and the insurers are not upto the mark in identifying the factors' influencing the buying behaviour of the consumers. Even though there are so many factors, which affect the consumer behaviour besides,

which attitude plays a very important role in influencing the buying behaviour of consumers and differs with age, gender, education, social class, geographical area, etc. Attitude is one of the psychological factor which should be assessed properly by the insurer to offer excel products to the consumers as per their needs and wants. The widespread attitude of the people towards life insurance is, it is only a urban phenomenon, it is only meant for the rich, it is a form of saving and investment, and it is a product which gives money after death only etc. The insurer has to plan and design his marketing strategies to built positive attitudes, to make every one to have economic security to their dependents with life insurance. Every person needs insurance to overcome the any unforeseen events which creates financial problems to the family, but so many people in the urban, rural and tribal areas are deceived by the private banks, agents etc, which created negative attitude towards life insurance and private life insurance organizations. These are the few things, which made me to do a study on attitude of uninsured towards life insurance.

V. SCOPE OF THE STUDY

This study aims to forge the way in relation to how future studies are conducted on the affect of attitude of uninsured towards life insurance in terms of depth and content. Exclusively this study contributes to know the inner feelings of uninsured people of East Godavari District in Andhra Pradesh. For this study the selected geographical regions are Urban, Rural, and Tribal areas and this topic is studied for the first time in Coastal area of Andhra Pradesh.

VI. OBJECTIVES OF THE STUDY

The study examines the issues relating to attitude of uninsured towards life insurance. The study designed with the following objectives.

- To know about the level of awareness about life insurance among uninsured population.
- To know about the sources of information about life insurance.
- To diagnose the reasons for not knowing about life insurance.
- To know about the reach of insurance agents.
- To know the attitude in making and not making life insurance compulsory.
- To study the attitudes of the people living in urban, rural and tribal area of East Godavari District towards life insurance.
- To evaluate the attitudes of uninsured respondents with reference to product, premium, promotion, distribution etc.

VII. HYPOTHESIS OF THE STUDY

H0: Uninsured respondents do not know about life insurance.

H0: The main source of information to uninsured respondents is agent.

H0: Benefit of life insurance is protection to life.

H0: Uninsured respondents identified the benefits of insurance but not insured because of low income.

H0: Knowledgeable uninsured wants to make life insurance compulsory as it provides security to dependents.

VIII. REVIEW OF LITERATURE

A.Vijaya Kumar studied opening up of insurance sector and identified it will foster competition, innovation and product variation. He said that in the global context one has to consider various issues like demand, separateness of banking from insurance sector, role of information technology and above all the role of regulatory authority.

Anupam Goswami revealed that all economic areas were opened for private competition like that insurance sector also lifted its gates. All private insurers agree that rural India has great potential for insurance. The insurance companies show that statutorily defined proportion of their business comes from rural India. According to the pioneer study carried by Foundation for Research, Training and Education in insurance (FORTE), there is great opportunity in rural India. She quoted opinion of an expert from the planning commission that 'the rural population be not excluded from the operations of modern insurance business'.

Bhakthi Chugane revealed that the Federation of Afro-Asian Insurance and Reinsurers (FAIR) were established in 1964. After opening up of the insurance sector in 2000, Mumbai was the first host to FAIR. It shows the interest in the Indian Insurance sector. When the federation was started most members included government insurance companies. Today new international players have entered and the FAIR has 188 members. FAIR has created pools – reinsurance aviation and oil and energy as the means to generate reinsurance business.

C.S.Rao, said that the mission of IRDA is to protect the interest of policyholders and regulate and ensure ordinary growth of industry. This study emphasised the role of IRDA for regulation of tariff, ensuring quality of service, improving the efficiency and productivity, protection of consumer interest and ensuring the fair competition. It is gratifying that the industry has been taking big strides in improving the customer service. The stress on the product innovation and the focus on aggressive marketing was made.

D. Chennappa, as per the IRDA annual report - 2003-04 out of the 13 private insurance companies in life insurance suffered losses the aggregate loss of private insurers amounted 966.3 crore, surplus earned by LIC. In the insurance company has earned profit of 9 cor in 2003-04. After liberalization of insurance sector in 1999

no significant change has taken place as for mobilizing savings by this sector is continued the foreign capital followed in the after opening up of insurance sector as been accompanied by any technological innovation in the insurance sector. These are adopting the same old products the same old advertisements and same customer base. It is therefore suggested to bring down the entry of capital norm 100 cror to Rs. 60 cror for the life and non life insurance business, health insurance which would be obviously attract more number of domestic players when the sector depending on foreign equity and players.

IX. METHODOLOGY OF THE STUDY

This research is embodied with both primary and secondary data. As far as secondary data is concerned they were sought from various books, journals, magazines, news papers, periodicals, unpublished sources, internet etc. The study also embodied a sizeable primary data, which was collected by way of canvassing a questionnaire amongst selected sample of respondents through personal interviews. The data was collected in Urban, Rural and Tribal areas of East Godavari District in Andhra Pradesh. The selection criteria are based upon the data availability, convenience to access and the level of participation.

a) Sample Selection

The Multi stage sampling technique was used in selecting respondents. The respondents were interviewed in person and were asked to respond to the questionnaire. The field survey for primary data collection was conducted in three different phases. In the first phase, a pilot survey was conducted to prepare a prototype questionnaire, in the second phase, questionnaire was tested and finalized. In the third phase, final field survey had been conducted by administering the finalized questionnaire to the sample respondents. Besides field survey for primary data, literature surveys were also conducted simultaneously along with field surveys and there by sought required secondary data. It is essential that the individuals included in the survey are representatives of the total population from which they are taken as this helps to generalize the findings of the study. For the present study a total sample size of 1200 was taken in which, 400 respondents were covered in each of the geographical segments. The sample selected was to know the attitudes of insured and uninsured people. Almost equal number of respondents in the age group, across different income levels, employment and education were taken. This was done to make sure that it was a representative sample.

X. METHODOLOGY OF THE STUDY METHODS ADOPTED FOR STATISTICAL DATA ANALYSIS

Primary data were entered using SPSS (spell out acronym) software and STATISTICA. Uni-variate and bi-variate tables were generated and correlation values and percentage were carried out for testing the hypotheses. The calculated value of r is compared with the table value at 5% or 1% level of significance. If the calculated value of r is greater than the table value, then it is considered significant and the null hypothesis is rejected. On the other hand, if the calculated value of F is less than the table value the null hypothesis is accepted and it is inferred that both the samples have come from the population having the same variance. Likert's five point scaling technique has been applied to find out the opinions of respondents. Semantic differential scale was used to measure the agents' training and competency level.

This paper deals with measuring the attitude of uninsured respondents. As most of the uninsured respondents don't know any thing about the concept of life insurance so measuring the attitude of uninsured is complex when compared with the insured. The study is made in urban, rural and tribal areas of East Godavari District. The total sample taken is 1200 in three areas i.e. urban, rural and tribal with equal ratio. It means 400 respondents from each area were interviewed. The total uninsured respondents from the three areas are 597, out of which urban area comprises of 113, rural area 202 and tribal area 282 respectively. The data was collected basing on the factors that are influencing the attitude of uninsured, i.e. types of insurance, level of awareness, sources of awareness, benefits of life insurance, level of interest to know about life insurance, opinion on agents, etc. Likert's five point scaling technique has been applied to find out the opinions of respondents. The collected raw data was processed by using Statistical Package for Social Sciences (SPSS) for analyzing and interpretation. The study is presented by using percentages and correlations for accurate and fruitful results.

XI. ATTITUDE OF UNINSURED

Life insurance is as old as human civilization. Hence the uninsured respondents' knowledge towards life insurance was measured. It is pity to say that 72.86 per cent of the total respondents don't know about insurance.

H_0 : Uninsured respondents do not know about life insurance.

Table 1.1 : Particulars of Sample

S.No.	Area	Towns/Villages	Objective	Selection	Sample
1.	Urban	1.Kakinada 2.Rajahmundry	To know the urban people attitude towards life insurance	Multi stage sampling	400
2.	Rural	1.Korukonda 2.Jaggam peta 3.Malkipuram 4.Razole	To know the rural people attitude towards life insurance	Multi stage sampling	400
3.	Tribal	1.Rampachodavarm 2.Addateegala 3.Maredumilli 4.Y.Ramavaram	To know the Tribal people attitude towards life insurance	Multi stage sampling	400

This paper gives meticulous attention on the attitudes of insured towards the promotional activities and competencies of agents of life insurance companies.

Table 2.1 : The knowledge of insurance among uninsured respondents

Known About Insurance	Urban	Rural	Tribal	Total
Yes	46 (40.71)	116 (57.43)	0	162 (27.14)
No	67 (59.29)	86 (42.57)	282 (100.0)	435 (72.86)
Total	113 (100.0)	202 (100.0)	282 (100.0)	597 (100.0)

Source: Survey report

Numbers in parentheses are percentages

Table-2.1 shows the knowledge of respondents on insurance among urban, rural and tribal areas. Out of the total respondents of urban area 40.71 per cent know about insurance and 59.29 per cent don't know about insurance. Among the total rural respondents 57.43 per cent know about insurance and 42.57 per cent don't know about insurance. Where as, in the tribal uninsured respondents are not aware of insurance. Out of the total 597 uninsured respondents 72.86 per cent don't know about insurance, where as 27.14 knows about insurance.

Table 2.1(a) : The Types of insurance knowledge of uninsured respondents.

Type Of Insurance Known	Urban	Rural	Tribal	Total
Life Insurance	46 (100.0)	116 (100.0)	0	162 (100.0)
General Insurance	41 (89.13)	70 (60.34)	0	111 (68.51)
Both	41 (89.13)	70 (60.34)	0	111 (68.51)

Source: Survey report

Numbers in parentheses are percentages

Insurance ranged from life, medical and general. General insurance include residential, commercial property, crop, burglary etc. This verifies respondents' awareness about different insurances. Table-2.1 (a) shows the types of insurance knowledge of respondents. Out of the total urban respondents cent percent know about life insurance and 89.13 per cent know about general insurance also. Out of the total rural respondents cent percent know about life insurance and 60.34 per cent know about general insurance also. Where as, in tribal area respondents no one knows about insurance. Out of the total 597 uninsured respondents 162 knew about insurance. Among 162 cent percent knew about life insurance and 68.51 per cent knew about general insurance also. According to the above analysis it shows that respondents from urban area and rural area have knowledge on life insurance and general insurance. Hence the hypothesis is accepted.

H₀: The main source of information to uninsured respondents is agent.

Table 2.1(b) : (Urban) Correlation coefficient to sources of information about life insurance - Urban respondents

RANK	Through friends & relatives	Advertisements	Agents	Development officers	Others
1	21 (45.65)	13 (28.26)	12 (26.09)	0	0
2	25 (54.35)	18 (39.13)	3 (6.52)	0	0
3	0	15 (32.61)	31 (67.39)	0	0
4	0	0	0	46 (100.0)	0
5	0	0	0	0	46 (100.0)
Correlation Values	0.84	0.81	0.32	-0.35	-0.71

Source: Survey report

Numbers in parentheses are percentages

The information source of one person is different from the other person. That is the reason for the development of various promotional tools. The sources identified are friends and relatives, advertisements, agents, development officers etc. The respondents are asked to give rank to their sources.

The priority of the urban respondents regarding the means by which they knew about the life insurance is presented in the table-2.1 (b) (Urban). Among the total respondents 46 respondents know about life insurance out of this the first rank is given to friends and

relatives by 45.65 per cent, through advertisements by 28.26 per cent and through agents by 26.09 per cent. The calculated correlation values for the above types of source which brought awareness regarding the life insurance among the urban area respondents are 0.84, 0.81, 0.32, -0.35 and -0.71 respectively. The total knowledgeable respondents are 27.14 per cent ranked the sources of information. According to correlation values the sources information to urban respondents was friends and relatives (0.84).

Table 2.1(b) : (Rural) Correlation coefficient to sources of information about life insurance - Rural respondents

RANK	Through friends & relatives	Advertisements	Agents	Development officers	Others
1	69 (59.48)	12 (10.34)	35 (30.17)	0	0
2	47 (40.52)	23 (19.83)	46 (39.66)	0	0
3	0	81 (69.83)	35 (30.17)	0	0
4	0	0	0	116 (100.0)	0
5	0	0	0	0	116 (100.0)
Correlation Values	0.89*	0.22	0.85	-0.35	-0.71

The priority of the rural respondents regarding the means by which they knew about the life insurance is presented in the table-2.1 (b) (Rural). Among the total uninsured respondents 116 respondents know about life insurance out this the first rank given to through friends and relatives by 59.48 per cent, through agents by 30.17 per cent and through advertisements by 10.34 per cent. The calculated correlation values for the above types of

source that brought awareness regarding the life insurance among the urban area respondents are 0.89, 0.22, 0.85, -0.35 and -0.71 respectively. The total knowledgeable respondents (27.14 per cent) ranked the sources of information. According to correlation values the source of information to rural respondents is friends and relatives (0.89*).

According to the correlation values 0.32 and 0.85 of table – 7.1 (b) urban and rural, the hypothesis is rejected in both the urban and rural areas. And

uninsured tribal respondents not have knowledge of insurance.

Table 2.1(c) : Shows the reasons for not knowing about insurance

REASONS FOR NOT KNOWING ABOUT INSURANCE	URBAN (n=67)	RURAL (n=86)	TRIBAL (n=282)	TOTAL (n=435)
Not interested	17 (25.37)	56 (65.12)	166 (58.87)	239 (54.94)
No insurance agent approached	15 (22.39)	27 (31.40)	73 (25.89)	115 (26.43)
I do not understand insurance	31 (46.27)	22 (25.58)	21 (7.45)	74 (17.01)
I don't know the benefits	25 (37.31)	11 (12.79)	22 (7.80)	58 (13.33)

Source: Survey report
Numbers in parentheses are percentages

Uninsured respondents are given with reasons for not knowing about life insurance, if a person was not informed through various means it may be wrong with the respondent or may be the sources of information used by the marketer. To examine why they are not aware the reasons given are, not interested, no insurance agent approached, I do not understand the insurance and I don't know the benefits.

The majority of the uninsured respondents in urban, rural and tribal areas don't know about life insurance. Hence, the reasons for not knowing about life insurance are explained in the table 2.1 (c). The total respondents in the urban area are 113 out of which 67 don't know about life insurance but they are having more than one reason for not knowing about life insurance. Out of the total respondents from urban area 25.37 per cent are not having interest, to 22.39 per cent respondents said that no insurance agent approached, 46.27 per cent respondents did not understand the concept of insurance and 37.31 per cent respondents don't know the benefits of insurance. Out of the total rural respondents 65.12 per cent not have interest, 31.40 per cent respondents said that insurance agent did not approach, 25.58 per cent respondents did not understand the concept of insurance and 12.79 per cent respondents don't know the benefits of insurance. Out of the total not knowledgeable uninsured respondents from tribal area 58.87 per cent were not interested, to 25.89 per cent respondents said that insurance agent did not approach, 7.45 per cent respondents did not understand the concept of insurance and 7.80 per cent respondents don't know the benefits of insurance. Out of the total 597 uninsured respondents not knowledgeable about insurance are 435 respondents and they are having more than one reason for knowing about it. Hence the percentage will be more than 100 per cent. Out of the total respondents 54.94 per cent

are not interested to know about insurance, 26.43 per cent are not approached by any agent and so on.

Table 3.1 : There is no difference between Life insurance and General insurance

SCALE	URBAN	RURAL	TRIBAL
Strongly Disagree			
Disagree	0	0	0
Neither Agree or Disagree	5 (10.87)	46 (39.66)	0
Agree	0	0	0
Strongly Agree	41 (89.13)	70 (60.34)	0

Source: Survey report
Numbers in parentheses are percentages

In the modern days there are different types of insurance. But many uninsured do not know the difference between life and general insurance. Here it examines the level of knowledge on types of insurance. The table-3.1 explains the opinion of the respondents on the statement that is there is no difference between Life insurance and General insurance. Out of the total urban respondents 89.13 per cent were strongly agreed and 10.87 per cent were neutral. From the total rural respondents 60.34 per cent were strongly agreed and 39.66 per cent were neutral. Nobody from tribal responded against the above statement. It clearly shows that most of the respondents do not know the difference between life insurance and general insurance. Where as, in tribal area the respondents don't know the difference between life insurance and general insurance.

Table 4.1: The interest to know about life insurance

HAVING INTEREST TO KNOW ABOUT LIFE INSURANCE	URBAN	RURAL	TRIBAL	TOTAL
Yes	91 (80.53)	105 (51.98)	22 (7.80)	218 (36.51)
No	22 (19.47)	97 (48.02)	260 (92.20)	379 (63.48)
Total	113 (100.0)	202 (100.0)	282 (100.0)	597 (100.0)

Source: Survey report

Numbers in parentheses are percentages

Here it examines the interest to know about life insurance. If the respondents are interested then it observed whether the interested candidates contacted the agent or not, then the reasons for not insuring can be identified.

Table-4.1 explains the opinion of the uninsured respondents' interest to know about life insurance. Out of the total respondents from urban area 80.53 per cent have interest to know about insurance and 19.47 per cent are not interested to know about life insurance. Among the total rural respondents 51.98 per cent have interest to known about life insurance and 48.02 per cent are not interested to know about life insurance. And from the total uninsured sample of tribal area 7.80 per cent have interest to know about life insurance and 92.20 per cent are interested to know about life insurance. Out of the total 597 uninsured respondents 63.48 per cent not have interest to know about life insurance and 36.51 per cent have interest to know about life insurance.

Table 4.1(a) : The information about contact of insurance agents, who are interested in insurance

Source: Survey report

HAVE YOU CONTACTED ANY INSURANCE AGENT	URBAN (n=91)	RURAL (n=105)	TRIBAL (n=22)	TOTAL (n=218)
Yes	40 (43.96)	44 (41.90)	0	84 (38.53)
No	51 (56.04)	61 (58.10)	22 (100.0)	134 (61.47)

Source: Survey report

Numbers in parentheses are percentages

Table-4.1 (a) explains the respondents' information about contact of insurance agents, who are interested in insurance. Out of the total uninsured interested respondents from urban area 43.96 per cent have contacted insurance agents and 56.04 per cent didn't contact the agent. Among the total rural uninsured interested respondents 41.90 per cent have contacted

insurance agents and 58.10 per cent didn't contact the agent. And from the total tribal respondents cent percent have not contacted any insurance agents. Out of the total interested respondents 61.47 per cent have not contacted the agent, where as 38.53 per cent have contacted through the agent.

Table 4.1(b) : The interested uninsured respondents identified the benefits of life insurance after contacting with the agent

DO YOU IDENTIFY THE BENEFITS OF LIFE INSURANCE	URBAN (n=40)	RURAL (n=44)	TRIBAL (n=0)	TOTAL (n=84)
Yes	22 (55.0)	27 (61.36)	-	49 (58.33)
No	18 (45.0)	17 (38.64)	-	35 (41.66)

Source: Survey report

Numbers in parentheses are percentages

Table-4.1 (b) examines whether the interested uninsured respondents identified the benefits of life insurance after contacting with the agent or not. Out of the total urban interested uninsured respondents 55.0 per cent have identified the benefits from life insurance and 45.0 per cent are not. Out of the total rural interested uninsured respondents 61.36 per cent have identified the benefits from life insurance and 38.64 per cent are not. This shows that the rural uninsured interested respondents could not understand the benefits from agents than urban area respondents. Out of the total 597 uninsured respondents only 84 respondents have contacted the insurance agents. Among this 58.33 percent identified the benefits of life insurance and 41.66 didn't identify the life insurance benefits.

H₀ : Benefit of life insurance is protection to life.

Table 4.1 (c) (Urban) explains the urban respondents, who identified the benefits in life insurance have ranked the benefits in different categories. The total agent contacted urban uninsured interested respondents that contacted agent are 40 but who identified the benefits in life insurance are only 22. Out of the total urban respondents two persons gave first rank to savings, two persons gave first rank to investment, 10 persons gave first rank to protection to life and eight persons gave first rank to family security. The calculated correlation values for the above benefits of life insurance among the urban area persons are - 0.41, -0.43, 0.27, 0.28, 0.77, -0.23 0.80 and -0.58 respectively. The analysis shows that majority of the respondents have identified protection to life and family security by the life insurance.

The table 4.1 (c) (Rural) explains the uninsured sample respondents, rankings the benefits of life insurance in different categories. The total agent

contacted rural uninsured interested respondents are 44 but who identified the benefits in life insurance are only 27. Out of the total rural respondents 17 persons had given first rank to Children education, seven persons gave first rank to savings, and three persons gave first rank to family security. The calculated correlation values for the above benefits of life insurance among the rural area persons are -0.40, 0.18, 0.63, -0.46, 0.03, -0.26, 0.62 and -0.58 respectively. The analysis shows that majority of the respondents have identified of family security and Children education as the benefits of life insurance.

According the correlation values 0.77* and 0.03 of table – 7.3 (c) urban and rural, the hypothesis is accepted in the urban area and rejected in rural area.

H0. : Uninsured respondents identified the benefits of insurance but not insured because of low income.

Table 4.1 (d) (Urban) explains the different reasons for not taking life insurance. The total respondents from urban who identified the benefits have ranked the reasons. Out of the total agent contacted urban uninsured interested respondents (22) was contacted agents, the first rank is given to financial problems by 19 persons and low income by three

persons. The calculated correlation values for the above reasons for not insuring even after identifying benefits are 0.62, 0.23, -0.26, -0.33, -0.41, 0.56, 0.63, -0.11 and -0.55 respectively. The analysis shows that majority of the respondents have identified the benefits but are unable to insure because of their poverty.

Table 4.1(d) (Rural) explains the different reasons for not taking life insurance. The total rural respondents who identified the benefits have ranked the reasons. Out of the total rural uninsured interested respondents (27), who contacted agents cent percent respondents gave first rank to financial problems. The calculated correlation values for the above different types of difficulties why they have not insured among the rural area persons are 0.55, 0.17, -0.17, -0.21, -0.39, 0.25, 0.51, -0.18 and -0.55 respectively. The analysis shows that majority of the respondents have identified the benefits but unable to insure because of their poverty.

According the correlation values 0.63 and 0.51 of table – 3.3 (c) urban and rural, even though these are the high correlation values in the table as they are not significant, hence the hypothesis is rejected.

Table 4.1(c) : (Urban) Correlation coefficient to the benefits of life insurance –Urban respondents

RANKS	Children education	Children marriage	Savings	Investment	Protection to life	Protection from disability	Family security	Others
1	0	0	2	2	10	0	8	0
2	0	0	2	2	8	0	10	0
3	4	3	4	4	2	3	2	0
4	3	4	4	4	0	7	0	0
5	4	4	4	5	0	4	1	0
6	4	4	4	5	0	4	1	0
7	7	7	2	0	2	4	0	0
8	0	0	0	0	0	0	0	22
Correlation Values	-0.41	-0.43	0.27	0.28	0.77*	-0.23	0.80*	-0.58

Source: Survey report

Table 4.1(c) : (Rural) Correlation coefficient to the benefits of life insurance – Rural respondents

RANKS	Children education	Children marriage	Savings	Investment	Protection to life	Protection from disability	Family security	Others
1	17	0	7	0	0	0	3	0
2	0	15	2	3	0	0	7	0
3	0	0	7	0	0	7	13	0
4	0	0	3	0	17	3	4	0
5	0	0	8	3	10	6	0	0
6	10	10	0	7	0	0	0	0
7	0	2	0	14	0	11	0	0
8	0	0	0	0	0	0	0	27
Correlation Values	0.40	0.18	0.63	-0.46	0.03	-0.26	0.62	-0.58

Source: Survey report

Table 4.1(d) : (Urban) Correlation coefficient of the reasons for not taking life insurance – Urban respondents

RANKS	Financial problem	Lack of interest	Uncertainty of companies	Conservation thinking	Religious restrictions	High premiums	Low income	Misconception	Any other
1	19	0	0	0	0	0	3	0	0
2	3	0	0	0	0	11	8	0	0
3	0	6	0	0	0	5	11	0	0
4	0	16	0	0	0	6	0	0	0
5	0	0	8	2	0	0	0	12	0
6	0	0	7	6	0	0	0	9	0
7	0	0	7	14	0	0	0	1	0
8	0	0	0	0	22	0	0	0	0
9	0	0	0	0	0	0	0	0	22
Correlation Values	0.62	0.23	-0.26	-0.33	-0.41	0.56	0.63	-0.11	-0.55

Source: Survey report

Table 4.1(d) : (Rural) Correlation coefficient of the reasons for not taking life insurance – Rural respondents

RANKS	Financial problem	Lack of interest	Uncertainty of companies	Conservation thinking	Religious restrictions	High premiums	Low income	Misconception	Any other
1	27	0	0	0	0	0	0	0	0
2	0	0	0	0	0	8	19	0	0
3	0	2	0	5	2	3	8	7	0
4	0	19	8	0	0	0	0	0	0
5	0	6	5	0	0	16	0	0	0
6	0	0	6	14	0	0	0	7	0
7	0	0	8	6	0	0	0	13	0
8	0	0	0	2	25	0	0	0	0
9	0	0	0	0	0	0	0	0	27
Correlation Values	0.55	0.17	-0.17	-0.21	-0.39	0.25	0.51	-0.18	-0.55

Source: Survey report

Table 5.1 : The life insurance should be made compulsory to every one.

LIFE INSURANCE SHOULD BE MADE COMPULSORY	URBAN	RURAL	TRIBAL	TOTAL
Yes	71 (62.83)	138 (68.31)	-	209 (35.08)
No	42 (37.17)	64 (29.69)	282 (100.0)	388 (64.92)
Total	113 (100.0)	202 (100.0)	282 (100.0)	597 (100.0)

Source: Survey report

Numbers in parentheses are percentages

Life insurance is compulsory in many western countries but in India majority of the people opined that it should not be made compulsory.

Table-5.1 shows the opinion of the respondents on a given statement i.e. life insurance should be made compulsory to every one. Out of the total respondents from urban area 62.83 percent said 'yes' and remaining 37.17 per cent said 'no' for the above opinion. Among the total rural respondents 68.31 per cent said 'yes' and 29.69 per cent said 'no' for the above statement. And from the total respondents from tribal area cent percent are against to compulsory taking of life insurance. Out of the total respondents 64.92 per cent are against and 35.08 per cent are positive to make life insurance compulsory.

H₀: Knowledgeable uninsured wants to make life insurance compulsory as it provides security to dependents.

Table 5.1(a) : (Urban) Correlation coefficient of the reasons for making life insurance compulsory - Urban respondents

RANKS	Human life is more valuable	Security for dependents	Future protection	Any other
1	22 (30.99)	31 (43.66)	18 (25.35)	0
2	11 (15.49)	17 (23.94)	43 (60.56)	0
3	38 (53.52)	23 (32.39)	10 (14.08)	0
4	0	0	0	71 (100.0)
Correlation Values	0.31	0.85	0.61	-0.77

Source: Survey report
Numbers in parentheses are percentages

Table-5.1 (a) (Urban) explains the reasons for making life insurance compulsory. The total respondents from urban area have ranked the reasons. Among the total urban respondents only 71 opted 'yes' for making life insurance compulsory. Out of this the first rank is given to human life is more valuable by 30.99 per cent, security for dependents by 43.66 per cent and future protection by 25.35 per cent. The calculated correlation values for the different types reasons for life insurance compulsory among the urban area persons are 0.31, 0.85, 0.61 and -0.77 respectively. Total 35.678 respondents identified and ranked the reasons for making life insurance compulsory. According to correlation values the urban respondents (0.85) identified benefit as security for dependents.

Table 5.1.(a) : (Rural) Correlation coefficient of the reasons for making life insurance compulsory - Rural respondents

RANKS	Human life is more valuable	Security for dependents	Future protection	Any other
1	11 (7.97)	127 (92.03)	0	0
2	97 (70.29)	2 (1.45)	39 (28.26)	0
3	16 (11.59)	9 (6.52)	0	113 (Saving) (81.88)
4	14 (10.15)	0	99 (71.74)	25 (18.12)
Correlation Values	0.33	0.78	-0.71	-0.48

Source: Survey report
Numbers in parentheses are percentages

Table-5.1 (a) (Rural) explains the reasons for making life insurance compulsory. The total rural respondents have ranked the reasons. Among the total rural respondents only 138 opted 'yes' for making life insurance compulsory. Out of this the first rank is given to human life is more valuable by 7.97 per cent, security for dependents by 92.03 per cent. The calculated correlation values for the above reasons for making life insurance compulsory among the rural area persons are 0.33, 0.78, -0.71 and -0.48 respectively. 35.68 per cent of the respondents identified and ranked the reasons for making life insurance compulsory. According to correlation values the rural respondents (0.78) identified benefit as security for dependents. According to the correlation values 0.85 and 0.78 of table - 7.4 (a) urban and rural, even though these are the high correlation values in the table as they are not significant the hypothesis is rejected.

H₀: Uninsured respondents oppose to make life insurance compulsory because of low income.

Table 5.1(b) : (Urban) Correlation coefficient of the reasons for not making life insurance compulsory – Urban respondents

RANKS	It is not a basic need	Present important than future	Low income	Low return	Any other
1	27 (64.29)	0	25 (59.52)	0	0
2	15 (35.71)	6 (14.29)	17 (40.48)	0	0
3	0	36 (85.71)	0	0	0
4	0	0	0	42 (100.0)	0
5	0	0	0	0	42 (100.0)
Correlation Values	0.89*	0.06	0.89*	-0.35	-0.71

Source: Survey report
Numbers in parentheses are percentages

Table-5.1 (a) (Urban) is explaining the reasons for not making life insurance compulsory. The total urban respondents were 113 out of which 71 agreed for making life insurance compulsory. Hence, the remaining 42 respondents have ranked the reasons. Out of the total respondents (42) the first rank is given to insurance is not a basic need by 64.29 per cent and to low income by 59.52 per cent. The calculated correlation values for the above reasons for not making life insurance compulsory among the urban area persons are 0.89, 0.06, 0.89, -0.35 and -0.71 respectively. Out of the total respondents 64.32 per cent are against to make life

insurance compulsory. According to correlation values the urban respondents (0.89*) opined as it is not a basic need.

Table 5.1(b) : (Rural) Correlation coefficient of the reasons for not making life insurance compulsory – Rural respondents

RANKS	It is not a basic need	Present important than future	Low income	Low return	Any other
1	12 (20.0)	10 (16.67)	38 (63.33)	0	0
2	31 (51.67)	11 (18.33)	18 (30.0)	0	0
3	17 (28.33)	39 (65.0)	4 (6.67)	0	0
4	0	0	0	60 (100.0)	0
5	0	0	0	0	60 (100.0)
Correlation Values	0.67	0.10	0.83	-0.35	-0.71

Source: Survey report

Numbers in parentheses are percentages

Table-7.5 (a) (Rural) shows the reasons for not making life insurance compulsory. The total respondents from rural area were 202 out of which 60 agreed to making life insurance compulsory. Hence, the remaining 142 respondents have ranked the reasons. Out of the total respondents (142) the first rank is given to insurance is not a basic need by 20.0 per cent and to low income by 63.33 per cent. The calculated correlation values for the above reasons for not making life insurance compulsory among the rural area persons are 0.67, 0.10, 0.83, -0.35 and -0.71 respectively. Out of the total respondents 64.32 per cent are against to make life insurance compulsory. According to correlation values the rural respondents (0.83) opposed because of low income.

Table 5.1(b) : (Tribal) Correlation coefficient of the reasons for not making life insurance compulsory – Tribal respondents

RANKS	It is not a basic need	Present important than future	Low income	Low return	Any other
1	0	20 (7.09)	262 (92.91)	0	0
2	191 (67.73)	71 (25.18)	20 (7.09)	0	0
3	91 (32.27)	191 (67.73)	0	0	0
4	0	0	0	282 (100.0)	0

5	0	0	0	0	282 (100.0)
Correlation Values	0.36	0.12	0.75	-0.35	-0.71

Source: Survey report

Numbers in parentheses are percentages

Table-5.1 (a) (Tribal) shows the reasons for not making life insurance compulsory. The total respondents from tribal area were 282 out of which no one agreed with making life insurance compulsory. So the total respondents ranked the reasons for not making compulsory. The first rank is given to low income by 92.91 per cent and that present is important than future by 9.09 per cent. The calculated correlation values for the different reasons for not making life insurance compulsory among the urban area persons are 0.36, 0.12, 0.75, -0.35 and -0.71 respectively. Out of the total respondents 64.32 per cent are against to make life insurance compulsory. According to correlation values the rural respondents (0.83) opposed because of low income. According to the correlation values 0.89*, 0.83 and 0.75 of table – 7.4 (b) urban, rural, and tribal, the hypothesis is accepted in the urban area and rejected in rural and tribal areas.

Table 6.1 : The visit of an agent/advisor to the uninsured persons

IS ANY INSURANCE AGENT CAME TO YOU	URBAN	RURAL	TRIBAL	TOTAL
Yes	78 (69.03)	121 (59.90)	6 (2.13)	205 (34.33)
No	35 (30.97)	77 (40.10)	276 (97.87)	388 (65.67)
Total	113 (100.0)	202 (100.0)	282 (100.0)	597 (100.0)

Source: Survey report

Numbers in parentheses are percentages

Table-6.1 examines the visit of an agent/advisor to the uninsured persons from the selected three areas. Out of the total urban respondents from urban area 69.03 per cent said 'yes' and remaining 30.97 per cent said 'no' regarding the visit of agent. Among the total rural respondents 59.90 per cent said 'yes' and 40.10 per cent said 'no' regarding the agent's visit. Among the total tribal respondents 2.13 per cent said 'yes' and 97.87 per cent said 'no' to the visit of agent. Out of the total 597 uninsured respondents 65.67 per cent are not approached by any insurance agent where as to 34.33 per cent said that the insurance agents approached them.

Table 6.1(a) : (Rural) Response to agent

DID YOU TALKED WITH HIM	URBAN (n=78)	RURAL (n=121)	TRIBAL (n=6)	TOTAL (n=205)
Yes	12 (15.38)	18 (14.87)	0	30 (14.64)
No	66 (84.62)	103 (85.13)	6 (100.0)	175 (85.36)
Total	78 (100.0)	121 (100.0)	6 (100.0)	205 (100.0)

Source: Survey report

Numbers in parentheses are percentages

Table-6.1 (a) explains the response of the respondents' to the insurance agents or advisors who approached them. Out of the total respondents to whom agents or advisors contact in urban area 15.38 per cent were talked with them and 84.62 per cent are not. Among the total rural interested respondents 14.87 per cent were talked with agents and 85.13 per cent did not. And from the total interested respondents' from tribal area cent percent did not talk to agents. This shows that majority of the respondents in all areas have not allowed the agents to talk with them so they did not take insurance. Out of the total 205 respondents who were approached by agents only 14.64 percent talked with the agent. The attitude of uninsured is complex to measure even still the study tried to dig the information from the respondents to identify their attitude. Majority do not have knowledge of insurance. As all of them are suspects to insurance companies, the study focused to find the prospects. Hence the reasons for not having the knowledge of insurance was found, and asked to not knowledgeable respondents. The knowledgeable persons are interested to make life insurance compulsory as it provides security to dependents. Most of the knowledgeable respondents not insured because of financial problems. Even though they are not interested to talk with the agent, agents approached them but very few talk to the agent and out of which very few identified the benefit. They failed to have insurance policy because of financial problems, low income, unable to understand, not interested etc.

XII. FINDINGS

Out of the total 597 uninsured respondents 72.86 per cent don't know about insurance, where as 27.14 per cent are aware of insurance. The total knowledgeable respondents (27.14 per cent) ranked the sources of information. According to correlation values the sources information to urban respondents is friends and relatives (0.84) and advertisements (0.81). Where as in rural respondents it is through friends and relatives (0.89*). The total not knowledgeable respondents are 72.86 per cent, out of which 54.94 per cent do not have interest. Where as 28.89 per cent respondents were not

approached by agent. The total knowledgeable respondents are 27.14 per cent, out of which the urban respondents 89.13 per cent and rural respondents by 60.34 per cent don't know the difference between life and general insurance. Out of the total respondents, 63.48 per cent do not have interest to know about life insurance and 36.51 per cent have interest to know about life insurance. Out of the total 36.51 per cent interested respondents 61.47 per cent could not contact the agent hence only 38.53 per cent contacted the agent. Total 38.53 per cent respondents contacted the agent, out of which 58.33 per cent identified the benefits of life insurance and 41.66 per cent could not identify the benefits of life insurance. The 58.33 per cent respondents identified and ranked the benefits of life insurance for which correlation coefficient values are calculated. According the correlation values the urban respondents priority of benefits is family security (0.80*) and protection to life (0.77*). Where as the rural respondents priority is family security (0.62) and children's education (0.40). According to the correlation values the urban and rural respondent's priority of reasons for not taking a policy because of low income (0.63) and financial problem (0.62).35.678 per cent of the respondents identified and ranked the reasons for making life insurance compulsory. According to correlation values the urban respondents (0.85) and rural respondents (0.78) priority is security for dependents. Out of the total respondents 64.32 per cent are against to make life insurance compulsory. According to correlation values the urban respondents (0.89*) opined as it is not a basic need and rural respondents (0.83) and tribal respondents (0.75) opposing because of low income. Out of the total respondents 34.33 per cent met the agent, but only 14.64 per cent respondents talked with agent.

XIII. CONCLUSION

Nearly 50 per cent of the respondents are not insured as they have negative attitude towards life insurance. The insurance companies should target this segment and change their attitude. Among the uninsured, the potential segment is daily wage workers and small business people. People with low education levels need to be convinced by the agents as they can not understand the various schemes offered by the companies.

The attitudes of the uninsured are not favorable towards life insurance because of their family type, size, number of dependents etc. This can be changed by direct marketing, family counseling, etc. The respondents are investing in unlicensed chit funds, daily finance etc, and some of them lost their money. If they are given proper awareness about the insurance they can be protected from illegal activities and will have risk coverage. Majority of respondents from rural and tribal areas are not having awareness about the type of

insurance policies. It is the duty of all the insurance players to state the importance of life insurance and various life insurance products in the present scenario. In tribal areas agents services should be improved. Agents in the tribal areas must be trained how to deal with tribal customers. In rural and tribal areas companies should appoint local people as agents because they do not believe the strangers. Agents should be encouraged and provided incentive when they cover the rural and tribal areas.

To eliminate these obstacles insurance companies have to take necessary action to gain the trust of the consumer. Irrespective of the occupation, age, marital status, caste, religion and educational qualification every one has to feel the need of life insurance. Hence Government should bring awareness about the insurance and its importance and need. The unfavorable feeling of illiterates, daily wage workers etc., can be washed out by educating the households extensively. Government should create awareness about insurance among people. Most of the uninsured have negative attitude as they don't have knowledge about insurance. Generally insurance is considered as only for high income people. This notion must be changed, through social marketing among the low income people.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Leon G.Schiffman and Leslie Lazar Kanuk, Consumer Behaviour – Pearson Publishers, eighth edition, 251-257
2. Various IRDA Journals and Reports.
3. U.Jawaharlal and K.Seetha Pathi, Life insurance Vol-I, Insurance series, ICFAI University, 2002.
4. A vijaya Kumar, Globalization of Indian insurance sector issues and challenges, journal of Management Accountant, March 2004, p. 195-198
5. Anupam Goswami, Business India, December 2003 – January 2004, Pg No. 92 and 93.
6. Bhakti Chuganee, Business India, Sep – 26 oct – 9 – 05, page: 100.
7. C.S.Rao, insurance issues and challenges, yojana journal, April 2006', p: 4-9
8. http://www.irdaonline.org/irdacontent/journals/irda_mar0.pdf
9. D.Chennappa, FDI in insurance sector in India, Southern Economist journal, May 15, 2006,p: 13-17.
10. Opinion of Life Insurance Agents by P. Vaidyanathan published by National Insurance Academy in March 84.
11. Deloitte, financial services, global insurance industry out look, 2005 top 10 issues (http://www.viewswire.com/report_dl.asp?mode=fi&fi=910705876.PDF&rf=0)
12. Chatterjee, D. and Jessup, L.M. (2002): leveraging the Web in Knowledge based Service Industry
13. Edwin R Erickson How to be a better life insurance salesman, Publisher: Insurance Research & Review Service, Inc (1956)
14. K P Sarma, Business Performance of Life Insurance Agents, Published by National Insurance Academy, 1998.



GLOBAL JOURNAL OF MANAGEMENT AND BUSINESS RESEARCH
Volume 12 Issue 4 Version 1.0 March 2012
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4588 & Print ISSN: 0975-5853

Multiple Borrowing and Loan Repayment: A Study of Microfinance Clients at Iringa, Tanzania

By Hosea Mpogole, Immaculate Mwaungulu, Serijo Mlasu,
& Galinoma Lubawa

Tumaini University, Iringa

Abstract - Studies on multiple borrowing and its effect on loan repayment among clients and sustainability of microfinance providers (MFIs) show contradicting results. Some studies indicate that multiple borrowing has a positive effect on loan repayment and sustainability of MFIs while others show that it leads to over indebtedness and consequently default on loan. Therefore, this study analysed the incidences of multiple borrowing, reasons for multiple borrowing, and effects of multiple borrowing on loan repayment at Iringa municipality in Tanzania. Results showed that prevalence of multiple borrowing at Iringa in Tanzania was very high. Over 70% of the 250 microfinance clients had at least two loans from different MFIs at the same time. In addition, about 16% had also borrowed from individual lenders. Major reasons for multiple borrowing were insufficient loans from MFIs, loan recycling, and family obligations. Over 70% of the respondents had problems in loan repayment because of multiple pending loans. We found that education level and number of dependants of the respondent significantly influenced the number of loan contracts. Recommendations are also provided.

Keywords : *Loan repayment; Microfinance; Microfinance institutions; Multiple borrowing; Multiple loans, Tanzania.*

GJMBR-B Classification : *FOR Code:150203, 150202, JEL Code: G21*



MULTIPLE BORROWING AND LOAN REPAYMENT A STUDY OF MICROFINANCE CLIENTS AT IRINGA, TANZANIA

Strictly as per the compliance and regulations of:



RESEARCH | DIVERSITY | ETHICS

© 2012 . Hosea Mpogole, Immaculate Mwaungulu, Serijo Mlasu, & Galinoma Lubawa. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License (<http://creativecommons.org/licenses/by-nc/3.0/>), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Multiple Borrowing and Loan Repayment: A Study of Microfinance Clients at Iringa, Tanzania

Hosea Mpogole^a, Immaculate Mwaungulu^σ, Serijo Mlasu^a, & Galinoma Lubawa^a

Abstract - Studies on multiple borrowing and its effect on loan repayment among clients and sustainability of microfinance providers (MFIs) show contradicting results. Some studies indicate that multiple borrowing has a positive effect on loan repayment and sustainability of MFIs while others show that it leads to over indebtedness and consequently default on loan. Therefore, this study analysed the incidences of multiple borrowing, reasons for multiple borrowing, and effects of multiple borrowing on loan repayment at Iringa municipality in Tanzania. Results showed that prevalence of multiple borrowing at Iringa in Tanzania was very high. Over 70% of the 250 microfinance clients had at least two loans from different MFIs at the same time. In addition, about 16% had also borrowed from individual lenders. Major reasons for multiple borrowing were insufficient loans from MFIs, loan recycling, and family obligations. Over 70% of the respondents had problems in loan repayment because of multiple pending loans. We found that education level and number of dependants of the respondent significantly influenced the number of loan contracts. Recommendations are also provided.

Keywords : *Loan repayment; Microfinance; Microfinance institutions; Multiple borrowing; Multiple loans, Tanzania.*

I. INTRODUCTION

Tanzania is one of the poorest countries in the world with a per capita GDP of about USD 525 (NBS, 2010). About 34% of the 40 million Tanzanians fall below the basic needs poverty line and 17% below the food poverty line (HBS, 2009). Contrary to the government efforts of reducing poverty incidences through various measures such National Strategy for Growth and Reduction of Poverty (NSGRP) or commonly known as MKUKUTA, Vision 2025, Millennium Development Goals (MDG), and financial deepening, the absolute number of people living in poverty has been increasing since 2000/01. For instance, in 2007/08 there were 12.9 million Tanzanians below the basic needs poverty line as compared to 11.4 million in 2000/01 (HBS, 2009).

The main factors behind the slow progress and poverty incidences in Tanzania are primarily inadequate capital accumulation and productivity growth (Randhawa and Gallardo, 2003). To address the issue of capital there has been a number of economic and financial reforms notably the financial reforms of 1991 and the subsequent development of the National

Microfinance Policy of 2000. Since then, a number of supportive microfinance institutions (MFIs) have been mushrooming extending credit to the informal business sector (Chijoriga, 2000; Kuzilwa, 2005). Such MFIs share a common belief that provision of microfinance can facilitate growth and development (Kessy and Urio, 2006; PRIDE Tanzania, 2006).

The rising number of microfinance providers has led to a drastic increase in competition. On one hand, this has enabled microfinance clients to have a wider choice of services as from which MFI to take a loan. On the other hand, anecdotal evidence and our own observation show that the increasing number of MFIs has tempted clients to take more than one loan at the same time resulting into multiple loans. Incidences of one client with five different loans at the same time are not uncommon. Literature shows that multiple borrowing for low-income clients is said to increase incidences of over-indebtedness and consequently default on loans (Gwendolyn, 2001; Vogelgesang, 2003). As such, multiple borrowing can sometimes make clients poorer and at the same time threaten the sustainability of MFIs (Gwendolyn, 2001; Vogelgesang, 2003).

This study, therefore, analysed the incidences of multiple borrowing, reasons for multiple borrowing, and effects of multiple borrowing on loan repayment at Iringa municipality in Tanzania. Currently, Iringa municipality is estimated to have a population size of about 120,000 people (NBS, 2007) with over 10 microfinance providers excluding Savings and Credit Cooperative Societies (SACCOS) (MBF, 2010).

II. MULTIPLE BORROWING AND ITS EFFECTS

The fast growth of microfinance services is leading to the risk of multiple borrowing by clients, which makes governance of the loans being more difficult (Johnson, 2004; Krishnaswamy, 2007). In fact, multiple borrowing is becoming a common practice for many clients in areas where there is concentration of MFIs (Wisniwski, 2010). According to Wisniwski, some of the causes of multiple borrowing are clients poaching and loan pushing on the MFIs side, and loan recycling from the clients' side.

Empirical evidences on the effect of multiple borrowing on clients and the MFIs are contradictory. Some studies find that multiple borrowing has a positive

Author ^a : Tumaini University, Iringa, Tanzania.

Author ^σ : Mama Bahati Foundation (MBF), Iringa, Tanzania.

effect on loan repayment and sustainability of MFIs (Krishnaswamy, 2007) while others, for example, Chaudhury et al. (2001), Rhyne (2001), Johnson (2004), and Wisniwski (2010) show the opposite. Krishnaswamy (2007) reports that multiple borrowers have been found to have equal or better repayment records than their single borrowing peers in the same villages.

Contrary to Krishnaswamy (2007), a number of incidences of failure to repay because of multiple borrowing have been reported. For example, Chaudhury et al. (2001) find that there have been an increasing number of households in Bangladesh that take multiple loans from different MFIs and that their repayment rate was declining. Similar incidences have been reported in Bolivia, Bosnia, Herzegovina, Morocco, Nicaragua, and elsewhere (Rhyne, 2001; Wisniwski, 2010). It has been found that multiple borrowers had increasingly high debt levels and repayment obligations, which they frequently could not fulfil because of over-indebtedness. For instance, Wisniwski (2010) finds a correlation between over-indebtedness as measured by number of credit contracts and risk of default as measured by over 30 day unpaid loans. Individuals with more credit contracts were at a higher risk of defaulting. On the other hand, Vogelgesang (2003) argues that lower repayment rates may lead to less favourable credit conditions for the poorest borrowers, for example, when interest rates are raised, which may consequently lead them to drop-out from the loan portfolio of the MFI. In this regard, Johnson (2004) argues that caution must be taken when planning for expansion of loan to discourage multiple borrowing and default.

Incidences of multiple borrowing and its effects have not been well studied and documented in a Tanzanian context. As such the prevalence of multiple borrowing, reasons for multiple borrowing and their effects have not been documented. This study attempted to bridge this knowledge gap and to propose ways of managing loans for sustainability of the microfinance sector and the informal business sector. According to UK (2007), over-indebtedness threatens the government's goal of improving the well-being of its citizens and is therefore a serious concern.

III. METHODOLOGY

a) Study location

The study was conducted at Iringa municipality in Tanzania. The location was purposively selected for two major reasons. First, Iringa has both characteristics of urban and semi-urban features where like other parts of the country, microfinance services have been growing rapidly with increasing cases of multiple borrowing (MBF, 2010). Second, the location was within the reach of the researchers especially in terms of associated travel and data collection costs since there was no external funding for this study. According to Creswell

(2003) and Kumar (2011), the choice of study location and data collection depend upon among other things the resources available and the demographic characteristics of the study population. As such, we did not find any threats or limitations on data quality associated with the study location.

b) Sampling and data collection

A sample of 250 microfinance clients from 6 MFIs at Iringa municipality was included in the survey. The six MFIs were BRAC Tanzania, FINCA, PRIDE Tanzania, IDYDC, MBF, and Presidential Trust Fund (PTF). MFIs were purposively selected because of their popularity regarding the number of clients they served. In addition, six depth interviews were conducted.

Survey participants were randomly drawn from the mentioned MFIs when they went to repay the loan or to negotiate for an extension of repayment date. A lot of socialisation was done to make the interviews interactive for participants to disclose their multiple borrowing statuses. Depth interviews were carried out with group loan leaders. Because of lack of collateral, clients organise themselves in groups and guarantee each other. In case of default of one group member, the entire group is held responsible. These interviews helped to solicit information on prevalence of multiple borrowing among group members. It was considered easier for a person to talk about the status of the group or another person than him/herself. In this regard, depth interviews were supplement to the survey questionnaire. However, since the results of survey questionnaire and the interviews did not contradict, the distinction between the two in the results and discussion section is less pronounced.

Depth interviews were conducted in Swahili, a Tanzanian national language and later translated to English. Each interview took about 45 minutes and was tape-recorded for further transcription. Participants of the depth interviews were not part of the respondents of the survey questionnaire.

The survey questionnaire included questions on: demographic information of the respondents such as age, education level, and gender; whether had loans from more than one institution; reasons for taking more than one loan; repayment schedule; whether repays on time; and benefits and problems associated with multiple loans. The main survey was conducted between June and July 2010. Data for this study were part of the principal researcher's MBA dissertation at Tumaini University, Iringa University College.

c) Data analysis techniques

This was a descriptive study aiming at obtaining a general picture of the prevalence of multiple borrowing, reasons for multiple borrowing and associated effects of multiple borrowing. Although we performed a regression analysis for determinants of

multiple loan contracts, rigorous statistical/econometrical analysis was not our aim at this stage as we did not focus at meeting any statistical significance (see Kumar (2011)). For the regression model, we hypothesised that age, sex, education level, and number of dependants would affect the number of loan contracts of clients. This supposition led to the development of the following linear model:

$$\text{Multiloans} = \beta_0 + \beta_1 \text{age} + \beta_2 \text{sex} + \beta_3 \text{Education} + \beta_4 \text{dependants} + \epsilon$$

Where:

- Multiloans is the dependent variable measured by the number of loan contracts a client had;
- Age is the age (in years) of the client;
- Sex is the sex of the client (1 = male, 0 = female);
- Education is the level of education of the client measured on a scale of 1 to 5, where 1 means no formal education and 5 means university/college education;
- Dependants is the number of persons who completely depend on the client for a living;

- β_0 is the intercept;
- β_i 's are the parameters to be estimated using the OLS method; and
- ϵ is the stochastic error term.

Also, depth interviews were coded by tagging recurring themes about incidences of multiple borrowing, reasons for multiple borrowing, and benefits/problems associated with multiple borrowing.

IV. RESULTS AND DISCUSSION

a) Description of respondents

Our sample consisted of both male and female respondents. As shown in Table 1, out of the 250 survey respondents, about 38% were male while the remaining about 62% were female. Since our sample was random, this reflects the current situation where majority of the MFIs focus their loans to women. It was expected that men would have more multiple loans than women because are less risk averse as compared to women (Olomi, 2009).

Table 1: Characteristics of respondents

Category	Frequency	Percentage	Category	Frequency	Percentage
Sex			Dependants		
Male	96	38.4	1 - 3	70	28.0
Female	154	61.6	4 - 5	95	38.0
Total	250	100.0	Above 5	85	34.0
Age			Total	250	100.0
15 - 24	26	10.4	Education		
25 - 34	82	32.8	No formal education	23	9.2
35 - 44	127	50.8	Primary education	125	50.0
45 +	15	6.0	Secondary education	65	26.0
Total	250	100.0	Vocational training	18	7.2
			College/university	19	7.6
			Total	250	100.0

About 51% of all survey respondents were in the 35 to 44 year age group whereas about 43% were less than 35 years of age. It was expected that older people would have more loan contracts than younger ones reflecting the family obligations. Since, clients of 45 years of age and above were negligible, it either means that older people were not engaged in small businesses or MFIs discouraged such people. According to NBS (2010), life expectancy at birth in Tanzania is 51 years.

In terms of education, 50% of all survey respondents were primary school leavers, 26% had secondary education, and about 9% did not have any formal education. According to HBS (2009), about 24% of adults in Tanzania mainland do not have any formal education. By definition, adults with no formal education are the ones who never attended school whether primary or adult education (HBS, 2009). It is interesting

however, to note that even complete illiterate people were entrusted with loans. In this study it was expected that individual with higher levels of education would have less loan contracts as compared to individuals with lower levels.

The other important characteristic of respondents to measure was the number of dependants. As shown in Table 1, all respondents had at least one dependant. However, 72% of all survey respondents had four or more dependants. Contrary to HBS (2009), which defines dependants as individuals who are under 15 or above 65 years, we defined dependants as individuals of whatever age who entirely depend on the respondent for a living. We expected that individuals with more dependants would have more loan contracts than those with fewer dependants.

b) *Existence of multiple loans, reasons, and repayment*

The incidences of multiple loans, reasons for multiple loans, and effects on repayment schedules are summarised as in Table 2. Results indicate that about 71% of all survey respondents had two or more loan contracts with different MFIs at the same time. This indicates that the prevalence of multiple borrowing at Iringa in Tanzania is very high. In addition to multiple loan contracts with MFIs, about 16% of all survey

respondents had also borrowed from friends/relatives or just individuals. These findings indicate that majority of the MFIs did not adhere to traditional banking credit rating history nor did they share clients' information with each other. On the other hand, this might reflect Wisniwski (2010) argument that client poaching exist among MFIs in various countries. Since, majority of the MFIs are clustered in same urban or town centres, they certainly compete for the same clients.

Table 2: Incidences of multiple loans, reasons, and effects

Category	Freq	%	Category	Freq	%
No. of loans from MFIs			Reasons for multiple loans		
One	72	28.8	Loan recycling	29	11.6
Two	125	50	Family obligations	60	24.0
Three or more	53	21.2	Delayed loan disbursement	10	4.0
Total	250	100	Small loans from MFIs	80	32.0
Loans from friends/individuals			Influence of friends	26	10.4
Yes	39	15.6	Relaxed procedures	45	18.0
No	211	84.4	Total	250	100.0
Total	250	100	Reasons for late repayment		
Incidences of late repayment			Multiple loans	85	34.0
Yes	178	71.2	Family obligations	59	23.6
No	72	28.8	Poor business turnover	106	42.4
Total	250	100.0	Total	250	100.0

We asked respondents to mention the one major reason for multiple loan contracts. Results show that the mismatch between the size of loans issued by MFIs and the needs of the clients was one of the major reasons for multiple loan contracts. During the depth interviews, we learnt that some MFIs provide loans between TZS 50,000 to TZS 100,000 equivalent to USD 36 to USD 72 for an exchange rate of TZS 1,396 per USD 1 (BOT, 2010). These amounts are too small to conduct any meaningful business; as such clients have to take the small loans from different sources to reach their goals. Other reasons for multiple borrowing include family obligations, loan recycling, and relaxed or simple loan procedures, influence of friends who are taking multiple loans, and delayed loan disbursement from the MFI in which the client first applied. Family obligations ranked second after that of small loans. This means that although MFIs provide loans for running businesses, clients used the loan for family obligations as well. From the depth interviews, we also learnt that clients did not distinguish business from family matters, as one informants said in Swahili "Huwezi kuacha watoto wanakufa wakati hela ya mkopo ipo" meaning in our own interpretation "You cannot leave children dying at home while there is some money from the loan." The

lack of distinction between family and business in Tanzania has persisted for quite some time (Olomi, 2009).

Incidences of failure to repay loan on time were also high. About 71% of all survey respondents admitted to often face the problem. Multiple borrowing was one of the major reasons for failure to repay on time. Although other reasons such as family obligations and poor business turnover were mentioned, we are of the opinion that the major reason remains to be multiple borrowing. Our argument is backed by the fact that about 71% of all survey respondents had two or more loan contracts while at the same time about 71% of all survey respondents faced problems in loan repayment. With the exception of Krishnaswamy (2007), our findings are consistent with previous studies that multiple borrowing among the poor increases their indebtedness, which threatens their ability to repay. However, Krishnaswamy (2007)'s findings may apply in situations where the borrowers are purely business enterprises who separate the family from the business. In the following section, we briefly discuss about the factors for multiple borrowing.

c) *Determinants of multiple borrowing*

The regression results are shown in Table 3. As seen, the model was significant in explaining about multiple borrowing. The adjusted R-squared was as high

as 83.5% and the variance inflation factor (VIF) did not indicate any presence of serious collinearity among the independent variables.

Table 3: Factors for multiple borrowing

Source	SS	df	MS	Number of obs =	250	
				F(4, 245)	316.140	
Model	103.503	4.000	25.876	Prob > F	0.000	
Residual	20.053	245.000	0.082	R-squared	0.838	
				Adj R-squared	0.835	
Total	123.556	249.000	0.496	Root MSE	0.286	
Multiloans	Coef.	Std. Err.	t	P>t	VIF	Tolerance
Age	0.073	0.048	1.53	0.128	.247	4.044
Sex	-0.095	0.069	-1.37	0.172	.290	3.446
Education	0.153	0.030	5.01	0.000	.342	2.925
Dependants	0.550	0.048	11.49	0.000	.232	4.307
_cons	-0.294	0.155	-1.89	0.059		

Contrary to our expectation, we find that age and sex did not significantly affect the number of loan contracts an individual had. However, level of education and number of dependants significantly affected the number of loan contracts a client had. Again, contrary to our expectation we found that the higher the level of education the more the number of loan contracts. Also, the coefficient of Dependants is relatively very high. The more dependants a client had the more were the loan contracts. This reflects the response that one of the reasons for multiple loans was family obligations, where we have seen that some clients borrow to meet some family problems rather than for business. Even those who borrowed for business did not distinguish between family matters and business itself. In fact, we found that the Pearson correlation coefficient between Multiloans and Dependants was as high as 0.90. Meaning that there is a strong and positive association between the number of dependants a person has and his/her loan contracts.

V. CONCLUSION AND RECOMMENDATIONS

Prevalence of multiple borrowing at Iringa in Tanzania was very high. Over 70% of the 250 microfinance clients had at least two loans from different MFIs at the same time. In addition, about 16% had also borrowed from individual lenders. Major reasons for multiple borrowing were insufficient loans from MFIs, loan recycling, and family obligations. Over 70% of the respondents had problems in loan repayment because of multiple pending loans. We found that education level and number of dependants of the respondent significantly influenced the number of loan contracts.

In order to control the incidences of multiple borrowing we recommend that MFIs should devise a

way of sharing clients' loan information. In addition, MFIs should provide adequate loans so as to avoid the practice of clients to reapply to other MFIs to meet their requirements. Some form of training should also be provided to help clients distinguish between business and family matters.

VI. ACKNOWLEDGMENTS

The authors would like to thank Ms. Grace Sanga and all other research assistant for data collection. Also, authors would like to thank all respondents for their time and for their participation in this study.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Bank of Tanzania (BOT), (2010). Indicative Foreign Exchange Market Rates. Bank of Tanzania; <http://www.bot-tz.org>, site visited September 2010.
2. Chaudhury, I. A. and Imran, M. (2002). Dimensions and Dynamics of Microfinance Membership Overlap: A Micro Study from Bangladesh. *Small Enterprise Development* 13(2): 46-55.
3. Chijoriga, M. M. (2000). Performance and Sustainability of Micro Financing Institutions in Tanzania. *Austrian Journal of Development Studies*, Volume, XVI/3, December.
4. Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Second edition). Sage Publications; Thousand Oak, London, and New Delhi.
5. Gwendolyn, A. (2001). *An Empirical Analysis of Microfinance: Who are the Clients?* North East Universities Development Consortium (NEUDC); <http://www.minneapolisfed.org>, site visited July 24, 2010.

6. Household Budget Survey (HBS), (2009). Household Budget Survey 2007. Ministry of Finance and Economic Affairs, United Republic of Tanzania.
7. Johnson, S. (2004). The Dynamics of Competition in Karatina's Financial Market. Imp-Act Working Paper No. 9. Brighton: Institute of Development Studies.
8. Kessy, S. S. A. and Urrio, F. M. (2006). The contribution of microfinance institutions to poverty reduction in Tanzania. Research on Poverty Alleviation (REPOA); Dar es Salaam.
9. Krishnaswamy, K. (2007). Competition and multiple borrowing in the Indian microfinance sector. Working Paper, Institute for Financial Management and Research, Centre for Microfinance; <http://www.mendeley.com/research>, site visited on January 31, 2012.
10. Kumar, R. (2011). Research Methodology (Third edition). Sage; Los Angeles, London, New Delhi, Singapore, and Washington DC.
11. Kuzilwa, J. A. (2005). The Role of Credit for Small Business Success: A Study of the National Entrepreneurship Development Fund in Tanzania. *Journal of Entrepreneurship*, 14(2):131-161.
12. Mama Bahati Foundation (MBF), (2010). Annual Report; Mama Bahati Foundation, Iringa, Tanzania.
13. National Bureau of Statistics (NBS), (2010). Tanzania in Figures 2009. Ministry of Finance and Economic Affairs, United Republic of Tanzania.
14. National Bureau of Statistics (NBS), (2007). Iringa region socio-economic profile. NBS and Iringa Regional Commissioner's Office, United Republic of Tanzania.
15. Olomi, D. R. (Ed.) (2009). African entrepreneurship and small business development: context and process. Otme; Dar es Salaam.
16. PRIDE Tanzania (2006). Performance and Expansion service to the working poor.
17. Randhawa, B. and Gallardo, J. (2003). Microfinance Regulation in Tanzania, Implications for Development and Performance of the Industry; <http://www.worldbank.org>, site visited July 20, 2010.
18. Rhyne, E. (2001). Mainstreaming Microfinance: How lending to the poor began, grew, and came of age in Bolivia. Kumarian Press ; Bloomfield CT.
19. UK (2007). Tackling over-indebtedness. Department for Business Enterprise & Regulatory Reform, Annual Report, UK; <http://www.bis.gov.uk>, site visited on April 12, 2011.
20. Vogelgesang, U. (2003). Microfinance in times of crisis: The effects of competition, rising indebtedness and economic crisis on repayment behaviour. *World Development*; 31(12): 2085-2115.
21. Wisniewski, S. (2010). Overindebtedness: Evidence, causes and consequences. European Fund for Southeast Europe, Prague, Czech Republic.

GLOBAL JOURNALS INC. (US) GUIDELINES HANDBOOK 2012

WWW.GLOBALJOURNALS.ORG

FELLOW OF INTERNATIONAL CONGRESS OF MANAGEMENT AND BUSINESS RESEARCH (FICMBR)

- 'FARSB' title will be awarded to the person after approval of Editor-in-Chief and Editorial Board. The title 'FARSB' can be added to name in the following manner. eg. **Dr. John E. Hall, Ph.D., FARSB or William Walldroff Ph. D., M.S., FARSB**
- Being FARSB is a respectful honor. It authenticates your research activities. After becoming FARSB, you can use 'FARSB' title as you use your degree in suffix of your name. This will definitely enhance and add up your name. You can use it on your Career Counseling Materials/CV/Resume/Visiting Card/Name Plate etc.
- 60% Discount will be provided to FARSB members for publishing research papers in Global Journals Inc., if our Editorial Board and Peer Reviewers accept the paper. For the life time, if you are author/co-author of any paper bill sent to you will automatically be discounted one by 60%
- FARSB will be given a renowned, secure, free professional email address with 100 GB of space eg.johnhall@globaljournals.org. You will be facilitated with Webmail, SpamAssassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.
- FARSB member is eligible to become paid peer reviewer at Global Journals Inc. to earn up to 15% of realized author charges taken from author of respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account or to your PayPal account.
- Eg. If we had taken 420 USD from author, we can send 63 USD to your account.
- FARSB member can apply for free approval, grading and certification of some of their Educational and Institutional Degrees from Global Journals Inc. (US) and Open Association of Research,Society U.S.A.
- After you are FARSB. You can send us scanned copy of all of your documents. We will verify, grade and certify them within a month. It will be based on your academic records, quality of research papers published by you, and 50 more criteria. This is beneficial for your job interviews as recruiting organization need not just rely on you for authenticity and your unknown qualities, you would have authentic ranks of all of your documents. Our scale is unique worldwide.
- FARSB member can proceed to get benefits of free research podcasting in Global Research Radio with their research documents, slides and online movies.
- After your publication anywhere in the world, you can upload you research paper with your recorded voice or you can use our professional RJs to record your paper their voice. We can also stream your conference videos and display your slides online.
- FARSB will be eligible for free application of Standardization of their Researches by Open Scientific Standards. Standardization is next step and level after publishing in a journal. A team of research and professional will work with you to take your research to its next level, which is worldwide open standardization.

- FARSB is eligible to earn from their researches: While publishing his paper with Global Journals Inc. (US), FARSB can decide whether he/she would like to publish his/her research in closed manner. When readers will buy that individual research paper for reading, 80% of its earning by Global Journals Inc. (US) will be transferred to FARSB member's bank account after certain threshold balance. There is no time limit for collection. FARSB member can decide its price and we can help in decision.

MEMBER OF ASSOCIATION OF RESEARCH SOCIETY IN BUSINESS (MARSB)

- 'MARSB' title will be awarded to the person after approval of Editor-in-Chief and Editorial Board. The title 'MARSB' can be added to name in the following manner. eg. Dr. John E. Hall, Ph.D., MARSB or William Walldroff Ph. D., M.S., MARSB
- Being MARSB is a respectful honor. It authenticates your research activities. After becoming MARSB, you can use 'MARSB' title as you use your degree in suffix of your name. This will definitely will enhance and add up your name. You can use it on your Career Counseling Materials/CV/Resume/Visiting Card/Name Plate etc.
- 40% Discount will be provided to MARSB members for publishing research papers in Global Journals Inc., if our Editorial Board and Peer Reviewers accept the paper. For the life time, if you are author/co-author of any paper bill sent to you will automatically be discounted one by 60%
- MARSB will be given a renowned, secure, free professional email address with 30 GB of space eg.johnhall@globaljournals.org. You will be facilitated with Webmail, SpamAssassin, Email Forwarders, Auto-Responders, Email Delivery Route tracing, etc.
- MARSB member is eligible to become paid peer reviewer at Global Journals Inc. to earn up to 10% of realized author charges taken from author of respective paper. After reviewing 5 or more papers you can request to transfer the amount to your bank account or to your PayPal account.
- MARSB member can apply for free approval, grading and certification of some of their Educational and Institutional Degrees from Global Journals Inc. (US) and Open Association of Research,Society U.S.A.
- MARSB is eligible to earn from their researches: While publishing his paper with Global Journals Inc. (US), MARSB can decide whether he/she would like to publish his/her research in closed manner. When readers will buy that individual research paper for reading, 40% of its earning by Global Journals Inc. (US) will be transferred to MARSB member's bank account after certain threshold balance. There is no time limit for collection. MARSB member can decide its price and we can help in decision.



AUXILIARY MEMBERSHIPS

ANNUAL MEMBER

- Annual Member will be authorized to receive e-Journal GJMBR for one year (subscription for one year).
- The member will be allotted free 1 GB Web-space along with subDomain to contribute and participate in our activities.
- A professional email address will be allotted free 500 MB email space.

PAPER PUBLICATION

- The members can publish paper once. The paper will be sent to two-peer reviewer. The paper will be published after the acceptance of peer reviewers and Editorial Board.

PROCESS OF SUBMISSION OF RESEARCH PAPER

The Area or field of specialization may or may not be of any category as mentioned in 'Scope of Journal' menu of the GlobalJournals.org website. There are 37 Research Journal categorized with Six parental Journals GJCST, GJMR, GJRE, GJMBR, GJSFR, GJHSS. For Authors should prefer the mentioned categories. There are three widely used systems UDC, DDC and LCC. The details are available as 'Knowledge Abstract' at Home page. The major advantage of this coding is that, the research work will be exposed to and shared with all over the world as we are being abstracted and indexed worldwide.

The paper should be in proper format. The format can be downloaded from first page of 'Author Guideline' Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (*.DOC, *.DOCX).

The Author can submit the paper either online or offline. The authors should prefer online submission. Online Submission: There are three ways to submit your paper:

(A) (I) First, register yourself using top right corner of Home page then Login. If you are already registered, then login using your username and password.

(II) Choose corresponding Journal.

(III) Click 'Submit Manuscript'. Fill required information and Upload the paper.

(B) If you are using Internet Explorer, then Direct Submission through Homepage is also available.

(C) If these two are not convenient, and then email the paper directly to dean@globaljournals.org.

Offline Submission: Author can send the typed form of paper by Post. However, online submission should be preferred.



PREFERRED AUTHOR GUIDELINES

MANUSCRIPT STYLE INSTRUCTION (Must be strictly followed)

Page Size: 8.27" X 11"

- Left Margin: 0.65
- Right Margin: 0.65
- Top Margin: 0.75
- Bottom Margin: 0.75
- Font type of all text should be Swis 721 Lt BT.
- Paper Title should be of Font Size 24 with one Column section.
- Author Name in Font Size of 11 with one column as of Title.
- Abstract Font size of 9 Bold, "Abstract" word in Italic Bold.
- Main Text: Font size 10 with justified two columns section
- Two Column with Equal Column with of 3.38 and Gaping of .2
- First Character must be three lines Drop capped.
- Paragraph before Spacing of 1 pt and After of 0 pt.
- Line Spacing of 1 pt
- Large Images must be in One Column
- Numbering of First Main Headings (Heading 1) must be in Roman Letters, Capital Letter, and Font Size of 10.
- Numbering of Second Main Headings (Heading 2) must be in Alphabets, Italic, and Font Size of 10.

You can use your own standard format also.

Author Guidelines:

1. General,
2. Ethical Guidelines,
3. Submission of Manuscripts,
4. Manuscript's Category,
5. Structure and Format of Manuscript,
6. After Acceptance.

1. GENERAL

Before submitting your research paper, one is advised to go through the details as mentioned in following heads. It will be beneficial, while peer reviewer justify your paper for publication.

Scope

The Global Journals Inc. (US) welcome the submission of original paper, review paper, survey article relevant to the all the streams of Philosophy and knowledge. The Global Journals Inc. (US) is parental platform for Global Journal of Computer Science and Technology, Researches in Engineering, Medical Research, Science Frontier Research, Human Social Science, Management, and Business organization. The choice of specific field can be done otherwise as following in Abstracting and Indexing Page on this Website. As the all Global

Journals Inc. (US) are being abstracted and indexed (in process) by most of the reputed organizations. Topics of only narrow interest will not be accepted unless they have wider potential or consequences.

2. ETHICAL GUIDELINES

Authors should follow the ethical guidelines as mentioned below for publication of research paper and research activities.

Papers are accepted on strict understanding that the material in whole or in part has not been, nor is being, considered for publication elsewhere. If the paper once accepted by Global Journals Inc. (US) and Editorial Board, will become the copyright of the Global Journals Inc. (US).

Authorship: The authors and coauthors should have active contribution to conception design, analysis and interpretation of findings. They should critically review the contents and drafting of the paper. All should approve the final version of the paper before submission

The Global Journals Inc. (US) follows the definition of authorship set up by the Global Academy of Research and Development. According to the Global Academy of R&D authorship, criteria must be based on:

- 1) Substantial contributions to conception and acquisition of data, analysis and interpretation of the findings.
- 2) Drafting the paper and revising it critically regarding important academic content.
- 3) Final approval of the version of the paper to be published.

All authors should have been credited according to their appropriate contribution in research activity and preparing paper. Contributors who do not match the criteria as authors may be mentioned under Acknowledgement.

Acknowledgements: Contributors to the research other than authors credited should be mentioned under acknowledgement. The specifications of the source of funding for the research if appropriate can be included. Suppliers of resources may be mentioned along with address.

Appeal of Decision: The Editorial Board's decision on publication of the paper is final and cannot be appealed elsewhere.

Permissions: It is the author's responsibility to have prior permission if all or parts of earlier published illustrations are used in this paper.

Please mention proper reference and appropriate acknowledgements wherever expected.

If all or parts of previously published illustrations are used, permission must be taken from the copyright holder concerned. It is the author's responsibility to take these in writing.

Approval for reproduction/modification of any information (including figures and tables) published elsewhere must be obtained by the authors/copyright holders before submission of the manuscript. Contributors (Authors) are responsible for any copyright fee involved.

3. SUBMISSION OF MANUSCRIPTS

Manuscripts should be uploaded via this online submission page. The online submission is most efficient method for submission of papers, as it enables rapid distribution of manuscripts and consequently speeds up the review procedure. It also enables authors to know the status of their own manuscripts by emailing us. Complete instructions for submitting a paper is available below.

Manuscript submission is a systematic procedure and little preparation is required beyond having all parts of your manuscript in a given format and a computer with an Internet connection and a Web browser. Full help and instructions are provided on-screen. As an author, you will be prompted for login and manuscript details as Field of Paper and then to upload your manuscript file(s) according to the instructions.



To avoid postal delays, all transaction is preferred by e-mail. A finished manuscript submission is confirmed by e-mail immediately and your paper enters the editorial process with no postal delays. When a conclusion is made about the publication of your paper by our Editorial Board, revisions can be submitted online with the same procedure, with an occasion to view and respond to all comments.

Complete support for both authors and co-author is provided.

4. MANUSCRIPT'S CATEGORY

Based on potential and nature, the manuscript can be categorized under the following heads:

Original research paper: Such papers are reports of high-level significant original research work.

Review papers: These are concise, significant but helpful and decisive topics for young researchers.

Research articles: These are handled with small investigation and applications

Research letters: The letters are small and concise comments on previously published matters.

5. STRUCTURE AND FORMAT OF MANUSCRIPT

The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also. Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

Papers: These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

- (a) Title should be relevant and commensurate with the theme of the paper.
- (b) A brief Summary, "Abstract" (less than 150 words) containing the major results and conclusions.
- (c) Up to ten keywords, that precisely identifies the paper's subject, purpose, and focus.
- (d) An Introduction, giving necessary background excluding subheadings; objectives must be clearly declared.
- (e) Resources and techniques with sufficient complete experimental details (wherever possible by reference) to permit repetition; sources of information must be given and numerical methods must be specified by reference, unless non-standard.
- (f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;
- (g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.
- (h) Brief Acknowledgements.
- (i) References in the proper form.

Authors should very cautiously consider the preparation of papers to ensure that they communicate efficiently. Papers are much more likely to be accepted, if they are cautiously designed and laid out, contain few or no errors, are summarizing, and be conventional to the approach and instructions. They will in addition, be published with much less delays than those that require much technical and editorial correction.



The Editorial Board reserves the right to make literary corrections and to make suggestions to improve briefness.

It is vital, that authors take care in submitting a manuscript that is written in simple language and adheres to published guidelines.

Format

Language: The language of publication is UK English. Authors, for whom English is a second language, must have their manuscript efficiently edited by an English-speaking person before submission to make sure that, the English is of high excellence. It is preferable, that manuscripts should be professionally edited.

Standard Usage, Abbreviations, and Units: Spelling and hyphenation should be conventional to The Concise Oxford English Dictionary. Statistics and measurements should at all times be given in figures, e.g. 16 min, except for when the number begins a sentence. When the number does not refer to a unit of measurement it should be spelt in full unless, it is 160 or greater.

Abbreviations supposed to be used carefully. The abbreviated name or expression is supposed to be cited in full at first usage, followed by the conventional abbreviation in parentheses.

Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than $1.4 \times 10^{-3} \text{ m}^3$, or 4 mm somewhat than $4 \times 10^{-3} \text{ m}$. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

Structure

All manuscripts submitted to Global Journals Inc. (US), ought to include:

Title: The title page must carry an instructive title that reflects the content, a running title (less than 45 characters together with spaces), names of the authors and co-authors, and the place(s) wherever the work was carried out. The full postal address in addition with the e-mail address of related author must be given. Up to eleven keywords or very brief phrases have to be given to help data retrieval, mining and indexing.

Abstract, used in Original Papers and Reviews:

Optimizing Abstract for Search Engines

Many researchers searching for information online will use search engines such as Google, Yahoo or similar. By optimizing your paper for search engines, you will amplify the chance of someone finding it. This in turn will make it more likely to be viewed and/or cited in a further work. Global Journals Inc. (US) have compiled these guidelines to facilitate you to maximize the web-friendliness of the most public part of your paper.

Key Words

A major linchpin in research work for the writing research paper is the keyword search, which one will employ to find both library and Internet resources.

One must be persistent and creative in using keywords. An effective keyword search requires a strategy and planning a list of possible keywords and phrases to try.

Search engines for most searches, use Boolean searching, which is somewhat different from Internet searches. The Boolean search uses "operators," words (and, or, not, and near) that enable you to expand or narrow your affords. Tips for research paper while preparing research paper are very helpful guideline of research paper.

Choice of key words is first tool of tips to write research paper. Research paper writing is an art. A few tips for deciding as strategically as possible about keyword search:



- One should start brainstorming lists of possible keywords before even begin searching. Think about the most important concepts related to research work. Ask, "What words would a source have to include to be truly valuable in research paper?" Then consider synonyms for the important words.
- It may take the discovery of only one relevant paper to let steer in the right keyword direction because in most databases, the keywords under which a research paper is abstracted are listed with the paper.
- One should avoid outdated words.

Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

Numerical Methods: Numerical methods used should be clear and, where appropriate, supported by references.

Acknowledgements: Please make these as concise as possible.

References

References follow the Harvard scheme of referencing. References in the text should cite the authors' names followed by the time of their publication, unless there are three or more authors when simply the first author's name is quoted followed by et al. unpublished work has to only be cited where necessary, and only in the text. Copies of references in press in other journals have to be supplied with submitted typescripts. It is necessary that all citations and references be carefully checked before submission, as mistakes or omissions will cause delays.

References to information on the World Wide Web can be given, but only if the information is available without charge to readers on an official site. Wikipedia and Similar websites are not allowed where anyone can change the information. Authors will be asked to make available electronic copies of the cited information for inclusion on the Global Journals Inc. (US) homepage at the judgment of the Editorial Board.

The Editorial Board and Global Journals Inc. (US) recommend that, citation of online-published papers and other material should be done via a DOI (digital object identifier). If an author cites anything, which does not have a DOI, they run the risk of the cited material not being noticeable.

The Editorial Board and Global Journals Inc. (US) recommend the use of a tool such as Reference Manager for reference management and formatting.

Tables, Figures and Figure Legends

Tables: Tables should be few in number, cautiously designed, uncrowned, and include only essential data. Each must have an Arabic number, e.g. Table 4, a self-explanatory caption and be on a separate sheet. Vertical lines should not be used.

Figures: Figures are supposed to be submitted as separate files. Always take in a citation in the text for each figure using Arabic numbers, e.g. Fig. 4. Artwork must be submitted online in electronic form by e-mailing them.

Preparation of Electronic Figures for Publication

Even though low quality images are sufficient for review purposes, print publication requires high quality images to prevent the final product being blurred or fuzzy. Submit (or e-mail) EPS (line art) or TIFF (halftone/photographs) files only. MS PowerPoint and Word Graphics are unsuitable for printed pictures. Do not use pixel-oriented software. Scans (TIFF only) should have a resolution of at least 350 dpi (halftone) or 700 to 1100 dpi (line drawings) in relation to the imitation size. Please give the data for figures in black and white or submit a Color Work Agreement Form. EPS files must be saved with fonts embedded (and with a TIFF preview, if possible).

For scanned images, the scanning resolution (at final image size) ought to be as follows to ensure good reproduction: line art: >650 dpi; halftones (including gel photographs) : >350 dpi; figures containing both halftone and line images: >650 dpi.



Color Charges: It is the rule of the Global Journals Inc. (US) for authors to pay the full cost for the reproduction of their color artwork. Hence, please note that, if there is color artwork in your manuscript when it is accepted for publication, we would require you to complete and return a color work agreement form before your paper can be published.

Figure Legends: Self-explanatory legends of all figures should be incorporated separately under the heading 'Legends to Figures'. In the full-text online edition of the journal, figure legends may possibly be truncated in abbreviated links to the full screen version. Therefore, the first 100 characters of any legend should notify the reader, about the key aspects of the figure.

6. AFTER ACCEPTANCE

Upon approval of a paper for publication, the manuscript will be forwarded to the dean, who is responsible for the publication of the Global Journals Inc. (US).

6.1 Proof Corrections

The corresponding author will receive an e-mail alert containing a link to a website or will be attached. A working e-mail address must therefore be provided for the related author.

Acrobat Reader will be required in order to read this file. This software can be downloaded

(Free of charge) from the following website:

www.adobe.com/products/acrobat/readstep2.html. This will facilitate the file to be opened, read on screen, and printed out in order for any corrections to be added. Further instructions will be sent with the proof.

Proofs must be returned to the dean at dean@globaljournals.org within three days of receipt.

As changes to proofs are costly, we inquire that you only correct typesetting errors. All illustrations are retained by the publisher. Please note that the authors are responsible for all statements made in their work, including changes made by the copy editor.

6.2 Early View of Global Journals Inc. (US) (Publication Prior to Print)

The Global Journals Inc. (US) are enclosed by our publishing's Early View service. Early View articles are complete full-text articles sent in advance of their publication. Early View articles are absolute and final. They have been completely reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after sending them. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so Early View articles cannot be cited in the conventional way.

6.3 Author Services

Online production tracking is available for your article through Author Services. Author Services enables authors to track their article - once it has been accepted - through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The authors will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript.

6.4 Author Material Archive Policy

Please note that if not specifically requested, publisher will dispose off hardcopy & electronic information submitted, after the two months of publication. If you require the return of any information submitted, please inform the Editorial Board or dean as soon as possible.

6.5 Offprint and Extra Copies

A PDF offprint of the online-published article will be provided free of charge to the related author, and may be distributed according to the Publisher's terms and conditions. Additional paper offprint may be ordered by emailing us at: editor@globaljournals.org.



the search? Will I be able to find all information in this field area? If the answer of these types of questions will be "Yes" then you can choose that topic. In most of the cases, you may have to conduct the surveys and have to visit several places because this field is related to Computer Science and Information Technology. Also, you may have to do a lot of work to find all rise and falls regarding the various data of that subject. Sometimes, detailed information plays a vital role, instead of short information.

2. Evaluators are human: First thing to remember that evaluators are also human being. They are not only meant for rejecting a paper. They are here to evaluate your paper. So, present your Best.

3. Think Like Evaluators: If you are in a confusion or getting demotivated that your paper will be accepted by evaluators or not, then think and try to evaluate your paper like an Evaluator. Try to understand that what an evaluator wants in your research paper and automatically you will have your answer.

4. Make blueprints of paper: The outline is the plan or framework that will help you to arrange your thoughts. It will make your paper logical. But remember that all points of your outline must be related to the topic you have chosen.

5. Ask your Guides: If you are having any difficulty in your research, then do not hesitate to share your difficulty to your guide (if you have any). They will surely help you out and resolve your doubts. If you can't clarify what exactly you require for your work then ask the supervisor to help you with the alternative. He might also provide you the list of essential readings.

6. Use of computer is recommended: As you are doing research in the field of Computer Science, then this point is quite obvious.

7. Use right software: Always use good quality software packages. If you are not capable to judge good software then you can lose quality of your paper unknowingly. There are various software programs available to help you, which you can get through Internet.

8. Use the Internet for help: An excellent start for your paper can be by using the Google. It is an excellent search engine, where you can have your doubts resolved. You may also read some answers for the frequent question how to write my research paper or find model research paper. From the internet library you can download books. If you have all required books make important reading selecting and analyzing the specified information. Then put together research paper sketch out.

9. Use and get big pictures: Always use encyclopedias, Wikipedia to get pictures so that you can go into the depth.

10. Bookmarks are useful: When you read any book or magazine, you generally use bookmarks, right! It is a good habit, which helps to not to lose your continuity. You should always use bookmarks while searching on Internet also, which will make your search easier.

11. Revise what you wrote: When you write anything, always read it, summarize it and then finalize it.

12. Make all efforts: Make all efforts to mention what you are going to write in your paper. That means always have a good start. Try to mention everything in introduction, that what is the need of a particular research paper. Polish your work by good skill of writing and always give an evaluator, what he wants.

13. Have backups: When you are going to do any important thing like making research paper, you should always have backup copies of it either in your computer or in paper. This will help you to not to lose any of your important.

14. Produce good diagrams of your own: Always try to include good charts or diagrams in your paper to improve quality. Using several and unnecessary diagrams will degrade the quality of your paper by creating "hotchpotch." So always, try to make and include those diagrams, which are made by your own to improve readability and understandability of your paper.

15. Use of direct quotes: When you do research relevant to literature, history or current affairs then use of quotes become essential but if study is relevant to science then use of quotes is not preferable.



16. Use proper verb tense: Use proper verb tenses in your paper. Use past tense, to present those events that happened. Use present tense to indicate events that are going on. Use future tense to indicate future happening events. Use of improper and wrong tenses will confuse the evaluator. Avoid the sentences that are incomplete.

17. Never use online paper: If you are getting any paper on Internet, then never use it as your research paper because it might be possible that evaluator has already seen it or maybe it is outdated version.

18. Pick a good study spot: To do your research studies always try to pick a spot, which is quiet. Every spot is not for studies. Spot that suits you choose it and proceed further.

19. Know what you know: Always try to know, what you know by making objectives. Else, you will be confused and cannot achieve your target.

20. Use good quality grammar: Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straight forward. put together a neat summary.

21. Arrangement of information: Each section of the main body should start with an opening sentence and there should be a changeover at the end of the section. Give only valid and powerful arguments to your topic. You may also maintain your arguments with records.

22. Never start in last minute: Always start at right time and give enough time to research work. Leaving everything to the last minute will degrade your paper and spoil your work.

23. Multitasking in research is not good: Doing several things at the same time proves bad habit in case of research activity. Research is an area, where everything has a particular time slot. Divide your research work in parts and do particular part in particular time slot.

24. Never copy others' work: Never copy others' work and give it your name because if evaluator has seen it anywhere you will be in trouble.

25. Take proper rest and food: No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

26. Go for seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

27. Refresh your mind after intervals: Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

28. Make colleagues: Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

29. Think technically: Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

30. Think and then print: When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

31. Adding unnecessary information: Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be



sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

32. Never oversimplify everything: To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren't essential and shouldn't be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

33. Report concluded results: Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

34. After conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium through which your research is going to be in print to the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects in your research.

INFORMAL GUIDELINES OF RESEARCH PAPER WRITING

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form, which is presented in the guidelines using the template.
- Please note the criterion for grading the final paper by peer-reviewers.

Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.

Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear

· Adhere to recommended page limits

Mistakes to evade

- Insertion a title at the foot of a page with the subsequent text on the next page



- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

- Use standard writing style including articles ("a", "the," etc.)
- Keep on paying attention on the research topic of the paper
- Use paragraphs to split each significant point (excluding for the abstract)
- Align the primary line of each section
- Present your points in sound order
- Use present tense to report well accepted
- Use past tense to describe specific results
- Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives
- Shun use of extra pictures - include only those figures essential to presenting results

Title Page:

Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address (es) of all authors.

Abstract:

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript-- must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing references at this point.

An abstract is a brief distinct paragraph summary of finished work or work in development. In a minute or less a reviewer can be taught the foundation behind the study, common approach to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Yet, use comprehensive sentences and do not let go readability for briefness. You can maintain it succinct by phrasing sentences so that they provide more than lone rationale. The author can at this moment go straight to



shortening the outcome. Sum up the study, with the subsequent elements in any summary. Try to maintain the initial two items to no more than one ruling each.

- Reason of the study - theory, overall issue, purpose
- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

Introduction:

The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.
- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

Procedures (Methods and Materials):

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic



principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently. You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.

Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.



- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.

ADMINISTRATION RULES LISTED BEFORE SUBMITTING YOUR RESEARCH PAPER TO GLOBAL JOURNALS INC. (US)

Please carefully note down following rules and regulation before submitting your Research Paper to Global Journals Inc. (US):

Segment Draft and Final Research Paper: You have to strictly follow the template of research paper. If it is not done your paper may get rejected.



- The **major constraint** is that you must independently make all content, tables, graphs, and facts that are offered in the paper. You must write each part of the paper wholly on your own. The Peer-reviewers need to identify your own perceptive of the concepts in your own terms. NEVER extract straight from any foundation, and never rephrase someone else's analysis.
- Do not give permission to anyone else to "PROOFREAD" your manuscript.
- **Methods to avoid Plagiarism is applied by us on every paper, if found guilty, you will be blacklisted by all of our collaborated research groups, your institution will be informed for this and strict legal actions will be taken immediately.)**
- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.



CRITERION FOR GRADING A RESEARCH PAPER (COMPILATION)
BY GLOBAL JOURNALS INC. (US)

Please note that following table is only a Grading of "Paper Compilation" and not on "Performed/Stated Research" whose grading solely depends on Individual Assigned Peer Reviewer and Editorial Board Member. These can be available only on request and after decision of Paper. This report will be the property of Global Journals Inc. (US).

Topics	Grades		
	A-B	C-D	E-F
Abstract	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form Above 200 words	No specific data with ambiguous information Above 250 words
Introduction	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
Methods and Procedures	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
Result	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
Discussion	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
References	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring



INDEX

A

Accounting · 1, 2, 6, 7
Administration · 7, 1, 6, 14, 15, 16, 17, 20, 21,
23, 24, 9, 11, 2, 5
Anthropology · 8, 2, 4

B

Bureaucracy · 1, 2, 6, 7, 8, 9, 10, 12, 14,
17, 20, 21, 23, 24

C

Chemists · 1, 3, 2, 1, 3, 4
Commercial · 1, 2, 3, 4, 6, 7, 2, 22, 2, 3, 2, 1, 2, 5, 2
Complexity · 9
Cultural · 3, 8, 4, 10, 12, 19, 3, 5, 8

D

Decentralised · 22
Decomposing · 4
Demonstration · 4, 5
Deviation · 5, 14, 3

E

Economics · 1, 8, 2, 4, 10, 2
Elasticities · 1, 2, 3
Empirical · 2
Evaluation · 7, 1, 7, 3, 5
Executives · 6

F

Factors · 1, 4, 5, 6, 3, 4, 10, 3, 2, 5

G

Geography · 3, 4
Granger · 1, 2, 3, 4, 2, 3

H

Holistic · 8, 2, 3
Hydropower · 1
Hypothesizes · 3, 5

I

Impact · 1, 6, 7, 23, 1, 10, 11

L

Leadership · 1, 3, 4, 5, 6, 8, 9, 10, 11

M

Mediating · 1
Medications · 1
Methodology · 4, 2, 4, 2, 6, 4, 3, 4, 2, 3
Microfinance · 1, 2
Multivariate · 1

O

Occupation · 1
Opinion · 1, 5
Organization · 4, 8, 10
Organizations · 8, 2, 20, 23, 9, 10, 1
orientation · 8, 2, 5, 12, 3

P

Panel · 1, 2, 3, 4, 2, 3, 1, 2, 1, 2

Panelists · 4

Patrimonialism · 11

Political · 8, 2, 3, 4, 1, 2, 3, 4, 5, 6, 11, 12, 14, 15,
16, 17, 18, 19, 20, 21, 1, 3, 5

Psychology · 8

R

Relevance · 4, 5

T

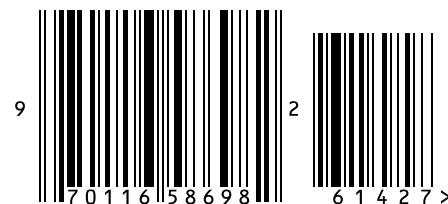
Technology · 1, 2, 3, 6, 7, 24, 1, 4, 3, 2, 5



save our planet

Global Journal of Management and Business Research

Visit us on the Web at www.GlobalJournals.org | www.JournalofBusiness.Org
or email us at helpdesk@globaljournals.org



ISSN 9755853

© 2012 by Global Journals