THE APPLICATION OF PALMISTRY KNOWLEDGE IN THE DIAGNOSIS OF DISEASES FOLLOWING THE PRINCIPLES OF TRADITIONAL THAI MEDICINE

PhatphongKamoldilok*, OrawanSinpaiboonlert & Mukda Tosang*****

[*]*Instructor of College of Allied Health Sciences, SuanSunandhaRajabhatUniversity, Bangkok, Thailand*
E-mail: phatphong.ka@ssru.ac.th
[**]*Instructor of College of Allied Health Sciences, SuanSunandhaRajabhatUniversity, Bangkok, Thailand*
E-mail:Orawan.si@ssru.ac.th
[***]*Instructor of College of Allied Health Sciences,SuanSunandhaRajabhatUniversity, Bangkok, Thailand*
E-mail: Mukda.to@ssru.ac.th

ABSTRACT

This research the objective to analyze 1) Palmistry or handwriting can tell health. 2) To bring the knowledge of science to craft used for diagnosis of medical care facilities in Thailand. 3) More ways to enhance the diagnosis of Traditional Thai Medicine, to help make the diagnosis more accurate.

This research is a qualitative research, record of document types of palmistry textbooks and Traditional Thai Medicine textbooks and samples of professional handwriting forecasters and the patient who come to Traditional Thai Medicine clinic for diagnosis and treatment. The instrument used in this study consisted of data and the questionnaires to interview the present research is descriptive analysis.

The research found that science subjects of palmistry or handwriting are a type of horoscope the forecast stories about the lives human living. In the past the health of each man can tell health problems and illness forecast analysis of palmistry. The shape of the hands with nature of the width and thickness hands and The point in center of the hand, including a large cross that appears to be colored, throughout the cold temperatures of the palm. All this indicates health issues current and future owners of the palm. People with the red hands, thick and fleshy, that person is likely to have sensitive, chest pain, indigestion, flatulence, easily and with high blood pressure. The color of the nails can indicate a health problem for many things. Very red nails indicate high blood pressure. Nails are yellow, often with liver problems. If a grid on the under thumb, Might indicate the presence of a particular disease or disease of the uterus of women. The Life line hands can be a record of your health problems. It can show A palmist that you had an illness and accidents at a certain point in your life. For example, children with a chain on the beginning of life line, often problems with the respiratory system. The island or breaks on the Head line shows signs of injury, mental illness, nervous tension. These it shows the hand of a patients while they are sick.

The study analyzes the palmistry made aware of the disease, we have thousands of people. The illness is a little or a lot. Disease from infection and chronic intractable disease such as pneumonia, allergies, gastrointestinal diseases, hypertension, AIDS, reproductive system of women, which says that disease and other diseases, is visible on the palm from the patient. The study analyzes the palmistry is a big health problem in Thailand and useful medicine in diagnostics to patients more accurately.

Keywords--horoscope, palmistry, calligraphy, Traditional Thai Medicine, diagnosis.

INTRODUCTION

Palmistry or hand-reading is a type of astrology used in forecasting, stories about the lives of men. The past and various events that will occur in the future.Reading from a hand-writng to make a fortune. Fortunately for self and others about the careers, finance, travel, love, child, spouse fortune problems. Disease is one of the oldest of the ancient sages and foreign nearly global study analyzed until a statistically accurate. And can be helpful to forecast the fates it has been widely appreciated.

Later, when all nations all languages have to study science subjects palmistry increasing. The rules are absolutely correct. Trust is more acceptable. It have taken this course to be used in conjunction with other academic areas. And can be used in the medical field. Become a part of Medical Astrology that has brought this knowledge to use in predicting or diagnosing disease. Or have symptoms of the disease are in progress. Those with a medical professional needs to learn to be included in their careers. Hippocrates a Greek philosopher, who has been hailed the father of medical was declared "doctors without knowledge of astrology. There is no right to call himself a doctor."

In the United States Medical Chief of Pathology St. Luke's Hospital, New York, announced that examination of handreading able to accurately diagnose schizophrenia and leukemia to 90 percent.In Germany many doctors have packed fingerprint and hand-reading analysis course as part of the study of medicine. It have found that the predictive hand-reading help in the diagnosis of several types. And a precision of 80 percent, such as cancer, heart disease and diabetes.

In a study of knowledge in science since in the past. I know this has been popular for thousands of reliability. Has turned the course of this country, such as the International Association of Astrology, Astrological Association of Thailand as a medical doctor. Many medical and Thailand into education and in the knowledge in this field for use with patients. Modern medicine, some said. Teaching science subjects diagnosed faster than many modern medical equipment it takes time to see results from lab. will tell all diseases.

Diagnostic Medical Treatment of Thailand usually approach is typically based on wisdom. Thailand has been handed down from ancient times. The medical history of Thailand will ask for date of birth, place of birth, ages, domicile. To determine the etiology of a daily routine of living history, family environment. Those from the past to the present. Past medical history,then a physical examination. Without tools or medical devices to assist as currently planned. When complete,detailed patient information. It is a step in diagnosis before treat.

How to Diagnose Disease there may be many ways of medicine in Thailand used. According to the study of the Bible or the skill and experiences of the individual. Each method is intended to provide an accurate diagnosis to undergo treatment in the next. For researchers in this study, analysis and research in academic or see the hand-reading. That can be used to assist in diagnosis. And for the use of this medicine diagnosis of public and private hospitals in Thailand. The results of the research will be helpful to doctors and patients who received services. Including medicalacademies in future.

OBJECTIVE

1. To analyze the knowledge of science or hand-reading used in diagnosis.
2. To analyze the application of knowledge of science to craft used for diagnosis of hospitals in Thailand.

METHODOLOGY

This research came from the research papers of astrological texts of The Department of Health Thailand and foreign medicine texts. To delved select research problems to correct. Avoid redundant research and data from SEER or medicine Thailand took the lead of the hand-reading used in the diagnosis or prediction of 10 samples from patients who had been predicting or diagnosing disease in Thai medical clinics for 40 patients.

The scope, content This research is the fundamental basis of the content of science or craft handwriting. That is about predicting or diagnosing disease. And knowledge can be used to diagnose the disease. The boundary area Interview data from a population sample. Handwriting led to predict or diagnose disease. Only in Bangkok, Pathum Thani and for the patients who come to the clinic SuanSunandha Rajabhat University. And Pathumthani University

REASULT

According to the research study was conducted on the use of handwriting to predict or diagnose disease from the books and documents of Thailand and abroad. The data from the study population, and the examples given in the report, and to know that on the processes of making the analysis found Reading the handwriting of people be informed about health and disease. All the symptoms of more or less. Whether it is a common disease, infectious diseases, chronic diseases, as well as fever, colds, allergies, stomach and intestinal inflammation. Thyroid cancer, diabetes, gout, high blood pressure. Reproductive System diseases.Sexual dysfunction, HIV, cholera and other diseases as well.

Among mentioned to the ailments and other diseases. If the owners are going to be or are being used. Are visible, and note on the palm. The observations made by the shape of the hands, fingers, heat and cold. The color of the visible hand. Over the mount in the palm and the Life line around the padded area. The island marks cross, square, triangle asterisk Line cutting, bruising of the hand of the person with health ploblem or diseases appears to know.The body is usually not a sign of these diseases show up at all.

The study found color, temperature and smudges of the palm. Keeping in mind the health problems that occur in the body is present. People with a strong element of balance based medicine Thailand. There will be a warm temperature and pink palm, and a man of good humor. If crimson and with a violent temper irascible, may have problems with high blood pressure. It is a glossy palm as gout and rheumatoid arthritis. The hot palm and sweaty to indicateThyroid function than normal. People with black smudges under your thumb. Short comings in sex.

As mentioned of the projections to diagnosis diseases that are found in the hands of the patient from Thailand hospital. This is just the color, temperature and stain in hands only. But reading the handwriting of Thai traditional medicine. To consider the whole picture in the palm of hand, including the mounts, the Life line and the point in which it appears. Which can be an indication of health problems at all.

The meaning of the A bunch of small muscles in the hand of man. Known as mounts, It indicates the health problems of the examples is mount of The Jupiter has raised more than regular meat. There may be problems with the circulation of the blood, venereal diseases, digestive system and gout. The mount of the Saturn beneath the middle finger Indicative of neurotic paranoia, bone and teeth weakness, paralysis, arthritis, cancer, hemorrhoids. The mount of the Sun or Apollo beneath the ring finger. It relates to have problems with the eyes, spine, heart disease. The mount of Wednesday or Mercury under the finger. It is offbeat be careful about the diseases, gallbladder diseases, liver diseases, a brain. The mount Monday or Luna to beware of the digestive tract, urinary problems, arthritis and probems with mind. The mount of Friday or Venus, referring to the vitality, enthusiasm, love of family succession race. The mount of Venus to beware of problems with the throat, and reproductive organs.

Most medical palmistry Thailand will prevail of Life line and taken together, explain the meaning of a word is actually the most accurate forecast. The geometry used in predicting or diagnosing vascular disease is the life line, Head line, Heart line and the Health line. Life line is indicative of a healthy lifestyle. The body is a weak or sickly mental illness living comfort or distress. Lifeline with island Symptoms of gastritis Is more serious or less. Depending on the size and clarity of the island.The contrast may need surgery, if you do not treat it, it was gone. Lifeline as normal curve by the middle of the line up to become dent bend, the mount of Luna with diagonal stripes as a group, and the soft and swollen. These are diabetic, or will be.

The Head line is a good sharpness. Consistently throughout, if kink or broken line, or may be have the island chain. The Head line has a star on the tip line. Show that the owner used it as a mild heart attack. Heart pain , often erotic sometimes symptoms like crazy. If the star is much stronger than that of young stars. The Health line with the island's happening, or a broken line beneath the base of the finger, or mount of Apollo. It is a disease of the eye Blurry vision such as eye color blindness, blurred vision, etc. The Heart line is frayed and broken hearts broken over the line. Indicate symptoms of heart disease. And the hand is not true love.

The Health line or Wednesday. The line represents ailments memory successful trading career. The poor health reveal the problem with lifestyle, less successful The body of encroachment on a regular basis. An indication that good or bad working condition in the digestive system and liver. If the lack of scratchy and the line cross section. As many diseases simultaneously. It is one disease or another disease, like diabetes, neurological diseases, eye diseases, ear, nose, etc. Health line is a curve similar to ocean waves. Indicates that a liver disease, gallbladder disorders. Especially those who drink alcohol on a regular basis, be careful, cirrhosis can be deadly. Health line cutting through the brain and the heart. A health center with the island. Indicate that the owner of a cell. It is diseases of the brain, heart and neurodegenerative diseases.

As explained later, the researchers found that forecasting the health or sickness of the Palmistry. To analyze all aspects of the hand. But that is mainly used in the forecast include color temperature, stain, life line heart line, health line and Head line. With the reprimand marks that appear on the palms.

Table 1
The diagnosis of the patients with hand reading in the sample of 50 cases

Diagnosis	**Case (n = 50)**	**%**
Allergies	10	20.0
Migraine	9	18.0
Cancer	7	14.0
Diabetes Mellitus	6	12.0
Nephritis	5	10.0
Cardiac problem	5	10.0
Hypertension	4	8.0
Sexual dysfunction	3	6.0
HIV	1	2.0

CONCLUTION

But the introduction of handmade arts used to diagnose the disease is not yet known and widespread. It has a long tradition in the field of the prophet legendary.With the prediction of disease, coupled with the forecast is always the other side. Later this knowledge to patients in hospitals. And found that the accuracy is not a medical device. It takes less than the cost is not much. It has gained popularity and trust brings together more. It became a subject in the medical community. The focus of modern medicine, medical . The teaching seriously, both in institutions that teach the subject of astrology. The craft of science in nursing. The Faculty of Medicine at the University of and spread to several countries

Now, if we have the knowledge that this research. The study analyzed the possibilities. The results of which were sick with various diseases. The diagnostic tool in modern hospitals. Compared to diagnosis handwriting. When that provides accurate synchronization. It is the knowledge of the medical world to apply. synchronization. If there has been further development. The diagnosis handwritten convenient and easier to learn and analyze the components of the cell lines, the color of the hand.The marked increase in It will cause even more accurate. Hatt study science subjects would be valuable. There are enormous benefits to the medical and human prosperity.

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PIET MONDRIAN'S PAINTING INSPIRED YVES SAINT LAURENT, THE WORLD CLASS FASHION DESIGNER

Jaruphan Supprung

Assoc. Prof. Dr., lecturer of the Fashion Design Program, Faculty of Fine and Applied Arts,
Suan Sunandha Rajabhat University, Bangkok, Thailand
E-mail: jaruphans@yahoo.com, jaruphan.su@ssru.ac.th

ABSTRACT

The aim of the research was to study "Piet Mondrian's Painting Inspired Yves Saint Laurent, the World Class Fashion Designer." This documentary research employed qualitative research methodology. The findings of this research disclosed that "Colour Blocking" of Mondrian's Painting, the Dutch Artist, combined with white colour on background, black colour for vertical line and horizontal line and primary colour for creating the aesthetics. These paintings inspired Yves Saint Laurent for his masterpiece collection on catwalk in the themes "Mondrian Dresses" in 1960. His collection featured shift dresses in blocks of primary colour with black bordering. Later in 1965 for "The Fall Collection" Yves Saint Laurent adapted the new print pattern by using "Neo-Plasticism" into the structure of his dresses. The appearance remained flat by the cut and placement of colours, mirroring the concept of the artwork. This adaptation indicated how the intelligence of the designer and the vision of the artist were able to seamlessly worked as one.

Keywords : Painting, Piet Mondrian, Inspire, Yves Saint Laurent

INTRODUCTION

Fashion design is the way in which something on the current style or mode of dress and accessories by creative thinking of the designer. Fashion is also the prevailing custom in dress carried on by tradition and enforced by social. The innovation in the fabrics and cut may be free on time or applied from the past. The role of fashion design is very important for human being from the ancient age until nowadays. The designer interpreted the desires of customers and then be made to suit individual needs. At that time, there was no promotion the dress for general. Until 1770, there was a new media so-called "fashion plates" to represent the beautiful dress for the rich women. Cleverly cut out soon led to dressmaking by hands because there was no sewing machine. In 1840, there was the innovation of sewing machine, The outcome of garment went on very quickly and took the cheap price. The fashion magazine had become the interesting print for everybody. Fashion design has been the important professional job for the society, because of its supporting budgets and change you to become a well-known person. In 20 century. The painting of the great well-known painters become the inspiration for designer. The Painting of Piet Mondrian, the Dutch painter, who was one of the important contributors of "Neo-Plasticism", was the most influence for the commercial design and the industrial art too. Yves Saint Laurent, the world class fashion designer, was very successful in a global market because of his creature talent that was not been found in any designers at that time. An exacting sense of colour, cut, exoticism and androgyny were his signatures, as was the infamously fragile consituation that led him to retreat from the fashion world altogether in his final year. He took the idea of Piet Mondrian, the great painter, to create his work. For these reasons, this research is conducted.

OBJECTIVE

To analyze the inspiration of Piet Mondrian's Painting on Yves Saint Laurent, the World Class Fashion Designer.

METHODOLOGY

In this documentary research study, all data from National Library of Thailand and Electronic media were collected. The qualitative data were analyzed and interpreted in qualitative research without variable control just as naturalistic research, and the analysis results and research results were presented by descriptive writing with pictures about Piet Mondrian's Painting on Yves Saint Laurent, the World Class Fashion Designer.

RESULTS AND DISCUSSION

Piet Mondrian's Painting Inspired Yves Saint Laurent, the World Class Fashion Designer.

1. Piet Mondrian, one of the important contributor of "Neo-Plasticism".

His Famous painting was "Colour Blocking". This was combined with white colour on background, black colour for vertical line and horizontal line and primary colour such as gamboge tint, crimson lake and Prussian blue for creating the aesthetics. Piet Mondrian's painting inspired artists to create art in every field of art such as fashion design, furniture design, commercial design, home décor etc. We can discuss that Piet Mondrian's works always have the influence for new generation artists and designers. They can create works flexible and infinity by the inspiration of Piet Mondrian's works which the look you can archive with them are endless.

Figure 1
Tableau I, 1921

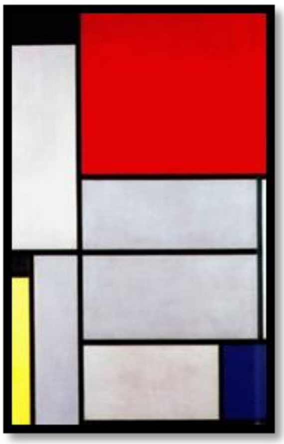
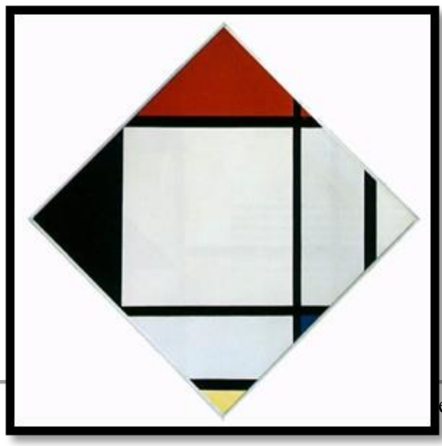


Figure 2
Tableau No. IV, 1925



2. Piet Mondrian's Painting Inspired "Mondrian Dresses", the famous design of Yves Saint Laurant, the World Class Fashion Designer.

Piet Mondrian, noted for his use of the fundamental elements of colour and line, was regarded as a key figure of modern art. His work inspired Yves Saint Laurent, the well-known fashion designer leading the Colour Blocking of Piet Mondrian to the creation of "Mondrian Dresses" in 1960. These were the masterpiece works of Yves Saint Laurent. Later in 1965, he adapted the new print patterns for the Fall collection. Yves Saint Laurent not only adapted the design but interpreted Neo-Plasticism into the structure of his dresses. The appearance remains flat by the cut and placement of colours, mirroring the concept of the artwork. This adaptation indicates how the intelligence of the designer and vision of the artist are able to seamlessly work as one.

Figure 3
Composition with Red Yellow and Black, 1921; Yves Saint Laurent Dresses, 1925

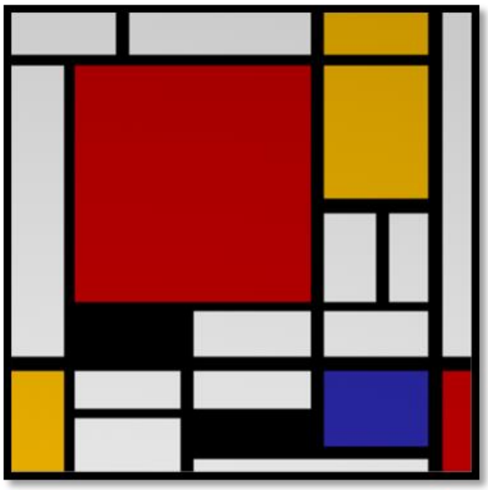


Figure 4
Composition C, 1935; Yves Saint Laurent Dresses, 1965

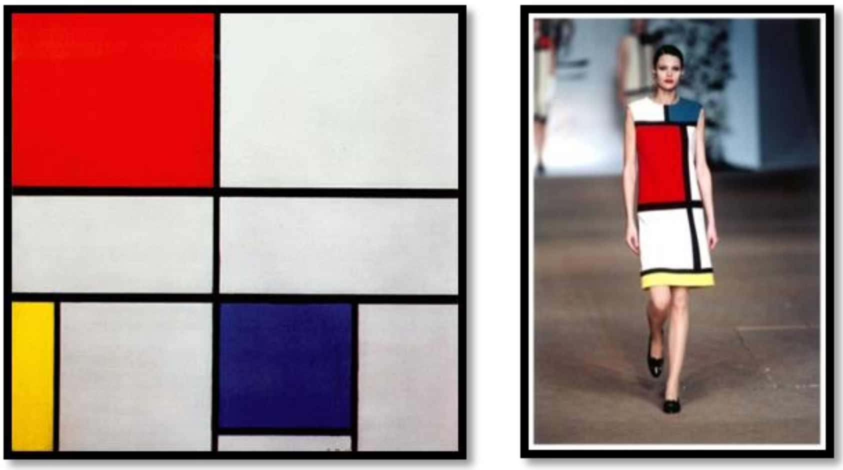
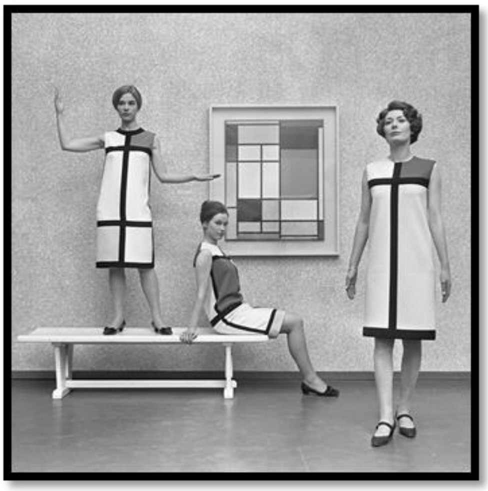


Figure 5
Yves Saint Laurent Dresses, 1966



The famous geometric compositions of black lines and primary colours can be seen to have a longstanding influence on fashion, right up until the present day.

Figure 6
Composition, 1916; Yves Saint Laurent Collection of Dresses, 2014

Figure 7
Modern design products inspired by Piet Mondrian Painting

IT MAY BE CONCLUDED THAT

1. **Piet Mondrian was a Dutch painter who was one of the important contributors of Neo-Plasticism.**

His famous painting was "Colour Blocking". This combined with white colour on background, black colour for vertical line and horizontal line and primary colour such as gamboge tint, crimson lake and Prussian blue for creating the aesthetics.

2. **Yves Saint Laurent's the masterpiece works were inspired from Piet Mondrian's painting.**

In the themes "Mondrian Dresses" in 1960. Later in 1965 for "The Fall Collection", Yves Saint Laurent adapted the new print patterns by using "Neo-Plasticism" into the structure of his dresses. The appearance remained flat by the cut and placement of colours, mirroring the concept of the artwork. This adaptation indicated how the intelligence of the designer and vision of the artist were able to seamlessly worked as one.

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SOCIAL SUPPORT OF POSTPARTUM MOTHERS BASED ON FOLK MEDICINE IN NAKORNPATOM PROVINCE, THAILAND

Supparas Oatsawaphonthanaphat[*], **Wichai Srikam**[**] **& Vichai Chokevivat**[***]

[*] *Instructor of College of Allied Health Sciences, Suan Sunandha Rajabhat University, Bangkok, Thailand,*
E-mail: supparas.oa@ssru.ac.th

[**] *Professor Dr., Former Dean of the Faculty of Arts, Silpakorn University Nakornpatom 73000, Thailand,*
E-mail: wichaisrikam@gmail.com

[***] *Instructor Dr. of College of Allied Health Sciences, Suan Sunandha Rajabhat University, Bangkok, Thailand and Former Director General, the Department for Development of Thai Traditional and Alternative Medicine, Ministry of Public Health,*
E-mail: vichai.ch@ssru.ac.th

ABSTRACT

Yoofai is a process of taking care of postpartum mothers based on folk medicine. It is a kind of Thai folk wisdom. Its steps involve in a method of heat. The purposes of Yoofai is to help postpartum mothers' involution of uterus rehabilitate more rapidly, as well as helping better circulation of blood, having more lactiferous, pushing lochia out better, making mother's body healthier and stronger, and recovering rapidly to normal health or nearly normal health. The purposes of this study are (1) to examine social support on Yoofai of postpartum mothers based on folk medicine in Nakornpatom Province, Thailand, (2) to compare the social support on Yoofai between postpartum mothers living in urban areas and postpartum mothers living in rural areas in Nakornpatom Province, and (3) to study the preference of postpartum mothers toward Yoofai based on folk medicine in Nakornpatom Province The sample used to study was drawn by using the purposive sampling (based on specific criteria and by application) with the number of 30 persons from the population of postpartum mothers in Nakornpatom Province. The data was gathered between March and July, 2016 by using in-depth interview and group discussion according to a questionnaire built by the researcher. The techniques used for analyzing were frequency, percentage, mean ($\bar{x}$) and Content Analysis. The research findings are that the social support on Yoofai of postpartum mothers based on folk medicine in Nakornpatom Province was at the high level ($\bar{x}$ = 3.74). More specifically, it is found that having a baby-caretaker while being Yoofai was at the highest level ($\bar{x}$ = 4.40) followed by being helped by mother as the second rank ($\bar{x}$ = 4.30). With regard to the comparison of social support on Yoofai of postpartum mothers based on folk medicine between urban areas and rural areas, it is found that the postpartum mothers in rural areas received more social support on Yoofai than the postpartum mothers in urban areas. With respect to the preference, postpartum mothers' preference toward Yoofai based on folk medicine was at the highest level ($\bar{x}$ = 4.25).

Keywords--Social Support on Yoofai, Yoofai of Postpartum Mothers Based on Folk Medicine, Postpartum Mothers

INTRODUCTION

Yoofai is a process of taking care of postpartum mothers based on folk medicine. It is a kind of Thai folk wisdom which has been treated since the settlement of Thailand. Its steps involve in a method of heat. The purposes of Yoofai is to help postpartum mothers' involution of uterus rehabilitate more rapidly, as well as helping better circulation of blood, having more lactiferous, pushing lochia out better, making mother's body healthier and stronger, and recovering rapidly to normal health or nearly normal health.

At present, institutions of public health service are ready to serve postpartum mothers based on folk medicine. But most of them provide the services mixed with the privilege of postpartum mothers which have served by the National Health Security Office (NHSO) (National Health Security Office (NHSO). [Online]. Accessed 7 December 2016. Available from http:// www.nhso.go.th/FrontEnd/Index.aspx). Five steps of serving postpartum mothers based on folk medicine are body massage, herbal incubation or sauna, being pressed by fomentation-hot pack, being pressed by salt-pot, following instructions of self-treatment (Ministry of Public Health, 2013: 81).

Based on the data of Thai Traditional Medicine Services of Public Hospitals in Nakornpatom Province: Year2015, there were 5,078 postpartum mothers. However, only 214 postpartum mothers (4.20%) had rehabilitation based on Thai traditional medicine (Office of Public Hospital in Nakornpatom Province, 2016: 80). It is obvious that the service does not meet the goal according to the national health consensus. Because some postpartum mothers still do not have an opportunity to get services of Yoofai even though they have a privilege to get the services. Thus, the national health consensus needs to develop Thai traditional medicine and alternative medicine in order to be a major health service system of the country in parallel with the modern medicine (Office of the National Health Commission, Ministry of Public Health, 2009: 5). Since Yoofai method is a useful type of Thai traditional medicine for taking care of postpartum mothers, social support is a major factor influencing them. Thus, the researchers were interested in examining social support on Yoofai of postpartum mothers based on folk medicine in Nakornpatom Province, Thailand

THE PURPOSES OF THE RESEARCH

1. To examine social support on Yoofai of postpartum mothers based on folk medicine in Nakornpatom Province.

2. To compare the social support on Yoofai between postpartum mothers living in urban areas and postpartum mothers living in rural areas in Nakornpatom Province.

3. To study the preference of postpartum mothers toward Yoofai based on folk medicine in Nakornpatom Province.

THE SCOPE OF THE RESEARCH

The Scope of content: This research had been studied only social support on Yoofai and preference of postpartum mothers toward Yoofai based on folk medicine in Nakornpatom Province.

The Scope of population: Postpartum mothers were only the first delivery.

The Scope of time period: The data was gathered between March and July, 2016

THE RESEARCH METHODOLOGY

With regard to social support of postpartum mothers on Thai traditional medicine based on folk medicine, it was divided into 3 parts as follows:

1. Data Collection

1.1 The characteristics of societies where postpartum mothers lived had been studied from related literature, maps and geographical materials including studying their ways of life.

1.2 The sample used to study was drawn by using the simple random sampling with the number of 30 persons from the population of postpartum mothers who had been rehabilitated at Nakornpatom Hospital, Muang District and Hooi-ploo Hospital, Nakornchaisee District, Nakornpatom Province. Fifteen postpartum mothers were sampled at Nakornpatom Hospital and another fifteen postpartum mothers at Hooi-ploo Hospital. The data was gathered between March and July, 2016. For the in-depth interview and group discussion, the sample was interviewed by using a questionnaire designed by the researchers based on the concept of social support.

2. Data Analysis

With regard to data analysis, the questionnaire used to interview postpartum mothers was designed as 5 rating scales based on Likert scale: highest(5), high(4), moderate(3), low(2), lowest(1). Scores were calculated in the form of percentage (%), mean ($\bar{x}$) and standard deviation (SD). All the scores were tabulated. The data analysis were divided into 3 parts as follows:

2.1 The social support on Yoofai

The mean scores were as follows:

0.00-1.00 = postpartum mothers had the social support on Yoofai at the lowest level.

1.01-2.00 = postpartum mothers had the social support on Yoofai at the low level.

2.01-3.00 = postpartum mothers had the social support on Yoofai at the moderate level.

3.01-4.00 = postpartum mothers had the social support on Yoofai at the high level.

4.01-5.00 = postpartum mothers had the social support on Yoofai at the highest level.

2.2 The comparison of social support on Yoofai of postpartum mothers based on folk medicine between urban areas and rural areas was shown in number and percentage.

2.3 With respect to analyzing postpartum mothers' preference toward Yoofai based on folk medicine, the questionnaire used to interview postpartum mothers was designed as 5 rating scales based on Likert scale: highest (5), high (4), moderate (3), low (2), lowest (1). Scores were calculated in the form of percentage (%), mean ($\bar{x}$) and standard deviation (SD). All the scores were tabulated.

The mean scores were as follows:

0.00 -1.00 = postpartum mothers had the preference toward Yoofai based on folk medicine at the lowest level.

1.01-2.00 = postpartum mothers had preference toward Yoofai based on folk medicine at the low level.

2.01-3.00 = postpartum mothers had preference toward Yoofai based on folk medicine at the moderate level.

3.01-4.00 = postpartum mothers had preference toward Yoofai based on folk medicine at the high level.

4.01-5.00 = postpartum mothers had preference toward Yoofai based on folk medicine at the highest level.

3. The techniques used for analyzing

The techniques used for analyzing were frequency, percentage (%), mean ($\bar{x}$), and Content Analysis.

THE RESULTS

1. Population Structure, Family and Economy

Most postpartum mothers had the ages of 20-24 years followed by 25-29 years (40.00 and 33.30%, respectively). The minimum age was 17 years; the maximum age was 35 years. Most of them lived in rural areas (73.30%). The characteristic of their household was mostly an extended family (76.70%). Haft of them had adequate income, but they could not save it.

Most of the postpartum mothers graduated from high school (43.30%). Their occupation was mostly a housewife followed by an official (40.00 and 26.70%, respectively). Everyone milks their babies by themselves. Only 40% of females in their families experienced Yoofai after giving birth. The postpartum mothers received Yoofai information from people in their families the most (66.70%) followed by the Internet. (53.30 %). The least source of Yoofai information that the postpartum mothers received from was public health personnel (16.70 %) as shown in Table1.

Table 1
Population Structure, Family and Economy (n=30)

Population Structure, Family and Economy	Number	%
Age		
Less than 20 year	4	13.40
20-24 years	12	40.00
25-29 years	10	33.30
30-34 years	3	10.00
35 years and over	1	3.30
Location		
Urban Area	8	26.70
Rural Area	22	73.30
Characteristics of Family		
Extended family	23	76.70
Nuclei family	7	23.30
Level of Education		
Primary Education	9	30.00
Secondary Education	13	43.30
Vocational Ed., Higher Vocational Ed.	5	16.70
Bachelor Degree or higher	3	10.00
Occupation		
Agriculturalists	4	13.40
Workers	6	20.00
Officials	8	26.70
Housewives	12	40.00
Type of Feeding Child		
Milk the child themselves	30.00	100
Not milk the child themselves	0	00.00
Person in the Family Experienced by Yoofai at Postpartum		
Yes	12	40.00
no	18	60.00
Source Received Information about Yoofai at Postpartum (can choose more than 1)		
Person in the family	20	66.70
Internet	16	53.30
Friends	12	40.00
Public health personnel	3	16.70

2. The social support on Yoofai of postpartum mothers based on folk medicine

As a whole, the postpartum mothers received the social support on Yoofai based on folk medicine at the high level ($\bar{x}$= 3.74). In consideration of each support, it was found that the postpartum mothers were supported by baby-sitter while being Yoofai at the highest level ($\bar{x}$= 4.50) followed by being taken care by mother ($\bar{x}$= 4.30). On the contrary, they were supported by public health team at the lowest level ($\bar{x}$= 1.00) as shown in Table 2.

Table 2

The Level of social support on Yoofai of postpartum mothers based on folk medicine (n=30)

The social support on Yoofai of postpartum mothers based on folk medicine	$\bar{X}$	SD.	Level of social support
Supported by baby-sitter while having Yoofai	4.50	0.567	Highest
Taken care by mother	4.40	0.523	Highest
Food for health provided Some people	4.40	0.527	Highest
Supported by members of the family	4.30	0.729	Highest
Expenses supported by others	4.10	0.625	Highest
Supported by helpers for preparing Yoofai equipment and herb	4.10	0.713	Highest
Taken care by husband	4.00	0.483	High
Taken care by mother-in-law	3.40	0.675	High
Received knowledge of Yoofai well	3.20	0.573	High
Supported and followed up by public health team	1.00	0.486	Lowest
Grand Mean	3.74	0.621	high

3. The comparison of social support on Yoofai of postpartum mothers based on folk medicine between urban areas and rural areas

With regard to the comparison of social support on Yoofai of postpartum mothers based on folk medicine between urban areas and rural areas, it was found that the postpartum mothers in rural areas received more social support on Yoofai than the postpartum mothers in urban areas as shown in Table3.

Table 3

The comparison of social support on Yoofai of postpartum mothers based on folk medicine between urban areas and rural areas (n=30)

Hospital	Location		Number of postpartum mothers	%
	Urban area	Rural area		
Nakornpatom	7	15	22	73.3
Hooi-ploo	1	7	8	26.7
Total	8	22	30	100

4. Analyzing postpartum mothers' preference toward Yoofai based on folk medicine

As a whole, postpartum mothers' preference toward Yoofai based on folk medicine was at the highest level ($\bar{X}$= 4.25). More specifically, it was found that the postpartum mothers had the preference toward expectation of the advantages that they would happen to them at the highest level ($\bar{X}$= 4.50) followed by the preference toward perception of the benefits of rehabilitating postpartum mothers ($\bar{X}$= 4.40). That is, they knew that Yoofai method helps involution of uterus rapidly ($\bar{X}$= 4.80). Moreover, it helps body to be fresh and skin-bright ($\bar{X}$= 4.70), as well as helping more lactiferous ($\bar{X}$=4.60) and pushing lochia out ($\bar{X}$=4.40). The preference toward fewer complicate steps, methods and expenses was at the high level (X= 3.80) as shown in Table 4.

Table 4

Postpartum mothers' preference toward Yoofai based on folk medicine (n=30)

Postpartum mothers' preference toward Yoofai based on folk medicine	$\bar{X}$	SD.	Level of preference
The perception of the benefits of postpartum mothers' Yoofai based on folk medicine			
1. Helping involution of uterus rapidly	4.80	0.425	Highest
2. Helping body to be clean, fresh, and skin-bright	4.70	0.427	Highest

3. Helping more lactiferous	4.60	0.412	Highest
4. Helping to push lochia out	4.40	0.432	Highest
5. Helping better circulation of blood	4.20	0.321	Highest
6. Helping to relieve body pain	4.10	0.423	Highest
7. Good for body and mind	4.00	0.438	High
Grand mean	4.40	0.434	Highest
The preference toward fewer complicate steps and methods			
1. Having convenient steps and methods	4.40	0.537	Highest
2. Having steps and methods in accordance with the way of life	3.50	0.642	High
3. Being worthwhile with more expenses	3.50	0.674	High
Grand mean	3.80	0.613	High
The preference toward safety			
1. Steps of rehabilitation of health for safety	4.30	0.437	Highest
2. Methods of rehabilitation of health for safety	4.30	0.532	Highest
Grand mean	4.30	0.543	Highest
The preference toward expectation of the advantages			
1. Involution of uterus rapidly	4.60	0.365	Highest
2. More lactiferous	4.50	0.653	Highest
3. Recover to be in good shape rapidly	4.50	0.487	Highest
4. Bright skin	4.50	0.578	Highest
5. Not being chilly when being in cold weather	4.4	0.538	Highest
Grand mean	4.5	0.547	Highest
Grand mean (As a whole)	4.25	0.612	Highest

CONCLUSIONS

As a whole, the social support on Yoofai of postpartum mothers based on folk medicine in Nakornpatom Province was at the high level ($\bar{x}$= 3.74). More specifically, it is found that having a baby-caretaker while being Yoofai was at the highest level ($\bar{x}$= 4.40) followed by being helped by mother as the second rank ($\bar{x}$= 4.30). On the contrary, they were supported by public health team at the lowest level ($\bar{x}$=1.00). With regard to the comparison of social support on Yoofai of postpartum mothers based on folk medicine between urban areas and rural areas, it was found that the postpartum mothers in rural areas received more social support on Yoofai than the postpartum mothers in urban areas. In terms of postpartum mothers' preference toward Yoofai based on folk medicine as a whole, it is found that the postpartum mothers' preference toward Yoofai was at the highest level ($\bar{x}$= 4.25). More specifically, the postpartum mothers had the preference toward expectation of the advantages that they would happen to them at the highest level ($\bar{x}$= 4.50) followed by the preference toward perception of the benefits of rehabilitating postpartum mothers ($\bar{x}$= 4.40). That is, they knew that Yoofai method helps involution of uterus rapidly ($\bar{x}$= 4.80). Moreover, it helps body to be fresh and skin-bright ($\bar{x}$= 4.70), as well as helping more lactiferous ($\bar{x}$=4.60) and pushing lochia out ($\bar{x}$=4.40). The preference toward fewer complicate steps, methods and expenses was at the high level ($\bar{x}$= 3.80). This is because the postpartum mothers perceived the social support on Yoofai method of folk medicine was useful for them in helping their health rehabilitation. Hence, they decided to get the services in order to rehabilitate their health at postpartum period which is in accordance with Norman, Mun, L.(1971) who states that attitude is people's feelings and opinions toward things, persons, situation, institution and any points of view in the way they accept or refuse which affect them to be ready to react or respond the same behavior at all times.

Furthermore, the findings are in accordance with Prueksachart Toppa (2005) who studied "the local wisdom for taking care of postpartum mothers' health in Prasart District, Surin Province, Thailand". He found that drinking hot water and hot herbal water, taking warm-water bath, Yoofai, and eating herbal food help rehabilitate postpartum mothers' better circulation of blood and pushing lochia out rapidly. Ounprasertpong, Ladaval. (2005) studied "the complementary and alternative medicine in nursing therapeutic," she found that social support on alternative medicine affected health rehabilitation of patients. Besides the method of rehabilitating postpartum mothers provided by hospitals, taking medicine to push lochia out, taking an herbal-water bath, using a hot bag, eating food for enhancing lactiferous, drinking herbal water, and following instructions of the principle of Thai traditional medicine are alternative science which apply for rehabilitating postpartum mothers in order to recover as soon as possible. These methods have also been in accordance with Thai culture and tradition for a long time. They are good not only for postpartum mothers' rehabilitation, but also for helping affections among family members and neighbors. Hence, Yoofai method is an outstanding characteristic of Thai folk medicine which is not excluded from families and societies where postpartum mothers live.

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DEA MODEL MEASURING AIRPORT PERFORMANCE IN THAILAND

Piyaon Sriwan
College of Logistics and supply chain of Suan Sunandta Rajaphat University, Thailand
E-mail: piyaon.sr@ssru.ac.th, pond_panitan@hotmail.com

ABSTRACT

Data Envelopment Analysis for Measuring Airport Performance in Thailand focuses on benchmarking techniques. This paper considers the past and the present of airport performance measurement to hypothesize future. Airport performance measurements are important in increasing for today's business and operational management, regulatory bodies, passengers and airline. Measurement systems have been developed in response to the changing organizational and from rapid passenger growth. For this objective focus on benchmarking these scores of all factors. Performance key factors selected measurement are based on four input factor follows; operational cost, number employees, gates and runway. And four output factor revenue, commercial, aviation movement, and total cargo transportation. We use Analytic Hierarchy Process (AHP) to weighting of Airport factor and then use Data Envelopment Analysis (DEA) to measurement Airport performance in Thailand (Don Mueang). As a result, we get performance score of Don Muang Airport.

Keywords-- Thailand Airport, Airport Performance, Data Envelopment Analysis

INTRODUCTION

Airport development is required as well as improving the efficiency of aircraft and airlines. Nowadays, the airport has been developed in various aspects in order to provide customers the satisfying conveniences, and also the efficiency cargo transportation, that is to say, airport is considered to be a primarily structure of country. Nowadays, many countries own more than one airport which is a brand new idea to gather all the conveniences for passengers from their departure to destination. Public utilities which are the restaurants, accommodation, and also entertainment are highly required in the airport to increase airport revenue. These followings are non-aeronautical revenue which consisted of concession revenue, office and real property rents and service revenue, except for aeronautical revenue which consisted of landing charge, parking charge, passenger service charge and aircraft service charge. It can be seen from the development plan in every country worldwide to widen constructions continuously in order to efficiently accommodate passengers, goods and enterprises which are future engaged, as well as expanding runways and taxiways to sufficiently support landing charge. Those are considered to be the highlight of the developed countries.

Thailand owns 6 main airports are

1. **Don Muang International Airport**
2. Suvannabhumi International Airport
3. Chiang Mai International Airport
4. Mae Fah Luang International Airport
5. Phuket International Airport
6. Hat Yai International airport

Don Mueang International Airport (Thai: ท่าอากาศยานดอนเมือง, IPA: [dɔ̄ːn.mɯ̄ːaŋ], or colloquially as Thai: สนามบินดอนเมือง, IPA: [sà.nǎːm.bīn.dɔ̄ːn.mɯ̄ːaŋ]) (IATA: DMK, ICAO: VTBD) (or also [old] Bangkok International Airport) is one of two international airports serving Greater Bangkok, the other one being Suvarnabhumi Airport ([New] Bangkok International Airport) (BKK). The airport is considered to be one of the world's oldest international airports and Asia's oldest operating airport.It was officially opened as a Royal Thai Air Force base on 27 March 1914, although it had been in use earlier. Commercial flights began in 1924, making it one of the world's oldest commercial airports. The first commercial flight was an arrival by KLM Royal Dutch Airlines. Don Mueang Airport closed in 2006 following the opening of Bangkok's new Suvarnabhumi Airport, before reopening on 24 March 2007 after renovations. Since the opening of the new airport, it has become a regional commuter flight hub and the de facto low-cost airline hub. In 2015, it became the world's largest low cost carrier airport.

Don Mueang was an important hub of Asia and the hub of Thai Airways International prior to its closure. At its peak, it served most[clarification needed] air traffic for the entire country, with 80 airlines operating 160,000 flights and handling over 38 million passengers and 700,000 tons of cargo in 2004. It was then the 14th busiest airport in the world and 2nd in Asia by passenger volume. Currently, Don Mueang is the main hub for Nok Air, Thai AirAsia, Thai Lion Air, and Orient Thai Airlines.

Traffic statistics

Total passenger traffic through Don Mueang jumped 40.7 percent to 30.3 million in 2015, with international numbers rising 53.1 percent to 9.17 million and domestic passengers increasing 35.9 percent to 21.1 million. Aircraft movements rose by 29.8 percent to 224,074, including 158,804 domestic (up 26.2 percent) and 65,270 international (up 39.3 percent)

Table 1
Traffic statistics

Calender Year	Passengers	Change from the previous	Movements	Cargo (tons)
				Source: *Airports of Thailand PLC*
2008	5,043,235	-	-	-
2009	2,466,997	51.1% ⬇	-	-
2010	2,999,867	21.6%	-	-
2011	3,424,915	14.2%	51,301	-
2012	5,983,141	74.7%	65,120	7,329
2013	16,479,227	472.70%	154,827	25,657
2014	21,546,568	30.75%	172,681	29,086
2015	30,304,183	29.76%	224,074	45,488

Don is a major hub in Asia and a hub of Thai Airways before closing. So this needs to adjust the performance of the airport and get the performance points.

LITERATURE

As the results of airport operation are importance to business and management under the operation of the government and those passengers who use service and airlines are affected. Therefore, the airport supervisor and government must evaluate the efficiency of the airport for the purpose of finance, management, competition strategy, investment options, environmental impacts and security checking. A few research showed the airport performance evaluation. While most showed the purpose of the efficiency of the airport as to focus on the consideration of airport performance indicators. Most airport performance evaluations are separated into 2 parts are efficiency and productivity, both are under the same idea to gain productive results. The article about the analysis of airport operational efficiency in USA focused on the airport performance evaluation along with airlines and passengers by evaluating the performance of 44 airports in USA by using Data Envelopment Analysis. The factors which are determined to evaluate appropriately consisted of 4 inputs are Airport Operation Costs, Number of Airport Employees, Gates and Runways. Also, 5 outputs are Operational Revenue, Passenger Flow, Commercial and General Movement, Total Cargo Transportation. Those focused on literature review and effects of outputs that could affect to the airport performance and airport operation. Also, focused on making a comparison of airport performance and factor affected to the departure and arrival in order to get a precise evaluation. The boundary of the study is consisted of 44 airports using the method and equipment called DEA model (Data Envelopment Analysis) including with many equations as following

- Basic (CCR, BCC) is the how to calculate the efficiency by equation.

- Cross-Efficiency (SXEF) is the how to calculate the efficiency of the airport. Consisting of "s" main standard airport having high points on the efficiency within the sample group being compared and the equation CCR is used.

- Aggressive-Cross-Efficiency (AXEF) is the structure being improved by using "s" main standard airport which was designed by Doyle and Green as to calculate the efficiency of points.

- Ranked-Efficiency (RCCR) is a structure to calculate the point of the airport efficiency being improved from CCR model as to rank the airport.

- Radii of Classification Rankings (GTR) is an adapted equation as to suit with the airport classification.

All data has been used for the efficiency of the airport as to scope the factors used in the calculation are input data consisted of finance: airport operational costs, airport employee wage, gate and runway, number of aircraft and landing charge. Also, output data are operational revenue, airline flow total passengers and airlines, and also cargo transportation. All data about 44 airports are from ACI. The conclusion and analysis shown by timetable no.4 are the efficiency of the airport in each year seen that the efficiency has been rising every year, except for 1993 which slightly decreased. As the figure, it could ensure the rising performance that is from the continual development, yet demonstrate the efficient use of the airport resources. The following table shows the factors that affect the performance of each airport. The research paper evaluates the performance of the airport to collect statistics on the use of the Input and Output of each airport. (table1, 2)

Table 2
Input and Output Valuable

Input Variables	
Airport service factors	
Number of employees	**23**
Size of terminal area	**16**
Number of runways	**15**
Financial Factors	
Operational cost	**12**
Capital cost	**8**
Labor cost	**6**

Output Variables	
Airport service factor	
Number of passengers	**41**
Aircraft movement	**33**
Amount of cargo	**30**
Financial Factors	
Amount of no aeronautical revenue	**12**
Amount of aeronautical revenue	**7**
Amount of operational revenue	**4**

Suggested several indictors when evaluating airport environmental performance such as waste per passenger and water consumption per passenger. These environmental variables offer significant potential scope for future research directions

METHODOLOGY

Methodology is the performance evaluation theory with DEA (Data Envelopment Analysis) equation DEA Basic (CCR) Data Envelopment Analysis is one of non-parametric method. It is the calculation by using performance indicators as to find out the highest performance each airport. DEA was developed by Charmes, Cooper and Rhodes in 1978 using linear equation and technical factors to translate into results and each result will show individual area. The advantage of DEA is to calculate the performance from input and output. DEA is the most practical method compared with other ones due to less data use and precise results.

$$E_{ks} = \frac{\sum_{y} O_{sy} v_{ky}}{\sum_{x} I_{sx} u_{kx}} \qquad (1)$$

$$\begin{aligned} &\text{maximize } E_{kk} = \frac{\sum_{y} O_{ky} v_{ky}}{\sum_{x} I_{kx} u_{kx}} \\ &\text{subject to: } E_{ks} \le 1 \ \ \forall \text{ Airports s} \\ &\qquad u_{ks}, v_{ks} \ge 0 \end{aligned} \qquad (2)$$

$$\begin{aligned} &\text{maximize } \mathrm{E}_{kk} = \sum_{y} O_{ky} v_{ky} \\ &\text{subject to: } E_{ks} \le 1 \ \ \forall \text{Airports s} \\ &\qquad \sum_{x} I_{kx} u_{kx} = 1 \\ &\qquad u_{kx}, v_{ky} \ge 0 \end{aligned} \qquad (3)$$

E_{ks} = efficiency or relative productivity measure of airport s

O_{sy}= value of output y for airport s

I_{sx} = value of input x for airport s

V_{ky}= weight assigned to airport k for output y

U_{kx}= weight assigned to airport k for input x

The equation seen no.1-3 showing the variables V and U which are the weight variables of factors indicating the importance of each factor used for indicating the efficiency of the airport. As the theory and reality, the weight variables are required to specific area because of the limitations of area and geographical features. So, it requires data from experts or those who related to airport operation as to give the accurate data of the efficiency of the airport in Thailand requiring the perfection on equation and creditable results from the evaluation or operation in order to select the factors or indicators that suit the equation that we have as to gather the data clearly and completely.

1. Data

Table 4
Data of Don Mueang International Airport in 2014

Input	**Number**	**Output**	**Number**
Number of employees	**976**	**Number of passengers**	**30,304,183**
Number of runways	**2**	**Aircraft movement**	**224,074**
Size of terminal area	**6209**	**Amount of cargo**	**45,488**
Operational cost	**-**	**Amount of no aeronautical revenue**	**-**

RESULT

The calculated value of the Don Mueang International Airport Figure 1 values were calculated by DEA Model increased every year from 2014 to 2015 show that the Don Mueang International Airport has developed respectively. And are ready to serve tourists is increasing every year. Based on indicators that researchers have defined.

CONCLUSION

This article has investigated the statistical foundation of using DEA in the context of airport efficiency modeling. During the analysis, it became obvious that, while DEA has been widely adopted in the literature on airport efficiency and productivity studies, it has merits as well as limitations. To overcome the latter, the paper has proposed the Simar–Wilson two-stage procedure, and the main focus has been to argue that the discussion raised by Simar and Wilson is relevant to this area of research.

Performance Evaluation of the airport is essential for the effective presentation to the development of the airport in the future. Expected to be the calculation of the efficiency of airports in the UK to be used in the development of comparable competitors. The tool also has the potential. DEA Model to evaluate more than to see in this paper.

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COMMUNICATION BILINGUAL APPROACH IN A THAI SCHOOL ON VOCABULARY AT HOME AND AT SCHOOL

Suwaree Yordchim*, Goragot Butnian& Palaunnaphat Siriwongs*****

**Suwaree Yordchim, Suppawit School Faculty of Humanities and Social Sciences, Suan Sunandha Rajabhat University, Dusit, Bangkok, Thailand*
E-mail: suwaree.yo@ssru.ac.th

*** Goragot Butnian, Suppawit Schoo, Wangnamyen, Sakaeo province, Thailand*
E-Mail: goragot@gmail.com

**** Palaunnaphat Siriwongs, Language Center, Faculty of Graduate Studies, Mahidol University*
E-Mail: plaunnaphat@hotmail.com

ABSTRACT

The objectives of this study were (1) to develop a set of teaching material on vocabulary by using the Communicative Bilingual Approach; (2) to compare the achievement of students in the fourth grades by implementation on vocabulary at home and at school before and after the experiments; 10 sets of vocabulary assignments: five sets for using at home and five sets for using at school. A quasi-experimental research with one group Pretest-Posttest design was employed to collect data and administered to four teachers and 89 students in the fourth grade at Suppawit School in the district of Wangnamyen, Sakaeo province, over one semester (2013). The instruments used to collect data in this research included 10 sets of oral tests analyzed by percentage; mean value, E1/E2 efficiency index, Z-test dependent and content analysis.

The results from this experimental study revealed that (1) The designed and developed a set of teaching material on vocabulary by using the Communicative Bilingual Approach in Thai school; 120 words for 10 sets with 12 words in each category 2) The research found that the mean values of the fourth grade students' academic achievement after the experiments was higher than before experiments significantly at 0.05. The use of conversation and vocabulary cards for home, and school has facilitated the good grasp of communicating in different situations. Using both Thai as their base language and English, the target language can motivate and develop the students' communicative ability.

Keywords—Communicative bilingual approach, Thai school, Vocabulary at Home and at School

INTRODUCTION

Preparation for the ASEAN Economic Community (AEC) that should take effect in 2015 also brought about the fast tracking of the English communication skills improvement among Thai people that should be seen starting in schools from teachers to students and to the community at large. Bilingual Education in this study is defined as an education in which L1 and English are employed as the two languages of instruction. The definition relates to Baker (1987) who points out that bilingual education is referred to 'education in which two languages are used within the school'. Bilingual Education in this study also refers to English Programme (EP) and Mini English Programme (MEP) in which Thai and English are used in Thailand.

LITERATURE & THEORY

Bilingual Approach

Saunders (1982) defines bilingual approach involves teaching most subjects through two languages, mainly the mother tongue and the second language. Bilingualism implies the ability to use more than one language but this conceals a variety of possibilities regarding the forms of language that are used and the contexts in which they are brought to play. Garcia (2011) explain that bilingual teaching is instruction given in, and study of, English, and to the extent necessary to allow a child to progress effectively through the educational system, the native language. It is generally accepted by scholars and researchers that for learners of English as a second language, there is a transfer of language learning skills from the native language to the second language especially in writing (Krapels, 1990; Simpson, 2004).

Code Switching in the Classroom

Language alternation is intended to help promote meta-linguistic awareness through the communicative use of two languages. This model builds the teaching and learning experience on the basis of language alternation, the fundamental idea that the alternating use of both languages reinforces awareness of the free, non-fixed relationship between objects and their labels and the necessary ability to separate words and concepts (Moore, 2002).

Communicative Bilingual Approach

The merger of communicative and bilingual approaches can be termed as "communicative bilingual approach". This fusion suggests that the methods used in both models are applicable to teaching English whereby the students are encouraged to learn English through Thai as the base language having the activities done in such a way that the function of language is observed. This means that during the teaching-learning process, the teachers and students are allowed dual language use in and outside the classroom. During their discussions or the teachers giving instructions, it is presumed that new vocabularies are used in place of Thai words to express themselves. Applying the idea of Halliday (1975), the communicative bilingual approach fits the description of the functions of language whereby English is used for instrumental, personal, interactional, regulatory, representational, heuristic and imaginary. Among these seven functions of language, it is observed that the instrumental, interactional and regulatory functions are the most used in and outside classroom. Interactional and regulatory are the most used functions owing to the fact that speaking and listening exercises employ short dialogues, discussions, and giving instructions or imperatives. Role playing as one unit in instrumental function deserves second-most usable form of language exercise in the classroom. Since the main goal of the communicative bilingual curriculum is to improve teachers' and students' English usage, especially listening and speaking, it is necessary that the activities are focused on useful expressions and what and how to respond to everyday situations.

Curriculum and Instructional Media Design

The design and development of the curriculum and instructional media that suits the teaching and learning activities in the Communicative Bilingual Approach need a thorough setting of theory and model as guiding principles.

The Taba Rationale on Curriculum Development (Taba, 1962) consists of the following seven steps:

Step 1. Diagnosis of needs

Step 2. Formulation of objectives

Step 3. Selection of content

Step 4. Organization of content

Step 5. Selection of learning experiences

Step 6. Organization of learning experiences (development of methods)

Step 7. Determination of what to evaluate and how

OBJECTIVES

The objectives of this study were (1) to develop a set of teaching material on vocabulary by using the Communicative Bilingual Approach; (2) to compare the achievement of students in the fourth grades by implementation on vocabulary at home and at school before and after the experiments;

METHODOLOGY

A quasi-experimental research with one group Pretest-Posttest design was employed to collect data and administered to four teachers and 89 students in the fourth grade at Suppawit School in the district of Wangnamyen, Sakaeo Province, over one academic year (2013). The experiment tools were 52 sets of weekly conversation cards, 10 sets of vocabulary assignments: five sets for using at home and five sets for using at school. The instruments used to collect data in this research included 52 sets of oral tests analyzed by percentage; mean value, and Z-test dependent.

RESULTS

1. Vocabulary Sets by using the Communicative Bilingual Approach

From the study, there were 10 sets of vocabulary composed of five sets for using at home and five sets for using at school as shown in Table 1.

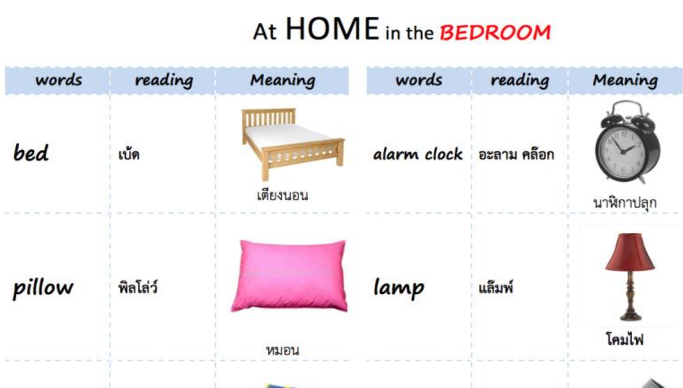
Table 1
Topics for Vocabulary: At Home and At School

No.	At HOME	No.	At SCHOOL
1	Bedroom	1	First Aid
2	Dining Room	2	Canteen
3	Garage	3	On the Bus
4	Living Room	4	Classroom
5	Washroom	5	Toilet

2. An example of vocabulary sets: At home in the bedroom

Each set contains 12 English words, Thai pronunciation, and Thai meaning with a picture. For example, At home in the bedroom, they were: bed, pillow, blanket, mirror, hook, hanger, alarm clock, lamp, comb, clothe, lipstick, and powder. They were as the labels on those things in the bedroom at home of the students. The students studied the words as shown in Figure 1 Vocabulary: At Home in the bedroom, below.

Figure 1
Vocabulary: At Home in the bedroom



3. Students' Learning Achievement

The 89 students in the fourth grades were able to improve themselves in terms of their English skills. The research found that the students' learning progress increased significantly at .05. The post-test results are higher than the pre-test ones as shown in table 2.

Table 2
The post-test and the pre-test results

Tests	$\bar{x}$	S.D.	Z	P. Value
Pre-test	6.9887	1.1530	-10.4296	.000
Post-test	7.9887	1.2476		

4. The post-test and the pre-test results in each sets of vocabulary

Learning achievements comparing between Pre-test and Post-test results of each sets of vocabulary showed that vocabulary on bedroom set was the highest for at home while first aid was the highest for at school while washroom for at home was the lowest for at home while toilet was the lowest for at school. It showed in Table 3.

Table 3
The post-test and the pre-test results

Vocabulary sets	**Pre-test**		**Post-test**	
At HOME	$\bar{x}$	S.D.	$\bar{x}$	S.D.

Bedroom	8.5955*	1.3876	9.7191*	0.6740
Dining Room	8.2584	1.2110	9.2134	1.2922
Garage	7.7528	1.1004	8.6179	1.3272
Living Room	7.3595	1.2177	8.1348	1.3667
Washroom	6.9887	1.1530	7.9887	1.2476
At SCHOOL				
First Aid	8.6629*	1.2242	9.5168*	0.9306
Canteen	8.1685	1.1305	8.8764	1.1948
On the Bus	7.5842	1.1561	8.1460	1.2205
Classroom	7.5842	1.1851	7.8089	1.2511
Toilet	7.1123	1.1720	7.5168	1.3577

CONCLUSION

The fusion of communicative approach and bilingual approach can be termed as "Communicative Bilingual Approach". The way that the designed teaching material focusing on vocabulary at home and at school to be taught follows a combination of communicative language teaching method and that of bilingual approach with the inclusion of code switching. The focus of this merger of approaches is the students' confident use of English in and outside the classroom or home and school. The observation of the function of language should be seen as the dominant feature of the communicative bilingual approach. According to Cook (2001) said that treating the L1 as a classroom resource opens up several ways to use it, such as for teachers to convey meaning, explain grammar, and organize the class, and for students to use as part of their collaborative learning and individual strategy use. The first language can be a useful element in creating authentic L2 users rather than something to be shunned at all costs. With different activities, teaching methods and with various learning styles, they affected students' learning achievement at a high level. Therefore, teachers should also have a variety of teaching styles and learning activities based on students' different learning styles (Anugkakul, 2016). For vocabulary both at home and at school can encourage the students' learning achievements as Chatburapanun & Yordchim (2014) said that students can employ authentic materials and present language from natural texts rather than made-up examples. The corpus-based learning list will be used to develop language testing such as making tests that reflect the actual language that students will be using on a general basis. It is also useful for the creation of effective teaching materials and activities for classroom and workplace training.

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DIABETES CARE AND PATIENTS' PERSPECTIVES ON DIABETES MELLITUS IN RURAL THAILAND: A QUALITATIVE STUDY

Kantapong Prabsangob

College of Allied Health Science, Suan Sunandha Rajabhat University, Thailand
E-Mail: kantapong.pr@ssru.ac.th

ABSTRACT

Background and purpose: Diabetes Mellitus (DM) is one major problem in Thailand. DM patients have their own beliefs and perceptions about the illness. This study aimed to describe diabetes care and patients' perspectives on diabetes mellitus in rural Thailand.

Methods: Observations and in-depth interviews were conducted in the sub-district of Bangkonthee in Samut Songkram province. Fourteen DM patients were purposely selected for in-depth interviews. A content analysis was performed.

Results: The majority of the participants were female, aged 50-76 years old. Most participants were diagnosed with DM more than one year (ranged 1- 20 years) prior to interviewing. All participants did not have risk perception of DM. Most patients were encouraged by providers to participate in a DM screening program, where they were first diagnosed. All participants reported having been compliant with their DM medications. However, most participants had also been taking herbal medicines in addition to their prescribed medications. The majority believed that food intake caused DM, especially over-eating rice. Many of the participants reported elevated blood glucose levels in the last two months due to increased fruit consumption. All participants were satisfied with health service provisions at the health center. By our observations, the health center offers services every day. The patients reported that they appreciate and trust their health providers.

Conclusion: Some DM patients were not aware that they were in a risk group. Understanding the beliefs and the perceptions of DM among these patients may help identify effective approaches to proper interventions for DM treatment.

Keywords-- Belief, Diabetes Mellitus, Perception, Rural Thailand

INTRODUCTION

Diabetes mellitus or diabetes is one of chronic diseases and causes death to numbers of patients around the world. In 2013, an approximately 382 million people are estimated to have diabetes and 316 million people are living with impaired glucose tolerance (International Diabetes Federation [IDF], 2013, p. 7). The number of people with diabetes is increasing in every country. For Thailand, according to Ministry of Public Health (Thailand), Chronic Disease Surveillance Report of 2010, there were 888,580 diabetic patients in Thailand. The ratio of diabetic illness from the report was 1,395 patients per 100,000 populations. This made it ranked as the second top of non-communicable diseases, of which the first top belonged to high blood pressure. Diabetes is due to abnormal insulin production or the effect of insulin that has an impact on high blood sugar or glucose level. According to pathology, diabetes can be classified into four types; type I, type II, gestational diabetes (found during pregnancy), and other types (American Diabetes Association [ADA], 2007). Type II diabetes mellitus is caused by the combination of abnormal insulin secretion of beta cells and the effect of insulin resistance. A person with diabetes may have either result from those mentioned causes greater than one another. Despite diabetes is a chronic disease, it is treatable through dietary control, physical exercises, and oral medicine. The patients who have long term diabetes, their beta cells may gradually be destructed and fail to control the blood sugar or glucose level. Insulin medication, such as insulin injection, is needed to help control the glucose level instead of the cells' production itself. Type II diabetes is mostly found in people aged over 40 years. Risk factors of this type are older age, overweight, lack of physical exercises, and genetics. The patients with long term diabetes and poor blood sugar control will easily develop complications that cause illness and death. Complications in diabetic patients may be found when the persons are first diagnosed of diabetes. Those people may have diabetes without any symptoms. The goal of treatment in diabetes is to control blood sugar to normal or close to normal level as much as possible. So fasting blood glucose level after 8-12 hours must be 90-130 mg/dl, or the level of hemoglobin A1c (HbA_{1c}) is less than 7% (ADA, 2007).

LITERATURE

Diabetes is a chronic disease. The patients must see their doctors regularly for health check up, picking up some medicine, and taking doctors' advice. While examining, the patients must inform symptoms and health problems related to their diabetic illness. The doctor will provide recommendation of how to take better care of themselves, and how to control blood sugar to normal level; prescribe medicine; and explain how to take medicine correctly. In order to make patients understand and follow doctors' advice correctly, communication between patients and doctors must be effective. The important components to improve mutual and better understanding are language usage in communication and point of views on the topic discussing. Both patients and doctors must understand what the other try to communicate and what the other perceive on the subject they are discussing. When the patients do not understand health information, they will not follow doctors' direction. However, although some of the patients with diabetes understand and recognize health information and doctor's recommendation well, they deny to follow doctors' advice. In addition, according to the study of Wanich Suksathan and Kantapong Prabsangob (2016), there was no correlation between health literacy and self-care behavior of diabetic patients. That because of diabetic patients' thought and point of view towards their diabetes differs from the doctors'. According to Arthur Kleinman (1988), he explained that medical staff always viewed patients' illness as a disease. It was important to focus on curing a disease through medication. In contrast, patients viewed their illness as incapability to perform their normal activity. That had an impact on behavior change and social role. Since both doctors and patients had different views on patients' illness, there was a gap between doctors and patients in understanding health care plan or treatment. As the consequence, it causes delay in care and treatment; lack of patients' cooperation; dissatisfaction in care and treatment; error diagnosis; and inappropriate treatment (Germain, 1982).

The patients with diabetes have their own belief and attitude on their sickness differently. This leads to individuals' practice in self-care distinguishingly. At the same time, each doctor provides treatment differently based on one's belief and attitude towards the patients' illness. In some cases, both doctors and patients have conflict due to their belief and attitude is unlike. They will not cooperate in controlling blood sugar level or better health care. Some patients rarely provide the information on their health problem and their eating behavior when seeing their doctors. They are not only afraid that the doctors may reject their behavior, but they also refuse to follow the doctors' recommendation as they feel that it is too difficult to practice. In some cases according to the interview, the patients did not take medicine as doctors directed. They took herbal medicine or holy water from traditional healer they believe instead. On the other hand, the doctors were likely not to find out nor understand the patients' belief and attitude related to diabetes and self-care. They even do not try to adjust their advice and treatment to each patient properly. The differences point of view from both patients and doctors have affected on promoting good health in patients which both definitely join the same goal. Here are some examples that prevent them from good health: The patients are dissatisfied in receiving the treatment; Both patients and doctors have less motivation in cooperating in health care: They misunderstand each other as they fail to communicate. Therefore, it is necessary for both patients with diabetes and doctors to understand each other's views in order to have effective communication and lead to the better health of the diabetic patients.

Samut Songkram Province is situated in southern central Thailand. It is a small town with 200,000 population. Samut Songkram Province is composed of three districts; Samut, Amphawa, and Bangkhonthi. This province is very important economics area of the central part where most residents produce palm sugar as a household industry. During the past decades, lifestyle of the people in Samut Songkram has changed tremendously from simple life to complex life. They used to work in their own land; consume the product they grew; and sell the extra they had left. They have become to live in semi-industry society that focuses on increasing product to industrial plants. Therefore, more labors are hired and rapid work is needed to increase the productivity in the province. Competition in the market is very tense. The more those labors increase the output, they more they get paid. Keeping themselves refreshing throughout their work shift is an excuse to make long for sweeten and energized drinks. Their lifestyle become in rush and causes them neglect their health. Lots of them like others spend their spare time on eating. They love party, especially Chinese feast that often serves fatty food. Neglect in self-care and consumption unhealthy food may somehow lead to the increasing numbers of diabetic patients in Samut Songkram yearly.

METHODS

In the study, a qualitative research was used. The researcher focused to study the situation on diabetes care and diabetic patients aged between 50-70 years, live in Jormploug sub-district Bangkhonthi district Samut Songkram province, and visit Jormploug sub-district health promotion hospital for their diabetic treatment. The qualitative research method was employed, observation and in-depth interviews were used to collect data about diabetes care and diabetic patients' perspectives of diabetes. During the interview, there was tape record. The researcher observed and recorded obtained information from the interview. In addition, an anthropological expert, who was as an advisor making some recommendations, closely advised during an in-depth interview data collection process in order to receive appropriate and accurate information. Data was collected and analyzed by using content analysis to describe the belief and perception of diabetes.

RESULTS

Result of the statistical description analysis

The majority of the participants were female, aged 50-76 years old. Most participants were diagnosed with DM more than one year (ranged 1- 20 years) prior to interviewing. Most of them were not able to control their blood sugar (HbA1c > 7.0) as shown in Table 1.

Table1:
The demographic information of 14 samples

No.	Sex	Age (years)	DM duration	BMI	HbA1c/DTX
1	M	59	5	38	8.0
2	F	70	4	23	6.9
3	F	50	7	21	8.3
4	M	75	20	17	9.2
5	F	72	12	26	7.9
6	F	73	10	20	7.6
7	F	76	15	20	7.0

8	F	62	1	25	N/A, 125
9	M	72	2	27	8.5
10	F	67	8	22	8
11	F	57	4	28	7.4
12	F	51	1	27	N/A, 121
13	F	55	4	29	10.5
14	M	51	2	27	N/A, 140

The result of observation and content analysis

Jormploug sub-district health promotion hospital provided care and treatment to the patients via doctor's appointment and medication. The patients would be scheduled to pick up their medicine and have blood sugar test monthly. If the glucose level exceeded the acceptable level, the patients would be scheduled to see a doctor on the next day. When seeing a doctor, a nurse would first screen the patients' health through an interview. She would note important information or problem found in the patients' history file, and give some advice at the same time. The assisting of a nurse on this process helped a doctor in rapid examination. A doctor would have only a few minutes to discuss with the patients because numbers of patients are waiting in line.

The raising numbers of the patients visiting doctors daily was greater than the number of health providers. The doctors had limited time to discuss on health with each patient that caused ineffective care. All participants responded that they had to take 2 – 3 hours for waiting to see a doctor and take only 2 – 5 minutes to talk with him, for example:

"On the day of diabetes clinic, I have to get the hospital by 7 AM. and have to wait to see a doctor until 10 AM." (Msr K)

Most diabetic patients of Jormploug sub-district were also elderly with low education that caused communication problem. Presently, lots of elders were neglected at home since their children and relatives had to work far from where they live. They rarely had someone to take care of them or accompany them to visit a doctor. Three participants stated that they have to have their family members or relatives take them to the hospital and some time, nobody is available, for example:

"Last time, I skipped meeting the doctor, because my nephew was busy." (Msr Y)

Though the residents' lifestyle has changed, many of them still live in their houses built on their land as in the past. Each house was settled individually far from others. Bus routes were not many and that took so long to make one round. A few buses running through villages inconvenienced the patients to commute to see a doctor. When they came to see a doctor, they could not wait for so long as they had to be hurry to catch a bus back home otherwise they might miss it.

All participants did not have risk perception of DM. Five participants responded that they were not aware of diabetes because they are strong and healthy, for example:

"Before, I thought I am strong and healthy because I am able to work hard in my garden every day; therefore I should not have diabetes." (Mr C)

Most patients were encouraged by providers to participate in a DM screening program, where they were first diagnosed. All participants reported having been compliant with their DM medications. However, most participants had also been taking herbal medicines in addition to their prescribed medications. The majority believed that food intake caused DM, especially over-eating rice. Many of the participants reported elevated blood glucose levels in the last two months due to increased fruit consumption. All participants were satisfied with health service provisions at the health center. By our observations, the health center offers services every day. The patients reported that they appreciate and trust their health providers, for example:

"The health care providers here treat me like their family member. I like to stop by the hospital to talk with them." (Mr. W)

DISCUSSION AND CONCLUSIONG

The patients with diabetes have their own belief and attitude on their sickness differently. This leads to individuals' practice in self-care distinguishingly. Similar to this opinion, it was mentioned by Masoudi Alavi et al. (2004) and Stonea et al. (2005). Based on those mentioned factors, the impact on public health of Jormploug sub-district can be summarized into three areas. First of all, there is unacceptable ratio of the doctors to the patients. Similar to this opinion, it was mentioned by Medical Council of Thailand (2010). Second, there is communication problem due to age group and low education of the patients. Similar to this opinion, it was mentioned by Passche-Orlow K.M. and Wolf S.M. (2007). Third, there is difficultly commuting of the patients for care. Some DM patients were not aware that they were in a risk group. Similar to this opinion, it was mentioned by Kantapong Prabsangob (2016). Understanding the beliefs and the perceptions of DM among these patients may help identify effective approaches to proper interventions for DM treatment.

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AN ANALYTICAL STUDY OF SOCIAL PROBLEMS OF WOMEN RELATED TO SPORTS

***Shagufta Jahangir, *Dr. Asma Manzoor, **Dr. Nusreen Aslam Shah ***Raisa Jahangir**

**Center of excellence for women studies, University of Karachi*

****Federal Urdu University of Arts, Science and Technology, Islamic Studies Department, Islamabad*

ABSTRACT

In many societies, sports considered inappropriate for women. It traditionally associated with mascunity. The aim of the study to critically analyzes the situation of sports women in Pakistan. social and cultural values, myths, norms, wobbly economical pose, erroneous religious outlook and the role of media towards women in sports are the main issues of Pakistani sports women, whilst sports activities can give a channel to educate women about their communal, legal ,physical condition and reproductive issues. A major concern of the study is to identify the crucial problems, which grudging Pakistani women from games .In Pakistan at 21 May2005 a mini marathon race was arranged by Joint Action Committee for People's Rights and Human Rights Commission of Pakistan just for challenge arbitrary curbs of women to show sports activity in public places. Historically, sport has engaged the perception of gender-hierarchy in rectify to imitate the attitude of male sovereignty, an impression that habitually interpreted into usual authority with the superior shared sort. It contended now that we are in a state of communal instability with esteem to women's participation in sport.

THE INVESTIGATION OF CLINICAL EXPERIENCE ONLEARNING BEHAVIORS AND STRESS FOR NURSING STUDENTS

Yen-ju Hou

Shu Zen Junior College of Medicine and Management, Taiwan

Abstract

The aim of this study was to examine learning behavior and practical stress of student nurses during medical interns. Types of learning behaviors, such as motivation and attitude toward learning, were identified. In addition, types of stress student nurse encountered during medical interns were discussed as well. In doing so, nursing students were participated in internship for one year during fourth- and fifth grade. Participants were asked to complete a set of surveys regarding learning attitudes and practical stress in the middle and in the end of internship year. The result showed that Self-efficacy, Intrinsic value, and Strategy use are the top three high means in students motivated strategies for learning. Regarding to types of stress in clinical practice, students suffered the most from Stress of assignment and work, followed by Stress of taking care of the patients, and Stress of professional knowledge and skills, Stress of teachers and nurses, Stress of peers and life, as well as Stress of internship surroundings.

Keywords: learning behaviors, internship, clinical practice, stress

INTRODICTION

In clinical practice, student nurses learn practical skills through real interaction with patients and family, medical staffs, and the working environment. However, these kinds of practical experience might have either positive or negative impacts on student nurses, such as depression, desire, anxiety, or career desire (Pearcey & Elliott, 2004). Still, factors, such as working environment, patient, equipment, or supervisor' teaching style, could influence student nurses on their professional skills to certain degree (Wang & Kao, 2010; Yeh, 2007; Papp, Markkanen, & Bonsdorff, 2003. Not surprisingly, problem or negative matters might occur during internship, and students dissatisfy about their performance and then result in giving up their study or changing their major. However, one may learn from either success or failure in doing something. Sometimes, learning from failure is always more efficient than that of from success.

At the research school, nursing-major students are required to complete a set of practical intern program 36 hours a week for one school year from their second semester of fourth year. Nursing students would go to a total of 8 different medical sessions to apply their knowledge into real medical situation. During practical year, teachers would visit hospitals regularly and see if students or hospitals have anything needs to be helped out. Since the nursing students are between 18 and 19 years old, they might not be experienced in dealing with practical interns or personal emotions, such as stress. Those could be something that affects students practical performance in positive or negative way.

In order to understand what might contribute to student nurses' learning during internship year, this study is conducted to investigate their learning attitudes and stress during internship year.

2. Literature review

The importance of practical experience

Intern has been seen as essential experience that shapes the quality of learning (Chung, 2004). As Dewey (1997) proposed, education is supposed to perceive through occupations because it can lead students to learn important knowledge and values. Since all kinds of knowledge resulted from human's real life, let students participate in real life through education and get a variety of knowledge (Smith, 2001). In addition, "learning by doing" is another aspect that Dewey stated. He believed that learning, a process of accumulation of knowledge, involves in an interaction between person and environment. It is the fact that progress of human is from learning of experience, and that's the important idea of education system.

Theories of learning behavior

As education is often associated with the change of society and educational needs, some theoretical frameworks have been presented in the realm of education. These are behaviorism, cognitivism, and constructivism.

Behaviorism. Behaviorists believe that all things which organisms do should be considered as behaviors, and those behaviors would change according to its environment. In the book *Integrating Educational Technology into Teaching* written by Roblyer & Edwards (2000), Skinner states that learning is, like anything our organisms do, a stimulus-response behavior, or a reaction to environment. He also finds that the inner process involved in learning cannot be observed directly, therefore, behaviors could be shaped or influenced by "contingencies of reinforcement" which is the technique used for a learner to enforce the desired responses/consequences. Thus, he further proposes operant conditioning theory which states "people can have mental control over their responses" (p. 54). For instance, when performing better in school, teacher will give praise to student to reinforce this behavior to be continuing. The conditions that can shape behavior, identified by Skinner, are positive reinforcement, negative reinforcement, and punishment.

Similar to Skinner's S-R theory, Gagné identifies five types of learning which emphasize the different ways organisms react to stimuli: intellectual skills, cognitive strategies, verbal information, motor skills, and attitudes (Bigge & Shermis, 2004). He believes that behavior is an accumulating result from learning, and each individual will use different strategies to acquire different types of skills. According to his theory of learning hierarchies, each individual embeds different level of skills and he/she requires the foundation for advanced-level skills. In other words, learning a skill is like building block which requires foundation (lower-level skills) to move to next level (high-level skills) (Gagné, Briggs, & Wager, 1988; Roblyer & Edwards 2000).

In other words, if proper antecedent (i.e., sensory inputs) and reinforcement (rewards or praise) have been well arranged, the behavior of language learning can be possibly expected and predicted. Since then, the problem of language learning is not learners themselves or their difficulties on pronunciation. Rather, whether the arrangement of learning environment is set properly is the key factor that affect learning outcome.

Cognitivism. Since behaviorists' explanation of human learning on external behavior is seen as insufficient to explain internal process, cognitive-learning theorists began to propose models that help people to explore what goes beyond the head of the individual (Eggen & Kauchak, 1997; Roblyer & Edwards 2000). In contrast to behaviorists' focus on behavior investigation, cognitivists, such as J.W. Bruner and Gagne, believe that learning involves several internal states, like memory, motivation, metacognition, meaningful-making, thinking and reflection etc (Bigge & Shermis, 2004; Gagné & Briiggs, 1974; O'neil & Spielberger, 1979).

Constructivism. It is difficult to make a definition for constructivism because these theories are with overlap, but remain major difference (Gordon, 2009; Molenda, 1991; Phillps; 1995; Roblyer & Edwards 2000). However, constructivist strategies for learning are based on cognitive science, which a student-focused learning theory that requires learners to learn actively and construct their prior knowledge to create and interpret their information (Gordon, 2009; Roblyer & Edwards 2000; Windschitl, 1999). Following are some major constructivist theories of learning.

Vygotsky's scaffolding theory and the Zone of Proximal Development both state the importance of social relations and the belief that learning takes place through social interactions in all forms of complex activity (Daniels, 2001; Gage; Berliner, 1988; Roblyer & Edwards 2000; Rothenberg & Fisher, 2007).

Concerning the importance of social interaction, Piaget's four stages of cognitive developments in children stress that children will develop higher reasoning ability by the process of interacting with the environments while going through these four stages (Daniels, 2001; Roblyer & Edwards 2000). In addition, Piaget's assumptions about the stages of development point that children are active and motivated on learning and they can develop certain level of complex thinking skills through interaction with physical and social environments (Ormrod, 2000; Roblyer & Edwards 2000).

3. Methodology

Research design

In order to investigate nursing students' perceive stress and learning behavior during their internship. Two surveys are adopted for see their perception of stress and learning behavior.

Research Site

The study was conducted at a private five-year medical junior college in Southern Taiwan in the spring of 2014. Students who enrolled in the five – year junior college are normally between 16 and 20 years of age. The school contains two academic systems; a two-year college section and a five-year junior college section. There are eleven departments in the five-year junior college, such as nursing, medical technology, management, and foreign languages.

Participants

A total of 216 students from Nursing Department were chosen to participate in the study. Nursing students are required to participate in clinical practice for one year from the second semester of fourth year to the first semester of fifth year. The locations for intern will be hospitals in different cities in Taiwan. So, all the participants filled out the questionnaires of learning behaviors before and after their internship and then, completed the questionnaire of their stress during the internship year.

Instruments

The research instrument used in the study consists of two sections:

Section 1: Revised Chinese version of Motivated Strategies for Learning Questionnaire (MSLQ-RCV). The Pintrich's Motivated Strategies for Learning Questionnaire (MSLQ) was used primary with college students to measure levels of motivation and self-regulating learning. In order to help reduce the misunderstanding from translation, Rao and Sach (1999) developed a Chinese version of MSLQ-CV. However, items regarding extrinsic motivation and perceptions of the management of learning environment which offered evidences on students learning in some studies were removed. Thus, the MSLQ-RCV was developed by incorporating new factors into MSLQ-CV for junior secondary students by Lee, Yin, and Zhang (2010). MSLQ-RCV contains 50 items that are grouped into 6 factors: self-efficacy (7 items), intrinsic value (9 items), extrinsic value (4 items), test anxiety (4 items), strategy use (19 items), and peer learning (7 items).

Section 2: Perceived Stress Scale for Nursing Students in Clinical Practice. This scale was designed by Sheu et al (1997) to measure perceive stress of nursing students in clinical practice. It consists of 29 items which fall into 6 factors: stress from taking care of patients (item 2, 3, 4, 8, 9, 10, 11, 12), stress from the faculty of the school and the staff of hospitals (item 1, 14, 17, 18, 20, 25), stress from their homework and workload (item 13, 15, 16, 19, 22), stress from their peers and in their personal lives (item 4, 21, 23, 24), stress from the clinical environment (item 27, 28, 29), and stress related to professional knowledge and skills (6, 7, 26).

The scale was chosen because it is designed to assess Taiwanese student nurses' perception of stress in interns, especially for students in junior college level. In addition, it has been tested and reported acceptable validity and reliability with Cronbach's $\alpha = 0.891$. In order not to cause the misunderstanding from cultural difference and translation, this scale is best to fit the need of the research purpose.

Table 3.1. Research instruments

Questionnaire	sources	adopted/ original items	scale
Revised Chinese version of Motivated Strategies for Learning Questionnaire (MSLQ-RCV)	Lee (2010)	50/55	Self-efficacy (7 items)
			Intrinsic value (9 items)
			Extrinsic value (4 items)
			Test anxiety (4 items)
			Strategy use (19 items)
			Peer learning (7 items)
Perceived Stress Scale for Nursing Students in Clinical Practice	Sheu (1997)	29/30	Stress of taking care of patients (8 items)
			Stress of teachers and nurses (6 items)
			Stress of assignment and (5 items)
			Stress of peers and life (4 items)
			Stress of professional knowledge and skills (3 items)
			Stress of internship surroundings (3 items)

Adopted from:

Lee, C.K., Yin, H., and Zhang, Z. (2010). Adaptation and Analysis of Motivated Strategies for Learning Questionnaire in the Chinese Setting. *International Journal of Testing, 10*, 149-165.

Sheu, S., Lin, H.S.,Hwang, S.L.Yu, P.J. Hu, W.Y.,and Lou, M.F.(1997).The Development and Testing of a Perceived Stress Scale for Nursing Students in Clinical Practice. Nursing Research, 5(4), 341-352.

Procedures

Before conducting the study, the researcher completed the application of Institution Review Board (IRB). For the purpose of identifying the changes of nursing students' learning behavior and stress during clinical practical, motivation, a set of questionnaires was handed to participated students at the beginning of second semester of fourth-year before interns. Participants took the MSLQ_RCV at the beginning of the semester, and completed the same materials at the end of the semester. In addition to know types of stress students encountered, participants took and a Perceived Stress Scale for Nursing Students in Clinical Practice at the end of their internship. Since the survey deals with stress, students could choose not to answer the survey if they did not feel comfortable. Then, the researcher collected data and analyzed the data, and completed the findings and results of the study.

Data collection

In the beginning of the semester, participants will be handed two questionnaires, including the MSLQ-RCV and a SCEQ. In order to investigate the effects of questioning on student performance, the same materials will be handed to participants at the end of the course.

4. Findings and Results

Findings and results of the study were described below, including the reliability of the research instruments, T-test analysis of students' learning behaviors of before and after the internship, as well as their types of stress during the internship year.

(1) Reliability of the research instruments

The reliability of the three sets of questionnaires of MSLO-RCV, and PSSNSCP were .943, and 939, respectively. It indicated that the research instruments were quite reliable.

Table 4.1.Reliability of the Research instruments

Questionnaire	Sources adopted	Adopted/ original	Reliability of pretest	Reliability of posttest

		items		
Revised Chinese version of Motivated Strategies for Learning Questionnaire (MSLQ-RCV)	Lee (2010)	50/55	.919	.943
Perceived Stress Scale for Nursing Students in Clinical Practice (PSSNSCP)	Sheu (1997)	29/30	---	.939

(2) T-test analysis of learning behaviors before and after internship and stress

By using T-test analysis of students' learning behaviors before and after internship, it was found that some significant differences did exist. In addition, students experienced some types of stress more than others. The findings were shown in Table 4.2.

(3) Motivated strategies for learning

As for their motivated strategies for learning, students had higher means in "Self-efficacy" ($p<.01$), "Intrinsic value" ($p<.01$), and Strategy use" ($p<.01$). Particularly, students felt more confident in being a good student (item 9) ($p<.01$), doing well in assignment and homework (item 11) ($p<.01$), having a good grade (item 13) ($p<.01$), having good study skills (item 16) ($p<.05$), and being capable to learn what would be tested (item 19) ($p<.01$). Additionally, students preferred to accept challenging teaching contents to learn more (item 1) ($p<.01$), recognized what was taught in school was important to them (item 4) ($p<.01$), completed more assignment than expected (item 10) ($p<.01$), and realized that it was important to understand what was taught (item 21) ($p<.05$). Furthermore, students used more strategies for learning, such as to prepare well both the instruction and textbook (item 23) ($p<.01$), to ask themselves related questions of learning (item 25) ($p<.01$), to memorize all the materials (item 30) ($p<.05$), to complete reading the materials (item 33) ($p<.01$), to make plans before studying (item 35) ($p<.01$), and to understand the whole content thoroughly (item 39) ($p<.01$) (see Appendix II). Except for those mentioned above, after the internship, more students expressed if they could, they wanted to perform better than other peers (item 51) ($p<.05$), and less students revealed that they would not always ask help from peers when encountered difficulties in learning (item 55) ($p<.05$).

(4) Perceived stress for nursing students in clinical practice

Regarding to types of stress in clinical practice, students suffered more from "Stress of assignment and work" (M=2.06), followed by "Stress of taking care of the patients" (M=1.91), and "Stress of professional knowledge and skills" (M=1.83), "Stress of teachers and nurses" (M=1.67), "Stress of peers and life" (M=1.67), as well as "Stress of internship surroundings"(M=1.51). In particular, what students were anxious more were there was a gap between what was learned and clinical practice (item 1) (M=2.55), lacking enough experience of judging the situation and managing ability (item 2) (M=2.50), anxious about the quality and quantity of the assignment (item 16) (M=2.50), worrying about the internship scores (item 13) (M=2.45), being not accepted or trusted by the patients or their families (item 8)(M=2.15) , how to deal with patients' psychological or social problems (item 3)(M=2.13), having a gap between internship performance and self-expectation (item 11)(M=2.09), as well as influencing daily activities, family and social activities due to the long and inflexible clinical practice schedule (item 19) (M=2.01).

Table 4.2. T-test analysis of learning behaviors before and after internship and stress

Questionnaire	scale	pretest		posttest		sig
		M	SD	M	SD	
Revised Chinese version of Motivated Strategies for Learning Questionnaire (MSLQ-RCV)	Self-efficacy	3.21	.03	3.39	.04	**.000**
	Intrinsic value	3.50	.03	3.62	.03	**.001**
	Extrinsic value	3.45	.05	3.53	.05	1.11
	Test anxiety	3.26	.04	3.19	.04	.164
	Strategy use	3.31	.02	3.41	.03	**.001**
	Peer learning					
Perceived Stress Scale for Nursing Students in Clinical Practice (PSSNSCP)	Stress of taking care of patients			1.91	.73	(2)
	Stress of teachers and nurses			1.67	.71	(4)
	Stress of assignment and work			2.06	.79	(1)
	Stress of peers and life			1.67	.80	(4)
	Stress of professional knowledge and skills			1.83	.73	(3)
	Stress of internship surroundings			1.51	.79	(6)

5. Discussions and Implications

The findings showed that some significant differences did exist, before and after students' internship, including Self-efficacy, Intrinsic value, and Strategy use. In addition, students experienced some types of stress more than others. Some discussions and implications derived from the study were listed below.

Discussions

(1) **Motivated strategies for learning**

A. As for their motivated strategies for learning, students had higher means in *Self-efficacy*, *Intrinsic value*, and *Strategy use.* Particularly, students felt more confident in being a good student, doing well in assignment and homework, having a good grade, having good study skills, and being capable to learn what would be tested.

B. Students preferred to accept challenging teaching contents to learn more, recognized what was taught in school was important to them, completed more assignment than expected, and realized that it was important to understand what was taught.

C. Students used more strategies for learning, such as to prepare well both the instruction and textbook, to ask themselves related questions of learning, to memorize all the materials, to complete reading the materials, to make plans before studying, and to understand the whole content thoroughly.

D. Except for those mentioned above, after the internship, more students expressed if they could, they wanted to perform better than other peers, and less students revealed that they would not always ask help from peers when encountered difficulties in learning.

(2) Stress in clinical practice

A. Regarding to types of stress in clinical practice, students suffered more from *Stress of assignment and work*, followed by *Stress of taking care of the patients*, and *Stress of professional knowledge and skills*, *Stress of teachers and nurses*, *Stress of peers and life*, as well as *Stress of internship surroundings*.

B. In particular, what students were anxious more were there was a gap between what was learned and clinical practice, lacking enough experience of judging the situation and managing ability, anxious about the quality and quantity of the assignment, worrying about the internship scores, being not accepted or trusted by the patients or their families, how to deal with patients' psychological or social problems, having a gap between internship performance and self-expectation, as well as influencing daily activities, family and social activities due to the long and inflexible clinical practice schedule.

Implications

(1) After the internship, students had higher means in their career satisfaction and certainty. But there were still some students expressing that they didn't know what careers they could have after graduation. Hence, it suggested that teachers provide students with more information about appropriate careers to engage in the future.

(2) Students had more self-efficacy, intrinsic value, and strategy use after they had clinical practice. However, more students expressed that if they could, they wanted to perform better than other peers. It is suggested that students should be taught that cooperation is more important than competition, especially in the field of medical care.

(3) Regarding to stress in the internship, what students were anxious most was the gap between what was learned in school and what was expected to do in clinical practice. So, it is suggested that in addition to theory of knowledge, schools should provide students with more practical skills and experiences to help students be ready to engage in any job in the real world.

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London Interbank Offer rate volatility: The US Dollar, the British Pound, the Japanese Yen and the Euro: How it affects Multinational companies (1986-2016)

Alhassan Ndekugri

Allen University, 1530 Harden street, Columbia SC, USA
Email: andekugri@allenuniversity.ed

ABSTRACT

Multinational corporations are companies that engages in foreign trade and owns value added activities in more than one country. Short term funding is needed for these Companies to carry their businesses in the foreign country. This research looks at how LIBOR rate volatility may affect borrowing among these multinational companies. This paper uses quantitative methodology and data is obtain from a secondary source such as the Federal reserve bank of the United States of America and the Wall street Journal. The null hypothesis states that there is a variation in the LIBOR of USD, JPY,GBP and EURO in the international market. Descriptive statistics is use in this research to determine the standard deviation of the four major currencies: The US dollar, the British Pound, the Japanese Yen and the Euro. A difference in standard deviation means that there is a volatility in the currencies and will have an effect on borrowing, as a result the null hypothesis is retained and conclude that LIBOR rate volatility does have an effect on multinational companies.
Keywords: currencies, LIBOR, Multinational companies, Volatility,

INTRODUCTION

Multinational companies are companies that do business in more than one geograhpical region besides the home country of that company, Dunning and Lundan (2008: 3) defined Multinational corporation as companies that engages in foreign trade and owns value added activities in more than one country. Lazarus, A,A. (n. d) also defined multinational corporations as a business organization whose activities are located in more than two countries and is the organizational form that defines foreign direct investment. these companies needs funding to be able to expand into the international market for a short term. Cost of borrowing to fund these companies be may be more costly for first time entrants considering the interest rate that comes with the borrowing. This research looks at London Interbank Offered Rate(LIBOR) as a source for funding multinational companies.

According to the US commodity futures trading commission, London Interbank Offer Rate is currently used in interest rate transactions with a total notional value of about $500 trillion, this include the over the counter(OTC) Swaps, loans and exchange traded interest rate futures and option contracts(US commodity Futures and Trading Commission,2013). LIBOR is the most commonly indexed interest rate in the world. The idea of LIBOR came as a result of the British Bankers' Association (BBA) effort. BBA is a private organization that set the LIBOR on the basis of submissions made by the large international banks in European, American, and Japanese included in it panel, since then the UK government had introduced additional regulations for LIBOR administration and rate setting procedures acting on the recommendation of the Wheatley Review.

Bennet(2005) indicated that interest rates play a very crucial role in the financing of firms in the construction industry and Multinational companies that seek to expand their businesses in the global market. If interest rate follows a certain pattern such as cyclical, rising when there is a demand for investment funds and falling when investment demand is low then spending on construction and MNCs can be expected to be partly related to interest rate. McAdrews et al.(2008) also noted that LIBOR affects interest rate on loans and securities, including corporate borrowing in the US. Loans from banks to firms and individuals are then based on retail interest rates, using a wholesale rate plus a margin.

2.0 Purpose statement

The purpose of this this research is to investigate how LIBOR affetcs multinational corporation borrowing in the short term to finance their business in the international market using the major currencies such as the US dollar, the Euro, the British Pound, and the Japanese Yen.

Hypothesis

With the level of business competitiveness around the world, there is the likelihood that financial institutions such as the banks may not lend short term financing using the same LIBOR, for this reason, multinational companies may borrow using different LIBOR in the four major currencies such as the USD, the GBP, the EURO and the JPY.

1. **Null hypothesis**: There is a variation in the LIBOR of USD, JPY,GBP and EURO,

   Retain the null hypothesis if the significance of any of the currencies level is more than α of 0.05(5%)

2. **Alternative hypothesis**: there is no variation in the LIBOR of USD, JPY,GBP and the EURO

   We fail to retain the null hypothesis if the significance level of any of the currencies is less than α of 0.05(5%)

LITERATURE REVIEW

2.1 MNCsCredit worthiness

Madura and Fox(2011), suggest that interest rate parity and purchasing power lead to very strong explanation of exchange rate movement. The ability for Multinational companies to borrow for short financing depends on their credit worthiness, Multinational corporations have to demonstrate that the credit extended to them will be paid when the time come due. Short term financing through LIBOR takes into accounts the riskiness of a MNCs and its ability to borrow, for this reason, companies with international recognition are likely to borrow at a low interest rate as compared to companies entering the market for the first time, first time entrants may have high default risk and are likely to borrow at a higher cost. Elliot, Koeter-Kant, and Warr(2008) examine the public equity vs public and private debt issuance decision in a framework that controls for the static trade off and discovered that overvalued companies are likely to to issue equity whiles udervalued companies issue debt. Undervalued here refers to companies with lower assets.

2.2 Market Model, LIBOR

In short term borrowing using LIBOR, the forward rate at time t, base on the simple interest for lending in the interval(T_1,T_2) is denoted by

$F(t, T_1,T_2)= 1/T_2-T_1(Z_t^T{}_1-Z_t^T{}_2)/Z_t^T{}_2$……………………(1)

where Z_t^T is the time of a zero coupon bond with a maturity time t. LIBOR rate here are quoted using compound interest rates. T_2-T_1 are fixed at σ=1/4 or ½ corresponding 3months and 6months. The key element underlying LIBOR is the fact that it is based upon the offered rate, rather than the bid rate. The submission of Banks are therefore based upon the lowest percieved rate that a bank could enter the inter-bank market and acquire funding for a given maturity date.

2.3 Inter Bank Rates

LIBOR play a very significant role in determing the interest of corporate loans and any time there is a change in the LIBOR, it may have repercussions on corporate borrowing including student loan, auto, and home loans as a resultof the flutuations.

The four major currencies(JPY, GBP, EUR, USD) can be reference to the LIBOR at any point in time whether fixed or floating. For instance, LIBOR in the JPY fixed income market, the Euro Inter Bank Rate(EURIBOR) and the USD fixed income market are fixed income contracts refrence to the LIBOR and Multinational companies in any of these reference currencies are subjected to calculation on the host country. By reason of the fact that LIBOR is the average rates at which contributer Banks estimates how they are able to obtain unsecured funding for a given period in a given currency such as the USD, the JPY, GBP, and the EURO. The overnight rate is another reference that significantly affects multinational corporation, with this rate, the Euro overnight index average(EONIA) and the Effective Federal Funds Rates (EFFR) in the USD market may affect borrowing as a result of the flutuations that occurs frequently.

In the US, the weighted average rate of overnight unsecured borrowing uses the Federal Reserve Bank of New York which is the largest Federal reserve Bank in the United States and runs international FEDwire. The rates of the FED is calculated daily by the Federal Reserve Bank based on the data obtained from the various depository institutions. This calculation is base on daily count conventions. On the other hand, the EONIA rates in the Euro market calculates its borrowing of unsecured overnight money using the European central Bank and in Japan, calculation is based on the central Bank of Tokyo.

2.4 Day count convention

The day count convention determines how interest is calculated between coupon payments on financial transaction such as funding, derivatives and investments. This also determines how much is paid or received on the payment date at the end of the respective interest period(Teasury,2012). On the money market, basis,(Actual or Act/360), the day count fraction is actual number of days in the period divided by 360 is consistent with Euro LIBOR transactions. In Britain, the sterling overnight Index average(SONIA) is calculated by the Wholesale markets Brokers Association (WMBA) as the uncollateralized overnight interest rate benchmark of the interBank market in England. In Japan, the Tokyo Overnight average Rates(TONAR) is calculated by the Bank of Japan, transactions based benchmark for the uncollateralized call rate using information provided by money market brokers.

In some market, each year contains 365 days, interest is calculated on that period that is actual/365, in a leap year, interest is calculated using actual/366. The model used for this calculation is **df=1/1+deposit Rate$_t$*daycount fraction$_t$ ………………..(2)**

where df is the discount factor, and t is the period. For instance, in the US, coupon reference start date, end date and accrual calculation days is shown below

Table 1 coupon days calculation

Coupon start date	Coupon end dates	Accrual calculation days
30 Jan. 2009	30 Jan.2009	0
30 Jan. 2009	30 April, 2009	90
30 April, 2009	30 July, 2009	92
31 July, 2009	30 Oct. 2009	91

2.5 Time value of money

MNCs companies that seeks for short financing have to pay interest on the amount borrowed. Two types of interest are the simple interest and compound interest, these two types of interest payment have different modalities. Whiles in simple interest, a company may be paying less for borrowing, the reverse is said on compund interest. For simple interest the fomula Future value, FV= Initial investment(1+rxt)…………………(3)

where r is the rate of borrowing in percentage terms. On the other, compound interest uses the fomula FV= Initial investment$(1+r)^t$………………(4)

t is the time in both scenarios. For instance, if a company borrows $5000 with interest earned on a rate of 6% for five years, then on simple interest,

FV=$5000(1+0.06*5)=$6,500 Whiles in the compound interest, FV=5000(1+0.06)^5$.

FV=$6,691.13. Adifference of $191.13 between the compound interest and simple interest.

METHODOLOGY

This research used quantitative methodology and data collected was from the Federal reserve Bank of the United States of America and Wall street journal. The data from the Federal reserve Bank were randomly selected LIBOR rate from 1986- 2016, the 52 weeks 2016 data obtained from the Wall street journal, that is The US dollar, the Japanese Yen, the British Pound, and the Euro were subjected to various analysis such as descriptive statistics, T-test, Reliability test, autocorrelation, Chi-square test, factor analysis and hypothesis testing.

Table 2 52weeks LIBOR

Column1	Column2	Column3	Column4
GBP	JPY	USD	EUR
0.225	-0.064	0.68822	-0.41071
0.23538	-0.06757	0.72333	-0.39243
0.25763	-0.03086	0.77111	-0.37786
0.3225	-0.02586	0.81944	-0.35286
0.36675	-0.02586	0.99789	-0.33571
0.53363	0.01957	1.31767	-0.22657
0.77788	0.12586	1.68733	-0.08557

Source: Wall street journal, 2016

Results and Discussion

The results indicated that interest rate of the four major currencies, the Euro, the GBP, the USD, and the JPY have varying. From the hypothesis testing, the significance level of GBP, USD, and the EUR are more than α of 0.05, therefore we retain the null hypothesis. However, the significant level of the JPY is less than α of 0.05, as a result, we fail to retain the null hypothesis

Tabel 3 hypothesis test results

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of GBP is norma with mean 0.388 and standard deviation 0.20.	One-Sample Kolmogorov-Smirnov Test	.179[1]	Retain the null hypothesis.
2	The distribution of JPY is normal with mean -0.010 and standard deviation 0.07.	One-Sample Kolmogorov-Smirnov Test	.041[1]	Reject the null hypothesis.
3	The distribution of USD is norma with mean 1.001 and standard deviation 0.37.	One-Sample Kolmogorov-Smirnov Test	.174[1]	Retain the null hypothesis.
4	The distribution of EUR is norma with mean -0.312 and standard deviation 0.12.	One-Sample Kolmogorov-Smirnov Test	.064[1]	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

[1] Lilliefors Corrected

Table 4 descriptive statistics test result

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
GBP	**7**	**.22500**	**.77788**	**. 3883957**	**.20199564**	**.041**	**1.463**	**.794**	**1.616**	**1.587**
JPY	**7**	**-.06757**	**.12586**	**-. 0098171**	**.06645878**	**.004**	**1.712**	**.794**	**3.204**	**1.587**
USD	**7**	**.68822**	**1. 68733**	**1. 0007129**	**.37239837**	**.139**	**1.290**	**.794**	**.707**	**1.587**
EUR	**7**	**-.41071**	**-.08557**	**-. 3116729**	**.11644024**	**.014**	**1.523**	**.794**	**1.777**	**1.587**
Valid N (listwise)	**7**									

Table 5 correlation test results

Correlations

			GBP	JPY	USD	EUR
Kendall's tau_b	GBP	Correlation Coefficient	**1.000**	**.878****	**1.000****	**1.000****
		Sig. (2-tailed)	**.**	**.006**	**.**	**.**
		N	**7**	**7**	**7**	**7**
	JPY	Correlation Coefficient	**.878****	**1.000**	**.878****	**.878****
		Sig. (2-tailed)	**.006**	**.**	**.006**	**.006**
		N	**7**	**7**	**7**	**7**
	USD	Correlation Coefficient	**1.000****	**.878****	**1.000**	**1.000****
		Sig. (2-tailed)	**.**	**.006**	**.**	**.**

		N	**7**	**7**	**7**	**7**
	EUR	Correlation Coefficient	**1.000****	**.878****	**1.000****	**1.000**
		Sig. (2-tailed)	**.**	**.006**	**.**	**.**
		N	**7**	**7**	**7**	**7**
Spearman's rho	**GBP**	**Correlation Coefficient**	**1.000**	**.955****	**1.000****	**1.000****
		Sig. (2-tailed)	**.**	**.001**	**.**	**.**
		N	**7**	**7**	**7**	**7**
	JPY	**Correlation Coefficient**	**.955****	**1.000**	**.955****	**.955****
		Sig. (2-tailed)	**.001**	**.**	**.001**	**.001**
		N	**7**	**7**	**7**	**7**
	USD	**Correlation Coefficient**	**1.000****	**.955****	**1.000**	**1.000****
		Sig. (2-tailed)	**.**	**.001**	**.**	**.**
		N	**7**	**7**	**7**	**7**
	EUR	**Correlation Coefficient**	**1.000****	**.955****	**1.000****	**1.000**
		Sig. (2-tailed)	**.**	**.001**	**.**	**.**
		N	**7**	**7**	**7**	**7**

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

Correlation was significant for the four currencies LIBOR at 0.01

Table 4 Factor analysis results

		GBP	JPY	USD	EUR
Correlation	GBP	**1.000**	**.980**	**.995**	**.998**
	JPY	**.980**	**1.000**	**.964**	**.983**
	USD	**.995**	**.964**	**1.000**	**.993**
	EUR	**.998**	**.983**	**.993**	**1.000**
Sig. (1-tailed)	GBP		**.000**	**.000**	**.000**
	JPY	**.000**		**.000**	**.000**

USD	**.000**	**.000**		**.000**
EUR	**.000**	**.000**	**.000**	

A reliability analysis of the four currencies, USD, GBP, JPY and the EURO was also performed using Cronbach's alpha and the results indicated as shown in the table below, the minimum expected is 0.871 and all the four currencies have Cronbach's alpha of more than 0.871 confirming that there is a variation in the LIBOR market for multinational companies.

Table 6 Reliability Statistics results

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.871	**.996**	**4**

LIBOR comparison

The GBP, JPY and the EURO were also compared with the USD and the analysis showed that the three currencies performed independently against the USD as shown fig 6 to fig 8. This also firmed that LIBOR differ in the various currencies in the international market and will have a significant effect in terms of borrowing and the return for these companies.

Figure 1 USD/EURO LIBOR

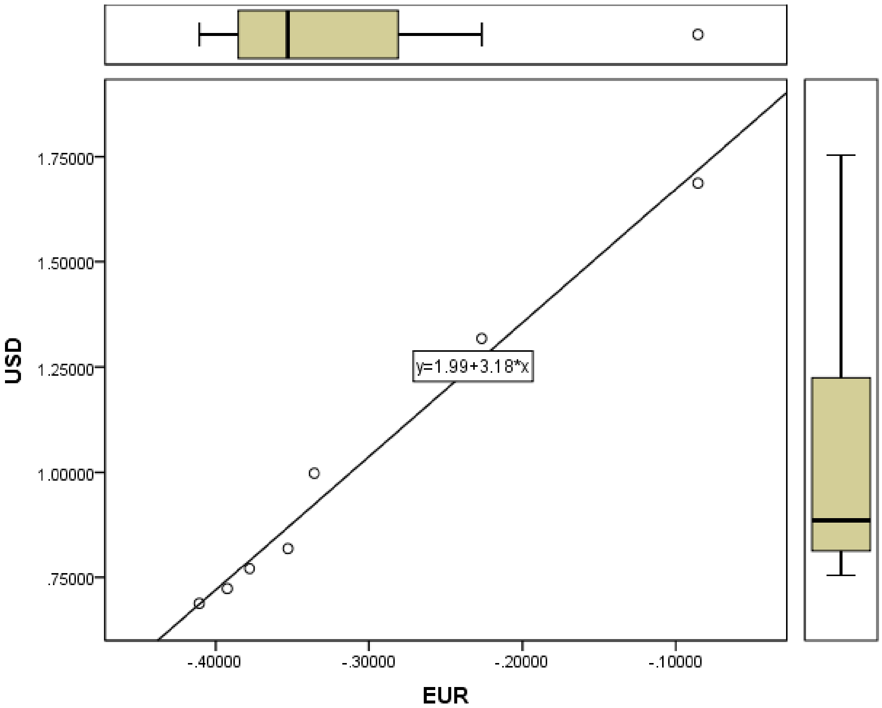


Figure 2 USD/JPY LIBOR

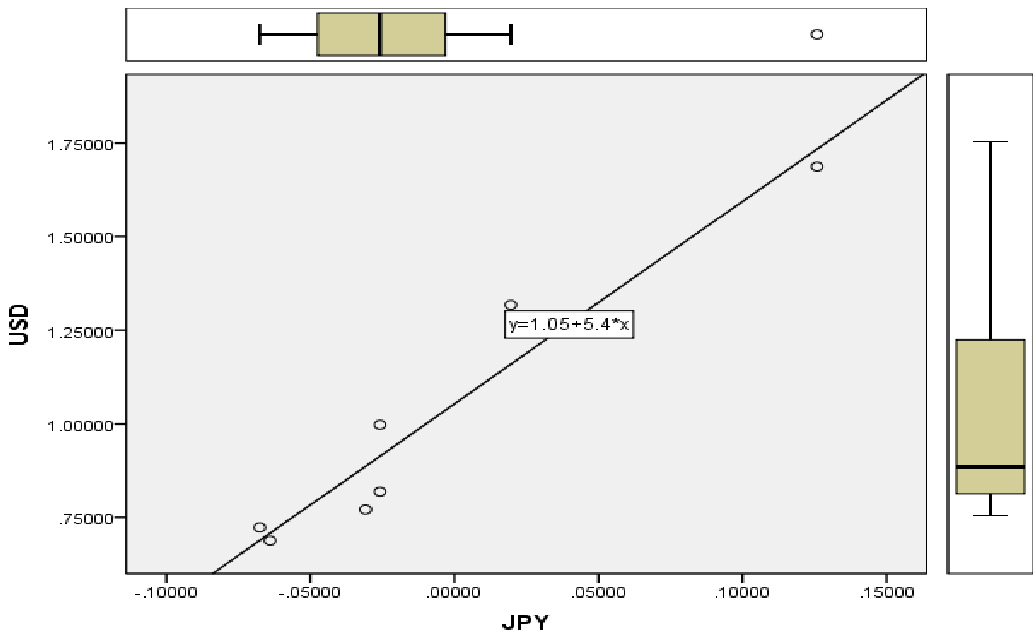


Fig 3 USD/GBP LIBOR

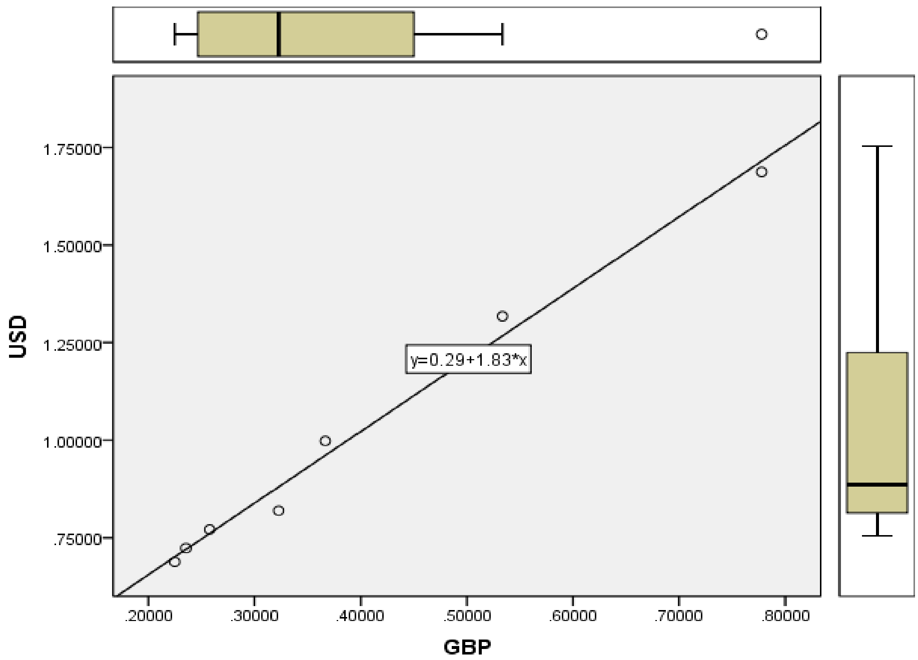


Table 7 USD * GBP Chi square test results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	**42.000[a]**	**36**	**.227**
Likelihood Ratio	**27.243**	**36**	**.853**
Linear-by-Linear Association	**5.938**	**1**	**.015**
N of Valid Cases	**7**		

a. 49 cells (100.0%) have expected count less than 5. The minimum expected count is .14.

Table 8 USD * JPY Chi-square test results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	**35.000[a]**	**30**	**.243**
Likelihood Ratio	**24.470**	**30**	**.750**
Linear-by-Linear Association	**5.580**	**1**	**.018**
N of Valid Cases	**7**		

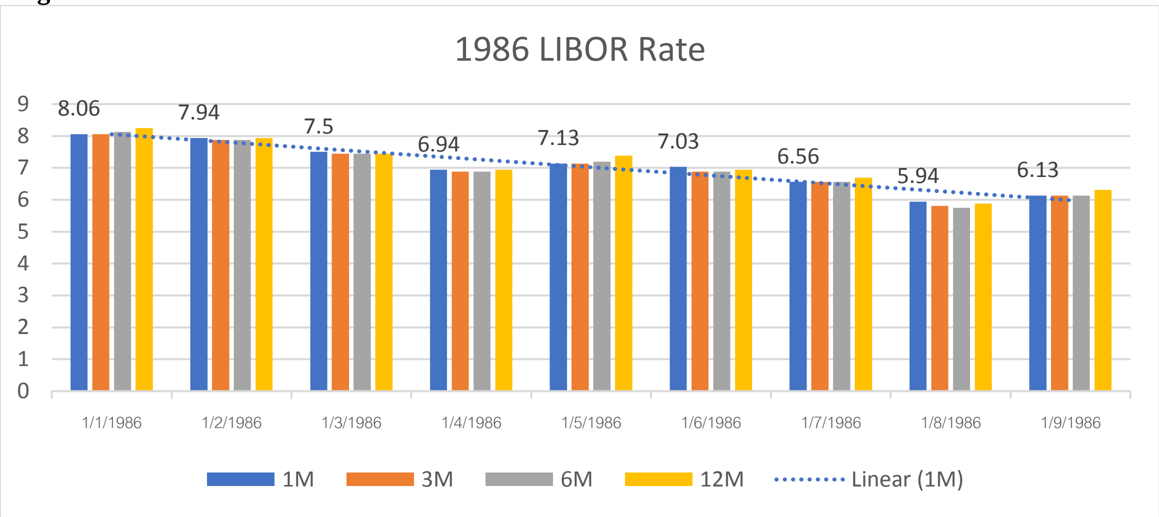
a. 42 cells (100.0%) have expected count less than 5. The minimum expected count is .14.

Table 9 11USD * EUR Chi-square test results

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	**42.000[a]**	**36**	**.227**
Likelihood Ratio	**27.243**	**36**	**.853**
Linear-by-Linear Association	**5.914**	**1**	**.015**
N of Valid Cases	**7**		

a. 49 cells (100.0%) have expected count less than 5. The minimum expected count is .14.

Fig 3



LIBOR Rates in the 1980s and the early 1990s were very high. The possible reasons were that most multinational companies did not gain international recognition at that time, as a result, this lead to low credit rating and the ability to pay back was low, hence, Multinational companies that were able to borrow do so at a very higher interest rates.

Fig 4

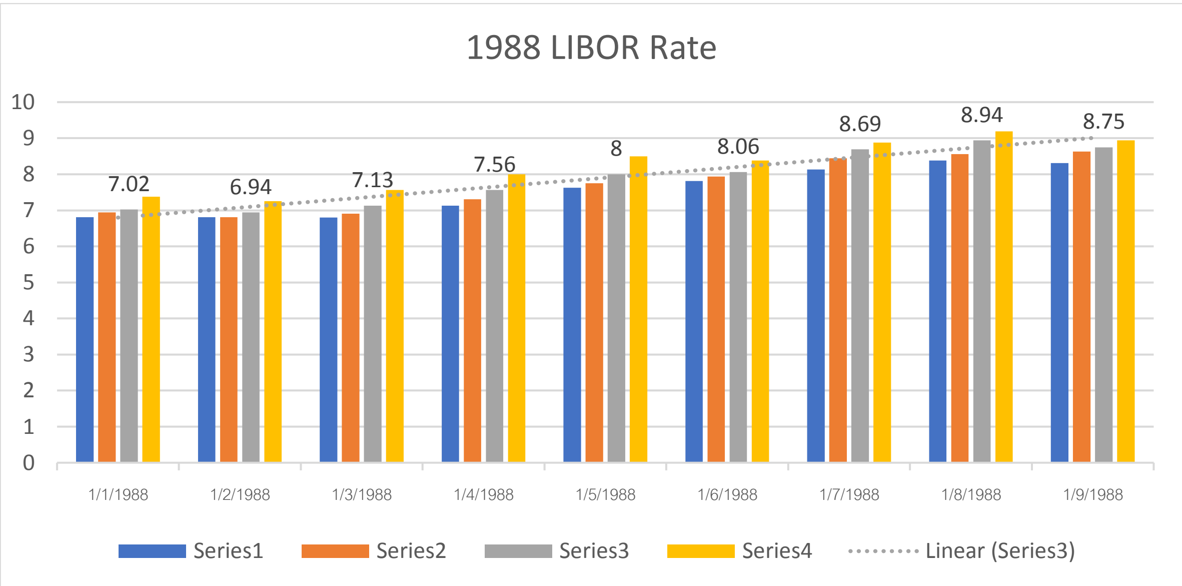


Fig 5

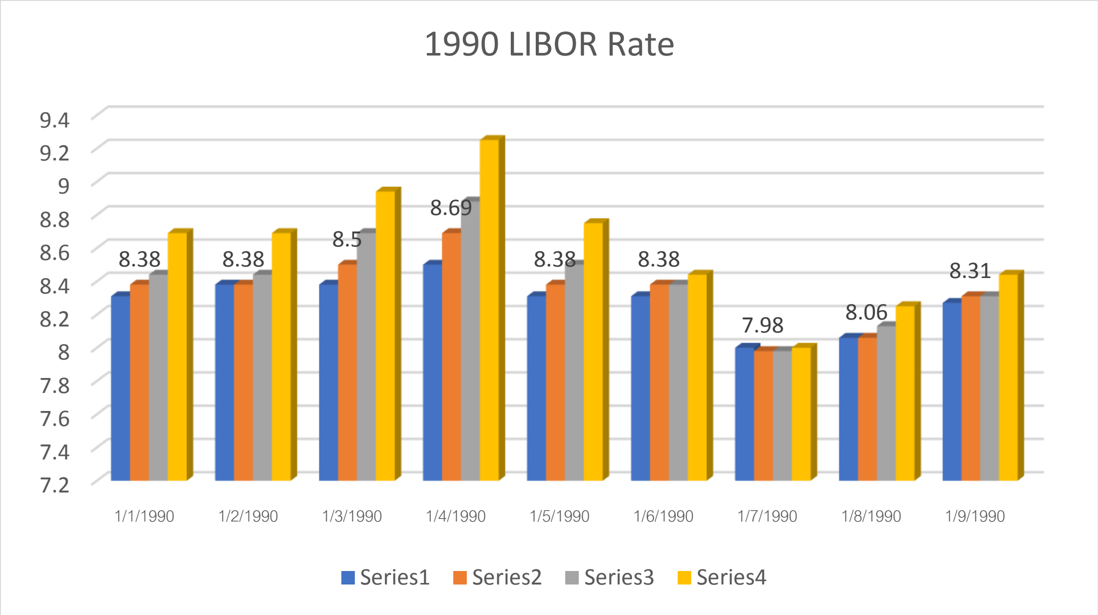

1990 LIBOR Rate
9.4
9.2
9
8.8
8.6
8.4
8.2
8
7.8
7.6
7.4
7.2
8.38
8.38
8.5
8.69
8.38
8.38
7.98
8.06
8.31
1/1/1990
1/2/1990
1/3/1990
1/4/1990
1/5/1990
1/6/1990
1/7/1990
1/8/1990
1/9/1990
Series1
Series2
Series3
Series4

Fig 6

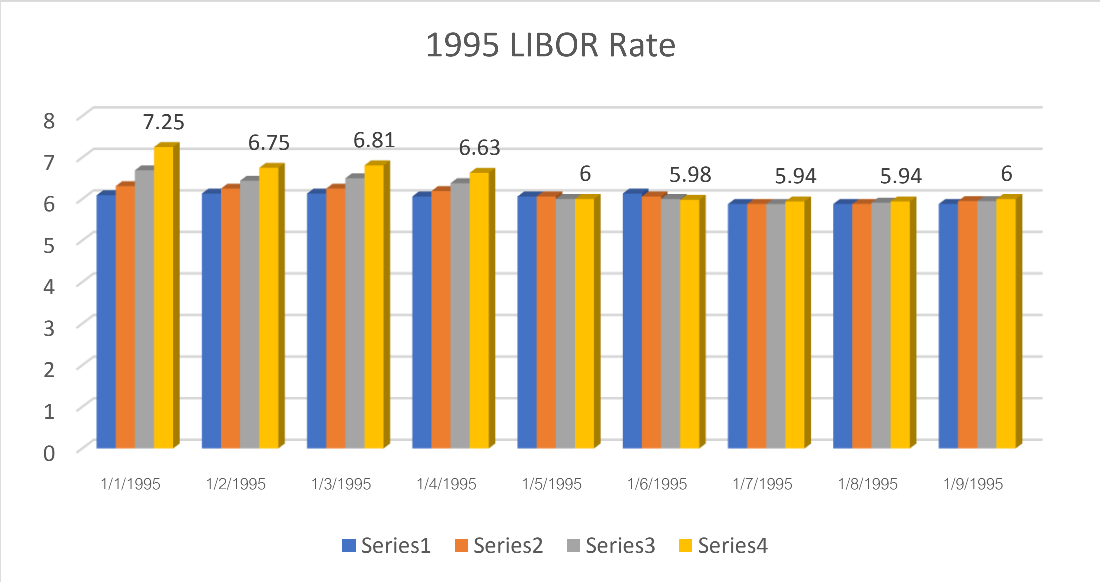
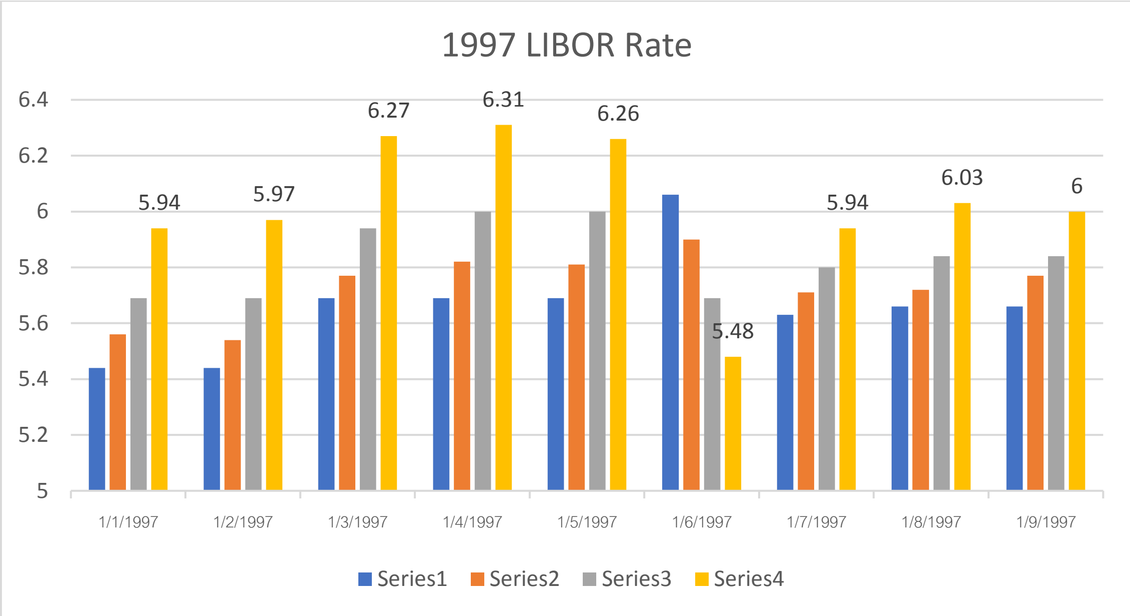

1995 LIBOR Rate
8
7
6
5
4
3
2
1
0
7.25
6.75
6.81
6.63
6
5.98
5.94
5.94
6
1/1/1995
1/2/1995
1/3/1995
1/4/1995
1/5/1995
1/6/1995
1/7/1995
1/8/1995
1/9/1995
Series1
Series2
Series3
Series4

Fig 7



After the 1990s, most Multinational companies had gone global and had also gained a lot of international recognitions building corporation's credit. As a result of the international presence, hence the ability to borrow from the international financial market were made easy. This also led to lower interest rates

Fig 8

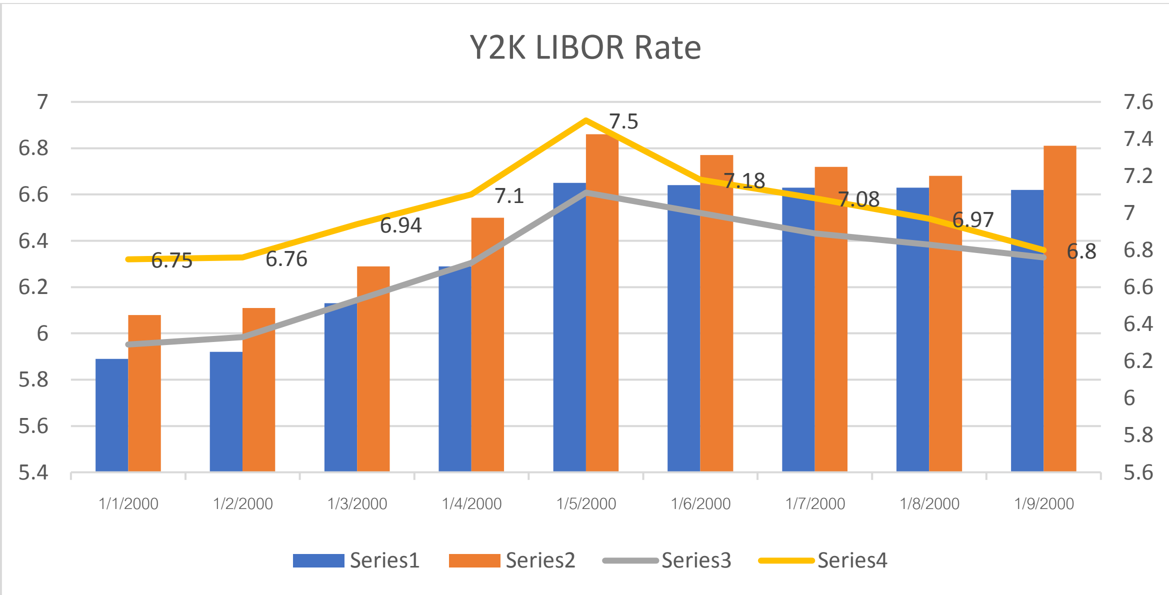


Fig 9

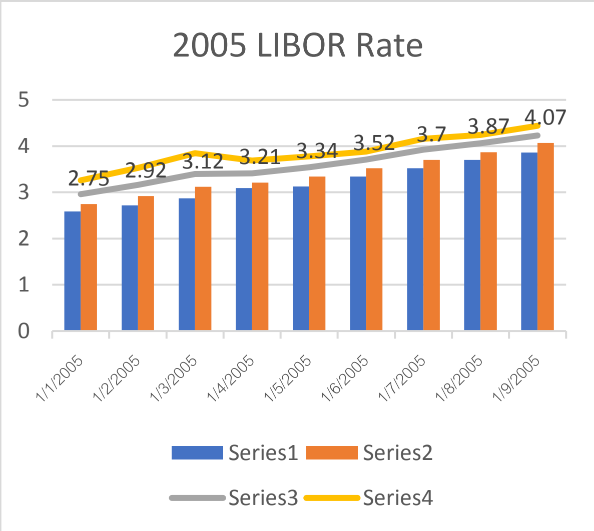
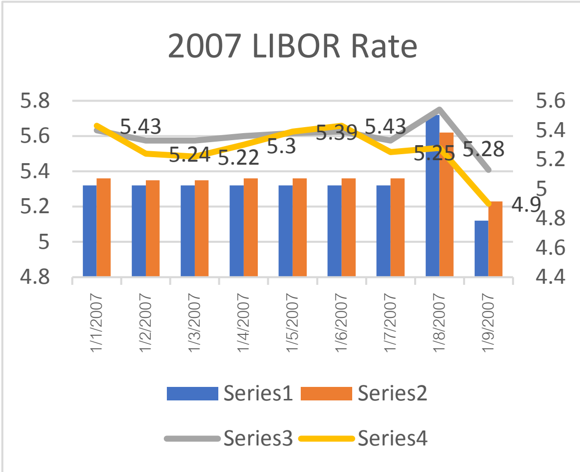


Fig 10



Around the 2007/ 2008, interest in the international financial market started to rise as a result of the Global financial crisis that destabilized the economy of both developed and emerging economies. This led to so many of the Multinational companies filling for bankruptcies and others merging in order to gather momentum for a comeback in the in the business environment. However, after the financial crisis of 2007/2008, LIBOR rates started falling as indicated in 2010 to

Fig 11

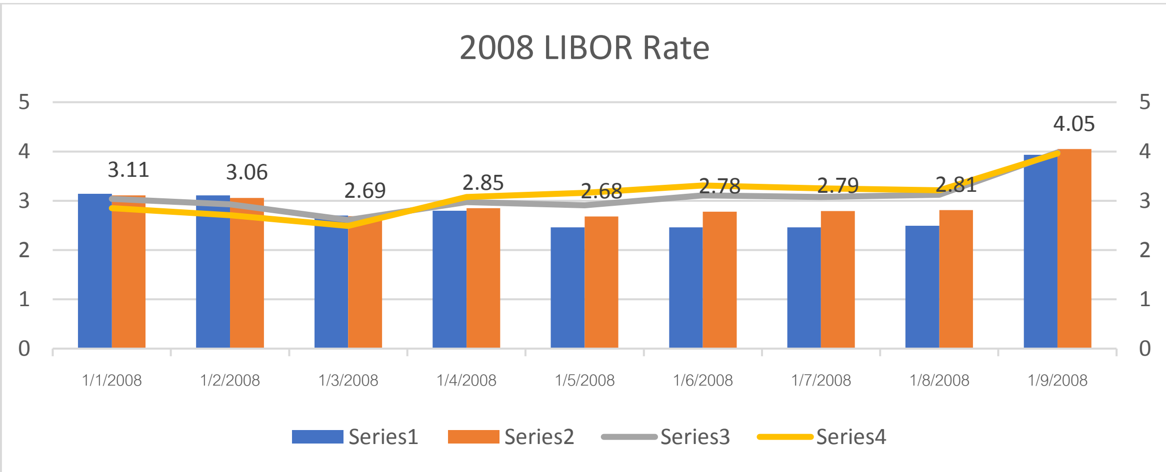
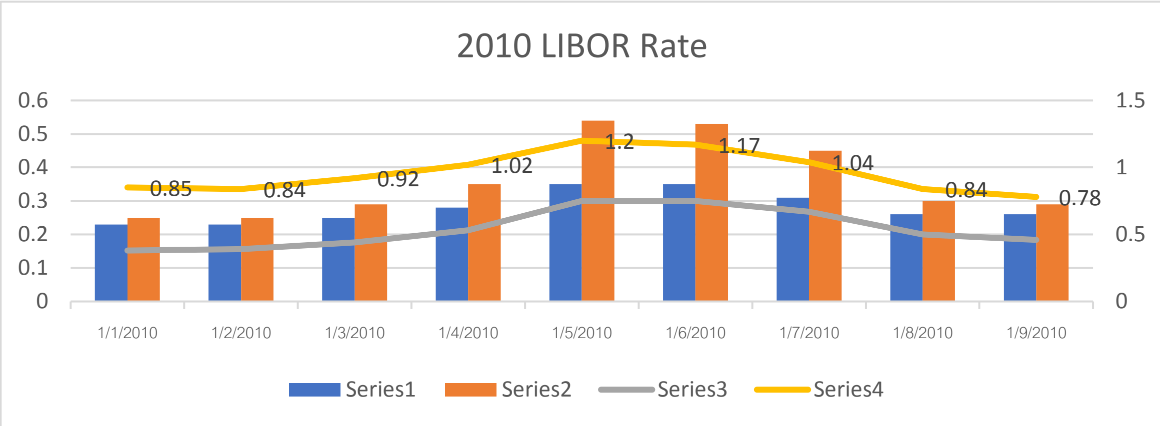


Fig 12 **Fig 13**



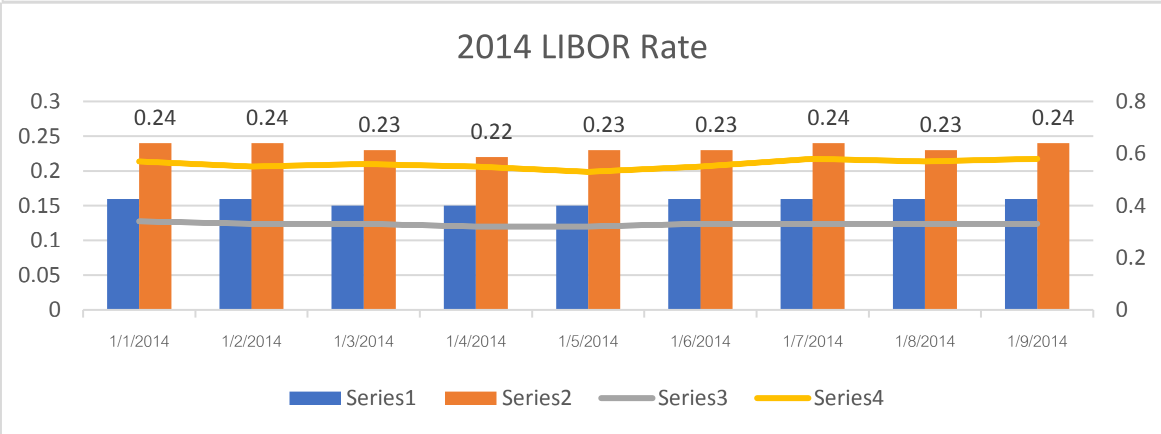
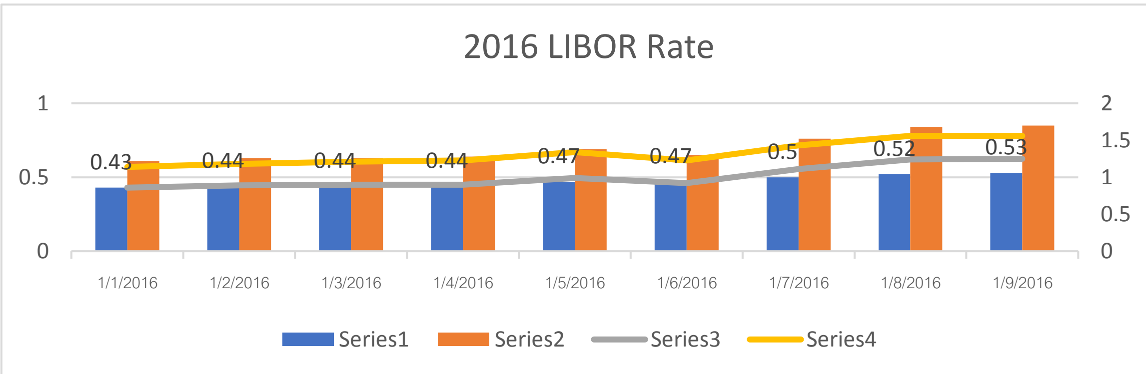


Fig 14



LIBOR became lower from 2010-2016, probable reasons are that the financial crisis had started to settle down. More and more MNCs had also gained a lot of international presence and had good credit history that enabled them to borrow at a lower rate as compared to the 1980s and 1990s.

CONCLUSION

multinational corporations are defined as a business organization whose activities are located in more than two countries and is the organizational form that defines foreign direct investment. these companies needs funding to be able to expand into the international market for a short term. Cost of borrowing to fund these companies be may be more costly for first time entrants considering the interest rate that comes with the borrowing. Corporation are able to get their funding through financial institutions, the four major currencies in the international market USD, the JPY, GBP and the EURO were examined in this research in terms of their volatility. The analysis showed that all the four currencies had LIBOR variations,this means that multinational companies in the international market borrow at different rate and this will surely have an effect on their business in terms of profit and loss.

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CORRUPTION, POLITICAL ACCOUNTABILITY AND THE CHALLENGES OF GOVERNANCE IN NIGERIA

IMOUKHUEDE BENEDICT KAYODE

DEPARTMENT OF PUBLIC ADMINISTRATION
RUFUS GIWA POLYTECHNIC OWO, ONDO STATE, NIGERIA
E-mail - imoukay@yahoo.com

ABSTRACT

This paper examines the issues of corruption, political accountability and the challenges of governance with emphasis on the fourth republic of Nigeria that is 1999 – 2016. This study examines the nature and character of Nigerian State vis-à-vis her politics, corruption and governance. It examines the possible causes of corruption, how it has permeated the Nigeria society. The data for the paper were analysis derived from the available secondary data. The paper recognizes the nexus between corruption and crisis of governance in Nigeria. The paper acknowledged that, democratic practice in the last sixteen years due to corruption has failed to deliver the dividend of democracy solely based on good governance and national development. The paper concludes that previous efforts by various governments to tackle the menace of corruption were superficial and fraught in nature. The paper therefore concludes and recommends that the political and economic elites, the Nigeria society and government must embrace democratic practice, political accountability, transparency in service and good ethics-oriented principle as measures to curb the menace of corruption and the challenges it pose to socio-economic and democratic development in Nigeria.

Keywords: Nigeria, Prebendal Politics, Corruption Political Accountability, Governance.

INTRODUCTION

In most of the countries of the world, the major economic challenges that confront such nations is how to manage and optimally utilize the available human and material resources in their possession and of which Nigerian-State is of no exception. Thus, accountability is the hallmark of a prudent government whereby resources are well managed and there is transparency in the utilization of funds by the government. It has been noted that corruption has been the indicator for lack of political accountability in most of the nations of the world especially developing nations. Ogundiya(2009) acknowledged that corruption is neither culture specific nor system bound. However, the practice of corruption is more rampant in countries where the public institutions and the legal system are very weak and relatively underdeveloped. With these attributes, most of the developing nations are more prone to ills of corruption more than the advanced developed countries.

The fourth republic evolved in 1999 in Nigeria and since its inception manifest inadequate good governance while, lack of political accountability and systemic corruption are its hallmark and pose greater challenges to democratic consolidation and governance in Nigeria more than any other factors. Corruption in its multi-dimensional levels have continued to manifest in the level of poverty among the people, induced apathy for the government, reflects in economic mis-management and lack of good service delivery by the political class in Nigeria.

Statement of the problem

The crisis of corruption and the challenges of governance and national development have become more apparent in the fourth republic in Nigeria more than ever. In addition, it has raise concern in the minds of the people, her leaders and even the international community because corruption has gradually become a way of life in Nigeria. As Achebe (2009) observed that, Nigerians are corrupt because the system in which they live makes corruption easy and profitable; corruption goes with power, whatever the average man may have it is not power. Therefore, to hold any discussion on corruption, we must first locate it where it properly belongs in the ranks of the powerful.

Furthermore, it is pertinent to note that corruption in Nigeria especially during the fourth republic progressed from the level of petty corruption to the high alarming rate of systemic and grand corruption. The crisis of corruption that poses challenge on governance in Nigeria has blighted Nigeria's image globally. Even David Cameron the British Prime Minster quoted from The Guardian (2016) that "Nigeria is a fantastically corrupt country", probably one of the two most corrupt nations in the world. However, it is deducible that this is a fallacy of generalization on the part of the British government because research on corrupt do not support his assertion. Nevertheless, the problem arising from this discourse is to appraise the impact of corruption on governance and national development in the fourth republic in Nigeria.

Conceptual Clarification

In the course of this study, the following concepts would be duly clarified; corruption,political accountability, governance and good governance.

Corruption

Corruption has been brought throughout the last decade to an important position in the development and political economy debate/literature. According to Mauro [1995] and Kray [2002] corruption has been seen as a primary impediment to growth with dramatic consequence in the developing world. This analysis has been mainly founded on bureaucratic/public sector corruption, emphasizing in particular manifestations such as administrative bribery. Kaufmann and Kray (2005) view corruption as the use of public office and policy for private gain.

Transparency International (2011) the global anti-corruption watchdog asserted that, corruption is the abuse of entrusted power for private gain. It hurts everyone whose life, livelihood of happiness depends on the integrity of people in a position of authority. While, Kwame[2000] analyzed corruption from the sociological perspective, according to him; corruption is prevalent in societies where integration is low and socialization is poor such that recognition of the common national interest is not pervasive enough.Asian Development Bank (2013) posits that; corruption is a behavior on the part of officials in the public or private sector and unlawfully enriches themselves or those close to them, or induces to do so by misusing the position in which they are placed. It is deducible form all these various conceptualization of corruption that it is insidious and criminal act, it erodes the moral value of the society and it is anti-thetical to the development of any society where it permeates and allows to flourish.

Concept of Political Accountability

The concept of accountability in governance is described as answerability for one's deed. While, political accountability is the accountability of the government to the public and to the parliament. The US Legal (2016) refers political accountability to the responsibility or obligation of government officials to act in the best interests of society or face the consequence. It is deducible from this conceptualization of political authority that, public officials at all levels should be answerable for their actions or behavior while in the position of leadership of their society.

The Concept of Governance

Governance is a concept that is central to democracy and it has gained great usage in contemporary period according to UNESCO (2016) Governance refers to structures and processes that are designed to ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment and broad-based participation. While; the United Nations Development Programme (1997) defined governance as the exercise of economic, political and administrative authority to manage a country's affairs. Mo Ibrahim Foundation [2016] defines governance as the provision of the political, social and economic goods that any citizen has the right to expect from his or her state, and that any state has the responsibility to deliver to its citizens.

The Concept of Good Governance

Good governance is a concept used to describe how public institutions conduct public affairs and manage public resources. United Nations Economic and Social Commission for Asia and the Pacific (2016) acknowledged that good governance has eight major characteristic. Accordingly, it is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. The assumption of this conceptualization of good governance is that, it assures that corruption is minimized, the views of minorities are taken into account and that the voices of the weak in the society are heard in decision-making. It is also responsive to the present and future needs of society.

Figure 1: Characteristics of Good Governance

Source: United Nations Economic and Social Commission for Asia and the Pacific .retrieved from www.unescap.org/pdd 20th May, 2016

Theoretical Issues

The theory of prebendalism as postulated by Richard (1996) which was used to describe the nature of a patron-client relationship in Nigeria would serve as the basis of theoretical analysis of corruption and the crisis of development in Nigeria with emphasis on the fourth republic. According to the theory of prebendalism, state offices are regarded as prebends that can be appropriated by office holders who use them to generate material benefits for themselves and their constituent kith and kin. In the fourth republic which cover 1999 till date, prebendal politics is the order of the day being displayed by political office holders at all levels of governments. Thus, corruption is the order of the day, regularly being perpetrated at will and the society is at the receiving end. Inevitably, the prebendal nature of Nigerian political system in term of its patron-client or identity politics further allows corruption to thrive, undermine, weakening the deepening of democracy and its institutions and stagnate the development of Nigerian society.

Nigeria and the Challenges of Governance: The Nexus of Corruption

Nigeria is a country that is well endowed by nature with abundant human and natural resources, despite all these available resources and potentials for sustainable development, Nigeria remain a paradox and a complete contrast with its low level of socio-economic development. The United Nations Development Programme has over the years persistently ranked Nigeria among countries with low development index. According to UNDP Human Development Index (2013) Nigeria ranked among countries with low development index at 153 out of 186 countries that were ranked. The low performance of Nigeria can be attributed to leadership failure and the inability of government to address the root causes of corruption and lack of political accountability in Nigeria. It is deducible that, there is a nexus between corruption and failure of governance in Nigeria.

According to a report by Sunday Punch (2016) Nigeria has lost over N38 trillion through mismanagement, embezzlement and money laundering under successive administrations since democracy returned in 1999. The figures were drawn form findings by anti-graft agencies and investigative panel reports on major economic scandals and financial crimes form 1999 – 2016 in Nigeria.It is noteworthy out of the N39 trillion stolen in the country's economy, crude oil theft, official corruption and electoral campaign funding were responsible for a larger percentage of the loss. Nwolise (2010) also linked corruption and Nigeria's underdevelopment, thus, he posited that corruption blocks good governance and accountability, enthrones mediocrity and incompetence and weakens competitive advantage.

Table 1: 2010 – 2014 (four years) sharing of Revenue between Central, State and Local Government from the federation Account

Year	Amount in Billions Federal Government	Amount in billions state government	Amount in billions Local government
2010	154,633,681,796.66	89,719,045,266.40	41,936,047,771.84
2011	531,612,593,116.78	348,291,513,603.64	167,160,070,675.77
2012	723,920,377,511.08	465,401,088,573.91	197,546,513,263.92
2013	791,030,594,492.65	441,784,920,342.94	321,324,219,934
2014	739,208,155,737.65	557,887,744,033.24	396,799,689,065.92

Source: Federal Ministry of Finance, 2015 Accessed from Sunday, O and Lawal. T. (2016) Fiscal Accountability, Resource Management and Sustainable Development in Nigeria ,International Journal of Academic Research in Business and Social Sciences Vol. 6. No. 5

It is noteworthy that despite all these huge revenue that accrued to the three tiers of government ,the management of the resources disbursed have not being optimally utilized and neither its effects reflected positively in the lives of the people of Nigeria.

Table II: Transparency International Corruption Perceptions Index 2015

Rank	**Country**	**Score**	**Rank**	**Country**	**score**
1	Denmark	91	83	Zambia	36
2.	Finland	90	83	Benin	37
3.	Sweden	89	83	China	37
4	New Zealand	88	83	Colombia	37
5	Netherlands	87	83	Liberia	37
5	Norway	87	88	Seri Lanka	37
7	Switzerland	86	88	Albania	36
8	Singapore	85	88	Egypt	36
9	Canada	83	88	Indonesia	36
10	Germany	81	88	Morocco	36
10	United Kingdom	81	88	Peru	36
10	Luzembourg	81	95	Suriname	36
13	Australia	79	95	Armenia	35
13	Iceland	79	95	Mali	35
15	Belgium	77	95	Mexico	35
16	Austria	76	99	Phillipines	35
16	United States	76	99	Bolivia	34
18	Hong Kong	75	99	Djibouti	34
18	Ireland	75	99	Gabon	34
18	Japan	75	103	Niger	34
21	Uruguay	74	103	Dominica Republic	33
22	Qatar	71	103	Ethiopia	33
23	Chile	70	103	Kosovo	33

23	Estonia	70	107	Moldova	33
23	France	70	107	Argentina	32
23	United Arab Emirates	70	107	Belarus	32
27	Bhutan	65	107	Cote dívore	32
28	Botswana	63	107	Ecuador	32
28	Portugal	63	112	Togo	32
30	Poland	62	112	Honduras	31
30	Taiwan	62	112	Mauritania	31
32	Cyprus	61	112	Mozambique	31
32	Israel	61	112	Vietnam	31
32	Lithuania	61	117	Pakistan	30
35	Slovenia	60	119	Tanzania	30
36	Spain	58	119	Azerbaijan	29
37	Czech Republic	56	119	Guyana	29
37	South Korea	56	119	Russia	29
37	Malta	56	123	Sierra Leone	29
40	Cape Verde	55	123	Gambia	28
40	Costa Rica	55	123	Guate mala	28
40	Latvia	55	123	Kazasthan	28
40	Seychelles	55	123	Lebanon	28
44	Rwanda	54	130	Madagascar	28
45	Jordan	53	130	Cameroon	27
45	Mauritius	53	130	Iran	27
45	Namibia	53	130	Nepal	27
48	Georgia	52	130	Nicaragua	27
48	Saudi Arabia	52	130	Paraguay	27
50	Bahrain	51	136	Ukraine	27
50	Croatia	51	136	Comoros	26
50	Hungary	51	136	Nigeria	26
50	Slovakia	51	139	Tajikistan	26
54	Malaysia	50	139	Bangladesh	25
55	Kuwait	49	139	Kenya	25
56	Cuba	47	139	Laos	25
56	Ghana	47	139	Papua New Guinea	25
58	Greece	46	145	Uganda	25
58	Romania	46	146	Central African Republic	24
60	Oman	45	147	Congo Republic	23
61	Italy	44	147	Chad	22
61	Lesotho	44	147	Democratic Republic of the Congo	22
61	Montenegro	44	150	Myanmar	22
61	Senegal	44	150	Burundi	21
61	South Africa	44	150	Cambodia	21
66	Sao Tome and Principe	42	153	Zimbabwe	21
66	Macedonia	42	154	Uzbekistan	19
66	Turkey	42	154	Eritrea	18
69	Bulgaria	41	154	Turkmenistan	18
69	Jamaica	41	158	Yemen	18

71	Serbia	40	158	Haiti	17
72	Elsavador	39	158	Guinea-Bissau	17
72	Mongolia	39	161	Venezuela	17
72	Panama	39	161	Iraq	16
72	Prinidad and Tobago	39	163	Libya	16
76	Bosnia and Herzegovina	38	136	Angola	15
76	Brazil	38	165	South Sudan	15
76	Burkina Faso	38	166	Sudan	12
76	India	38	167	Afghanistan	11
76	Thailand	38	167	Korea (north)	8
76	Tunisia	38		Somalia	8

Note: Nigeria occupied 136^{th} position out of 167 countries rated score of 26 out of 100 in the global overview of corruption source: www.transparency.org/cpi

Analysis: The 2015 Transparency International Corruption Index (CPI) which was a survey by the global anti-corruption organization that measures the perceived level of corruption in 168 countries in the world. Based on the survey, advanced developed countries with evidence of political accountability, good governance, strong democratic institutions, political stability and good economy occupied the top least corrupt nations in the world, such as Denmark, Finland, Sweden, New Zealand, Netherlands, and Norway. While, countries that are characterized with poor economy, lack of political accountability and evidence of weak social institutions occupied the top-most corrupt nations in the world such as south Sudan, Sudan, North Korea, Afghanistan, Somalia etc. Nigeria ranked abysmally at position 136^{th} globally.

Quality of Governance in Africa

The Ibrahim Index of African Governance is a tool to measure and monitor African governance performance, its progress over time and across countries of which Nigeria is inclusive. It measures safety and rule of law, participation and human rights, sustainable economic opportunity and human development as a basis of performance of overall governance by African countries.

Table III: 2015 Ibrahim Index of African Governance

Rank	**Country**	**Score(%)**	**Rank**	**Country**	**Score (%)**
1^{st}	Mauritius	79.9	28^{th}	Swaziland	49.6
2^{nd}	Cape Verde	74.5	29^{th}	Madagascar	49.1
3^{rd}	Botswana	74.2	30^{th}	Mali	48.7
4^{th}	South Africa	73.0	31^{st}	Ethiopia	48.6
5^{th}	Namibia	70.4	32^{nd}	Comoros	48.5
6^{th}	Seychelles	70.3	33^{rd}	Niger	48.4
7^{th}	Ghana	67.3	34^{th}	Togo	48.3
8^{th}	Tunisia	66.9	35^{th}	Cote D'voire	48.2
9^{th}	Senegal	62.4	36^{th}	Djibouti	45.9

10th	Lesotho	61.1	37th	Cameroon	45.8
11th	Rwanda	60.7	38th	Burundi	45.7
12th	Zambia	59.5	39th	Nigeria	44.9
13th	Sao Tome and Principe	59.1	40th	Guinea	43.7
14th	Kenya	58.8	41th	Mauritania	43.0
15th	Benin	58.7	42th	Congo	42.8
16th	Morocco	57.6	43rd	Angola	40.8
17th	Malawi	56.7	44th	Zimbabwe	40.4
18th	Tanzania	56.6	45th	Guinea-Bissau	35.7
19th	Uganda	54.6	46th	Equatorial Guinea	35.5
20th	Algeria	52.9	47th	Libya	35.4
21st	Mozambique	52.3	48th	Dr Congo	33.9
22nd	Burkina Faso	52.2	49th	Chad	32.8
23rd	Gabon	52.1	50th	Eritrea	29.9
24th	Egypt	51.3	51st	Sudan	28.3
25th	Sierra Leone	51.0	52nd	Central African Republic	24.9
26th	Liberia	50.7	53rd	South Sudan	19.9
27th	Gambia	50.5	54th	Somalia	8.5

Source: www.moibrahimfoundaiton.org/u/2015/10/02193/252/2015-IIAG-Executive-summary.pdf

Analysis: The 2015 Ibrahim Index of African Governance (IIAG) which was a survey by the respected and well-acclaimed MO Ibrahim origination that measure quality of governance in Africa showed that Mauritius, the best governance performance on the continent, achieves a score that is over 70points performer, Somalia. While, Nigeria occupied 39th position out of 54 countries that were surveyed in Africa. It shows that Nigeria is far from having good governance.

Anti-corruption Efforts of Nigerian Government

It is on record that a lot of public policies and measures have being formulated and implemented as part of the federal government measures to combat corruption in Nigeria, at the fore-front of the anti-corruption crusade by the Nigerian government are the anti-graft agencies, independent corrupt practices and other related offences (ICPC) and Economic and Financial Crimes Commission (EFCC)While Public Procurement Act (2007) recognizes that sound public procurement policies and practices are one of the essential elements of good governance. Good practices reduces costs and produce timely results; poor practices lead to waste and delays and are often the causes of allegations of corruption and government inefficiency.

The efforts of the current administration has shown that the government is trying to sanitize the polluted governance-system in Nigeria. Albeit the slow progress made so far, the anti-corruption crusades of the Nigerian government and the mode of operation of EFCC and ICPC have being fraught and in-adequate to address the root cause of corruption in Nigeria holistically. The efforts so far made by the government were symptomatic in nature and not a lasting remedy to the problem of corruption in our society.

CONCLUSION

Conclusion and Policy Recommendations

This study analyses corruption in Nigeria as a drawback and challenge to political accountability and governance in Nigerian society, it analyses the global trend of corruption and findings indicate that the issue of corruption is of global problem that posses hindrance to deepening of democracy and sustainable development It is deducible from the analysis that political accountability remains a pivotal stand for effective and efficient utilization of public financial resources and pillar of sustainable development. This is because accountability eliminates wastes and embraces efficiency, effectiveness, openness, discipline, integrity, transparency and good governance.

Also, the study posits that, measures that were formulated and implemented to checkmate corruption in Nigeria were superficial, fraught and could not provide the required solution to the malaise of corruption in Nigeria. The scourge of corruption will only be brought down to an appreciable level when Nigerian society have a social rebirth, embrace good ethics, integrity, the entrenchment of mechanism of accountability and good governance at all levels of governments in Nigeria bearing in mind that, accountability and good governance are the desired remedy for the problem of corruption in Nigeria.Finally, Nigerian government must lay emphasis on political accountability and good governance as means of deepening and consolidate democracy in Nigeria.

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