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**HEAD OF DEPARTMENT LEADERSHIP STYLES,  
LEADERSHIP BEHAVIOUR AND DECISION MAKING ON JOB  
SATISFACTION OF UNIVERSITY LECTURERS IN NORTH  
EASTERN STATES OF NIGERIA**



**DOCTOR OF PHILOSOPHY  
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Universiti Utara Malaysia

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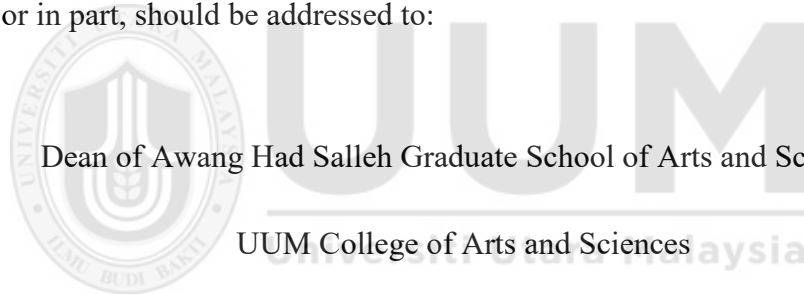
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## Abstrak

Pendidikan universiti adalah penting bagi negara Nigeria bagi meningkatkan sumber manusia, pembangunan sosio-politik dan pembangunan ekonomi. Kualiti pendidikan bergantung kepada pemimpin pendidikan, terutamanya para pensyarah universiti. Ketua jabatan yang cekap akan melibatkan pensyarah dalam membuat keputusan dan membantu mereka untuk mencapai kepuasan kerja. Meski pun penting, idea ini masih kurang dibincangkan di universiti-universiti di rantau timur laut Nigeria. Tesis ini bertujuan mengkaji hubungan antara gaya kepimpinan ketua jabatan, tingkah laku, gaya membuat keputusan dan kemungkinan penggunaannya sebagai petunjuk untuk meramal kepuasan kerja pensyarah dalam konteks tertentu di universiti-universiti awam di rantau timur laut Nigeria. Reka bentuk penyelidikan kuantitatif digunakan dalam kajian ini. Data dikumpulkan daripada 433 orang pensyarah yang dipilih melalui teknik persampelan rawak berstrata dengan menggunakan instrumen tinjauan. SPSS versi 22 dan Smart PLS 3 digunakan untuk menganalisis data. Hasil kajian menunjukkan kepuasan kerja pensyarah berada pada tahap yang sederhana. Seterusnya, dapatan kajian mendedahkan bahawa gaya kepimpinan ketua jabatan, tingkah laku dan gaya membuat keputusan adalah positif dan signifikan dengan kepuasan kerja para pensyarah. Dapatan kajian juga menunjukkan bahawa gaya kepimpinan ketua jabatan, tingkah laku dan membuat keputusan adalah penting bagi kepuasan kerja pensyarah. Penekanan perlu diberikan kepada gaya kepimpinan khususnya daripada segi gaya kepimpinan demokratik serta tingkah laku menyokong dan gaya membuat keputusan iaitu dalam konteks gaya pembuatan keputusan yang intuitif dan rasional. Dapat disimpulkan bahawa kepuasan kerja pensyarah boleh dipertingkatkan melalui gaya kepimpinan ketua jabatan, tingkah laku dan gaya membuat keputusan.

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**Kata kunci:** Gaya kepimpinan, Tingkah laku, Membuat keputusan, Kepuasan kerja, Ketua jabatan.

## Abstract

University education is essential for Nigeria to improve its human resources, socio-political and economic development. Apparently, quality of education depends on education leaders, particularly university lecturers. An effective head of department in a university will involve the lecturers in decision-making and help them to achieve their job satisfaction. Despite its importance, this idea is insufficiently discussed in universities in north eastern region of Nigeria. This thesis examines the relationship between head of department leadership styles, behaviour, decision-making styles and their possible use as indicators to predict lecturers' job satisfaction in a specific context of federal universities in north eastern region of Nigeria. A quantitative research design was used in this thesis. Data were collected from 433 lecturers selected through stratified random sampling technique using a survey instrument. SPSS version 22 and Smart PLS 3 were used to analyze data. Result of the study shows a moderate level of lecturers' job satisfaction. The results further revealed that the head of department leadership style, behaviour and decision making style are positive and significantly related to lecturers' job satisfaction. Findings from this study revealed that, head of department leadership style, behaviour and decision making are paramount to lecturers' job satisfaction. More emphasis should be laid on leadership style in terms of democratic leadership style as well as supportive behaviour and decision making style in the context of intuitive and rational decision making style. It is concluded that lecturers' job satisfaction can be improved through head of department leadership style, behaviour and decision making style.

**Keywords:** Leadership styles, Behaviour, Decision-making, Job satisfaction, Head of department.

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## List of Abbreviations

ADM	Avoidance Decision Making
AUT	Autocratic Leadership Style
AVE	Average Variance Extracted
CB-SEM	Covariance-based Structural Equation Modelling
CF	Conceptual Framework
CLT	Cooperation within the Leadership Team
CR	Composite Reliability
CR	Composite Reliability
DM	Decision Making
DVC	Deputy Vice Chancellor
FRN	Federal Republic of Nigeria
HOC	Higher Order Construct
HOD	Head of Department
HRM	Human Resource Management
ICT	Information and Communication Technology
IDM	Intuitive Decision Making
IE	Institutional Effectiveness
IPMA	Importance Performance Matrix Analysis
JB	Job Benefits
JS	Job Satisfaction
LB	Leadership Behaviour
LS	leadership Styles
LV	Latent variable
NES	North Eastern States
NPE	National Policy on Education
NSB	Non Supportive Behaviour
NUC	National Universities Commission
OP	Organizational Performance
PL	Personal Life
PLS	Partial Least Square
PS	Policy and Strategy

QACP	Quality Academic Process
QADP	Quality Administrative Process
RDM	Rational Decision Making
SB	Supportive Behaviour
UCM	University Council Members
UGB	University Governing Board
UL	University Lecturers
US	University Senate
WC	Working Condition
VC	Vice Chancellor



# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Job satisfaction is posited as an employee personal esteem, success and achievement at work. It is employee emotional well-being with a parallel link to high productivity at work. Job satisfaction entails an outcome of good attitude showed by the employee towards some specific tasks at work professionally. However, job satisfaction of lecturers is a key factor for the effectiveness teaching and learning and the overall success of students, as well as the quality of the university as a whole (Hongying, 2007).

It was based on this that Dave and Raval (2014) argued that, job satisfaction also connotes enthusiasm, contentment and freedom at work place. More so, according to Al-Smadi and Qblan (2015) personal feelings of fulfilment which lead to achievement of other goals in work such as promotion, income, and recognition are key rudiment of job satisfaction. Similarly, motivations at work in term of good salary an employee received determine the extent to Job satisfaction level of a person at work place (Bojadjiev, Petkovska, Misoska & Stojanovska, 2015). It is appropriate to note that, job satisfaction as a concept refers to the feelings and attitude an employee have on their job (Bakotic & Babic, 2013). Literally, an indication of negative behaviour from employees towards their job postulate job dissatisfaction, while positive attitude of employees to their duties indicate job satisfaction (Tariq, Ramzan & Riaz, 2013). Job satisfaction is critical in attracting and retaining well-qualified professional personnel in an educational organization (Cho & Perry, 2012). This is a considerable thought in educational institutions like university where

prudence, professionalism and accuracy are highly important (Baah & Amoako, 2011). Successful lecturing process is deemed on lecturers' jobs satisfaction which is a primary obligation of any university management (Mustapha, 2013). In view of this, McBride (2014) claimed that job satisfaction entails workers' internal feelings to a job, judge on differentiation between desired income and actual income. Mustapha and Zakaria (2013) contended that, job satisfaction entails many ideas including workers' feelings based on a variation of extrinsic and intrinsic job elements. It is important to point out that, its involves all the dimensions of job satisfaction such as relationship with co-workers, benefits, status, pay, supervision, promotion, environment, salary, work itself, growth, achievement, recognition, responsibility, benefit, policy and working condition (Mustapha, 2013).

Liu and Onwuegbuzie (2015) asserted the determinants of workers level of job esteem to includes numerous factors such as, job design, participative supervision, task understanding, scope of the job. Liu and Onwuegbuzie (2015) posited other factors like values, interest of the job, working conditions, aspiration level, relationships with colleagues, opportunities at work, and attainment of personal need are also factors of job satisfaction. Ferguson, Frost and Hall (2012) further enumerated many factors influencing lecturers' job satisfaction such as low remuneration which leads to limit welfare package, lack of recognition and communication gap. Al-Taher (2011) further adds that harsh working conditions, co-workers' levels of professionalism, university culture and climate, relationships with senior colleagues, support from departmental head, job security guarantee, flexibility in work place are factors that influence job satisfaction of lecturers. Ajayi and Abimbola (2013) contended that working with unskilled staff, carryout laborious task, issues on adequate insurance cover, conflict challenges, working for longer

hours are tend to be attribute of low job satisfaction. University education is perceived as the key to fast track national development (NUC, 2014). In educational organizations, job satisfaction is considered as most vital factors for effectiveness and efficiency (Bentley, Coates, Dobson, Goedegebuure & Meek, 2013). It needs effective leadership and efficient work force to achieve institutional aims and objectives (Northouse, 2010). Educational institution relies on the personnel commitment and efforts of all the lecturers' and their management (Bamiro, 2015). In the context of university, Hagos and Abrha (2015) concluded that, lecturer job satisfaction is connected to different aspects of personality roles in the university and during instructional process. Therefore, it is most important that lecturers shows satisfaction during instructional process in order to ascertain teaching effectiveness in lecture halls in the university.

Northouse (2015) perceived leadership as a process whereby an individual lead people to achieve their aims and objectives. Zeitchik (2012) viewed leadership as encouraging the people to follow parameter set in an organisation system through shared effort in achieving collective mission and vision. Leadership is also term as the capacity by which an individual impact on the people to fulfill their objectives in the way that is both cohesive and coherent (Parveen & Tariq, 2012). The researcher's concur with the various fundamental definitions of leadership which connotes leading group of people toward a common objective. Olowoselu, Hussin and Kasa (2016) enumerated laissez-faire, authoritarian and democratic as the three established leadership styles and autocratic leader's which is basically characterized as authoritarian. Autocratic leader formulate regulations the rules that bound on all staff under his leadership administration (Uprety, 2016). They tend to have total control on the people. Aina (2012) posited that, regulation, sanctions, orderliness are all

attributes of an authoritarian leader. He believed that, they tend to have total control on the people. Saleem (2015) asserted that, roles of authoritarian leadership include enacting regulation and rules on the followers for task accomplishment.

Shila and Sevilla (2015) argued that commitment to assigned tasks and adhering to leaders' instructions is responsibility of followers in authoritarian leadership setting. Murage and Kibera (2014) contended that institution with large work force with time management, hiring new employees, limited time for decision-making are appropriate for authoritarian leadership style. Bhatti, Maitlo and Shaikl (2012) considered that democratic leadership is convenient and good to educational institution of which staff are willing to contribute their ideas to the development of institution. Balogun (2010) claimed that autocratic leadership style in an organization often leads to high job dissatisfaction among staff. Karabina (2016) noted that characteristics of democratic leaders are facilitating open decision-making styles, listen to followers, praise, restrain criticism and assist the people to excel in their responsibilities. Omeka and Onah (2012) claimed that, self-determination, equal participation, self- discipline and participative leadership are attributes of democratic leadership.

Apparently, Adegbesan (2013) noted that active participation, prudence, equal delegation of task, accountability, and are democratic values which democratic leaders use to exercise their authority over their followers. Machumu and Kaitila (2014) contended that, sharing equal tasks within the people in the organization, seeking for staff ideas, assisting members on task delivery, equality in the system are parts of the functions of democratic leader..

Adewale (2014) argued that, laissez-faire leadership style is perceived as uninvolved with the people and term as absence of authority. Okeke (2014) claimed that, leaders of such category make no sign of authority for the people. Instead, the followers were responsible for decision-making in the organisation. Dada (2014) posited that, an organisation where laissez-faire leadership style is been practice; the leader entrust the tasks and decision to employee in the organisation. Apparently, Reynolds (2013) posited four essential qualities that leaders should have in all circumstances and situations. These are: Challenge the state of affairs; articulate a vision and mission; win commitment to the vision and mission; Do the right thing. Reynold (2013) further adds that, true leaders do not accept things as they are; they enquire and add value to the existing programme they meant. Oladele (2012) contended that, good school leaders are willing to take good risks for the school achievement. This can be done through communicating this vision in a way that makes sense and believable to subordinate. Jiboyewa (2013) claims that, successful leaders' are ardent to listening and learning with higher commitment to their jobs.

Sun, Gergen, Avila and Green (2016) asserted that leaders are team-builders and sees the importance of relationships, trust, humorous and empowering their staff. Balogun (2010) posited that outstanding leaders are confident communicators and trustworthy. Nyiha (2015) considered leaders as great thinkers, persuaders, listeners, motivators and getting their subordinate to complete task with high zeal at the heart of good leadership. Pacheco and Webber (2016) posited decision making as an action purposely taken from other alternatives in achieving organisation objective. Bamidele and Ella (2013) opined that decision making is an instrument to sustain for achieving institutional goals, and further contended that, positive relationship exists between faculty staff involvement in decision and their job satisfaction. In this study,

dimensions of decision making are rational, intuitive and avoidance. It is asserted that head of department decision-making will have effect on lecturers' job satisfaction (Bamidele & Ella 2013). In the educational system, positive character and selfless service serves as the basis of good leadership. (Ogunruku, 2013) claimed that, head of department leadership deals with the working and interpersonal relations with the lecturers and non-academic staff, through instilling spirit for achievement of university mission and vision.

Fernandez (2008) considered an empirical study on leadership behaviour and employee job satisfaction who examined that, there is positive connection between leadership behaviour and employee job satisfaction. Certainly, empirical study suggested link between effect of leadership behaviour and employee turnover in Nigeria (Satope, Akintunde & Olopade, 2016). Educational leaders' should have the ability of designing teachers' working task, with proper monitoring structure so as to facilitate better working system in educational institution (Famakin and Abisuga, 2016). There should be harmonious working relationship in terms of interaction between followers and leaders at work place for higher task completion (Kaiman, 2013). In the context of leadership behaviour, which is simply term as what leaders do when they are in leadership position. The behavioural process is geared towards how leaders relate with followers in various situations (Mehmet-Sahin and Busra, 2016). Study on leadership by Skeepers and Mbohwa (2015) posited behaviours as attitude of leaders' engaged with followers in discharging their responsibility at workplace. Akdol and Arikbog (2015) claimed that the process that involves leader's ability in creating good working relationship among workers' to complete assigned task with ease in the organisation is known as leadership behaviour. Malik, Aziz and



Hassan (2014) further asserted that successful leaders' are saddle with responsibility of achieving organizational objective through good leadership behaviour.

In the context of leadership behaviour, Satope, Akintunde and Olopade (2014) suggested that there should be smooth structural process of leadership behaviour in the departmental level of university. Whereas headships in the department are expected to be more supportive for leadership effectiveness. The perceptions of lecturers concerning the efficiency of their departmental heads in terms of good working relationship signifies good leadership behaviour (Satope, Akintunde & Olopade, 2014). Additionally, leadership behaviour is posited with supportive and non-supportive behaviour as dimensions to head of department leadership behaviour on job satisfaction of lecturers in this research. It is considered that head of department leadership behaviour will have effect on job satisfaction of lecturers' in the department. However, there is limited empirical research to correlate this link, which vehemently forms part of the reasons which the researcher tends to conduct this study.

Bateh (2013) opined that leadership in educational institutions is a continuous process, meaning that the education leaders and lecturers are geared achieve the institutional goals, but also call for the support and involvement of other stakeholders toward the achievement of education objectives. Nwana (2015) seek higher motivational aspects such as good salary, promotion and improved working conditions for academics in Nigeria. In the light of the above, the researcher aims to establish the level of lecturers' job satisfaction in Nigerian Universities and the purpose of his study is to determine the relationship of head of department leadership styles, behaviour and decision making on lecturers staff job satisfaction in north

eastern Nigerian universities. Findings from this research will provide guidance to head of department for improving practice and policies related to lecturers' job satisfaction in the university.

## **1.2 Problem Statement**

Head of department leadership styles, behaviour and decision-making on job satisfaction among university lecturers in north eastern Nigerian is an impending challenge affecting teaching and research in most Nigerian universities. Practically, at the departmental level, lecturers carry out their daily routine as stipulated in their contract agreement and supervised by the head of department. As a result of supervising these lecturers, disagreement do occur in most universities. The justify reason why Bogler (2002) concluded that the relationship between head of department and lecturer is exceptionally important that it can affect the school environment positively or negatively simply by affecting the level of teacher job satisfaction (Baughman, 1996; Bogler, 1999). In most cases, many of the lecturers are dissatisfied with the leadership style of their head of department, some are dissatisfied with the leadership behaviour exhibits by their head of department. In relation to this therefore, Hearn (2013) emphasized that job satisfaction of teachers is tremendously important for school success and should be a top priority in education.

Essentially, Bamidele et al., (2013) and Satope et al., (2014) established that leadership behaviour and decision-making challenges appeared in universities in Nigeria because many of the head of department take certain decisions which are more of autocratic in nature on lecturers that leads to additional challenges in the department. Consequently, among the practical challenges, the researcher also observed that delay in management feedback regarding lecturers' appraisal,

evaluation, promotion and excessive workloads further elevated job dissatisfaction among lecturers. It was in realization of this that the study set out to examine the head of departments' leadership styles, behavior and decision making in relation to lecturers' job Satisfaction.

These variables called for attention because they tend to affect the job satisfaction of both lecturers as well as head of department themselves. In relation to this, Black (2001) reiterated that although there are many factors which contribute to lecturers' morale and job satisfaction, however, the one factor which has more implication than any other is the head of department. This perception was corroborated by Saravia-Shore (2008) who stressed that lecturers have the greatest impact on student achievement since they have the most interactions with students throughout the semester.

Meanwhile, Bateh (2013) has emphasized the importance of leadership styles in relation to job satisfactions. Most of the numerous styles of leadership are based upon diverse theories and assumptions. The leadership style where individuals are eager to do their best is generally connected with the first three leadership styles: autocratic, democratic, as well as *laisser-faire* (Bhatti et al., 2012). On the other hand, styles such as, pacesetting and commanding, tend to promote a negative climate, and success is generally not accomplished with the exception of situations that are considered life-threatening where these type of leaderships are needed (Blankenstein, 2010). Though, according to Fontaine, Malloy and Spreier (2006) each style has its own strengths and challenges and is useful in precise situations. The most successful leaders are skilled in all types of leadership styles and know when to use the correct style for the circumstance.

Similarly, Kleim and Takeda-Tiker (2009) correlated leadership style and lecturer job satisfaction as the way the lecturer view their profession and the attitude they have towards that profession. From the empirical study carried out by Sadeghi (2012) it was also discovered that where head of department utilizes a combination of transformational, transactional and laissez-faire leadership styles, lecturers enjoy moderate levels of intrinsic, extrinsic in addition to overall job satisfaction. The varying findings as presented also makes it necessary to examine further issues concerning leadership styles using other dimensions. For instance, the results of logistic regression analysis carried out by Bateh and Heyliger (2014) revealed that faculty members who identified transformational leadership as dominant had increased job satisfaction, faculty members who identified transactional leadership as dominant had increased job satisfaction, and faculty members who identified passive leadership as dominant had decreased job satisfaction. In view of this, Bateh and Heyliger (2014) echoed that much more additional research in the area of academic leadership and faculty job satisfaction is warranted. Therefore, the need to further examine the relationship in relation to head of department leadership styles and university lecturers' job satisfaction in the North Eastern Nigerian is imperative.

Regarding head of department leadership behaviour in relation lecturers' job satisfaction, Satope et al., (2014) proved a significantly higher influence between leadership behavior and employee job performance in the universities. Therefore, to get to the root of the issue, it is being hypothesized that there is no significance relationship between head of departments' leadership behaviour on job satisfaction of lecturers in universities in north eastern states of Nigeria. As established by Wangai (2015) some of the findings reported by the previous studies on relationship between leadership behaviour and academics job satisfaction have been contradicting

and inconclusive. Therefore, this gap will be explored to ascertain the contradiction as well as to examine the relationship between head of department leadership behaviour and lecturers job satisfaction in the North Eastern Nigerian.

On the relationship between head of department decision making and lecturers' job satisfaction the result from Bamidele and Ella (2013) showed the level of lecturers participating in decision making in relation to job satisfaction in the survey and found high effect. Based on this, it was concluded that head of department often use decision-making style in department. Specifically, the analysis Bamidele and Ella (2013) indicated that employee job satisfaction levels in the university were predicted significantly by participating decision-making. Having been established by Scott and Bruce (1995) that earlier positing and empirical research was only dealing with the structure of the decision, and not the decision maker's behavior. Therefore, this study is set out to equally examine the relationship between head of departments' decision making on job satisfaction of lecturers in universities in North Eastern states of Nigeria.

### **1.3 Research Objectives**

The main research objective of this study is to investigate the link between head of departments' leadership styles, leadership behaviour and decision making on job satisfaction of university lecturers in north eastern states of Nigeria. In the context of this study, the aims are:

- i. To identify the level of job satisfaction of university lecturers in north eastern states of Nigeria.

- ii. To determine the relationship between head of departments' leadership styles and job satisfaction of university lecturers in north eastern states of Nigeria.
- iii. To explain the relationship between head of departments' leadership behaviour and job satisfaction of university lecturers in north eastern states of Nigeria.
- iv. To clarify the relationship between head of departments' decision making and job satisfaction of university lecturers in north eastern states of Nigeria.
- v. To design a partial least square-3 model for the study.

#### 1.4 Research Questions

These are the following research questions for the study:

- i. What is the level of job satisfaction of lecturer in universities in north eastern Nigeria?
- ii. Is there any significance relationship between head of departments' leadership styles on job satisfaction of lecturers in universities in north eastern states of Nigeria?
- iii. Is there any significance relationship between head of departments' leadership behaviour on job satisfaction of lecturers in universities in north eastern states of Nigeria?
- iv. Is there any significant relationship between head of departments' decision making on job satisfaction of lecturers in universities in north eastern states of Nigeria?

## 1.5 Research Hypotheses

The following research hypotheses guided the study at 0.05 level of significance:

H0<sub>1</sub> There is no significance relationship between head of departments' leadership styles on job satisfaction of lecturers in universities in north eastern states of Nigeria.

H0<sub>2</sub> There is no significance relationship between head of departments' leadership behaviour on job satisfaction of lecturers in universities in north eastern states of Nigeria.

H0<sub>3</sub> There is no significant relationship between head of departments' decision making on job satisfaction of lecturers in universities in north eastern states of Nigeria.

## 1.6 Significance of the Study

The result of the study will be of considerable value to National Universities Commission, University management, Deanship, Headship, Lectures, Educational Planners and Departmental non-academic staff, scholars and Human resources unit in the following ways:

The findings will be useful to National Universities Commission in particular for understanding the leadership styles and behaviour which will enhance job satisfaction of lecturers' in the universities in Nigeria. The findings from this research will be of benefit to university management body in the area of scheduling constant leadership seminars for newly head of department and faculty staff for the attainment of university mission and vision.

The contribution of the study will also be useful to all deans in the universities in the areas of managing professionalism in terms of leadership delivery in all departments under his or her supervision. The outcomes of the study will also be useful to Head of Department by providing them with literatures on the relationship between Headship leadership styles, behaviour on job satisfaction of lecturers in university. The findings of the study will contribute to the research knowledge of lecturers, scholars which will be useful for future studies in education. The findings of the study will be of benefit to educational planners and academic professional bodies for organizing seminars and workshops or related theme of departmental leadership behaviour and lecturers job satisfaction. Benefits of the study will be of importance to non-academic staff in the department, since the findings will be made known to them so as to reader their support to both the headship and lecturers when the need arises.

Theoretically, this research will be useful to scholars in the field of education as a guide in conducting research related to job satisfaction of lecturers, decision making and leadership styles in the university. The study will be outmost benefit to university staff development and hiring unit which will give an insight on needs of lecturers' job satisfaction in the university. In terms of the method used in this study, the instrument will be of beneficiary to other post-graduate students who will be interesting in adapting it for their various studies with in the future.

### **1.7 Theoretical Framework**

Lewin et al., (1939) leadership theory is posited as the founding theory of leadership. Many theorists believe that, leaders were made not born. This study relies on the theories of Lewin et al., (1939) leadership theory, Herzberg's (1966) job satisfaction



theory and other supporting leadership behaviour and decision-making theories by Northouse (2015). The application of these theories help to facilitate better understands of rudiments in leadership styles, behavior, decision making and job satisfaction in this study.

Lewin et al., (1939) posited three leadership styles as autocratic, democratic and laissez-faire style of leadership. Leadership behaviour theory is on supportive and non-supportive leadership behavior while decision-making entails rational decision-making, Intuitive decision-making style and avoidant decision-making (Northouse, 2010).

### **Theory of job satisfaction**

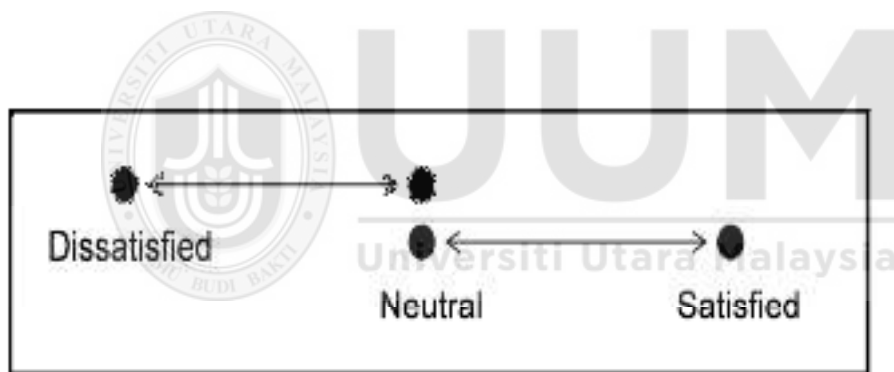
Job satisfaction theory has a strong view on explaining human motivation. The researcher adapted the prominent theory of Herzberg's (1966) motivator-hygiene theory. It is posited suitable for the purpose of this research.

### **Motivator-Hygiene Theory**

Herzberg's (1966) motivator-hygiene theory suggests that job satisfaction and dissatisfaction are not two opposite ends of the same continuum, but instead are two separate ends with unrelated concepts. 'Motivating' factors like pay and benefits, recognition and achievement need to be met in order for an employee to be satisfied with work (Collins, 2002). On the other hand, 'hygiene' factors such as, working conditions, company policies and structure, job security, interaction with colleagues and quality of management is associated with job dissatisfaction (Herzberg's, 1966).

Because both the hygiene and motivational factors are viewed as independent, it is possible that employees are neither satisfied nor dissatisfied (Herzberg's 1966). This theory postulates that when hygiene factors are low, the employee is dissatisfied, but when these factors are high, it means the employee is not dissatisfied (or neutral), but not necessarily satisfied (Collin's 2002).

Apparently employee satisfaction is largely based on the motivator factors. Moreover, it is thought that when motivators are met the employee is thought to be satisfied (Herzberg's 1966). This separation may aid in accounting for the complexity of an employee's feelings, as they might feel both satisfied and dissatisfied at the same time; or neither satisfied nor dissatisfied (Collins, 2002).



Source: (Herzberg's 1978).

*Figure 1.1.* Herzberg's Motivator-Hygiene theory

### **1.7.1 Conceptual Framework**

Based on the literature and theories, the researcher conceptualized the head of department leadership styles, behaviour and decision making to have direct effect on job satisfaction of university lecturers in north eastern states of Nigeria.

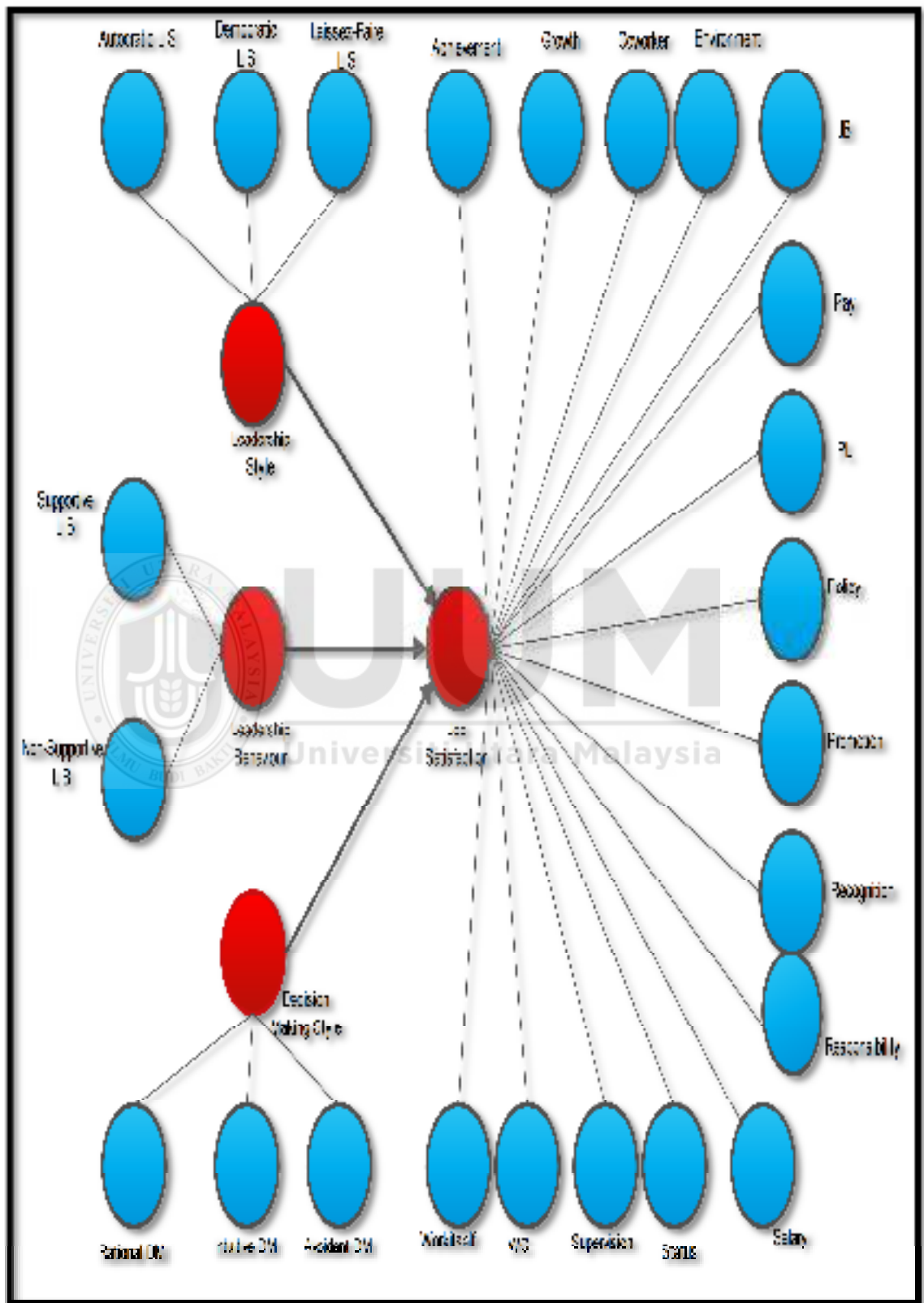


Figure 1.2. Conceptual framework of the study.

The figure above shows the three independent variables and its dimensions and one dependent variable in this study. The researcher conceptualized the head of department leadership styles which has autocratic, democratic and laissez-faire styles as dimension. Leadership behavior posited supportive and non-supportive behavior. Decision-making dimensions comprises of rational, intuitive and avoidant decision-making. Job satisfaction which stand as the dependent variable sixteen dimensions. These independent variables is posited to have direct relationship on job satisfaction of university lecturers in north eastern states of Nigeria.

### **1.7.2 Research Delimitations**

This thesis examines the relationships between head of department leadership styles, leadership behaviour, decision-making and their possible use as indicators to predict job satisfaction in the specific context of university lecturers' in north eastern states of Nigeria. Delimitations are the boundary of this study

This study has the following delimitations:

The scope is limited to male and female lecturers in the federal universities in north eastern states of Nigeria. The scope is limited to north eastern states of Nigeria only.

The participants to be surveyed are limited to professors', associate professors', senior lecturers, lecturer I, lecturer II, assistant lecturer and graduate assistant who have been at the university for more than one year. With more than one year tenure, it is assumed that the lecturers' have had an instinct about their job satisfaction in the department.

## **1.8 Definition of Terms**

The following terms were defined in this thesis as follows:

**Head of Department:** In this study refer to the person appointed to lead a department in the university in Nigeria (NUC, 2014).

**Leader:** Leader refers to as a person who influences a group of people to achieve stated goals (Northouse, 2015).

**Leadership:** Leadership is perceived in this study as a process whereby an individual lead people to achieve their aims and objectives using his or her position (Northouse, 2010).

**Leadership Styles:** Leadership styles in this study are autocratic, democratic and laissez-faire styles used in this research (Lewin et al., 1939).

**Leadership Behaviour:** The term in this research simply means what leaders do when they are in leadership position (Northouse, 2010).

**Decision Making:** A process of selecting the best course of action out of many alternatives available (Bamide & Ella, 2013).

**Decision making style:** Decision making styles used in this research are rational, intuitive and avoidance decision making styles (Hariri, 2011).

**Job Satisfaction:** Job satisfaction refers to satisfaction o lecturers in their job in the university (Mustapha, 2013).

**University Lecturers:** refers to academic staff of university which were saddle with the responsibility of lecturing and supervising students in university (NUC, 2014).

Graduate Assistant: refers to tutor in this research (NUC, 2014).



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The aim of this research is to study the relationship of head of department leadership styles, behaviour and decision making on university lecturers job satisfaction in north eastern Nigeria. This chapter presents related literature on which the study is based. The objective of chapter two is to review the literature and ensure that the methodology employed to this research correlate the relationships between head of department leadership styles, leadership behaviour, decision-making on lecturers' job satisfaction in federal universities, north eastern Nigeria.

The aims of this chapter is to review literature on concepts of system of education in Nigeria, curriculum development in Nigeria, evolution of university education. It also review literature relating to leadership styles, leadership behaviour, decision-making styles, and lecturers job satisfaction to identify issues that may provide a framework guide to locate gaps in the literature and demonstrate how this thesis helps to close some of these gaps, and develop a framework to aid in answering the research questions. This research sets out to understand the relationships between head of department leadership styles, behaviour, decision-making styles, and university lecturers' job satisfaction in north eastern Nigeria. There is a considerable body of knowledge dealing with head of department leadership styles, leadership behaviour, decision-making styles, and university lecturers job satisfaction; though much of the research dealing with these topics originates from the Asian, America and European continent. However, there is scarcity of research on these issues in the

literature with regards to Nigerian context. The chapter concludes with summary of literature review.

## **2.2 Educational System in Nigeria**

The Federal Republic of Nigeria is situated in the West African sub-region, bordered by Niger in the north, Chad in the northeast, Cameroon in the east, and Republic of Benin in the west (FMI, 2014). Nigeria currently has 36 states with Abuja as Federal Capital Territory and a population of over 180 million people. Of this population, approximately 30 million are students (FME, 2014). The three dominant tribes in Nigeria were Yoruba in the southwest, Ibo in the eastern region and Hausa-fulani in the north. English is the only spoken language used in schools for reading and writing (FME, 2014).

Nigeria operates on a 9-3-4 system (FME, 2014)

- i. Primary School — 6 years and Junior Secondary School — 3 years = 9years
- ii. Senior Secondary School — 3 years
- iii. University First Degree — 4 years

Education in Nigeria is the shared responsibility of the federal, state, local governments and private sectors. The federal ministry of education regulating the education sector through policy formation and ensuring quality control (FGN, 2014). However, the federal government is more directly involved in tertiary education than primary and secondary education, which is largely the responsibility of state government for secondary education and local government for primary education. The education system is divided into three levels namely: basic education which is nine years; post-basic or senior secondary education three years duration, and tertiary



education which is four to seven years, depending on the programme of study (FME, 2014).

According to Nigeria's National Policy on Education (FGN, 2004), basic education covers education given to children 3-15 years of age, which includes pre-primary programs (ages three to five), and nine years of formal (compulsory) schooling consisting of six years of primary and three years of junior secondary. Post-basic education includes three years of senior secondary education in either an academic or technical stream. Continuing education options are provided through vocational and technical schools (FGN, 2004). The tertiary education sector offers opportunities for undergraduate, graduate, vocational and technical. The tertiary educational sector comprises of university and non-university sector. The non-university sector consists of polytechnics and colleges of education. There are currently 140 universities in Nigeria accredited as degree-awarding institutions (NUC, 2014). Annually, more than one million students take the tertiary matriculation examination for entrance into colleges of education, polytechnics and universities in Nigeria (JAMB, 2014). In the context of educational management in Nigeria; the development of well-managed system and quality education has been strongly advocated by UNESCO (2005) which has been the main focus of many developing countries.

According to the report of UNESCO (2005), a variety of policies and programme perspectives have been developed to meet the educational needs of particular countries, helping them to move toward educational parity with the developed world. To link this assertion to this study, the Nigerian government has recently initiated a reform, which is referred to as the Education For All Programme (EFA). The reform is focusing on the improvement of efficiency and effectiveness in the delivery of

education services, enhancing transparency, accountability and local community participation. UNESCO (2005) argues that a decentralised education system would be more efficient, more compatible with local priorities, and would encourage more family participation, regarded as a factor of democratization. This reform has been implemented Nigerian, where the role of the federal government is confined to policing, planning, and regulating quality assurance and performance monitoring. Most of the education management and implementation responsibilities are devolved to state and school levels. The local authority management reform of schools in many other countries (especially in developed countries) has been followed by the decentralization of power and decision-making from the central authority to the school site. Principals and teachers have received autonomy in managing schools, with the aim of improving the quality of education (Balogun, 2010).

In the Nigerian educational system, however, some principals may not perceive that they are sufficiently empowered. Others complain that their power and authority are not adequately recognized (World Bank, 2005). Most primary and secondary schools in Nigeria are under the direction of state government, even though many do not receive their salaries as at when due (NUT, 2015). Federal government finances federal universities and federal government colleges all over Nigeria, while the 36 states government finances and runs their state universities and secondary schools. Fabunmi (2005) contend that, 774 local government authorities in Nigeria runs and finances their primary schools respectively. Aina (2012) claims that, the biggest challenges in Nigerian education is the inadequate provision of educational resource in all level and teachers' or lecturers job satisfaction.

### 2.3 Curriculum Development in Nigeria

Before the coming of colonial masters, Nigerians had their own multicultural ways of training not only the young ones, but also the adults (Fafunwa, 1991). The most interesting aspect of it was that, the education was not an end for mere certification but for employment, entrepreneurship skills and effective goal oriented (Fafunwa, 1991). It met the immediate needs of the individuals and the multicultural society at large. Fabunmi (2005) established the fact that, before colonialism in Nigeria, Africans undergone training, in their ways of education, albeit not in western sense. There was training going on, and if education is to inspire competence, develop skills, acquisition of knowledge (Fabunmi, 2005). African training system before colonial adventures performed no less tasks. Consequent upon the existence of the training system was the coexistence of curriculum (Fafunwa, 1991). This multicultural curriculum operated before colonialism in Nigeria is termed as informal curriculum.

Fafunwa(1991) outlined the following as the goals of Traditional African education in Nigeria;

- \* To develop the child's physical skill.
- \* To develop good character.
- \* To inculcate in the child respect for elders and those in position of authority.
- \* To develop intellectual skills.
- \* To acquire specific vocational training and to develop a healthy attitude towards honest labour.

- \* To develop a sense of belonging and to participate actively in family and community affairs.
- \* To understand, appreciate and promote the cultural heritage of the community at large.

Though the curriculum was not documented, but there were clear aims and objectives. Every member of the society went through the training (Fafunwa, 1991). Learning experience centred on the following aspects of life such as physical training, intellectual training which includes activities in the category of counting, story-telling, proverbs, poetry, legends, local and ancestral history, story-relays, riddles and jokes (Fafunwa, 1991). Vocational Training was the guiding principle of multicultural education (Aina, 2012). The curriculum was tailored towards achieving and mastering specific tasks which includes: Agricultural training such as farming, hunting, fishing, animal rearing (Balogun, 2010). Trades and hand crafts such as weaving, carving, carpentry, building, barbing, hair plaiting, petty trading and selling (Aina, 2012). Character training such as respect for cultures, elders, table manners, toilet sanitation, greetings, community participation and promotion of cultural heritage were all part of the curriculum (Balogun, 2010).

### **2.3.1 The Missionary Era**

The Christian Missionary Society(CMS) introduced western education into Nigeria in the year 1843, through the Methodist Mission under the leadership of Mr. and Mrs. De Craft by established the first school in Badagry (Fafunwa, 1991). The school was named "Nursery of the Infant Church" (Fafunwa, 1991). The objectives of education as was introduced by the missionaries influenced the type of curriculum

operated. The primary intention of the missionaries was evangelization in Nigeria (Omolewa, 2007). The Bible was the master textbook on every subject, no matter how remote it may be (Omolewa, 2007). All christian denominations such as Anglican, Methodist, C.M.S, Baptist and Catholics realized that, proper evangelization of Africans will require basic knowledge of how to read and write (Fafunwa, 1991). These urgent needs paved ways for the Missionaries to teach the Nigerians how to read and interprets the Bibles. Fafunwa (1991) claimed that, Nigerians who went through this curriculum were asked to serve as interpreters which posed as motivational factor for other Nigerians.

This narrow conception determined the structure of the school and its curriculum (Omolewa, 2007). The curriculum was predominantly Bible reading, the story of Jesus, hymns, prayers, sewing for girls and farming for boys (Fafunwa, 1991). There was no common curriculum among all the competing schools. Each school followed its own curricular which was solely teacher dependent (Fafunwa, 1991). Moreso, reading, writing, arithmetic and religious knowledge formed the core of the curriculum. During the missionary era, even though the established grammar schools were established in response to local demands, their curriculum was purely under the control of missionaries (Omolewa, 2007). Subjects offered include English and composition, Latin and Greek composition, History, Geography, Hebrew, Logic and Drawing (Fafunwa, 1991). Pupils were awarded certificate by College of Preceptors, London (Fafunwa, 1991). This body influenced the nature of the curriculum in this period (Omolewa, 2007). As an examination body certification comes after passing an examination (Omolewa, 2007). It is to the credit of the missionaries that various missions set up school management board to help regulate the curriculum, teachers' salaries and conduct (Fafunwa, 1991). Another achievement of the missionary was

the introduction of vocational school in Badagry, which is known as the Topo Industrial School, Badagry in Lagos State, Nigeria (Fafunwa, 1991). It was established by the Roman Catholic Mission in 1876. Fafunwa (1991) highlighted some of the imperfections associated with the system as lack of common syllabus, no standard textbooks, in regular school hours; lack of adequate supervision of school buildings, lack of uniformity in the condition of service of teachers, lack of adequate financial support and control. Aside the problems highlighted above, the education was restricted to the Southern Nigeria (Fafunwa, 1991). There was problem of acceptability of formal school in the North, who was earlier before this period, had embraced Islamic education (Omolewa, 2007).

### **2.3.2 Colonial Intervention Era**

Colonialism is perceived as the domination of certain people by another set of people, usually from another territory (Fabunmi, 2005). The abolition of slave trade stimulated the white merchants to look inward to Africa with legitimate trade (Fafunwa, 1991). The period between late eighteenth and early nineteenth century witnessed a phenomenal scramble for African among imperial powers (Fafunwa, 1991). This period also coincided with the industrial revolution in Europe, hence colonial powers engaged in trading activities in Africa to source for raw materials and develop their home industries (Fabunmi, 2005).

Certainly, after about six decades of missionaries' role in control of school, the colonial masters' began to formulate an Educational Ordinance Policy in 1882 which was put in place to serve as regulatory tools for schools in British West African Countries of Gold Coast now (Ghana), Sierra Leone, the Gambia and Lagos colony (Fabunmi, 2005). In 1886, Lagos was separated from Gold Coast. This led to the

promulgation of the first Education Ordinance in Nigeria (Fafunwa, 1991). In 1887, Education Ordinance was put in place to provide regulatory roles for educational practices, with limited impact on the curriculum. 1887 Education Ordinance Act made provision for "Assisted School" and "Non- assisted Schools" (Fafunwa, 1991). Assisted schools were given grants by the colonial government base on certain criteria such as the quality of the school results and good inspection reports (Fafunwa, 1991).

Nevertheless, there was substantial improvement on the school subjects over the colonial era, though school subjects were heavily tailored towards British system (Fabunmi, 2005). Interestingly, Fafunwa (1991) described the products of such school as "Africans in colour but British in outlook and intellects" Subjects such as scripture, Greek, Latin, Reading, Writing, English, History, Music, Mathematics, Philosophy and Recitation were introduced. Fabunmi (2005) claimed that, the reports of Phelps-Stokes Commission inspired noticeable development in Nigeria during colonial Era. The committee observed imbalance in educational practices in Sub-Saharan Africa and came out with some profound recommendations (Fabunmi, 2005). This inspired colonial government to appoint an Advisory Committee on Education in November 1923 (Fafunwa, 1991). The committee was to advise the secretary of state for the colonies on Education matters (Fafunwa, 1991).

Consequently, Fafunwa (1991) claimed that, in 1925, the committee produced "The memorandum on Education Policy in British Tropical Africa". Part of the Memorandum stressed that: Education should be adapted to the mentality, attitudes, occupations and traditions of the various peoples within the colonies. Secondly, Education should include primary education, secondary education of different types,

technical and vocational schools. University education is for those who select teaching, medicine, law, engineering as profession (Omolewa, 2007).

Examination bodies such as the University of Cambridge Local Examinations Syndicate (UCLES), London Matriculation Examination Boards, and College of Preceptors of London inspired some sort of curriculum changes (Fafunwa, 1991). Schools naturally prepared students for subjects being examined by these bodies (Omolewa, 2007). University of Cambridge Local Examinations Syndicate was responsible for the conduct of examination for the grammar schools and London Matriculation Boards focused much on the private students and Teacher Training Colleges such as St. Andrew College, Oyo which was established in 1896, Wesley College, Ibadan opened in 1905 (Fafunwa, 1991).

While the curriculum of the grammar schools was purely academic, the Teacher Training schools' curriculum combined pedagogical training with academics (Aina, 2012). The existing grammar schools such as C. M. S. Grammar School, Methodist Boys High school and Kings College naturally admitted students into the school new curriculum introduced by these examination bodies (Fafunwa, 1991). In March 1952, an indigenous examination body was created for the British West African countries namely West African Examinations Council (Omolewa 2007). Till date, WAEC exercises enormous control over the depth and structure of the school curriculum at secondary school level (FME, 2014). Students are urged to go through the curriculum content, designed and prescribed by WAEC syllabus (FME, 2014).

Regional governments of western regions of Nigeria through various committees embarked on curriculum reforms in the school (Omolewa, 2007). In 1955, Western region launched its Free and compulsory Primary Education programme and



introduced New Primary School Syllabus which includes character development, literacy and manual skills (Fafunwa, 1991). In 1957, modern Secondary Schools were introduced and a detailed syllabus was also introduced in 1958 (Fafunwa, 1991).

### **2.3.3 Post-Colonial Era**

The period after Nigeria political independence marked a change in the course of education system and curriculum development in Nigeria (Fafunwa, 1991). There was a phenomenal increase in schools and school enrolment (Aina 2012). This is partly due to free educational programme introduced in western region (Omolewa, 2007). Apart from free education programme, the educated class enjoyed certain privileges that put them on high social status (Balogun, 2010). Education eventually becomes an avenue for obtaining greater influence and access to political power in Nigeria (Fabunmi, 2005). In order to cater for the future needs of increasing prospective on school enrolment, Ashby Commission was put in place. Fabunmi (2005) posited that, the commission has two Americans, two British citizens, two Nigerians and chaired by Sir Eric Ashby. The report of the committee stimulated the establishment of some higher institutions in Nigeria.

Aina (2012) contends that, many African scholars contributed to the curriculum development in Nigeria after the independence. Some of their contributions were remote, while some were visible and direct. Omolewa, (2007) argues that, the colonial education system was severely criticized because of its British visible domination both in content and outlook. Eventually, Fafunwa (1991) posited that, the first Nigerian Conference on Curriculum took place in November, 1969 and a seminar was organized on "A National Policy of Education" in 1973 under the

chairmanship of Chief S. O. Adebayo. The outcome of the seminar was the modification of the 1969 conference papers and the adoption of National Policy on Education (Fafunwa, 1991). In the policy, the 6-3-3-4 system of education was adopted to be practiced in Nigeria (Fafunwa, 1991).

Fafunwa (1991) posited that, the objectives of each level of education such as the pre-primary, primary, junior and senior secondary schools and tertiary institutions were clearly stated in the National policy on Education which became operational in 1983. The new curriculum was diversified in nature with an element of multicultural education in the form of social studies at primary and junior secondary school level (Omolewa, 2007). Another core area of the policy innovation is the area of monitoring and maintenance of minimum standards (Fabunmi, 2005).

The introduction of Universal Basic Education, though launched in 1999, implemented in the 2004, geared towards the provision of free, compulsory education from primary school to junior secondary school level (Fabunmi, 2005). Subsequent to this organizational and structural innovation, there were content and pedagogical innovations in the curriculum (Aina, 2012). Some major subjects at Junior Secondary School went through restructuring, and in some instance a substantial overhauling of the subjects (Aina, 2012). Part of these phenomenal changes was the introduction of civics education which comes with content of multicultural education in both primary and junior secondary schools (FME, 2014).

#### **2.4 Evolution of University Education in Nigeria**

The history of university education in Nigeria can be rooted to the early period of 1930 when the Yaba Higher College was established based on the report of the Sir

Elliot Commission (Fafunwa, 1991). This report comprehend into the university education need of the Anglophone West African countries at that time (Fafunwa, 1991). Similarly, additional university college was established in Ibadan as a study campus of the University of London (NUC, 2014). With the emergence of Nigerian independence in 1960, Sir Ashbi Commission recommended the need for the provision of the professional manpower essential for the emerging public services; four regional universities were established in 1960 namely: Ahmadu Bello University Zaria, University of Nigeria Nsukka, University of Lagos and University of Ile-Ife (Fafunwa, 1991). In 1970, the Technical High College in Benin City was upgraded to fifth regional University called University of Benin (Oguruoku, 2013). The system of administration of these Universities was in consonant with the University of London system of public funded university which the university act provided for a chancellor appointed by Government and representatives of the academic society as council members, including vice-chancellor, deputy vice-chancellor and registrar (NUC, 2014).

This model has largely formed the pattern of the administrative structure of Universities in Nigeria (Fafunwa, 1991). In 1975, the seven Federal Universities, was established namely; Bayero University Kano, University of Maiduguri, University of Ilorin, Usman Danfodio University Sokoto, University Port Harcourt, University of Jos and University of Calabar (NUC,2014). The universities retained the same administrative model and structures as in University of Ibadan (Akpa, 2007). Fafunwa (1991) further adds that, in the early 1980s, the Universities of Agriculture and Universities of Technology were founded. Fabunmi (2005) contends that, About the same period, following the enactment of the 1979 Constitution which permitted state to establish university, many states in Nigeria began to establish their own

universities to provide easy access for their qualified students who could not secure admission in to the Federal Universities (Fabunmi, 2005). The socio-economic and political exigencies of that time paved way for the establishment of State universities in Nigeria (Oguru, 2013).

#### **2.4.1 Administration of University Education in Nigeria**

The structure of the university administration in Nigeria derived its pattern of administration from the University of Ibadan, which was the premier university in Nigeria (Fafunwa, 1990). Oguru (2013) asserted that, other universities were established in like University of Nigeria Nsukka, University of Lagos, University of Ile-Ife now Obafemi Awolowo University Ile-Ife and Ahmadu Bello University Zaria retained the structure of administration in University of Ibadan (Fafunwa, 1990). Other Federal Universities which were established in Nigeria thereafter and at this moment were equally modelled after the pattern of the University of Ibadan (Ogunru, 2013).

#### **2.4.2 Officers of University**

The statutory laws that established the university made provision for the officers of the university (NUC, 2014). The provisions and its Statutes stipulate the members of the university, including the officers who are required to lead the management of the university (Ogunru, 2013). These officers include the vice-chancellor, the pro-chancellor and council chairman, the deputy vice- chancellors, the registrar which stands as council secretary, the bursar and librarian (NUC, 2014). The Statute also makes provisions for council members, university senate members, deans of faculties, heads of departments, lecturers and students as well as the Chancellor

who's by Statute stands as the custodian of the university (NUC, 2014). Fafunwa (1990) concluded that, the structure in other state universities is the same to that of the federal universities. Ogunraku (2013) asserted that, the statutory provision of the universities play significant role for the daily operations of the system in actualizing the vision and mission of the university. The researcher will endeavour to briefly enumerate the important roles of the university officers as follows:

### **2.4.3 The Chancellor**

This chancellor is the custodian figure appointed by the Visitor of the university "The President of Federal Republic of Nigeria" (NUC, 2014). Ogunraku (2013) argued that the chancellor may wish to delegate his duties to the Pro-Chancellor. It also provides that "he shall be the custodian of the university", and when he is present "shall lead at all meetings of the university council and convocation of the university" (NUC, 2014). In the context of Federal Universities of Technology, the statute stipulated that the chancellor shall be appointed and hold office at the discretion of the President of Nigeria (Ogunraku, 2013). The implication of the above procedure is that, the university custodian of the first generation universities has many functions to carryout, while those of the state universities were merely ceremonial university chancellor. Fafunwa (1990) argued that, the chancellors of state universities still have significant roles to play in the university. This includes providing single overarching principle to consult with important cooperate organization to raise funds and intervene in conflict resolutions (NUC, 2014).

#### **2.4.4 The Pro-Chancellor and Council Chairman**

The government appoint a credible individual as pro-chancellor who also serve as university board chairman (NUC, 2014). According to Nigerian Universities Provision Act as Amended (2013). The pro-chancellor should be someone who is of excellent integrity, trustworthy, educated and familiar with the system of the University affairs. Ogunruku (2013) adds that the pro-chancellor office coordinates over all other council members of the University, exclude the vice-chancellor and deputy vice-chancellor when delegated to take charge as the Chairman of Convocation. Fafunwa (1990) asserted that, the imminent role of the pro-chancellor is very crucial in the appointment of vice-chancellor, deputy vice-chancellors and other senior management staff of the university. The crucial role of the university councils is more distinct given the efforts at ensuring university autonomy (NUC, 2014). Arguably, Nigerian Universities Provision Amendment Act (2013), affirmed the autonomy of the university council which stipulated that the university council shall be free in the discharge of its functions and carry out its responsibilities for the proper financial management, technological advancement and growth of the university (NUC, 2003).

Ogunruku (2013) posited that, the pro-chancellor also takes charge of the university finance committee which is expected to advise the university on matters relating to the revenue generation, insurance, property development, finances, accounts, investments, business affairs of the university and preside over council meetings, also act on behalf of council member in all matters in respect of the stipulated act of the university. Fafunwa (1990) claims that university council chairman and pro-chancellor is a prominent personality in the leadership of the university on and with higher responsibility of guiding the university along the right direction.

#### **2.4.5 The University Vice-Chancellor**

The position of university vice-chancellor is also refers as the head of university administration and the chief academic executive officer of the university (NUC, 2014). Fabunmi (2005) contends that the vice-chancellor as the director of the affairs of the University, has major responsibility and duties to ensure good management system and gives appropriate direction for the accomplishment of the university mission and vision of the university. Ogunraku (2013) claims that, the vice-chancellor stands as the official head of the university, an automatic member of university council and the executive chairman of the university senate. Fafunwa (1990) emphasized that, the vice-chancellor lead the daily operations of the university towards the accomplishment of university goals. Expected to report all activities to the senate and university council (NUC, 2014). Expected to show equality among his professor colleagues and resume teaching, research and community development after leaving the position (Ogunraku, 2013).

#### **2.4.6 Deputy Vice-Chancellor**

Ogunraku (2013) asserted that, deputy vice-chancellor in university is often a nominee of the vice-chancellor who acts in the absence of vice-chancellor and assists in certain areas such as administration, academic affairs of the vice-chancellor's responsibilities. Ogunraku (2013) adds that, the vice-chancellor usually delegate other assignments the deputy vice-chancellor officially.

#### **2.4.7 The Registrar**

Fafunwa (1990) point out that, registrar serves as the university council secretary, and also serves as secretary to university senate, congregation and convocation

board. Ogunraku (2013) contends that, registrar is reporting directly to the vice-chancellor and also coordinate the daily administration of the university. Registrar also serves as the custodian of university records and files through the help of the assistant registrars (NUC, 2014).

#### **2.4.8 Other Principal Officers**

Ogunraku (2013) notes that other principal officers of the university were the bursar, librarian, deans and directors. They are reporting directly to the vice-chancellor and conduct the daily operations of finance and knowledge management in the university (NUC, 2014). Bamiro (2015) adds that, principal officers are the professors and those who hold academic positions as director of research centres, deans, and heads of department. In discussing the roles played by these categories of scholars, it is vital to elaborate on the process of appointment into such positions. As revealed earlier, the university is a unique institution for teaching, research and community development (Bamiro, 2015). Professionally, appointment to the professorship level is passionately expected, not only to be evaluated on the academic qualification of the individual, but also the lecturers community services rendered to the society (Ogunraku, 2013). In addition to lecturers promotion to the level of professor in Nigeria, a candidate will expected to have published books and publications in referred peer reviewed local and international journals in adequate numbers as well as the capacity to provide academic mentorship and leadership in their departments (Bamiro, 2015). The professors were scholars with versed experience in academic administration and provide teaching, research and community service to the society. They trained junior colleagues on methods for teaching, ways of conducting research and channels for contributing their quota to the society through community services



(NUC, 2014). Meanwhile the librarian is responsible for the maintenance of the library and information management, the bursar update the vice-chancellor and the university council on financial aspect and management of the university account (NUC, 2014). Ogunraku (2013) posited that, others principal officers are deans in the faculties or graduate schools also coordinate the entire activities of their faculty or schools. Fundamentally, head of department stands as the focus of this research is posited as the leader representing the department in the university. According to Ogunraku (2013) Head of department leads the academic and non-academic staff in department of the university. Also, head of department reports to the Dean in the faculty and provides academic leadership in the department. Head of department also articulate and implement all strategic vision of the department, manage the department resources and coordinate students' academic activities in the department.

## **2.5 Concept of Job Satisfaction**

Scholars have given their different definition of job satisfaction within the field of educational management and organisational psychology (Furnham, 2009). Researchers have also posited their own meaning of the concept on job satisfaction. However, Lu (2005) defined job satisfaction as the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values. Collins (2002) posited job satisfaction as the extent to which people satisfy or dissatisfy with their jobs. Maher (2013) claims that job satisfaction covers how much an employee enjoys work and also the affective feeling of staff towards their job. This could be the lecturer feeling towards specific aspects of their job with their pay, relationship with colleagues and working conditions (Lu, 2005). Job satisfaction level may be determining the extent to which work outcomes meet or

exceed expectations. However, Collins (2002) found that when teaching staff of an educational institute was evaluated on how they enjoyed individual job tasks within their role, their responses were significantly correlated to satisfaction with the work itself. Collins (2002) also contends that other elements such as, level of supervision; level of time with concentration required for the job, and task importance all had no significant impact on job satisfaction. Maher (2013) contends that quick completion of assigned tasks signifies job satisfaction. However, the low relationship does suggest that other factors, besides enjoyment, contribute to how satisfied employees feel at work (Lu, 2005)

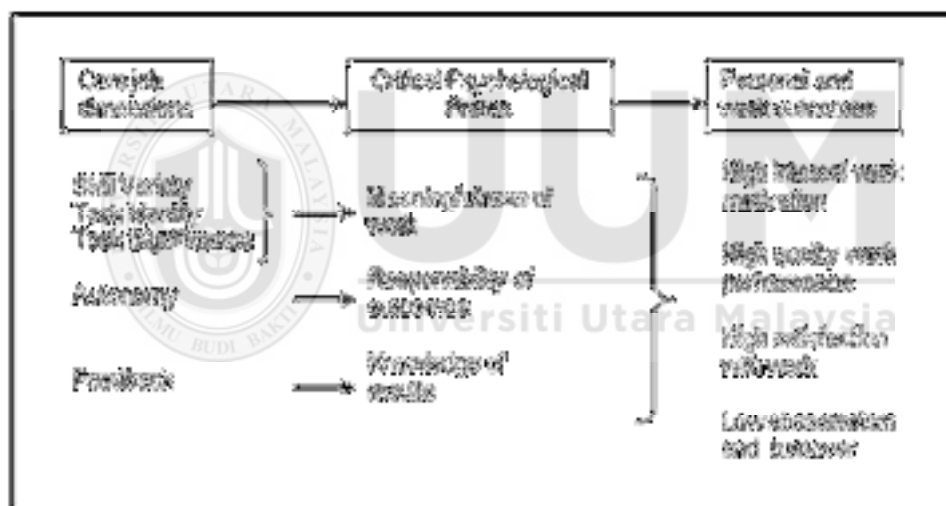
### **2.5.1 Supporting Theories**

The job characteristics model, the situational theory, contingency theory and path-goal theory were supporting theories in the research.

### **2.5.2 Job Characteristics Model**

The Job Characteristics Model by Hackman and Oldham (1975) posited that job satisfaction prevail when the condition of work invigorate standard job motivating characteristics. Hackman and Oldham (1975) claimed that job characteristics: task identity, skill variety, autonomy, task significance and feedback. Hackman and Oldham (1975) contends that, the three psychosocial states lead to a number of potential outcomes in job satisfaction. Hackman and Oldham (1975) further asserted that establishment of philosophy which is geared towards the improvement of the five standard job motivating characteristics will subsequently improve good work environment and increased staff job satisfaction.

Judge (2002) claimed that, Job Characteristics Model had significant empirical support from scholars. Similarly, it has also drawn criticism as many studies utilizing this model to investigate the direct impact of core job dimensions on personal and work outcomes, which completely disregarding the critical psychological states (Behson, 2010). Despite this, the Job Characteristics Model and its impact on job satisfaction has been the subject of many reviews which further lend support to the model.



Source: (Hackman & Oldham, 1975)

Figure 2.1. Job Characteristics Model.

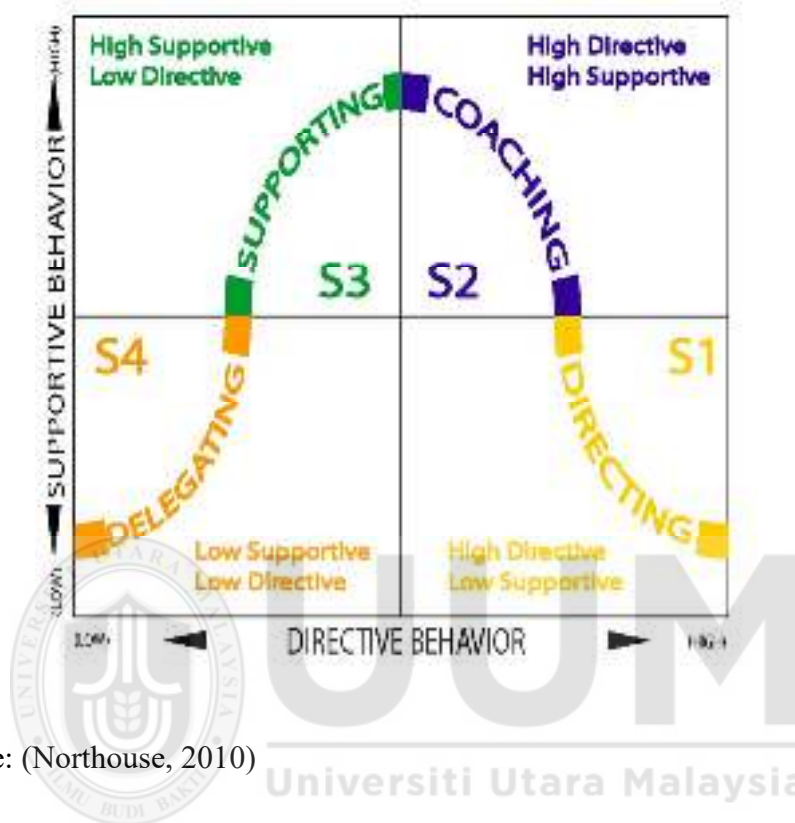
### 2.5.3 Situational Theory

Situational theory refers to applying different leadership situation to different context (Northouse, 2010). In this situation, leaders employ their leadership behaviour in terms of competence and commitment to match that of their subordinates (Zaccaro, 2007). Situational leadership style is defined as a leader's behavioural pattern to

influence others (Northouse, 2010). This type of leadership behaviour is divided into categories; directive situational leadership and supportive situational leadership (Blanchard, 1985). In directive situational leadership, a leader gives directives to the group of people to help accomplish the task goals (Maccoby, 2007). In contrast, the supportive situational leadership, the leader participates and supports the group members to help them feel comfortable and at ease to accomplish the task goals (Northouse, 2010). Certainly, it is important to note that this approach which stipulated that, the leader should focus all instruction on goal achievement and monitor their progress, spend more time with the followers using supportive approach (Blanchard, 1985). Using the style, the leader only directs the group members on what to be achieved, how it will be achieved and supports them on it (Harsey & Blanchard, 1993). This can be asserted as a process of training the followers' on task specification. The leader focuses his/her instruction on both achieving goals and meeting subordinates' socio-emotional needs (Vecchio et al., 2006). Similarly, the leader involves in all tasks with subordinates by giving encouragement and soliciting subordinates' input (Northouse, 2010). However, training the followers is an extension of situational leadership which requires that the leader makes the final decision on what and how the goal will be achieved (Vecchio & Boatwright, 2002).

The second approach is called a supporting approach which makes the leader take a high supportive approach to followers, (Maccoby, 2007). The leader does not exclusively focus on goals but uses supportive behaviours that bring out the employees' skills around the task to be achieved (Harsey & Blanchard, 1993). The supportive behaviour includes listening, praising, asking for input, and giving feedback (Northouse, 2010). A leader uses this approach which gives subordinates

control of day-to-day decisions but remains available to facilitate problem-solving (Vecchio et al., 2006). This leadership approach posited quick feedback and give recognition and social support to subordinates (Blanchard, 1985).



Source: (Northouse, 2010)

Figure 2.2. Situational Leadership Model.

### 2.5.4 Contingency Theory

Contingency theory is propounded by Fiedler and Chemers (1974). This theory proposes that a leader's effectiveness depends on how well the leader's style fits the situation (Fiedler and Chemers, 1974). The theory presents the styles and behaviour of many different leaders who worked in different situation (Northouse, 2010). Literally, Fiedler and Chemers (1974) posited that, before the followers can measure the performance of leader and it is essential to understand the situation in which they lead. According to Northouse (2015) contingency theory contains styles and

situations of a leader. Bass (1990) claimed that it provides the framework for effective matching of the leader with the situation.

Contingency theory consists of three factors namely; leader-followers relations, task structure, and authority (Northouse, 2010). These three factors are also called situational factors in the contingency theory (Northouse, 2010). The first factor which is leader-follower relations consist of the work environment, the degree of confidence, loyalty, and attraction the followers' feel to their leader (Zaccaro, 2007). This means that, if the work environment is not hostile and the employees have confidence in the leader to lead them effectively, they will be loyal, attracted to his/her leadership style and the leader is asserted to lead successfully (Burns, 1978). The second factor is the task structure which is based on the degree to which a given task is clear and easy to be implemented (Watson & Hoffman, 2004). This means that a clear structured tasks from the employer or a leader create confidence in the hearts of the employees (Avolio, 1999). A task is considered structured when (a) the requirements of the task is clearly stated and known by the people required to perform them, (b) the path to accomplishing the task is clear, (c) the completion of the task can be clearly demonstrated, and (d) correct solutions to the task exist if any errors occur (Northouse, 2010).

The third factor which is position power is term as the amount of authority a leader has to reward or to punish the followers (Northouse, 2010). It includes the legitimate power the individual has acquired as a result of the position they hold in an organization (Bass & Riggio, 2006). Position power is strong if the leader is asserted with the authority to hire and fire the employee or give raises in rank or pay (George, 2007). Northouse (2010) added that leaders are tends to be in weak situation, if they

do not have the authority to fire and hire employee. Theoretically, Northouse (2010) posited contingency situational factors to be highly favourable in term of rating, Conversely, if the situational factors are positive, it is rated higher. While it is rated moderately if the situational factors lie between two extremes (Northouse, 2010). On the other hand, they are situational factors are not positive, they are rated low (Northouse, 2010).

Contingency theory has several major strengths. Peters, Hartke and Pohlman (1985) found that contingency theory offers an approach to leadership that has a long tradition. This means that contingency theory has been found to be a valid with reliable approach in explaining how effective leadership can be achieved (Peters, Hartke & Pohlman, 1985). Secondly, it has broadened our understanding of leadership in considering the impact of situations on leaders (Northouse, 2010). Thirdly, it emphasizes the importance of focusing on the relationship between the leadership styles and the demands of various situations (Avolio, 1999). Fourthly, this theory is predictive and therefore provides useful information about the type of leadership that is most likely to be effective in certain contexts (Bass, 1990).

Lastly, this theory does not require that people should be effective in all situations (Burns, 1978). Arguably, leaders in organizations have the desire to deliver all the organizational goals through their employees (Peters, Hartke & Pohlman, 1985). Contingency theory argues that leaders should not expect to be able to lead in every situation (Avolio, 1990). Institution should try to place leaders in optimal situations that are ideal for their leadership style (Bass & Riggio, 2006). George (2007) contends that, when leaders are in the wrong situation, efforts should be made to

change the working variables and redeploy the leader to another context for serves delivery (George & Sims, 2007).

### **2.5.5 Path-Goal Theory**

Path-goal theory is the process by which leaders motivate their followers to accomplish designated goals (Northouse, 2010). This theory focuses on the process of enhancing employee's performance and employee's satisfaction through employee's motivation (House, 1996). Path-goal theory emphasizes the relationship between the leader's style, the characteristic of their followers and the work environment (Bess & Goldman, 2001). According to Northouse (2010) the three variables constituting path-goal theory can be achieved through the use of leadership behaviour that best meets followers' motivational needs in their work environment. Indvik (1988) contends that leaders always enhance followers' goal attainment by providing rewards in the work place. According to House and Mitchell (1974) the theory focuses on using leadership to enhance employee performance, motivation and satisfaction. Northouse (2010) added that followers also get motivated when their leaders makes the path to the goal clear to them and planned easy working process. Indvik (1988) concluded that removing working hindrances for goals attainment and making the work itself more satisfying to all. Additionally, Northouse (2010) posited that, path-goal theory is designed to explain how leaders can help employees to achieved task completion along the path to their goals by selecting specific behaviour that are best suit employees' needs. Although, Bess and Goldman (2001) contended that it is appropriate for the leader to choose the best leadership behaviour that increases followers' expectations for achieving the stated goals.



Path-goal theory is an approach to leadership that is not only theoretically complex, but also pragmatic (House, 1996). The theory provides set of assumptions about how leadership interacts with the subordinates in order to be motivated at work place (Northouse, 2010). In practice, the theory provides direction about how leaders can help subordinates to accomplish their work in a satisfactory manner (Bass & Riggio, 2006). Theoretically, the path-goal approach suggests that leaders need to choose a leadership behaviour that best fits the needs of subordinates (House, 1996).



Source: (Northouse, 2010)

*Figure 2.3.* Basic Idea of Path-Goal Theory.

## **2.6 Review on Job Satisfaction of University Lecturers.**

Job satisfaction is the dependent variable in this study with sixteen dimensions namely: Pay, status, promotion, recognition, environment, responsibility, working

condition, supervision, achievement, work itself, job benefit, growth, co-worker, policy, personal life and salary. Bentley et al., (2013) reported a comparative study on lecturers' job satisfaction around twelve countries and built their study on Herzberg's two factor theory of job satisfaction which relate job satisfaction on the basis of motivator and hygiene factors. Bentley et al., (2013) found out moderate level of job satisfaction of lecturers in Australia, United States, Germany, United Kingdom and South Africa. Coastes et al., (2009) researched on attractiveness of Australian academic profession using job satisfaction as one among the indicators. The study revealed that salaries of academics staff in Australian universities were relatively high in comparison with other Anglophonic countries (Coastes et al., 2009). Finding also revealed that the higher ranked academic staff were satisfied with their job as lecturers while the lower and middle ranked level shows lower job satisfaction. (Coastes et al., 2009). Both studies were research report on the basis of comparative studies and conducted in Australia focusing on job satisfaction of lecturers in the universities.

Similarly, studies have been conducted to give more insight on job satisfaction of lecturers in universities. Marston and Brunetti, (2009) researched on professors' job satisfaction focusing on salary, working environment and promotion of lecturers in a liberal art college while Froeschle and Sinkford (2009) researched on faculty perception of satisfaction with academic work environment. The study found that most dental academic staff intend to remain in their job for the next eight years. Froeschle and Sinkford (2009) revealed a positive relationship of academic staff working with their co-worker in department. The study revealed low salary and workload as pertinent issues affecting job satisfaction of academic staff. This is in consonance with the study of Marston and Brunetti (2009) who found work itself,

recognition, benefits, environment and love of learning are factors of job satisfaction of professors in the liberal arts school in United States. Marston and Brunetti (2009) stated that the importance of scholarship in the career of the professors and claiming that university policy enhances professional development of lecturers' career in the university. This has greater impact on professional satisfaction of faculty members in the university (Marston & Brunetti, 2009). However, both studies revealed good relationship between lecturers' co-workers and students which is a source of job satisfaction for lecturers in the colleges (Froeschle & Sinkford, 2009; Marston & Brunetti, 2009).

Additionally, Lien (2017) worked on factor affecting lecturer job satisfaction while Pan, Shen, Liu, Yang and Wang (2015) studied factors associated with job satisfaction among university lecturers in north eastern region of China. Lien (2017) conducted the study in Vietnam universities with a sample of 167 lecturers who participated in the study. Pan et al., (2017) sampled 1210 lecturers using quantitative research design and found monthly salary income to have positive relationship on job satisfaction of lecturers. However, Lien (2017) found salary, recognition and job benefits to have positive relationship with lecturers' job satisfaction. Similarly, both studies were conducted in different countries of the same continent. However, both studies are inter related as their finding shows moderate level of lecturers' job satisfaction in their universities. Although, both studies has its negative influences as further finding revealed no relationship between occupational stress, turn over and lecturers' job satisfaction (Pan et al., 2015). While Lien (2017) revealed no relationship exist between operating procedure, relationship with supervisor and lecturer job satisfaction. Also, both studies had some limitations, further studies were

recommended on using larger samples whilst a longitudinal design to validate their findings was also recommended (Lien, 2017; Pan et al., 2015).

Mustapha (2013) researched on financial reward on job satisfaction among university lecturers. The study was aimed to analyzed financial rewards on job satisfaction of lecturers' in university. Hanaysha (2016) conducted a similar study on determinants of job satisfaction in higher education and used 242 participants as sample in the study. Mustapha (2013) posited the influences of job satisfaction and has respondents that comprises 320 lecturers from four universities in northern Malaysia. However, Mustapha (2016) adopted Herzberg's two factor theory of job satisfaction and 10 point Likert scale was used as measurement procedure in the study. Analysis was done using Pearson product moment correlation in measuring the relationship in the study. Meanwhile, Hanaysha (2016) made use of SPSS and SEM for the analyses and finding revealed a positive relationship between work environment and lecturer job satisfaction. Finding also shows significant relationship on employee motivation and job satisfaction of lecturers in the universities. Mustapha (2013) found financial rewards to be significantly positive in relation to job satisfaction of university lecturers. In the same context, Mustapha (2013) concluded that salary tend to be a key dimension in determining lecturers' job satisfaction. Hanaysha (2016) found personal feeling of employee to have positive effect on job satisfaction and recommended further study to other researchers through the use qualitative method for an in-depth finding on the construct. Also, Hanaysha (2016) recommended future study on determinant of job satisfaction using moderator for wider understanding. Overall, the researcher is of the view that both studies were conducted in the same country but different state and different years, but concluded that lecturers with high level of job satisfaction tend to performed better in the universities.

Furthermore, studies have been conducted to broader knowledge on job satisfaction of lecturers in universities. For instance, Toker (2011) examined job satisfaction of academic staff in Turkey universities with the aim of measuring the level of their job satisfaction. Toker (2011) discussed the major role of lecturers as key resources for university effectiveness. Beside, Mustapha and Zakaria (2013) explored a study on effect of promotion opportunity on job satisfaction among university academics in Malaysia. Toker (2013) research aim was to measure the level of lecturers' job satisfaction while Mustapha and Zakaria (2013) was to correlate the promotion opportunity on job satisfaction of lecturers in the study. Mustapha and Zakaria (2013) uses Herzberg's two factor theory of job satisfaction that theorized motivator-hygiene factors of job satisfaction. Quantitation research design was adopted for both studies and research questions were structured in the study. Meanwhile, Toker (2011) made use of 648 academicians as sample of the study in which all the participants were lecturers of universities. On the other hand, Mustapha and Zakaria (2013) collected their data from 320 lecturers' to measure their satisfaction at work and correlational analysis was used to analyse the data. Toker (2011) found job satisfaction level of lecturers to be moderately high in universities in Turkey and further indicated that, professors showed higher level of satisfaction compared to instructors. Apparently, Mustapha and Zakaria (2013) found promotion opportunity to have significant relationship with lecturers' job satisfaction. Fundamentally, both studies were conducted in different continent in which Turkey is a country located in European part of the world while Malaysia is in Asian Continent geographically. The studies stressed value of job satisfaction to lecturers and university management. In the same vein, the authors cited in this review concerning lecturers' job satisfaction had indicated positive relationship between dimensions of job satisfaction which

signified the importance of job satisfaction of academics in the university (Mustapha & Zakaria, 2013; Mustapha, 2013; Hanaysha, 2016; Lien, 2017)

## **2.7 Leadership Styles and Job Satisfaction**

Certainly, in the field of leadership style in the university, studies have been conducted to give more insight on leadership and lecturers job satisfaction in universities. Alonderiece and Majauskaite (2016) conducted an empirical study on leadership style and job satisfaction among university faculty staff. Research objective was to measure leadership style impact on faculty staff job satisfaction. The study adopted quantitative research design and sample 72 lecturers and 10 supervisors in universities. In the same vein, Parveen and Tariq (2012) researched on leadership, gender and job satisfaction of faculty staff in universities in Pakistan. Their study aimed measuring relationship among the variables and situational leadership theory of Hersey and Blanchard was theorized in the study. Alonderiece and Majauskaite (2016) used questionnaire as an instrument which was validated to checked influences of leadership styles on job satisfaction of faculty members. In testing relationship, Parveen and Tariq (2012) tested two hypotheses and 223 respondents participated fully in the study and found leadership style to have positive significant effect on faculty staff job satisfaction.

Whereas Alonderiece and Majauskaite (2016) revealed positive significant impact of leadership style on job satisfaction of faculty members. Finding further indicated servant leadership which is known as democratic style of leadership to have high positive influences on lecturers' job satisfaction, while autocratic style was found to have lowest impact on lecturers. However, the research practical implication revealed that supervisors' tend to have control to intensify adequate job satisfaction

of lecturers' in the universities. Alonderiece and Majauskaite (2016) concluded that this can be achieved by demonstrating good leadership behaviour to the faculty staff. Further studies were recommended on using comparative analysis in other countries.

Apparently, in order to enhance research on effect of leadership style on job satisfaction and to measure the relationship. Bhatti, Maitlo and Shaikh (2012) researched on impact of autocratic and democratic leadership style on job satisfaction with a sample of 205 respondents. The study aimed at measuring the effect of both autocratic and democratic styles of leadership on job satisfaction. In the same vein, Kleim and Takeda-Tiker (2009) researched on impact of leadership on faculty job satisfaction with the purpose of determining the relationship between faculty members, their supervisor and faculty job satisfaction. During the analysis, Bhatti, Maitlo and Shaikh (2012) analysed their data through SPSS and found leadership style to have positive significant impact on job satisfaction. Additionally, the study shows democratic leadership style with high effect on job satisfaction while autocratic style posited lower effect on job satisfaction.

Kleim and Takeda-Tiker (2009) made use of Maslow and Herzberg theories which supported relationship between job satisfaction and performance. In their study, they used quantitative design and sample faculty members through survey monkey process as means of data collection. In the same vein, Bateh (2013) concluded a research on leadership styles and faculty satisfaction in the state university with the purpose of correlating the relationship between leadership style and faculty staff satisfaction. The study has a sample of 104 faculty members as respondents. Bateh (2013) found a significant relationship between leadership style and job satisfaction of academics. To this end, Kleim and Takeda-Tiker (2009) conducted their analysis

through SPSS and finding revealed significant relationship between leadership style and academic job satisfaction. However, both studies were conducted in different countries and their findings revealed relationship between leadership style and academics job satisfaction. Additionally, their study has its value on enlightening academic head on the merit of academic staff job satisfaction.

Since faculty staff are very important to university sustenance in the areas of research, teaching and development. It is also evident according to Coates et al. (2010) that concluded a study with an outcomes on the perception of Australian faculty members toward their universities' leadership with a comparative analysis to other nations. Coates et al., (2010) found Australian academics' satisfaction with their leadership to be below average likewise the British and Hong Kong faculty scored lower than the Australians. In the comparative analysis, Coates et al. (2010) revealed that faculties from United State of America shows higher satisfaction. Meanwhile, Coates et al (2010) revealed faculty members from Mexico and China expressed the highest overall levels of satisfaction with their leadership. They further said faculty satisfaction levels correspond with rank from senior faculties to middle and junior faculty members. In addition to further comprehend with this review on leadership and job satisfaction, it is clear that some faculty members were satisfied with leadership styles in their universities, while others indicated low satisfaction (Coates et al., 2010). Certainly, this has justify a need for further studies on leadership styles and job satisfaction of lecturers other universities.



## **2.8 Leadership Behaviour and Job satisfaction**

Fervently, in the field of leadership behaviour in the university, fewer studies have been conducted for an insight on lecturers' job satisfaction in universities. In the context of this research, some studies of leadership behavior on employee and lecturers job satisfaction, turnover and performance were reviewed. Similarly, Mehmet-Sahin and Busra (2016) conducted an empirical study on leadership behaviour, job satisfaction with the commitment of employees in an organization. Research objective was to analyse leadership behaviour effect on job satisfaction and staff commitment in an organization. Likewise, Kaiman (2013) researched on leadership behaviour, commitment and an effect on employee job satisfaction and performance in Indonesia. During the data collection process in which, Mehmet-Sahin and Busra (2016) made use of 234 questionnaires to extracts data from respondents. Their data analyses was done using multiple regression. Finding revealed that, leadership behaviour has significant effect on job satisfaction in relation to organization commitment. Similarly, Kaiman (2013) used cluster random sampling method in the study with a sample of 100 employees. Finding revealed a significant leadership behaviour to have effect on job satisfaction, commitment and performance of employee. According to Kaima (2013) this means that good leadership behaviour will improves employee performance, satisfaction and commitment to their job. Both studies has leadership behaviour effect on job satisfaction of employee.

Even though the studies were conducted in different countries, their conclusion is quite similarly to the study of Fernandez (2008) who conducted an empirical study on leadership behaviour on employee perception of performance and job satisfaction. Objective of the research was to analyse the leadership behaviour in relation to

performance and job satisfaction. Fernandez (2008) posited that leadership behaviour as a key factor for predicting employee performance and job satisfaction. In same context, Satope, Akintunde and Olopade (2014) researched on effect of leadership behaviour and employees turnover in the universities. Their research objective was to analysed relationship between leadership behaviour and employee decision likewise turnover. Fernandez (2008) found leadership behaviour to be significantly positive to performance and job satisfaction of federal employees, this means that leadership behaviour is a key factor to predict performance and job satisfaction at work.

Beside, Satope, Akintunde and Olopade (2014) discussed leadership behaviour influences on employee turnover in Nigerian universities context. Participants of their study consists of 148 lecturers and found leadership behaviour to have positive relationship to employee job performance in their departments. The similarity of these articles was that, both studies revealed the leadership behaviour to have influence on employee satisfaction, performance and turnover despite the fact that the studies were conducted in different countries. Both studies also have similar research purpose with same independent variable of leadership behaviour in the studies. However, in addition to the understanding of this review on leadership behavior and job satisfaction, it can be concluded that there was an effect of leadership behavior on job satisfaction as most authors cited in this review indicated a positive relationship between leadership behavior and job satisfaction (Satope et al., 2014; Fernandez, 2008; Mehmet- Sahim & Busra, 2016).

## **2.9 Decision Making and Job Satisfaction**

Similarly, the important of university lecturers participating in decision making is viewed as a way of motivating academic members to contribute to development of

their university. In their studies, Bamidele and Ella (2013) and Olcum & Titrek (2015) conducted similar studies on decision making and job satisfaction. Their objectives were similar which focuses on workers participation in relation to their job satisfaction. Bamidele and Ella (2013) examined relationship between workers' participation in decision making and academic staff job satisfaction in Nasarawa State University in Nigeria. Bamidele and Ella (2013) sample 60 academic staff and tested two hypotheses. The findings from their study revealed that lecturers' participation in decision making has a positive and significant relationship with their job satisfaction. This implies that job satisfaction level of lecturers' increases in relation to their participation in decision making in their department. Bamidele and Ella (2013) stressed that employee involvement in decision making tends to enhance and articulate the path towards their goals. This is on the basis that they feel sense of belonging in the institution.

Olcum & Titrek (2015) have explored the effect of school administrators' decision making styles on job satisfaction of teachers. The sample of the study was 483 teachers and 167 administrators and study was conducted in Sakarya province in Turkey. Olcum & Titrek (2015) reported high level of job satisfaction of teachers and administrators that participated in decision making in their schools. The result further revealed that administrators used more of rational decision making than avoidant decision making. Additionally the merit of both studies of Bamidele and Ella (2013), and Olcum and Titrek (2015) was that, they conducted their studies of decision making and job satisfaction which were in cognizance with two variables of this present research.

Similarly, it is evident that studies conducted on decision making with similar purpose of study shows an effect on job satisfaction. In the study of Pacheco and Webber (2010) considered a study on participative decision making on job satisfaction and investigated the link between participative decision making on job satisfaction. In the same vein, Perkasa (2012) researched on participative decision making, demographic characteristic and job performance among academic staff in a university. Perkasa (2012) focused on the influence of participative decision making, demographic characteristics and academics job performance. However, Pacheco and Webber (2010) collected their data from workers including the academics in higher education in 39 countries in Western and Eastern Europe and a sample of 18,591 respondents were effectively assessed in the study. Bivariate probit model was used to indicate the marginal effects of participative decision making on job satisfaction of employee. Finding revealed that, middle and high level workers in both universities and other sectors shows negative effect of participative decision making on job satisfaction.

Perkasa (2012) sample was 100 academic staff and analysis was done using correlational statistics and found participative decision making, teaching experience and academic rank to have influences on academic performance in the university. Both studies are contrary in finding on the effect of participative decision making on job satisfaction and performance. Both studies share the same similarity on the basis that, the studies were conducted on participative decision making in relationship to job satisfaction. Although, the studies were conducted in different continent as such different views of respondents may be the reason to different findings.

Meanwhile, Bat-Erdene (2006) considered a study on faculty participation in decision-making on their job satisfaction. The study was geared to address

challenges of faculty members participating in decision making in order to enhance their job satisfaction. The research objective was to determine if there is an effect of faculty members participating in decision making on their job satisfaction. Bar-Erdene (2006) has a total number of 235 respondents that filled, completed and returned their questionnaires and made use of correlational statistics to analyse the data. Conversely, Bar-Erdene (2006) found faculty members level of decision making to have positive relationship to their job satisfaction. Further studies were recommended on leadership styles and university culture.

Similarly, Maloney (2003) researched on faculty participation in decision making and its impact on job satisfaction. The study based its purpose on investigating the relationship between faculty members' participation in decision making and level of their job satisfaction. Maloney (2003) found significant relationship between faculty staff participation in decision making and their level of job satisfaction. This study is in line with the study of Bar-Erdene (2006) whose findings on decision-making' indicated a positive effect of on lecturers' job satisfaction in university and suggested a further study on leadership styles. The researcher of this particular research accepted the suggestion on the fact that it was one of the variables being studied in this particular research.

Conversely, it can be concluded that apart from Pacheco and Webber (2010) that revealed negative effect, all other authors cited in this review found decision making to have positive effect and significant relationship on lecturers' job satisfaction (Bamidele & Ella, 2013; Olcum & Titrek, 2015; Perkasa, 2012; Bar-Erdene, 2016; Maloney, 2003).

### **2.10.1 Summary of the Literature Review**

The chapter presents a wider outlook on reviews on system of education in Nigeria and job satisfaction of lecturers were critically reviewed. Leadership style, behavior and decision making of lecturers were also reviewed in relation to job satisfaction in university. The review also shows links between leadership in a department and job satisfaction which investigated the existing relationship between leadership style, leadership behaviour and decision making on job satisfaction among the university lecturers in north eastern states of Nigeria. However, there is need for further studies as some of the authors cited in this review were contrary on their findings (Coates et al., 2010; Bateh 2013; Bat-Erdene, 2016; Pacheco & Webber, 2010). Also, it is important for the researcher of this research to have empirical evident on the outcome of this study.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The objective of this study was to investigate the relationship of head of department leadership styles, behaviour and decision-making on lecturers' job satisfaction in universities in north eastern Nigeria. This chapter describes the methods that were used for gathering data for this study under the following sub headings: Research design, area of the study, population and sample and sampling techniques, instrument for data collection, validation of the instrument, Reliability of the instrument, method of data collection and method of data analysis.

#### **3.2 Research Area in Nigeria**

In the context of the research area, Nigeria as the largest nation in Africa continent has thirty-six states with six regions namely: North eastern region; North Central region; North western region; South western region; South eastern region and South region. Abuja stands as its Federal Capital Territory (NOA, 2014). Historically, Nigeria got her independence from Britain on October 1, 1960. Three years later, it becomes a republic in 1963. Geographically, Nigeria is located on the western coast of Africa. However, Nigeria's most socio-cultural diverse feature is the people. Hundreds of local languages are spoken in the country, including three major languages such as Yoruba, Igbo, Hausa, and English as official language (FMOI, 2014). The north-eastern region stands as the area of study for this research which comprises of six states namely: Adamawa State, Bauchi State, Borno State, Gombe State, Taraba State and Yobe State. Certainly, this region has contributed greatly to the economy of the Nigeria in term of crop and livestock production. The region is

densely populated as compared to the southern region in the country while Hausa and Fulani remain the dominant tribes in the region (NOA, 2014). They have 6 Federal Universities in the region (NUC, 2014).

### **3.3 Research Design**

There are three types of research design: quantitative, qualitative, and mixed research. In this study, quantitative research design based on survey method has been chosen for this study. This is due to the fact that, it is considered probably a good approach to address the research problem and research questions of this study. Research design has various definitions. According to Creswell (2014), research design is a research plan and procedures that span the decisions from broad assumptions to detailed methods of data collection and analysis. While, according to Creswell and Plano Clark (2011), research design is a design that provides the glue that binds the research project together and is used to structure the research. It is a design which shows how all the major parts of the research project such as samples, measures, treatments and methods of data collection link together to address the central research questions. Practically, these two definitions suggested that research design is a structure that guides the research direction, consider appropriate method for data collection and analysis techniques to address research questions.

### **3.4 Research Population**

The study population comprised five federal universities in the north eastern Nigeria. The numbers of the lecturers are 2797 from the five federal universities which constituted the population for the study. The federal universities chosen for this study are listed in Table 3.1.



Table 3.1

*List of sampled universities*

S/N	UNIVERSITIES	LECTURERS
1.	Federal University Kashere (FUK)	428
2.	Federal University Wukari (FUW)	420
3.	Federal University Geshua (FUG)	422
4.	Modibbo Adama University of Technology Yola (MAUTECH)	615
5.	Abubakar Tafawa Balewa University (ATBU)	912
	Total	2797

Source: (NUC, 2014)

### 3.5 Sample Size

In probability sampling, every lecturers' have equal opportunity of being chosen for sampling (Creswell, 2014). A representative sample was adopted for chosen the lecturers which ensured equal and independent representation of data selection. This sampling method is advantageous on the basis that it checkmate research bias in the process of sampling the lecturers' (Creswell & Plano Clark, 2011). In this study, samples were selected from five universities in north eastern Nigeria. This consists of 15% of lecturers each from the five federal universities that accounted for total summation of (433) lecturers for this study (Gray, 2014).

### 3.6 Sampling Techniques

Stratified random sampling technique was used to sample 15% lecturers each from the five selected federal universities which gave total number 433 lecturers which were 15% of the entire population for this study (Gray, 2014). Stratified random sampling techniques reflected the whole strata of entire sample size. Creswell (2014)

stated criteria's for using stratified random method namely: (a) increased samples statistical efficiency; (b) adequacy of data for analyzing the various strata in the sample. In addition, the techniques ensured that various strata or department in the universities with their different numbers of lecturers were well represented. Simple randomization was used to select the lecturers in each department. In this study, a total of 450 questionnaires were distributed to lecturers in five public universities in North-Eastern, Nigeria. Out of the 450 questionnaires that were distributed, 433 questionnaires were completed by the respondents and found valid for the study. This shows high response rate of respondents which were regarded as the valid response rate which is considered sufficient for survey (Sekaran, 2003).

Table 3.2

*Number of sampled lecturers from each university*

S/N	Universities Name	Number of sampled lecturers
1.	FUK- Federal University Kashere.	69 Lecturers.
2.	FUW- Federal University Wukari.	67 Lecturers.
3.	FUG- Federal University Geshua.	61 Lecturers.
4.	MAUTECH-Modibbo Adama University of Technology	99 Lecturers.
5.	ATBU-Abubakar Tafawa Balewa University.	137 Lecturers.
	Total Number	= 433 Lecturers.

### 3.7 Instrumentation

The study used four structured questionnaires such as: Leadership Style Questionnaire (MMLSQ); Leadership Behaviour Questionnaire (MLBQ); Decision-Making Questionnaire (MDMQ); Lecturers Job Satisfaction Questionnaire (MLJSQ).

The majority of questions were drawn from questionnaires on leadership, decision-making and job satisfaction with some modifications to suit the research context. A seven point Likert scale of Strongly Disagree (SD=1), Moderately Disagree (A=2), Slightly Disagree (SLD=3), Slightly Agree (SLA=4), Moderately Agree (MA=5), Agree (A=6), Strongly Agree (SA=7), was used for the items.

The questionnaire had following sections: A, B C, D & E. Section A dealt with the respondents bio-data information (i.e. the demographic and biographical details of the academics including the years of experience, gender, highest academic qualifications) with seven measuring questions. Section B dealt with 14 questions directed to lecturers covering major areas of head of department leadership styles in their respective department. Section C dealt with leadership behaviour of head of department with 10 measuring standard questions. Section D contained questions on head of department decision-making with 17 measuring questions. Section E contained 31 measuring questions about what the respondents feel about their job satisfaction level in their department.

### **3.8 Validity and Reliability of the Instruments**

Content and face validity were used to ensure validity of the questionnaire. Content validity is the ability of the questionnaire content to measure what the questionnaire intend to measure accurately (Creswell, 2014). Gray (2014) posited validity as the degree to which an instrument measures what it is supposed to measure. However, for this study, content and face validity was used to validate the questionnaire.

All the relevant dimensions of the topic are being fully explored; and that, the measuring instrument adequately covers all the dimensions or at least a good

representation of all the dimensions of the topic of research. For this study, experts reviewed the objectives of the study and questionnaire items to decide on the appropriateness of the test items and to ensure that all the questions asked in the questionnaire fully exhaust all that are implied by the research questions and hypotheses. The following took part in the evaluation of the content validity: a senior lecturer in the field of educational management, the researcher's supervisor, co-supervisor and the senior colleagues in the field. They examined each item and made judgments on the test items to ensure they represent adequate hypothetical content in correct proportions, paying particular attention to their relevance to the subject matter and their coverage of the entire topic of study.

Since content validity is the process of ensuring how well the questionnaire represent all the different components of the variables to be measured. To do this effectively, a literature review was conducted and key concepts identified was used in the formulation of questions, which were sent to three experts (an assoc. prof. in field of educational management, my supervisor and co-supervisor) which evaluated the content and items in the context of the study. Face validity involves an analysis of whether the instrument appears to be on a valid scale. By looking at the instrument, the investigators decided that it has face validity. According to Gray (2014) face validity should be included in every test for validity. In this study, face validity was done in order to validate whether the instrument contained the important items to be measured.

Reliability is the consistency of series of measurements on an instrument (Creswell, 2014). Thus, this implies that when measuring an instrument, the results should be consistent when the instrument test is repeated. Creswell & Plano Clark (2014)

posited reliability as the consistency between independent measurements of the same phenomenon. Reliability is then the stability, dependability and predictability of the measuring instrument (Gray, 2014). It is the accuracy of a measuring instrument. The researcher used SmartPLS-3 in this study to measure reliability of the instrument. It is use to estimate path and loading coefficient (Chin, 2010). It is also used when the researcher has several Likert-type scale ratings from strongly disagree to strongly agree that are summed to make a summated scale. SmartPLS-3 is use because it takes good account of measurement errors and provides a measure of reliability that can be obtained from one single administration of questionnaire.

Validity is the ability of an instrument to measure what is expected to measure for a construct (Creswell, 2014). Reliability refers to the ability of the study to produce the same information over time (Gray, 2014). It is the extent of how reliable is the said measuring model in measuring the intended latent construct. The validity and reliability were carried out using quantitative and qualitative approach.

### **3.8.1 Pilot Study**

The sample size of a pilot study differs according to different scholars in different discipline. Hertzog (2008) suggested that 10% of the intended sample should be adopted as the sample for the pilot study and Hertzog (2008) suggested that the samples size of a pilot study should range between 10 and 40. Therefore, this study follows Hertzog (2008) suggestion by sampling 40 academic staff for the pilot study.

The pilot study was conducted at university of Abuja, Nigeria which was not part of the sample for the study. The university is a national university with various faculties and also situated in the federal capital territory of Nigeria.

The analysis of the pilot study was done using SmartPLS 3.0. This is because, the instrument for this study was adapted from previous studies and as such, Exploratory Factor Analysis (EFA) is required and SmartPLS-3 is suitable. Secondly, SmartPLS-3 is good for handling little number of responses. As all the items in the instrument are reflective indicators, the construct validity and reliability were tested and reported. From the result of the analysis, the loadings for items measuring leadership style are between 0.741 and 0.876 showing that all the items indicated measuring loading greater than the threshold value of 0.6 as suggested by Chin (2010). Furthermore, the items for leadership behavior are between 0.789 and 0.883 and; the loadings of items measuring decision making style are between 0.814 and 0.869. The loadings of items measuring job satisfaction are between 0.712 and 0.763. Therefore, the loadings justify that the instrument are valid and reliable (Chin, 2010).

Also, as revealed in the average variance extracted (AVE) in this study, all the AVEs and the composite reliability are above the threshold value of 0.5 (Hair et al, 2014) respectively (See Tables 3.3 – 3.7). Therefore, the instrument is said to be valid and reliable.

Table 3.3

*Pilot study result for Leadership Style measurement*

<b>Constructs</b>	<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>			
Leadership Styles	Autocratic Leadership Style	Aut1	0.741	0.806	0.647			
		Aut3	0.849					
		Aut3	0.806					
		Aut4	0.807					
	Democratic Leadership Style	Laissez faire	Democ1	0.773		0.812	0.661	
			Democ2	0.832				
		Democratic Leadership Style	Democ3	0.841		0.802		0.641
			Democ4	0.823				
			Democ5	0.861				
			Democ6	0.876				
			Laise1	0.811				
			Laise2	0.803				
Laissez faire	Laise3	0.773	0.802	0.641				
	Laise4	0.751						

Table 3.4

*Pilot study result for Leadership Behaviour measurement*

<b>Constructs</b>	<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>			
Leadership Behaviour	Supportive Behaviour	SB1	0.819	0.823	0.713			
		SB2	0.809					
		SB3	0.883					
		SB4	0.819					
	Non Supportive Behaviour	Non Supportive Behaviour	NSB1	0.828		0.816	0.722	
			NSB2	0.794				
		Non Supportive Behaviour	NSB3	0.819		0.816		0.722
			NSB4	0.822				
			NSB5	0.789				
			NSB6	0.823				

Table 3.5

*Pilot study result for Decision Making Style measurement*

<b>Constructs</b>	<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>				
Decision Making Style	Avoidant Decision	ADM1	0.842	0.853	0.717				
		ADM2	0.813						
		ADM3	0.822						
		ADM4	0.811						
		ADM5	0.849						
		ADM6	0.851						
	Intuitive Decision	Avoidant Decision	IDM1	0.864	0.876	0.742			
			IDM2	0.849					
			IDM3	0.815					
		Intuitive Decision	IDM4	0.861					
			IDM5	0.871					
			IDM6	0.814					
			Rational Decision	RDM1			0.857	0.867	0.734
				RDM2			0.862		
				RDM3			0.867		
RDM4	0.858								
RDM5	0.869								



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Table 3.6

*Pilot study result for Job Satisfaction measurement*

<b>Construct</b>	<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>		
Job Satisfaction	Achievement	Achievement1	0.822	0.811	0.716		
		Achievement2	0.824				
	Coworker	Coworker1	0.851			0.849	
		Coworker2	0.848				
	Environment	Environment1	0.821			0.838	0.723
		Environment2	0.847				
	Growth	Growth1	0.837			0.825	0.757
		Growth2	0.831				
	JB	JB1	0.789			0.812	0.704
		JB2	0.823				
	Pay	Pay1	0.823			0.826	0.715
		Pay2	0.831				
	PL	PL1	0.875			0.874	0.761
		PL2	0.882				
	Policy	Policy1	0.954			0.954	0.954
	Promotion	Promotion1	0.853			0.846	0.741
		Promotion2	0.841				
	Recognition	Recognition1	0.883			0.864	0.744
		Recognition2	0.889				
	Responsibility	Responsibility1	0.873			0.855	0.743
Responsibility2		0.867					
Salary	Salary1	0.871	0.862	0.742			
	Salary2	0.864					
Status	Status1	0.882	0.876	0.759			
	Status2	0.872					
Supervision	Supervision1	0.835	0.833	0.721			
	Supervision2	0.831					
WC	WC1	0.771	0.766	0.673			
	WC2	0.763					
Workitself	Workitself1	0.866	0.864	0.744			
	Workitself2	0.862					

Table 3.7

*Breakdown for the measurement items during and after pilot study*

Section	Construct	Dimension	Initial items	Items deleted	Final items	Total
A.	Demography		7	-	7	7
B.	Leadership Style	Autocratic Leadership Style	6	2	4	14
		Democratic Leadership Style	7	1	6	
		Laissez faire	5	1	4	
C.	Leadership Behaviour	Supportive Behaviour	5	1	4	10
		Non Supportive Behaviour	11	5	6	
D.	Decision Making Style	Avoidant Decision	9	3	6	17
		Intuitive Decision	8	2	6	
		Rational Decision	6	1	5	
E.	Job Satisfaction	Achievement	2	Nil	2	31
		Co-worker Environment	2	Nil	2	
		Growth	2	Nil	2	
		JB	2	Nil	2	
		Pay	3	1	2	
		Personal life	2	Nil	2	
		Policy	1	Nil	1	
		Promotion	2	Nil	2	
		Recognition	2	Nil	2	
		Responsibility	2	Nil	2	
		Salary	2	Nil	2	
		Status	2	Nil	2	
		Supervision	2	Nil	2	
		WC	2	Nil	2	
		Work-itself	2	Nil	2	
		TOTAL	96	17	79	79

It is also evident in Table 3.7 that the breakdown for the measurement for the items during and after the pilot study was conducted. It is also important to note that 17 items were deleted from the initial items using exploratory factor analysis to ascertain the loadings. The analyses show that leadership styles with three dimensions deleted 4 items such as autocratic style 2 items, democratic style 1 item and laissez-faire 1 item. Leadership behavior as a variable deleted 6 items of which 1 item deleted from supportive behavior and 5 items deleted from non-supportive behavior. Meanwhile, from the three dimensions of decision-making, 6 items were deleted such as avoidance decision making has 3 items off, intuitive decision making 2 items deleted and rational decision making has 1 item deleted. The exploratory factor analysis result indicated that, Job satisfaction which is a dependent variable in this research has 1 item deleted from the initial items which is pay 3 respectively. This is the summary report of items loading and deletion of all the constructs in this research.

### **3.9 Method of Data Collection**

An introductory letter from the School of Education and Modern Languages, Awang Had Salleh Graduate School of Arts and Science, Universiti Utara Malaysia, seeking permission to conduct the study was served to the five federal universities in north eastern Nigeria. The researcher visited the sampled universities with copies for lecturers. The researcher administered the instruments with other five research assistants. The value of the study and the instructions were explained to the respondents. Respondents were requested to complete the questionnaires which were collected by the researcher and his assistants from individual respondents. This system ensured high return rate and encouraged freedom of expression from the respondents. The researcher confirmed that, relevant information and data on the

head of department leadership styles, behaviour, decision-making and lecturers' job satisfaction were gathered using the instrument. Finally, the researcher collected the responded questionnaires for screening and proceeded to data analysis.

### **3.10 Data Analysis**

Both descriptive and inferential statistics were employed for the analysis of the data collected for this study. SPSS 22 was used for the data screening, respondent's profile as well as the analysis for the data collected for research question one. The level of lecturers' job satisfaction was measured. The seven point scale were collapsed into five group and the mean value between , the seven point Likert scale was categorized into five namely: 1.00-2.20 as very low; 2.21-3.40 as low, 3.41-4.60 as moderate, while 4.61-5.80 as high and 5.81–7.00 as very high (Dawes, 2008). The research hypotheses in line with the quantitative design of the research questions two and three as well as the validity and reliability of the instrument through the assessment of the measurement and structural model was analyzed using the SmartPLS 3.1.2 which is referred to as “the second generation of multivariate data analysis (Fornell, 1982).

#### **3.10.1 Importance of PLS-3 in this Study**

Smart PLS-3 is a variation of multiple regression and correlation analysis. It is use to estimate path and loading coefficient (Chin, 2010). PLS-3 is use for the estimation of average variance extraction. It is use for bootstrapping the data set. It is also use for the analysis of the data when the model is complex and where as in this study there are four constructs which are in second order form (Cassel, Hackl & Westlund, 1999). It is also essential because of the items in the study are formative and

reflective in nature which other software analysis may not appropriately handled (Hair et al, 2010). Furthermore, PLS-3 is suitable for this study as it takes good account of measurement error.

Using the PLS-3 approach to source information regarding the relationship between the variables of the study, the analysis of the model was carried out in the form of model which is refers as the structural model (Chin, 2010). Smart PLS was used to assess the measurement of the variables in this study and for the confirmation of relationship among variables as well as the prediction. PLS was also used to show importance-performance matrix analysis in the study.

### **3.10.2 Measurement Model**

Measurement model according to Hair et al. (2014) indicates the association between the latent or unobserved variables and the observed measured variables (items/indicators/ scales for each construct). In evaluating the measurement model, the confirmatory factor analysis was carried out to measure the construct validity (discriminate validity and convergent validity) and reliability of the items. The average variance extracted (AVE) as well as the composite reliability (CR) for the variables in the study was calculated. According to Gefen, Straub, and Boudreau (2000), the CR must be  $\geq 0.7$ , AVE  $\geq 0.5$  while Nunnally and Bernstein (1994) recommends a value of 0.7 for the Cronbach alpha. The convergent validity are ascertained when the outer model loadings are greater than 1.96 at 0.05 level of significance. Once the measurement model is validated and found reliable, the structural model was also assessed.

### **3.10.3 Structural Model**

The structural model according to Hair et al. (2014) deals with dependent relationships connecting the constructs in the hypothetical model. It is a useful representation of interrelationships among constructs i.e. it explain the relationship between latent variables. The relationship among the variables in the formulated hypotheses in this study as indicated in the model was tested through the structural model. The structural model comprised of the exogenous variables which are leadership styles, behavior, decision-making and the endogenous variable which is job satisfaction. The structural model was assessed for collinearity issues, relevance and significance of the structural model relationships, level of  $R^2$ , effect sizes and the predictive relevance ( $Q^2$ ). Bootstrapping was used to generate the t-statistics and the standard errors as it represents a non-parametric approach for estimating the precision of the PLS estimates (Chin, 1998). However, which allowed the researcher to assess the statistical significance of the path coefficients.

### **3.10.4 Ethical Procedures**

This study applied ethical procedures as suggested by Sekaran (2007) in the research settings. The researcher makes sure that the respondents' participation was voluntarily. The researcher briefly described in the introductory part of the survey as well as the nature of the research, the duration of the study as well as the research questions. Furthermore, anonymity of the respondents in the survey conducted were ensure by the researcher and this was explained to the respondents that information obtained from them will be treated as confidential and solely used for academic purposes. The expected benefits of the research were clarified to the respondents so

as to relieved any fear that they might have in mind concerning the information that was provided.

### **3.11 Summary of Chapter Three**

This chapter explains methodology and research designed adopted for this study. The methodology is referred to as the heart of the research and it is carefully and systematically structured with appropriate research designed so as to achieved the objectives of the study. The study adopted a quantitative research design and outline the population of the study which was properly discussed in terms of the sample size, sampling strategies adopted in choosing the sample, how the validity and reliability of the instrument were ascertained, the research instrument that was used in gathering data for the study, the strategy for data collection as well as the data analysis techniques. The research framework was designed so as to guide the methodology being adopted in carrying out the study. The analysis of the data that was collected was explained in the subsequent chapter.

## CHAPTER FOUR

### FINDINGS

#### 4.1 Introduction

This chapter presents the results of analysis through the quantitative data that were collected to examine the relationship between leadership style, leadership behaviour, decision making style and lecturers job satisfaction in public universities in north-west Nigeria. The data analysis shows the respondents' demographic profile, the data screening procedure and the result of the structural equation modeling. The results of the structural equation modeling were presented in three sections. The first sections report the measurement model which includes individual item reliability, internal consistency reliability, convergent and discriminant validity. While the second section is the structural model which reported the coefficient of determination ( $R^2$ ), path coefficient, effect size, predictive relevance and the importance performance matrix analysis (IPMA). The data screening was done using SPSS why the testing for the relationship and items validity and reliability were carried out using Smartpls 3.1.4.

#### 4.2 Response Rate of Distribution

In this study, a total of 450 questionnaires were distributed to lecturers in five public universities in North-Eastern, Nigeria. Several phone calls and visits were made to have a reasonable response rate (Sekaran, 2007). Out of the 450 questionnaires that were distributed, 434 questionnaires were returned of which 433 were usable and a questionnaire was discarded because a significant part of it were not completed by the respondents. This shows that 96.44% of the questionnaire distributed were



returned while 96.22% were regarded as the valid response rate which is considered sufficient for survey (Sekaran, 2007).

Table 4.1

*Response Rate of the Questionnaires*

<b>Response</b>	<b>Frequency</b>	<b>Rate (%)</b>
No. of questionnaire administered	450	100
Returned questionnaires	434	96.44
Returned and usable questionnaires	433	96.22
Returned and excluded questionnaires	1	0.002
Questionnaires not returned	16	0.036
Response rate	434	96.44
Valid response rate	433	96.22

### **4.3 Data Screening and Preliminary Analysis**

Data screening is considered necessary in any multivariate analysis as it helps the researchers to identify any possible violation of the key assumptions regarding the techniques applied during data analysis (Hair, Money, Samouel, & Page, 2007). According to Pallant (2011), analyzing a data for research purpose requires that the data should be assessed to ensure its ability to reflect the phenomena under study. As such, all the 433 returned and usable questionnaire were completely inputted into the SPSS software. As suggested by Tabachnick and Fidell (2007), the following preliminary data analysis was carried out: accuracy of the inputted data, analysis of missing data, identification of outliers, identification of statistical assumptions for multivariate analysis such as normality test, linearity and multicollinearity test (Hair et al, 2010).

#### **4.3.1 Accuracy of Data Input**

All the 433 returned and usable questionnaire that was coded into the SPSS were re-examined by the researcher to ensure that the data were correctly inputted and it was

found that of all the individual items inputted, there is no out of range value. As the study utilized 7 point Likert scale for the questionnaire, all responses were between 1 and 7.

#### **4.3.2 Missing Data**

Missing data are often a human-centered problem in a survey research. It occurs when a respondent either fails to answer one or more question(s), consciously or unconsciously; which may negatively affect the outcome of the empirical research if not properly treated before analyzing the collected data. According to Hair et al. (2014), when the amount of missing data on a questionnaire exceeds 10%, the observations should be removed from the data file; if a high proportion of responses are missing for a single constructs, then the entire observation may be removed even if the overall missing data on the questionnaire does not exceed 10%; Other alternatives such as mean value replacement or case wise deletion can also be used in the treatment of missing data.

Of the 434 questionnaires that were returned, one of it has more than 40 items which exceeded 10% that were not responded to and as suggested by Hair et al. (2014), the questionnaires were not suitable to be used for analysis and therefore, was discarded. As the PLS-3 software allows users to detect any possible missing data; the missing value settings in the PLS-3 was used and it was discovered that there is no any item that was not responded to by the respondents.

### 4.3.3 Assessment of Outliers

Outliers have been defined as “an extreme response to a particular question or extreme responses to all questions” (Hair et al, 2014). Outliers are measures or observations that are much smaller or much larger when compared with the vast majority of the observations (Aguinis, Gottfredson, & Joo, 2013). The presence of outliers in the data set in any regression-based analysis can distort the estimates and invariably leads to undependable results (Mooi & Sarstedt, 2011). Three steps were taken to assess the presence of outliers in the data collected for this study. Firstly, all variables were tabulated using minimum and maximum statistics to check if there is wrong data entry and the frequency analysis shows that there is no any value on the table that is outside the expected range.

Secondly, according to Tabachnick and Fidell (2007), the data set were examined for univariate outliers on each single variable. Items (variables) were computed into set of a new variable as obtained in the model and the outlier diagnosis was also done by means of boxplots as suggested by Aguinis et al. (2013) using IBM SPSS statistics and the standardize values are within the threshold value of  $\pm 3.29$  ( $p < 0.001$ ). Furthermore, multivariate outliers were assessed using Mahalanobis distance ( $D^2$ ). Based on the 89 observed variables of the study, the recommended threshold of chi-square is 134.79 ( $p < 0.01$ ). From the result of the analysis obtained in Table 4.2 there is no case that exceeded the threshold value and as such, outliers are not a problem in this study.

Table 4.2. Assessment of outliers

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	183.81	251.43	215.00	11.874	433
Std. Predicted Value	-2.543	3.068	.000	1.000	433
Standard Error of Predicted Value	6.012	24.703	11.419	3.559	433
Adjusted Predicted Value	181.55	252.47	214.96	11.945	433
Residual	-221.061	238.910	.000	123.416	433
Std. Residual	-1.783	1.929	.000	.996	433
Stud. Residual	-1.807	1.942	.000	1.001	433
Deleted Residual	-225.465	242.241	.037	124.548	433
Stud. Deleted Residual	-1.811	1.949	.000	1.002	433
<b>Mahal. Distance</b>	<b>.011</b>	<b>16.030</b>	<b>2.993</b>	<b>2.632</b>	<b>433</b>
Cook's Distance	.000	.022	.002	.003	433
Centered Leverage Value	.000	.037	.007	.006	433

a. Dependent Variable: ID

#### 4.3.4 Test of Normality

One of the most fundamental assumptions of multivariate analysis is normality which according to Doornik and Hansen (1994) measures the difference revealed between the obtainable and the predicted scores of the dependent variable. Previous studies have traditionally assumed that PLS-SEM provides accurate model estimations in situations with extremely non-normal (Reinartz, Haenlein, & Henseler, 2009). However, testing for normality performed has been an important and common procedure in statistics tests and multivariate data analysis in which many tests have been proposed and the most utilized probability in social science (Doornik & Hansen, 1994). Such tests include the use of skewness and kurtosis (Hair et al., 2010), and others are the use of visual tools, such as stem and leaf plots, normal Q-Q plot and Kolmogorov-Smirnov tests (Mooi & Sarstedt, 2011). According to Chernick (2011), lack of normality in variable distributions could distort the relationships

between the variables of research and the significance of the results in multivariate analysis. As such, “it is important for researchers to examine the normality of their data distributions before proceeding to analysis stage” (Hair et al., 2014). Therefore, normality test for this study was carried out using histogram and the normal probability (Q-Q) plot as well as skewness and kurtosis which assess the spread of the data distribution. As a first step, the histogram and the normal probability plot (Normal Q-Q plot) was done for the entire variable (constructs) of the model. The observed value for each score of the variable is plotted against the expected value from the normal distribution. A reasonably straight line suggests a normal distribution (Pallant, 2011). As seen in Figures 4.1 and 4.2, the normal probability plots indicated that all the research variables are normally distributed.

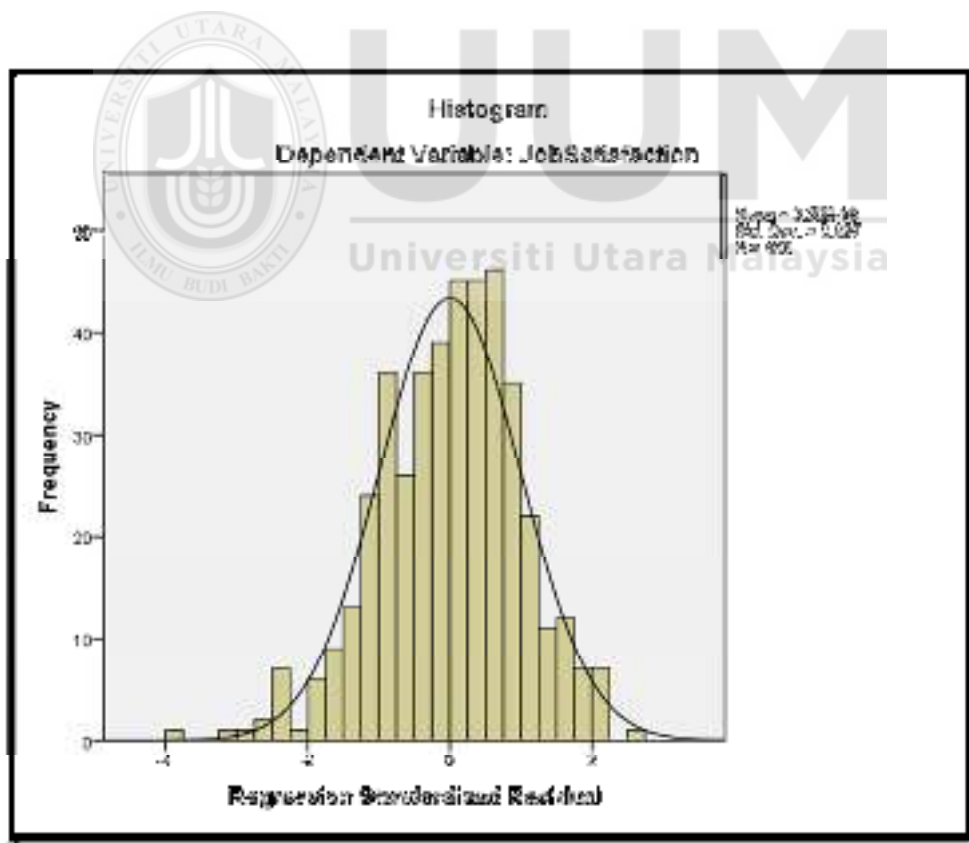


Figure 4.1. Histogram for test of normality

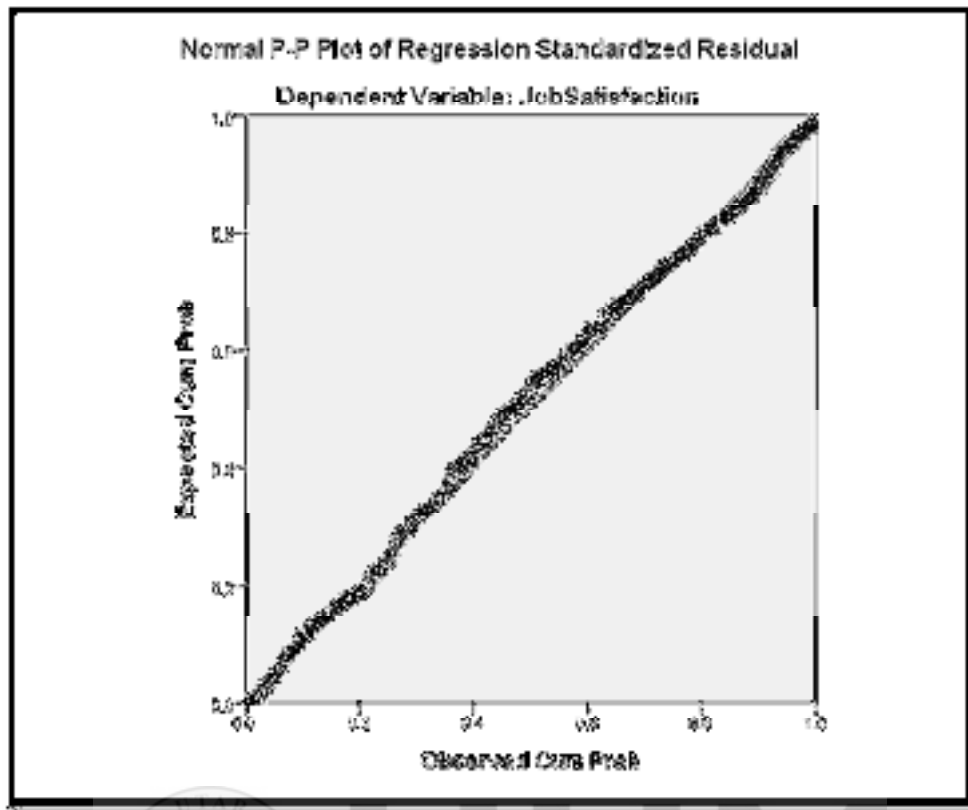


Figure 4.2. Normal P-P plot

In the second step, normality test was conducted by examining the skewness and kurtosis of the distributions (Hair et al., 2007; Tabachnick & Fidell, 2007). Kurtosis measures the peakness of the distribution and when it is positive, the distribution is peaked with most of the cases clustered at the center (long thin tails), but if negative then the distribution is somewhat flat, with many cases in the extreme. Skewness on the other hand is the extent to which the distribution of a variable is symmetrical. When the distribution of the observed scores of the variable clustered to the left at the low values or to the right-hand side (high values) of graph, then the distribution is assumed to be skewed. When both skewness and kurtosis are close to zero (0), the distributions of the observations are normal. As general rules, when skewness exceeded the range  $\pm 1$ , the distribution is considered skewed. For kurtosis, greater than +1 ( $> +1$ ), the distribution is considered too peaked, while kurtosis less than -1

(< -1), the distribution is too flat. As revealed in Table 4.3, the kurtosis and skewness values of the variables are within the acceptable range of  $\pm 1$ . Therefore, the entire constructs are said to be normal.

Table 4.3

*Values of Skewness and Kurtosis of measured variables*

Construct	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Leadership Style	-.125	.117	-.364	.234
Leadership Behaviour	-.663	.117	.368	.234
Decision Making	-.534	.117	-.019	.234
Job Satisfaction	-.306	.117	.604	.234

#### 4.3.5 Multicollinearity Test

Collinearity arises when two indicators are highly correlated and when more than two indicators are involved, it is called Multicollinearity. That is, multicollinearity is said to have occur when two or more exogenous variable latent constructs become highly correlated (Hair et al., 2014). The presence of multicollinearity among the independent variables tends to increase or boosts the size of standard errors which often leads to confusing and misleading results as it distort the estimates of regression coefficients as well as their statistical significance test (Hair et al., 2010; Hair, Ringle, & Sarstedt, 2011; Pallant, 2011; Tabachnick & Fidell, 2007). To test for multicollinearity in this study, the correlation matrix, variance inflated factor (VIF), tolerance value and conditional index were investigated.

According to Hair et al. (2010), a correlation matrix of the independent variables should also be examined and a correlation coefficient of 0.90 and above indicates multicollinearity among the independent variables. As shown in Table 4.4 the

correlations between the exogenous latent constructs were sufficiently below the suggested threshold values of 0.9. This shows that leadership style, leadership behavior and decision making style as independent variables were not highly correlated and as such multicollinearity is not a concern in this study.

Table 4.4

*Correlation Matrix of the exogenous latent constructs*

No	Latent Constructs	1	2	3
1	Leadership Style	1		
2	Leadership Behaviour	.402**	1	
3	Decision Making Style	.533**	.454**	1

Furthermore, multicollinearity test was carried out by examining the VIF value, tolerance value as well as the condition index for the independent variables. Tolerance represents the amount of variance of an independent variable not explained by the other independent variables in a structural model, while Variance Inflating Factor (VIF) is the degree to which the standard error has been inflated due to the presence of collinearity. A condition index (CI) on the other hand assess the presence of critical collinearity levels in formative measurement models (Götz, Liehr-Gobbers, & Krafft, 2010). A tolerance of 0.20 or lower; a VIF of 5.0 or higher and condition index of 30 or higher suggest a multicollinearity problem. As shown in Table 4.5, all the VIF values are less than 5, the tolerance values exceeded 0.20 and; the condition index are less than 30. Therefore, multicollinearity is not an issue in this study.



Table 4.5

*Tolerance and variance inflated factor (VIF) value*

<b>Latent Constructs</b>	<b>Tolerance</b>	<b>VIF</b>	<b>Condition Index</b>
Leadership Styles	.621	1.581	10.101
Leadership Behaviour	.742	1.494	14.203
Decision Making	.643	1.527	12.893

#### **4.4 Testing for Non-Response Bias**

As this study adopted a survey method using questionnaire to gather data for this study, it is necessary to conduct a non-response bias test. This is because, at times, the sampled respondents are unwilling or unable to participate in a survey and non-response bias occurs when the results of the respondents differ in meaningful way from those of the non-response. These responses according to Malhotra, Hall, Shaw, and Oppenheim (2006) could be as a result of attitude, personalities, demography, motivations or behaviour of the respondents which may affect the outcomes of the study by limiting the generalizability of the sample to the population of the study.

Out of the 450 questionnaires distributed, only 434 responses were received where only 433 questionnaires were usable for this study due to high level of missing data in one of the responses. A t-test was carried out to assess the non-response bias. The researcher therefore considered last respondents as a prediction of non-respondents for cases in which there were a priori grounds (Armstrong & Overton, 1977). All returned questionnaires were classified and tagged “early respondents” and “late

respondents”. 312 responses were classified as early respondents while 121 responses were classified as late respondents. The result of the independent sample t-test that was carried out shows that, there is no significant difference on all the variables of this study. Therefore, as seen on Table 4.6 and 4.7; non-response bias is not a problem in this study. Furthermore, with response rate of 96.44% achieved in this study, Wagner and Kemmerling (2010) argued that non-response bias is not a major issue.



Table 4.6

*Result of Independent-Samples T-test for Non-Response Bias*

Variable	Group	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means				
				F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
<b>Autocratic Leadership Style</b>	Early response	312	3.920	.027	.868	-.670	431	.504	-.071	.107
	Late response	121	3.992			-.675	222.019	.500	-.071	.106
<b>Democratic Leadership Style</b>	Early response	312	3.809	1.329	.250	-.527	431	.599	-.058	.110
	Late response	121	3.867			-.533	223.635	.595	-.058	.109
<b>Laissez-faire Leadership Style</b>	Early response	312	3.953	.004	.951	.289	431	.773	.034	.116
	Late response	121	3.919			.284	211.393	.776	.034	.118
<b>Supportive Behaviour</b>	Early response	312	4.178	1.305	.254	1.169	431	.243	.146	.125
	Late response	121	4.031			1.129	203.860	.260	.146	.129
<b>Non-Supportive Behaviour</b>	Early response	312	4.220	3.108	.079	1.408	431	.160	.178	.127
	Late response	121	4.041			1.334	196.910	.184	.178	.134
<b>Rational Decision Making</b>	Early response	312	3.986	.762	.383	.884	431	.377	.100	.113
	Late response	121	3.886			.851	202.524	.396	.100	.117
<b>Intuitive Decision Making</b>	Early response	312	4.226	.125	.723	.077	431	.939	.008	.098
	Late response	121	4.218			.076	211.642	.940	.008	.100
<b>Avoidant Decision Making</b>	Early response	312	4.209	.102	.750	-1.263	431	.207	-.118	.094
	Late response	121	4.328			-1.270	221.031	.205	-.118	.093
<b>Pay Status</b>	Early response	312	3.641	.180	.672	1.236	431	.217	.134	.109
	Late response	121	3.507			1.207	208.520	.229	.134	.111
<b>Status</b>	Early response	312	3.607	.125	.724	.835	431	.404	.103	.124
	Late response	121	3.504			.831	216.383	.407	.103	.124

Table 4.6 *continued*

<b>Promotion</b>	Early response	312	3.897	.570	.451	.545	431	.586	.071	.130
	Late response	121	3.826			.527	204.173	.599	.071	.135
<b>Recognition</b>	Early response	312	3.947	.078	.780	.640	431	.522	.079	.124
	Late response	121	3.868			.622	206.188	.535	.079	.128
<b>Environment</b>	Early response	312	3.883	.009	.923	.459	431	.646	.052	.114
	Late response	121	3.831			.451	210.955	.652	.052	.116
<b>Responsibility</b>	Early response	312	4.224	.043	.836	.590	431	.556	.080	.135
	Late response	121	4.145			.575	207.624	.566	.080	.139
<b>WC</b>	Early response	312	4.079	1.270	.260	1.207	431	.228	.149	.123
	Late response	121	3.930			1.147	198.085	.253	.149	.130
<b>Supervision</b>	Early response	312	4.109	1.213	.271	.014	431	.989	.002	.107
	Late response	121	4.107			.014	222.966	.988	.002	.106
<b>Achievement</b>	Early response	312	3.764	.127	.721	-.657	431	.512	-.079	.120
	Late response	121	3.843			-.658	219.602	.511	-.079	.119
<b>Workitself</b>	Early response	312	3.694	.180	.671	-.224	431	.823	-.029	.131
	Late response	121	3.723			-.215	201.688	.830	-.029	.136
<b>JB</b>	Early response	312	3.854	.051	.822	.795	431	.427	.090	.113
	Late response	121	3.764			.785	213.260	.433	.090	.114
<b>Growth</b>	Early response	312	4.011	.202	.653	.190	431	.849	.024	.124
	Late response	121	3.988			.185	208.069	.853	.024	.127
<b>Coworker</b>	Early response	312	4.184	.001	.974	.901	431	.368	.110	.122
	Late response	121	4.074			.879	207.758	.381	.110	.125
<b>PL</b>	Early response	312	4.167	1.608	.205	.452	431	.652	.059	.131
	Late response	121	4.107			.430	199.049	.667	.059	.138
<b>Salary</b>	Early response	312	4.029	.760	.384	.521	431	.603	.062	.119
	Late response	121	3.967			.502	203.213	.616	.062	.123
<b>Leadership Style</b>	Early response	312	3.894	.021	.885	-.411	431	.681	-.032	.078
	Late response	121	3.926			-.410	217.085	.682	-.032	.078

Table 4.6 *continued*

<b>Leadership</b>	Early response	312	4.199	2.641	.105	1.583	431	.114	.162	.102
<b>Behaviour</b>	Late response	121	4.036			1.509	198.966	.133	.162	.107
<b>Decision Making Style</b>	Early response	312	4.140	.001	.980	-.055	431	.956	-.004	.066
	Late response	121	4.144			-.054	210.676	.957	-.004	.068
<b>Job Satisfaction</b>	Early response	312	3.976	.041	.840	.570	431	.569	.052	.091
	Late response	121	3.925			.552	205.280	.582	.052	.094



#### **4.5 Common Method Variance Test**

Common method variance which according to Podsakoff et al (2012) is also known as mono method. It is defined as the variance that is attributable to the measurement method rather than to the construct of interest. As stated by Podsakoff et al (2012), common method variance is a major concern in self-report survey. This present study adopted various procedural remedies to minimize the effect of common method variance to the findings of the study. Firstly, the researcher perform Harman's single factor test twice. The first one include the dependent variable and all the independent variables while all the independent variables were considered at the second time. All the items in the study were loaded as a single factor and the result of the analysis revealed a poor fitness which justified that common method is not a substantial problem in this study (Malhotra et al, 2006).

Secondly, an exploratory factor analysis was carried out where, all the measurement items in this study were inputted into the SPSS and the result of the analysis yielded 22 factors with the first factor explaining 28.43% where the total variance explained is 82.99%. as the first factor is not a majority because it is less than 50%, it is evidence that there is lack of significant common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). Lastly, the correction matrix on Table 4.4 has the highest inter construct correlation coefficient of .539 which is far less than the threshold value of .90. Therefore, common method bias is not a serious problem (Bagozzi, Yi, & Phillips, 1991).

#### **4.6 Demographic Profile of the Respondents**

The profile of the respondents was analyzed by the researcher using their demographic characteristics in terms of the sampled universities, lecturers' gender, age, highest academic qualification, length of service as a university staff and their ranks. The detailed analyses are presented in Table 4.7. Of all the 433 respondents, 67 (15.47%) belong to university A, 66 (15.24%) belong to university B, 66 (15.24%) belong to university C, 95 (21.94) belong to university D and 139 (32.10%) belong to university E which shows a good representation of all the sampled universities (see Table 4.7).

As seen in Table 4.7, Out of the 433 valid responses used in this study, 287 (66.28%) of them were males while the remaining 146 (33.72%) were females. The number of respondent by gender reflects the total number of male and female lectures in public universities in Nigeria which according to NUC (2014) is 83% and 17% for male and female respectively. The descriptive analysis also revealed that 73 (16.86%) of the respondents were between the ages of 20 and 30 years; 153(35.33%) were between 31 and 40 years of age, 128 of the respondents representing 29.56% were in the age brackets 41-50 years; 54 (12.47%) were within the age bracket 51-60 years while 25(15.77%) of the respondents were above 60 years of age. The descriptive analysis also revealed that 179 (41.34%) of the respondents were Ph.D. holder; 198 (45.73%) had master degree while the remaining 56 respondents representing 12.93% of the total number of valid questionnaire holds a first degree (see Table 4.7). Furthermore, of the 433 valid respondents, the highest number of them 137 (31.64%) have work experience between 6-10years followed by 105 (24.28%) with 11-15years of work experience. While 91 (21.02%) of the respondents had between 0-5years; 47

(10.85%) had 16-20 years; 43 (9.93%) had between 21 and 25 years of work experience and; 10 (2.31%) had work experience of 26 years and above. As seen in Table 4.7, lecturers with different work experience were captured in this study. Table 4.7 also revealed that 121(27.94%) of the respondents were lecturer II, 96(22.17%) representing lecturer I; 77(17.78) were assistant lecturers; 64(14.78%) were senior lecturers; 32(7.39) representing associate professor; 24(5.54%) were graduate assistant and 19(4.39%) were professors. This shows that all the ranks of university lecturers were represented in this study.

Table 4.7

*Respondents Distribution by University*

<b>Demographic Profile</b>	<b>Dimensions</b>	<b>Frequency</b>	<b>Percent</b>
<b>Sampled Universities</b>	University A	67	15.47
	University B	66	15.24
	University C	66	15.24
	University D	95	21.94
	University E	139	32.10
	Total	433	100.00
<b>Gender</b>	Male	287	66.28
	Female	146	33.72
	Total	433	100.00
<b>Age Bracket</b>	21 - 30 years	73	16.86
	31 - 40 years	153	35.33
	41 - 50 years	128	29.56
	51 - 60 years	54	12.47
	61 years and above	25	5.77
	Total	433	100.00
<b>Qualification</b>	Ph.D.	179	41.34
	Master	198	45.73
	Bachelor	56	12.93
	Total	433	100.00
<b>Work Experience</b>	1-5years	91	21.02
	6-10years	137	31.64
	11-15years	105	24.25
	16-20years	47	10.85
	21-25years	43	9.93
	26 years &above	10	2.31



Total	433	100.00
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Table 4.7 *continued*

<b>Ranks</b>	Graduate Assistant	24	5.54
	Assistant Lecturer	77	17.78
	Lecturer II	121	27.94
	Lecturer I	96	22.17
	Senior Lecturer	64	14.78
	Associate Professor	32	7.39
	Professor	19	4.39
	Total	433	100.00

#### 4.7 Descriptive Statistics of the Research Constructs (Variables)

The descriptive statistics for all latent variables in this study was computed through means and standard deviation. Seven point Likert response scale of strongly disagree (1) at one end and strongly agree (7) at the other end was used to measure the indicators for all the latent variable of this study. The descriptive statistics in the form of means and standard deviations for the latent variables were computed for the main constructs and their components. The results of the descriptive statistics for all the main constructs and their dimensions are presented in Table 4.8. in order to ensure easy interpretation of the result, the seven point likert scale was categorized into five namely: 1.00-2.20 as very low; 2.21-3.40 as low, 3.41-4.60 as moderate, while 4.61-5.80 as high and 5.81–7.00 as very high (Dawes, 2008). As shown in Table 4.8, the mean values of all the three components of leadership style constructs are 3.94, 3.82 and 3.94 while leadership style as an unobservable construct itself has a component mean value of 3.90. This means that the leadership style in terms of autocratic, democratic and laissez-faire leadership style are moderately practiced in the sampled universities. The two dimensions of leadership behavior have mean value of 4.14 and 4.17 while leadership behavior as a construct has a composite

mean of 4.15. This also revealed that the sampled lecturers perceived the head of department leadership behavior to be moderate. Furthermore, head of department decision making style in terms of rational decision making, intuitive decision making and avoidant decision making has a mean value of 3.96, 4.22 and 4.24 respectively while the composite mean of the HODs decision making style is 4.14. Thus, the HODs decision making styles are adjudge to be moderate. However, the lecturers job satisfaction with 16 dimensions with mean value ranges between 3.58 and 4.55 while the composite mean value is 3.96. this suggest that the sampled lecturers are moderately satisfied with their job.

Table 4.8 *Descriptive Statistics for all Research Constructs (Variables) of the Study*

<b>Research Variable</b>	<b>Mean</b>	<b>Std. Deviation</b>
Autocratic Leadership style	3.74	0.89
Democratic leadership style	4.28	1.27
Laissez-fare leadership style	3.73	0.86
<b>Leadership style</b>	<b>3.81</b>	<b>0.87</b>
Supportive Behaviour	3.64	0.77
Non-Supportive Behaviour	3.57	1.68
<b>Leadership Behaviour</b>	<b>3.51</b>	<b>0.66</b>
Rational Decision Making	4.12	1.05
Intuitive Decision Making	3.66	0.71
Avoidant Decision Making	3.54	0.68
<b>Decision Making</b>	<b>3.61</b>	<b>0.65</b>
Pay	3.64	1.16
Status	3.58	1.15
Promotion	3.88	1.21
Recognition	3.92	1.16
Environment	3.87	1.07
Responsibility	4.20	1.26
WC	4.04	1.15
Supervision	4.11	1.00
Achievement	3.79	1.12
Work itself	3.70	1.22
JB	3.83	1.05
Growth	4.00	1.16
Co-worker	4.15	1.14
Policy	4.55	1.19
PL	4.15	1.22

Salary	4.01	1.11
<b>Job Satisfaction</b>	<b>3.97</b>	<b>0.86</b>

*Note: 1.00-2.20 (Very low); 2.21-3.40 (Low); 3.41-4.60 (Moderate); 4.61-5.80 (High) and 5.81-7.00 (Very high)*

## 4.8 Assessment of the Measurement Model

### 4.8.1 Overview

Two major approaches to model estimation in structural equation model (SEM) have been identified namely, variance based SEM and covariance based SEM (CB-SEM). Partial least square- structural equation modeling (PLS-SEM) is a variance-based approach to SEM. It uses the obtained data to estimate the relationships between the path models (coefficients) with the aims of reducing the error terms (residual variance) of the endogenous constructs in the structural model (Chin, 2010; Hair et al., 2014).

The PLS-SEM was used to estimate the theoretical model for the research using SmartPLS 3.1.2 application software (Ringle, Wende, & Will, 2005). The PLS-SEM approach as a variance based approach was chosen as the major analysis techniques for this study instead of Covariance-Based SEM (CB-SEM) because: (1) it is good for model development and prediction; (2) can be use when normality assumption of data are not met; (3) can be used for model with large number of indicator (observed) variables; (4) is appropriate for a complex model; and (4) suitable when the phenomenon under investigation is new and measurement model need to be newly developed (Hair et al., 2014; Hair et al., 2011; Urbach & Ahlemann, 2010). A PLS-3 assessment is in two stages which are the measurement model and the structural model assessment. Two main approaches namely, reflective and formative measurements have been acknowledged for evaluating the validity and reliability of

any measurement model. First, the reflective measures which are represented by arrows pointing from the construct to the indicators are calculated in PLS-3 by the outer loadings. Meanwhile the formative measures which are presented by arrows pointing from the indicator to the constructs are calculated by their outer weights. However, all indicators in this study are reflective measures which are shown in Table 4.16. Therefore, the assessment of reflective models in this study will be examined via: indicator reliability, internal consistency reliability and construct validity (convergence and discriminant validity).

#### **4.8.2 Individual Item (Indicator) Reliability**

Indicator reliability can be defined as the proportion of indicator variance that is explained by the latent variable. The value is between 0 and 1. According to Hair et al. (2014); Hulland (1999), indicator reliability is assessed by examining the outer loadings of each construct measures. That is, when indicator and latent variable are standardized, the indicator reliability equals the squared indicator loading. Following the rule of thumb that any reflective indicators whose loadings within the PLS model are smaller than 0.4 should be eliminated (Hair et al., 2014; Hulland, 1999; Peng & Lai, 2012). However, only five items were deleted from this study and only three other items are lower than the threshold value of 0.7 but that are all above 0.6 which Chin (2010) suggested that such item should be retained. This is shown in Tables 4.9(a-d). This means that all the items (indicators) used in this study are reliable.

#### **4.8.3 Internal Consistency Reliability**

The internal consistency reliability is assessed after the unidimensionality of the indicators have been carried out. The Partial Least Square (PLS-3) employs the use

of composite reliability ( $\rho_c$ ) instead of Cronbach's alpha ( $\alpha$ ) which estimate the reliability based on the inter-correlations of the observed indicators variables to measure the internal consistency reliability. The prioritization of items in accordance with their individual reliability by PLS-3 couples with the limitations of Cronbach's alpha ( $\alpha$ ) such as it assumes equality of all indicators loadings; it is sensitive to the number of indicators on a construct; and it underestimate the internal consistency reliability has made it imperatives for an alternative means of measuring internal consistency reliability which composite reliability ( $\rho_c$ ) has readily fill the gaps. According to Hair et al. (2014), composite reliability ( $\rho_c$ ) takes note of outer loadings of every indicator variables and it is calculated using the following formula:

$$\rho_c = \frac{(\sum_i l_i)^2}{(\sum_i l_i)^2 + \sum_i \text{var}(e_i)}$$

Where  $l_i$  is the standardized outer loadings of the indicator variable  $l$  of a specific construct,  $e_i$  represent the measurement error of indicator variable  $l$ , and  $\text{var}(e_i)$  is the variance of the measurement of error defined as  $1-l_i^2$ .

As shown in Table 4.9 (a-d), the composite reliability coefficient of each latent variable both in the first and second order are between the range of 0.794 and 0.966 which are above the threshold value of 0.7 (Hair et al, 2011). Thus, suggesting the adequacy of internal consistency reliability of the measures used in this study.

Table 4.9a

*Psychometric properties for leadership style components*

<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
<b>Autocratic Leadership Style</b>	Aut1	0.711	<b>0.880</b>	<b>0.552</b>
	Aut2	0.679		
	Aut3	0.824		
	Aut4	0.867		
<b>Democratic Leadership Style</b>	Democ1	0.74	<b>0.930</b>	<b>0.656</b>
	Democ2	0.862		
	Democ3	0.824		
	Democ4	0.817		
	Democ5	0.841		
	Democ6	0.784		
<b>Laissez faire</b>	Laise1	0.794	<b>0.903</b>	<b>0.653</b>
	Laise2	0.8		
	Laise3	0.853		
	Laise4	0.745		

Table 4.9b

*Psychometric properties for leadership behaviour components*

<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>
<b>Supportive Behaviour</b>	SB1	0.819	<b>0.928</b>	<b>0.720</b>
	SB2	0.809		
	SB3	0.883		
	SB4	0.916		
<b>Non Supportive Behaviour</b>	NSB1	0.919	<b>0.966</b>	<b>0.722</b>
	NSB2	0.872		
	NSB3	0.815		
	NSB4	0.885		
	NSB5	0.816		
	NSB6	0.767		

Table 4.9c

*Psychometric properties for decision making components*

<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>
Avoidant Decision	ADM1	0.834	0.941	0.641
	ADM2	0.783		
	ADM3	0.812		
	ADM4	0.831		
	ADM5	0.731		
	ADM6	0.781		
Intuitive Decision	IDM1	0.864	0.939	0.659
	IDM2	0.849		
	IDM3	0.815		
	IDM4	0.861		
	IDM5	0.791		
	IDM6	0.734		
Rational Decision	RDM1	0.858	0.928	0.683
	RDM2	0.902		
	RDM3	0.787		
	RDM4	0.759		
	RDM5	0.872		

Table 4. 9d

*Psychometric properties for job satisfaction dimensions*

<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>
Achievement	Achievement1	0.831	0.811	0.683
	Achievement2	0.821		
Coworker	Coworker1	0.951	0.933	0.874
	Coworker2	0.918		
Environment	Environment1	0.806	0.838	0.721
	Environment2	0.891		
Growth	Growth1	0.917	0.911	0.837
	Growth2	0.913		
JB	JB1	0.797	0.83	0.71
	JB2	0.886		
Pay	Pay1	0.712	0.794	0.566
	Pay2	0.665		
PL	PL1	0.964	0.964	0.931
	PL2	0.966		
Policy	Policy1	0.97	0.95	0.91
Promotion	Promotion1	0.961	0.953	0.91
	Promotion2	0.947		
Recognition	Recognition1	0.971	0.972	0.946
	Recognition2	0.974		
Responsibility	Responsibility1	0.962	0.958	0.92
	Responsibility2	0.957		
Salary	Salary1	0.96	0.952	0.908
	Salary2	0.946		
Status	Status1	0.93	0.925	0.86
	Status2	0.925		
Supervision	Supervision1	0.775	0.843	0.73
	Supervision2	0.926		
WC	WC1	0.856	0.821	0.697
	WC2	0.814		
Work itself	Workitself1	0.947	0.947	0.899
	Workitself2	0.949		



#### 4.8.4 Convergent Validity

This measured the extent to which each indicator of a constructs share a high proportions of variance and converges in comparison to indicators measuring other constructs. Convergent validity tests if whether an item measures the construct it is expected to Measure. The criterion for measuring convergent validity is the AVE proposed by (Fornell & Larcker, 1981). AVE which is equivalent to the communality of a construct is the sum of square loadings of indicators associated with a construct divided by the number of indicators. Convergent validity is achieved when the AVE value is 0.50 and above which means that, the construct explains more than half of the variance of its indicators on the average. When the value of AVE is below the threshold value of 0.50, convergent validity is not achieved because the construct on the average cannot explain the variance of its indicators due to errors in the items (Hair et al., 2014; Urbach & Ahlemann, 2010). As shown in Table 4.10, there is adequate convergent validity of the measures as their AVE values ranges from 0.598 to 0.953 except policy that is a single item construct which has an AVE value of 1. As all the AVE value exceeded the minimum acceptable level of 0.5 (Bagozzi & Yi, 1988). Therefore, convergent validity is achieved.

Table 4.10

*Overview of the model quality*

<b>Construct</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>	<b>R Square</b>
Autocratic Leadership Style	0.812	0.860	0.652	0.531
Democratic Leadership Style	0.912	0.930	0.656	0.820
Laisses-faire Leadership Style	0.865	0.803	0.653	0.514
Supportive Leadership Behaviour	0.913	0.918	0.783	0.638
Non-Supportive Leadership	0.801	0.803	0.641	0.615

Behaviour				
Avoidant Decision Making	0.901	0.903	0.721	0.601
Intuitive Decision Making	0.920	0.923	0.763	0.619
Rational Decision Making	0.933	0.936	0.775	0.625
Recognition	0.943	0.972	0.846	0.564
Responsibility	0.889	0.947	0.820	0.479
Salary	0.869	0.939	0.884	0.584
Status	0.835	0.924	0.858	0.582
Supervision	0.775	0.898	0.815	0.454

Table 4.10 *Continued*

Job	0.668	0.856	0.749	0.641
Working condition	0.763	0.894	0.808	0.711
Work itself	0.887	0.946	0.898	0.508
Achievement	0.581	0.827	0.704	0.611
Personal life	0.875	0.941	0.889	0.491
Pay	0.762	0.816	0.598	0.670
Policy	0.953	0.953	0.953	0.300
Promotion	0.902	0.953	0.911	0.484
Environment	0.671	0.858	0.752	0.681
Growth	0.810	0.913	0.840	0.622
Co-worker	0.834	0.923	0.857	0.543

#### 4.8.5 Discriminant Validity

Discriminant validity is defined as the extent to which the measures of a construct are distinct from the measures of another constructs by empirical standards. When discriminant validity is established, it means that, a construct is distinct in its representation of a phenomena in comparison to other constructs in the model. Two methods have been proposed for measuring discriminant validity in a reflective measurement model, namely: (a) Examination of the indicators cross-loadings. The indicators loadings for a particular construct should be greater than its loadings (cross-loadings) on the other constructs in the same model under consideration. Where any of the cross-loading is greater than the actual construct loading, then discriminant validity is violated and not achieved for that particular construct; (b) Fornell-Larcker criterion- a conservative method of assessing discriminant validity

examine and compare the square root of AVE of each latent construct with the latent variable correlations of other latent construct. The square root of AVE should be greater than its correlations with other constructs, otherwise Fornell-Lacker discriminant validity criterion assumed not meet for a reflective measurement models (Hair et al., 2014; Urbach & Ahlemann, 2010). As shown in Table 4.11, the square root of the average variances extracted (in bold) were all greater than the correlations among the latent construct which suggest discriminant validity.

Furthermore, Chin (1998) posited that the indicator loadings of a construct should be higher than the cross loadings and as shown in Table 4.11, all the indicators loading are higher when compare with other reflective indicators in the measurement model. Therefore, the measurement items suggest discriminant validity.



Table 4.11

*Fornell-Larcker Criterion (Loadings and Cross Loadings of Constructs in Second order)*

Items	Avoidant Decision Making	Achievement	Autocratic Leadership Style	Co-worker	Democratic Leadership Style	Environment	Growth	Intuitive Decision Making	JB	Laisses-faire Leadership Style	Non-Supportive Leadership Behaviour	PL	Pay
ADM1	0.70	0.03	-0.03	-0.02	0.00	-0.04	0.02	-0.03	-0.02	0.04	0.00	0.01	0.03
ADM2	0.76	0.03	0.01	0.02	-0.01	-0.03	0.02	-0.01	0.00	0.02	-0.01	0.02	0.06
ADM3	0.68	-0.05	-0.02	-0.01	0.02	-0.08	-0.02	0.02	-0.02	-0.01	0.03	0.03	0.01
ADM3	0.68	-0.05	-0.02	-0.01	0.02	-0.08	-0.02	0.02	-0.02	-0.01	0.03	0.03	0.01
ADM5	0.74	-0.03	-0.06	-0.03	-0.01	-0.06	-0.03	0.00	-0.05	0.04	0.00	-0.04	0.04
ADM6	0.79	-0.03	-0.07	0.00	0.01	-0.03	-0.05	0.00	-0.04	0.04	0.01	-0.02	0.06
Achievement1	0.02	0.85	0.35	0.38	0.44	0.56	0.61	0.25	0.63	0.42	0.31	0.47	0.49
Achievement2	-0.05	0.83	0.35	0.45	0.36	0.43	0.59	0.24	0.55	0.37	0.27	0.57	0.38
AUT1	-0.07	0.28	0.66	0.17	0.20	0.22	0.29	0.17	0.26	0.12	0.22	0.22	0.21
AUT2	-0.06	0.17	0.71	0.14	0.10	0.17	0.18	0.12	0.18	-0.09	0.16	0.17	0.22
AUT3	-0.01	0.22	0.79	0.21	0.31	0.11	0.28	0.21	0.31	-0.09	0.21	0.29	0.21

Table 4.11 *Continued*

AUT4	-0.03	0.17	0.82	0.15	0.19	0.13	0.18	0.17	0.23	-0.08	0.17	0.20	0.20
Coworker1	0.01	0.48	0.33	0.94	0.36	0.51	0.58	0.54	0.58	0.26	0.51	0.43	0.58
Coworker2	-0.01	0.44	0.29	0.92	0.37	0.35	0.57	0.50	0.54	0.29	0.33	0.60	0.48
Democ1	-0.06	0.37	0.33	0.23	0.71	0.45	0.44	0.20	0.43	0.28	0.24	0.43	0.34
Democ2	-0.02	0.30	0.30	0.26	0.82	0.23	0.45	0.30	0.48	0.21	0.30	0.46	0.42
Democ3	-0.04	0.37	0.31	0.33	0.82	0.35	0.49	0.29	0.49	0.24	0.28	0.48	0.53
Democ4	-0.07	0.39	0.42	0.40	0.83	0.36	0.49	0.31	0.47	0.30	0.43	0.39	0.59
Democ5	-0.01	0.48	0.40	0.33	0.83	0.29	0.46	0.37	0.50	0.33	0.41	0.36	0.41
Democ6	-0.01	0.42	0.32	0.25	0.82	0.36	0.35	0.28	0.41	0.31	0.40	0.31	0.42
Environment1	-0.05	0.43	0.22	0.49	0.26	0.85	0.31	0.34	0.43	0.23	0.27	0.22	0.53
Environment2	-0.02	0.59	0.37	0.34	0.44	0.89	0.54	0.26	0.56	0.38	0.43	0.45	0.61
Growth1	-0.01	0.66	0.45	0.61	0.56	0.43	0.92	0.43	0.67	0.35	0.42	0.75	0.57
Growth2	-0.02	0.66	0.36	0.52	0.43	0.49	0.91	0.31	0.63	0.40	0.37	0.59	0.52
IDM1	0.06	0.25	0.14	0.41	0.25	0.24	0.32	0.88	0.29	0.18	0.51	0.22	0.25
IDM2	0.05	0.26	0.16	0.42	0.25	0.26	0.34	0.88	0.29	0.19	0.48	0.24	0.27
IDM3	0.06	0.12	0.22	0.45	0.29	0.15	0.38	0.84	0.29	0.10	0.53	0.25	0.36
IDM4	0.01	0.19	0.28	0.55	0.37	0.30	0.39	0.84	0.37	0.17	0.57	0.21	0.43
IDM5	-0.02	0.38	0.36	0.50	0.36	0.45	0.34	0.81	0.42	0.16	0.49	0.20	0.41
IDM6	-0.02	0.20	0.16	0.43	0.27	0.22	0.28	0.75	0.33	0.06	0.37	0.35	0.22

Table 4.11 *Continued*

<b>JB1</b>	-0.05	0.49	0.34	0.57	0.47	0.42	0.54	0.39	0.83	0.30	0.30	0.48	0.44
<b>JB2</b>	0.00	0.70	0.48	0.49	0.52	0.56	0.68	0.31	0.90	0.43	0.44	0.62	0.52
<b>Laise1</b>	0.10	0.43	0.10	0.22	0.20	0.26	0.34	0.14	0.32	0.67	0.15	0.27	0.28
<b>Laise2</b>	-0.02	0.23	0.02	0.16	0.11	0.21	0.18	0.05	0.20	0.73	0.10	0.20	0.20
<b>Laise3</b>	-0.02	0.38	0.09	0.24	0.32	0.29	0.35	0.15	0.36	0.88	0.15	0.31	0.27
<b>Laise4</b>	0.04	0.39	0.10	0.28	0.27	0.35	0.29	0.14	0.37	0.88	0.20	0.31	0.34
<b>NSB1</b>	-0.03	0.30	0.26	0.38	0.34	0.40	0.32	0.51	0.34	0.19	0.85	0.32	0.42
<b>NSB2</b>	-0.02	0.35	0.31	0.38	0.44	0.38	0.43	0.46	0.43	0.22	0.88	0.37	0.47
<b>NSB3</b>	-0.01	0.32	0.37	0.36	0.38	0.32	0.39	0.50	0.41	0.10	0.88	0.36	0.43
<b>NSB4</b>	0.01	0.23	0.23	0.46	0.32	0.31	0.34	0.55	0.36	0.12	0.85	0.31	0.43
<b>NSB5</b>	0.01	0.29	0.28	0.47	0.34	0.37	0.35	0.57	0.39	0.19	0.89	0.35	0.47
<b>NSB6</b>	0.00	0.33	0.31	0.40	0.40	0.39	0.44	0.51	0.37	0.20	0.91	0.38	0.54
<b>PL1</b>	-0.02	0.59	0.40	0.51	0.46	0.34	0.72	0.26	0.61	0.32	0.34	0.94	0.45
<b>PL2</b>	0.02	0.58	0.35	0.53	0.49	0.40	0.67	0.31	0.60	0.36	0.41	0.95	0.44
<b>Pay1</b>	0.08	0.40	0.33	0.37	0.44	0.40	0.50	0.25	0.51	0.26	0.39	0.45	0.76
<b>Pay2</b>	-0.04	0.34	0.28	0.56	0.30	0.50	0.36	0.41	0.36	0.30	0.44	0.24	0.70
<b>Policy1</b>	-0.03	0.56	0.25	0.71	0.31	0.38	0.50	0.42	0.57	0.34	0.26	0.63	0.41
<b>Promotion1</b>	0.02	0.48	0.26	0.32	0.29	0.71	0.30	0.26	0.43	0.23	0.30	0.33	0.52
<b>Promotion2</b>	-0.02	0.38	0.20	0.42	0.22	0.69	0.19	0.28	0.38	0.22	0.28	0.24	0.60

Table 4.11 *Continued*

RDM1	0.00	0.47	0.26	0.42	0.44	0.38	0.40	0.30	0.56	0.30	0.21	0.24	0.35
RDM2	-0.02	0.49	0.33	0.48	0.50	0.42	0.45	0.38	0.63	0.33	0.31	0.34	0.39
RDM3	0.04	0.48	0.38	0.40	0.37	0.35	0.52	0.21	0.55	0.35	0.32	0.44	0.40
RDM4	0.07	0.53	0.51	0.54	0.56	0.46	0.65	0.35	0.63	0.39	0.45	0.56	0.65
RDM5	0.02	0.50	0.33	0.52	0.36	0.52	0.55	0.39	0.61	0.38	0.38	0.38	0.43
Recognition1	-0.05	0.46	0.26	0.51	0.31	0.73	0.33	0.39	0.46	0.27	0.35	0.31	0.58
Recognition2	-0.02	0.49	0.30	0.61	0.33	0.75	0.36	0.41	0.58	0.29	0.40	0.35	0.60
Responsibility1	-0.04	0.51	0.31	0.29	0.43	0.71	0.50	0.23	0.46	0.32	0.41	0.32	0.46
Responsibility2	0.03	0.54	0.38	0.34	0.43	0.61	0.50	0.29	0.45	0.32	0.37	0.30	0.49
SB1	0.01	0.19	0.28	0.22	0.16	0.22	0.20	0.20	0.20	-0.02	0.29	0.23	0.19
SB2	0.03	0.21	0.23	0.22	0.20	0.26	0.21	0.18	0.19	0.01	0.28	0.19	0.18
SB3	-0.01	0.25	0.30	0.24	0.24	0.28	0.25	0.22	0.24	0.02	0.32	0.25	0.24
SB4	-0.05	0.15	0.28	0.22	0.19	0.22	0.23	0.24	0.22	-0.05	0.30	0.16	0.22
Salary1	-0.03	0.57	0.37	0.60	0.56	0.50	0.76	0.40	0.61	0.34	0.45	0.78	0.58
Salary2	-0.02	0.53	0.40	0.59	0.49	0.40	0.75	0.39	0.55	0.31	0.46	0.73	0.56
Status1	0.08	0.43	0.28	0.46	0.45	0.62	0.42	0.31	0.42	0.18	0.40	0.32	0.73
Status2	0.04	0.46	0.27	0.42	0.28	0.66	0.38	0.20	0.40	0.24	0.31	0.34	0.65
Supervision1	-0.01	0.31	0.25	0.56	0.24	0.44	0.29	0.38	0.30	0.29	0.38	0.26	0.55
Supervision2	0.00	0.45	0.33	0.43	0.39	0.60	0.41	0.37	0.47	0.32	0.47	0.28	0.51
WC1	-0.03	0.59	0.40	0.42	0.50	0.76	0.50	0.36	0.59	0.36	0.42	0.41	0.62
WC2	0.03	0.44	0.39	0.55	0.53	0.58	0.63	0.43	0.52	0.31	0.60	0.45	0.67
Workitself1	0.00	0.62	0.47	0.35	0.56	0.51	0.56	0.20	0.65	0.35	0.37	0.49	0.50

Workitself2	0.02	0.69	0.48	0.42	0.58	0.53	0.66	0.29	0.71	0.44	0.39	0.52	0.53
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**Note:** ADM- Avoidance Decision Making. AUT-Autocratic Leadership Style. IDM- Intuitive Decision Making. NSB- Non Supportive Behaviour.

PL- Personal life. RDM- Rational Decision Making. SB- Supportive Behaviour. WC- Working Condition.





#### **4.9 Assessment of Higher Order Construct (HOC)**

All the four main constructs in this study (leadership style, leadership behavior, decision making and job satisfaction) are second order construct and as suggested by previous studies, it becomes necessary to assess the higher order construct to see if truly the dimensions are measuring the main constructs (Becker, Klein & Wetzels, 2012). Higher order construct also known as hierarchical models has been encourage because of its ability to shrink complex model as well as allowing for hypothetical thrift.

The four-main constructs of this study are second order construct that utilizes reflective-reflective model which according to Becker, Klein, and Wetzels (2012), when any of the dimensions are dropped or added will not change the conceptual meaning of the latent variable in the reflective model. A repeated indicator approach was adopted in this study for the hierarchical model where all indicators of the first order constructs are used in the second order constructs (Akter, D'Ambra, & Ray, 2011).

As revealed in Table 4.13, all the t value of the dimensions of the main constructs are all significant except avoidance decision making (ADM) which was deleted by the researcher to see if there is any change in the  $R^2$  value of the dependent variable but it was observed that the  $R^2$  value remain 0.663 and as such, the dimension was retained. Furthermore, the AVE and CR for all the second order construct are above the threshold value of 0.5 and 0.7. Therefore, it is justifiable in this study that leadership style, leadership behaviour, decision making and job satisfaction are multidimensional constructs.

Table 4.12

*Assessment of higher order construct validity and reliability*

<b>Construct</b>	<b>Dimensions</b>	<b>Loadings</b>	<b>t value</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted</b>
<b>Leadership Style</b>	AL	0.734	21.197**	0.782	0.624
	DL	0.915	56.947**		
	LL	0.674	19.144**		
<b>Leadership Behaviour</b>	SB	0.728	18.763	0.794	0.616
	NSB	0.712	17.961**		
<b>Decision Making Style</b>	RDM	0.79	39.819**	0.768	0.613
	IDM	0.77	26.879**		
	ADM	0.72	12.346**		
<b>Job Satisfaction</b>	Achievement	0.782	40.317**	0.947	0.748
	Coworker	0.737	21.907**		
	Environment	0.825	58.484**		
	Growth	0.789	43.552**		
	JB	0.823	44.701**		
	Pay	0.874	45.372**		
	PL	0.701	14.675**		
	Policy	0.605	11.859**		
	Promotion	0.696	23.618**		
	Recognition	0.751	22.628**		
	Responsibility	0.692	28.669**		
	Salary	0.764	20.835**		
	Status	0.763	33.825**		
	Supervision	0.674	22.777**		
WC	0.843	54.49**			
Workitself	0.713	25.131**			

\*\*P &lt; 0.001

**4.10 Structural Model Assessment (PLS-SEM)**

According to Hair et al. (2014), structural model is the dependent relationships connecting the variables or constructs in the hypothetical model. That is, structural model is an essential representation of interrelationships among constructs. That is, it explains the relationship between latent variables. The hypothesized relationship between leadership style, leadership behavior, decision making and job satisfaction

in this study was tested through the structural model. As such, the structural model was calculated for collinearity issues, relevance and significance of the structural model relationships, coefficient of determination ( $R^2$ ), effect sizes ( $f^2$ ), predictive relevance ( $Q^2$ ) and the importance performance matrix analyses (IPMA). Bootstrapping which is consistent with Chin (1998) was used to generate the t-statistics and the standard errors as it represents a non-parametric approach for estimating the precision of the PLS estimates. It also allow the researcher to evaluate the statistical significance of the path coefficients as well as the indirect effects (Hayes, 2012).

#### **4.10.1 Assessing the Structural Model for Collinearity**

Collinearity arises because of high correlation among constructs in a study. An assessment of collinearity in structural model followed the same step as used in the evaluation of formative model. Each predicting variables (leadership style, leadership behavior and decision making) in the model was assessed for collinearity using the Tolerance and VIF value and each predictors construct should meet the threshold value of 0.20 tolerance or higher ( $> 0.20$ ) and a VIF lower than 5. According to Hair et al (2014) when the above stated conditions of VIF and tolerance value are not meet by predicting or exogenous constructs, it is suggested that, such exogenous construct should either be removed, merged into a single construct, or a higher-order constructs be created in other to solved the collinearity problems. In order to test for collinearity among leadership style, leadership behavior and decision making style which are the predicting variables, the latent variable scores were extracted from default reports of PLS-3 calculation results, these scores were then copied and saved into an SPSS 22 file to run linear regression analysis. The result of the analysis as

shown in Table 4.6 with all the tolerance value above .20 and the VIF value less than 5 indicated that collinearity is not an issue in this study.

#### 4.10.2 Results of Hypothesis Testing

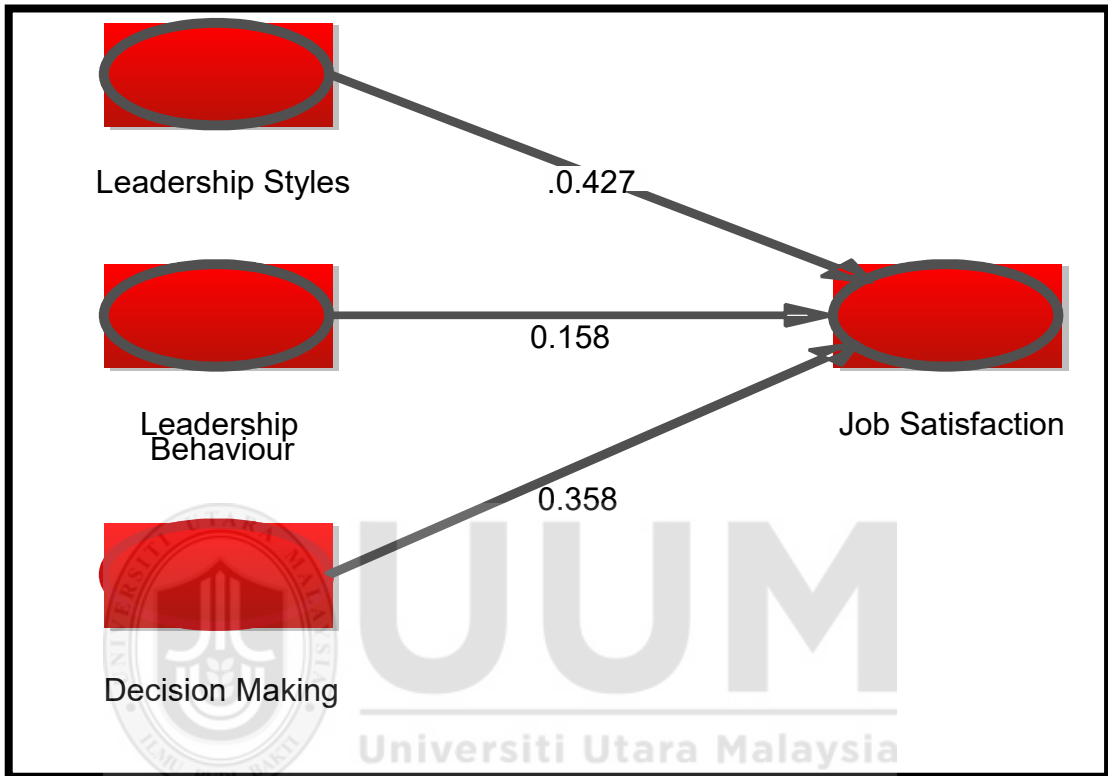


Figure 4.3. Structural model with  $\beta$  value

As shown in figure 4.3, the structural model is the point of testing the hypotheses which indicated the relationships between the constructs in the model (Sand, Lee & Lee, 2010). The estimates of  $R^2$  value and the path coefficients determines the predictive power of the model. The results of the structural model is presented in figure 4.3 which revealed that leadership styles is having 0.427, leadership behavior has 0.158 while decision making having 0.358. These estimates indicated the  $\beta$  value of the three constructs is less than 0.5 level of significance. This means that there is significant relationship between constructs in this study.

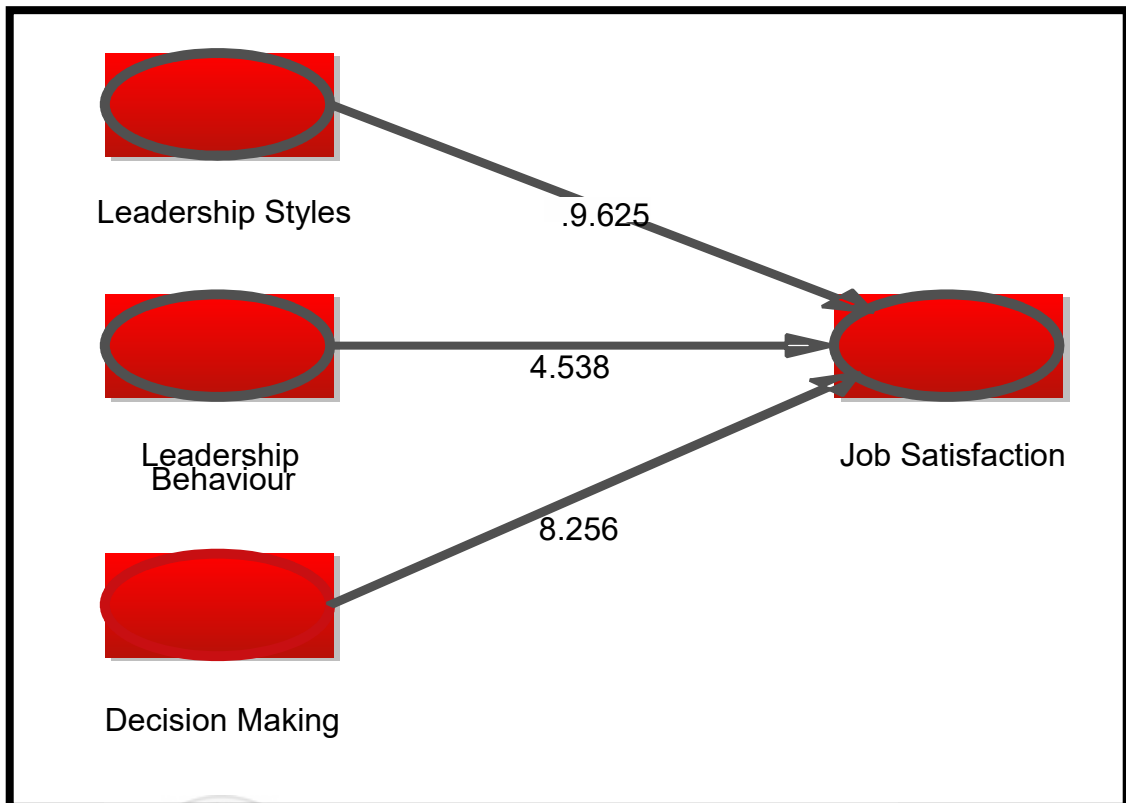


Figure 4.4. Structural model with t value

As shown in figure 4.4, the structural model with t-value indicated the relationships between the constructs in the model (Ee, Halim and Ramayah, 2013). The structural model postulated t-value of  $>4.0$  and  $\beta$ -value of  $< 0.05$  level of significance. This shows that relationship exist between the constructs in this study. Furthermore, the results of the structural model with t-value is presented in figure 4.4 which revealed that leadership styles is having 9.625, leadership behavior has 4.538 while decision making having 8.256. These estimates indicated the t value of the three constructs is greater than 4.0 value. This means that there is significant relationship between leadership styles, behavior and decision making on job satisfaction of lecturers in universities in north eastern states of Nigeria.

Thus,  $H_{01}$ ,  $H_{02}$ ,  $H_{03}$  are rejected.

Table 4.13

*Hypothesis testing*

Hypo Thesis	Relationship	Path Coefficient	Standard Error	T Values	P Values	Decision
H0 <sub>1</sub>	L S <----> Job Sat.	0.427	0.041	9.625	0.000	Rejected
H0 <sub>2</sub>	L B <----> Job Sat.	0.158	0.031	4.538	0.000	Rejected
H0 <sub>3</sub>	D M S <----> Job Sat.	0.358	0.038	8.256	0.000	Rejected

\*\* p< 0.01

*Note: Leadership Style (LS) Leadership Behaviour (LB) Decision Making Style (DMS) Job Satisfaction (JS).*

#### 4.10.3 Coefficient of Determination (R<sup>2</sup>)

Structural model is used to predict the relationship between constructs (Hair et al, 2014). The coefficient of determination (R<sup>2</sup>) demonstrated the ability of all the exogenous or independent variables in predicting the endogenous or dependent variable. According to Hair et al (2014), R<sup>2</sup> is a measure of the goodness of fit against the empirically manifest items obtained with values ranging from 0 to 1. The closer to 1 is the R<sup>2</sup> value, the bigger the percentage of variance explained by all the exogenous latent variable. R<sup>2</sup> value of 0.66, 0.31 and 0.17 are adjudge to be substantial, moderate and weak respectively. As revealed in Table 4.15, the R<sup>2</sup> value is 0.663 which can be adjudge to be moderately substantial. This means that leadership style, leadership behaviour and decision making style of the head of departments (HODs) collectively explain 66.3% of variance in lecturers' job satisfaction. Thus, the model of this study has predictive accuracy and is adjudge to be a good model (Lei & Chu, 2015).

Table 4.14

*Coefficient of determination ( $R^2$ )*

<b>Latent Variables</b>	<b>R Square (Variance Explained)</b>
Job Satisfaction	0.663

#### 4.10.4 Effect Size ( $f^2$ )

Apart from determining the  $R^2$  value, the change in  $R^2$  value when a specific exogenous variable is omitted from the model was also examined to know the effect size ( $f^2$ ) which is the magnitude of the impact of a particular exogenous variable on an endogenous variable (Gim, Desa, & Ramayah, 2015; Hair et al., 2014). Effect size  $f^2$  according to Preacher and Kelley (2011) serves as a practical guide to interpret the practical importance of a specific relationship. This according to Gim et al. (2015) is done by examining the  $f^2$  effect size for each relationship. It indicates the contribution of each exogenous latent variable leadership styles, behaviour and decision making to the overall prediction of the endogenous construct Job satisfaction (Chin, 1998). It is calculated by omitting an exogenous construct from the model and re-specifying the structural model to determine the new  $R^2$  on the endogenous construct. The difference between the  $R^2$  when the exogenous construct of interest is included and the new  $R^2$  when it is omitted shows the impact of the exogenous construct in the prediction of the endogenous construct under investigation. This is repeated for all exogenous constructs in the model to determine their impact. According to Callaghan, Wilson, Henseler, Ringle, and Næs (2007), Effect size ( $f^2$ ) is expressed as:

$$\text{Effect size: } f^2 = \frac{R_{included}^2 - R_{excluded}^2}{1 - R_{included}^2}$$

Where  $R_{included}^2$  is the  $R^2$  value of the endogenous construct when a particular exogenous construct is included and  $R_{excluded}^2$  is the value of such endogenous construct when that particular exogenous construct is excluded from the model. According to Cohen (1988)  $f^2$  value is assessed as: 0.02 (small), 0.15 (medium), and 0.35 (large). Table 4.16 shows the effect sizes of the respective exogenous variables of the structural model.

Based on the rule of thumb, leadership styles has large effect on job satisfaction. Although, leadership styles has large effect on job satisfaction which amounting to 35.4% respectively. Also, it is important to note that leadership behaviour has a small effect on job satisfaction amounting to 5.7% while decision making has a medium effect on job satisfaction amounting to 20.7%. However, a small effect size according to Chin, Marcolin, and Newsted (2003); Preacher and Kelley (2011) does not imply that the effect is not important. Since all of the hypothesized relationships were already shown to be statistically significant, all of the relationships here are deemed important and meaningful judging by the effect sizes found (Gim et al., 2015).

Table 4.15

*Effect size for direct effect*

<b>Relationship</b>	<b><math>f^2</math> effect size</b>	<b>Magnitude</b>
Leadership Style → Job Satisfaction	0.362	Large
Leadership Behaviour → Job Satisfaction	0.064	Small
Decision Making Style → Job Satisfaction	0.221	Medium





#### 4.10.5 Predictive Capability of the Model ( $Q^2$ )

Predictive relevance is a measure used to assess the relative predictive relevance of a predictor construct on an endogenous construct. It helps to determine the relevance of the reflective construct in a structural equation modeling (SEM) model. In this study,  $Q^2$  was calculated in SmartPLS 3 using blindfolding procedure. Cross-validated redundancy approach was used in this study to determine the predictive relevancy of the constructs. This is because, according to Hair et al. (2014), cross-validated redundancy approach includes the elements of structural model, path model and predicted eliminated data in its assessment. In table 4.17, the predictive relevance is shown in the column labelled 1-SSE/SSO which means squared prediction error/squared observations. Any value in the column that is more than 0 are said to have predictive relevance. The result shows that the  $Q^2$  value for all the three endogenous variables are above zero and therefore, the model is adjudged to have predictive relevance (Henseler, Ringle, & Sinkovics, 2009).

Table 4.16

##### *Predictive capability of the Model*

<b>Construct</b>	<b>SSO</b>	<b>SSE</b>	<b><math>Q^2</math></b>
<b>Job Satisfaction</b>	13,768.000	9,611.989	0.301

#### 4.10.6 Importance-Performance Matrix Analysis (IPMA)

The Importance-Performance Matrix Analysis (IPMA) was carried out by the researcher in order to extend the result of the PLS-3 structural model. The IPMA identifies the relative importance of the exogenous constructs in a study by assessing the direct, indirect, and total relationships to the endogenous construct. It also includes the actual performance of each constructs in the model using the latent

variable scores of the PLS-3 results. Hair et al. (2014) describe IPMA as a distinctions of total effects (importance) and the average values of latent variable scores (performance) in other to show the significant areas for the improvement of leadership in department or the specific focus of the research model. See table 4.18 and figure 4.5 respectively.

As revealed in this study, Leadership behavior exhibit both the highest performance and importance to lecturers' job satisfaction in universities in north eastern Nigeria with 63.16% and 4.15 index value respectively compared to decision making style with performance of 61.18% and importance index of 4.12 and leadership style of the HODs exhibits 56.15% performance and 3.89 importance index towards lecturers' job satisfaction. As shown in Figure 4.5, all the three exogenous variables (Leadership style, leadership behavior and decision making style) are very paramount towards enhancing lecturers' job satisfaction. As such, the three variables are to be considered by the HODs in their day to day ruining of their respective department.

Table 4.17

*Index Values and Total Effects for the IPMA of Job Satisfaction*

<b>Constructs</b>	<b>LV Index Values</b>	<b>LV Performances</b>
Leadership Style	3.891	56.146
Leadership Behaviour	4.154	63.168
Decision Making Style	4.116	61.179

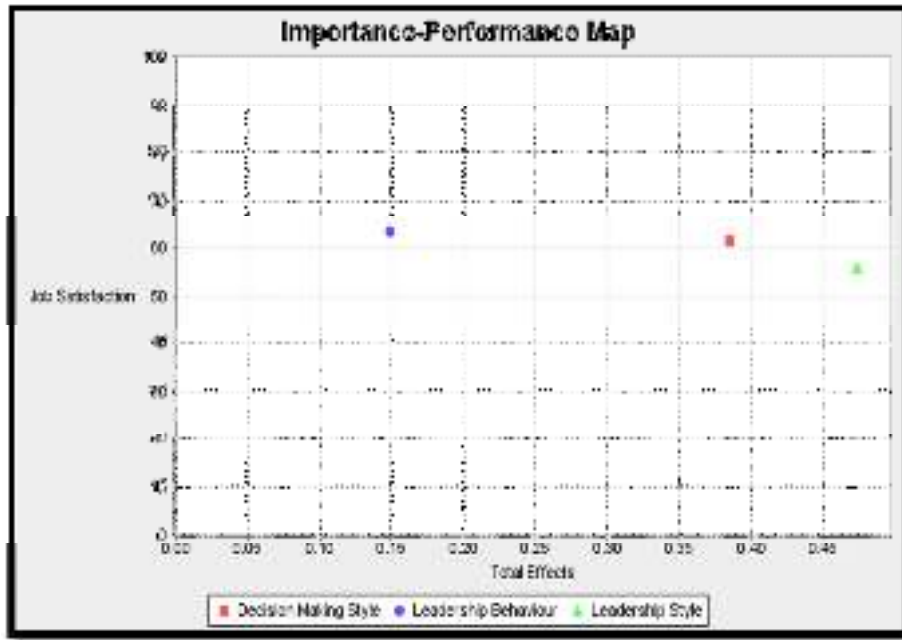


Figure 4.5. IPMA Results of IE as Target Construct.

#### 4.11 Summary of Chapter Four

This chapter is the presentation of the findings for this study. Three research questions and three hypotheses were raised and formulated for this study respectively. The findings of this study indicated that there is a moderate level of leadership styles, behaviour, decision-making and job satisfaction. A total of three null hypotheses were formulated for this study and all the three-null hypothesis formulated were rejected. The results of the tested hypothesis were summarized in

Table 4.19

Table 4.18

##### *Hypotheses summary*

Hypotheses	Hypothesized Path	Decision
H0 <sub>1</sub>	Leadership Style <-----> Job Satisfaction	Rejected
H0 <sub>2</sub>	Leadership Behaviour <-----> Job Satisfaction	Rejected
H0 <sub>3</sub>	Decision Making Style <-----> Job Satisfaction	Rejected

## **CHAPTER FIVE**

### **DISCUSSION AND CONCLUSION**

#### **5.1 Introduction**

This chapter entails the discussion of the research findings, the implications of the results and conclusion. The study adopted a quantitative research design where the data collected were analysed to answer the four research questions raised in this study. This chapter gives a summary of the research findings and the discussion of the findings were based on research questions. The contributions and implications of this study were also discussed and some suggestions were made for future study.

#### **5.2 Recapitulations of Research Findings**

The main objective of this study was to determine how leadership style, leadership behaviour and decision making style of head of departments (HOD) relate to lecturers' job satisfaction in public universities in north east Nigeria. To achieve this objective, four research questions were raised and answered:

- i. What is the level of job satisfaction of lecturer in universities in north eastern Nigeria?
- ii. Is there any significance relationship between head of departments' leadership styles on job satisfaction of lecturers in universities in north eastern states of Nigeria?
- iii. Is there any significance relationship between head of departments' leadership behaviour on job satisfaction of lecturers in universities in north eastern states of Nigeria?

- iv. Is there any significant relationship between head of departments' decision making on job satisfaction of lecturers in universities in north eastern states of Nigeria?

In this study, leadership style was examined through autocratic, democratic and laissez faire leadership style; leadership behaviour was measured through supportive and non-supportive leadership behaviour; the decision making style has three components (avoidant decision making, intuitive decision making and rational decision making) while; lecturers job satisfaction has 16 dimensions (pay, achievement, relationship with co-worker, environment, growth, job benefit, Policy, promotion, recognition, responsibility, salary, status, supervision, working condition, personal life and work itself). The research questions were addressed using quantitative approach where HODs leadership style questionnaire, leadership behaviour questionnaire, decision making questionnaire and lecturer job satisfaction questionnaire were distributed to the sampled lecturers from public universities in North-East, Nigeria.

Extensive literature was reviewed as reported in chapter two where the theoretical framework was employed to describe the relationship between the independent variables (HODs leadership style, leadership behaviour and decision making) and the dependent variable (lecturer job satisfaction). The framework for this study was supported by path-goal theory, contingency theory, Herzberg's motivator-hygiene theory and the supporting theory of Job Characteristics Model. Path-goal theory emphasizes the relationship between the leader's style, the characteristic of their followers and the work environment which determines lecturer job satisfaction. In practice, the path-goal theory provides direction about how leaders can help subordinates to accomplish their work in a satisfactory manner (Bass & Riggio,

2006). Theoretically, the path-goal approach suggests that leaders need to choose a leadership style that best fits the needs of subordinates and the work they are doing (House, 1996). Furthermore, the situational theory of leadership postulate that since no single leader behaviour is good for all situations, the university leader needs to find behaviour suitable to a particular situation (House & Mitchell, 1974; Bass, 1990). The motivator-hygiene theory posited that job satisfaction prevail when factors like pay, recognition, achievement, promotion, growth and working condition are meant in an institution (Herzberg's 1978). As such, these theories presume that when the right leadership style, leadership behaviour and decision making are put into place, lecturers will be satisfied with their job.

After the descriptive and multivariate analysis as well as the result of the hypotheses testing, the following are the summary of the key findings:

Firstly, there is a moderate level of lecturer job satisfaction, head of departments moderately practiced the identified leadership styles (autocratic, democratic and laissez faire), leadership behaviour (supportive and non-supportive leadership behaviour) and decision making styles (Avoidant, intuitive and rational decision making).

Secondly, the findings from the study revealed that the three-identified leadership styles are key factors to lecturers' job satisfaction. Thirdly, head of department leadership behaviour in terms of supportive and non-supportive behaviour determines the level of lecturers' job satisfaction and finally, head of departments' decision making style is very paramount to lecturers' job satisfaction.

### **5.3 Discussion of Research Findings**

This section is the discussion of research findings which are in line with the research questions raised for this study. This section entails the discussion on the level of lecturers' job satisfaction as well as the impact of head of departments' leadership style, leadership behaviour and decision making style of lecturer job satisfaction.

#### **5.3.1 The Level of Job Satisfaction of University Lecturers in North Eastern States of Nigeria.**

Job satisfaction is the dependent variable in this study with sixteen dimension namely: Pay, status, promotion, recognition, environment, responsibility, working condition, supervision, achievement, work itself, job benefit, growth, co-worker, policy, personal life and salary. As shown in the analysis of data collected for this study, lecturers in public universities in north-east, Nigeria were moderately satisfied with their job. The mean value of the sixteen dimension ranges from 3.58 to 4.55 and using the 7-point scale. The mean value justifies that lecturers are moderately satisfied with their job. The outcome of this study is in line with previous researches on lecturers' job satisfaction (Coastes et al, 2009; Bentley et al, 2013).

It is evident in this current study that lecturers are more satisfy with the policy put in place, their co-workers, responsibilities than the university environment, promotion, pay and recognition with a lower mean. This is in line with Marston and Brunetti (2009) who examined job satisfaction of tenured and experienced professors who have been teaching for 15 years at a mid-sized liberal arts college. The study revealed that several prominent intrinsic factors are affecting job satisfaction of university lecturers. Interacting with students and helping them learn and grow was the overarching source of satisfaction for the professors as well as motivation to



maintain an academic career. In fact, a love of learning was evident; the professors enjoyed their subjects and felt they were happy and always ready to help their students (Marston & Brunetti, 2009). Scholarship was an immensely valuable aspect of the professors' careers, which is not surprising on given their compelling interest in their academic fields (Marston & Brunetti, 2009). Extrinsic factors such as tenure or job security, compensation and benefits, and a flexible teaching schedule were also sources of satisfaction and motivation to which make the professors remain in the university, but these had less of impact than professional satisfaction (Marston & Brunetti, 2009).

Furthermore, in a study of salary and promotion of clinical faculties, Froeschle and Sinkford (2009) explored dental faculty members' satisfaction and perceptions of their work environment among 451 lecturers. The study revealed that status and salary were pertinent issues as lower paid lecturers felt they had fewer resources and opportunities for professional development, including promotion, tenure of job, workshops and mid-tenure review and feedback (Froeschle & Sinkford, 2010). However, relationships with their colleagues and students were main sources of satisfaction. hence, head of departments should enhance recognition and rewards for teaching and research to retain dedicated lecturers.

### **5.3.2 The Relationship between Head of Departments' Leadership Styles and Job Satisfaction of University Lecturers in North Eastern States of Nigeria**

The first hypothesis formulated for this study was to determine the relationship between head of departments (HODs) leadership style and lecturer job satisfaction. The findings from this study revealed that there is a positive and significant relationship between HODs leadership styles and lecturer job satisfaction. The result

of this study is consistent with previous studies that found out that leadership style is positive and significantly related to job satisfaction (Alonderiene & Majauskaite, 2016; Parveen & Tariq, 2012; Kleim & Takeda-Tiker, 2009; Bateh, 2013).

As revealed in the effect outcomes of this study, even though the three independent variables are significantly related to lecturer job satisfaction, leadership style has more effect on lecturer job satisfaction as it is adjudged to have a large effect on lecturer job satisfaction amounting to 36.2%. The path analysis also revealed that a unit improvement in HODs leadership style will bring about .427 increase in lecturer job satisfaction. According to House and Mitchell (1974), leadership generates motivation when it increases the number and kinds of pay that followers receive from their work. Northouse (2010) added that, followers also get motivated when their leader makes the path to the goal clear to them, and planned easy working process.

Of the many job characteristics that affect job satisfaction of lecturers in higher education leadership style holds much promise for studies aimed at retention. Alonderiene and Majauskaite (2016) stated that leadership is one of the factors that may have an impact on employee job satisfaction. The finding from the study also revealed that different leadership styles will stimulate different working environment and have directly affect the job satisfaction of the employees (Alonderiene & Majauskaite, 2016).

Parveen and Tariq (2012) stated that leadership style plays a vital role in influencing employees' job satisfaction, there is variation in leadership style of various heads of department, but they all share the common characteristic of being "the most powerful individual on their respective department and the way the HODs governs their subordinate plays a crucial role in the life of the human capital and the universities at

large (Parveen, 2012). The head of department who practice democratic leadership style favours shared governance by involving the other lecturers in departmental decision-making as well as encouraging creativity, feedback and innovation. When democratic leadership are put into place, it instils in the employee a sense of pride and ownership, which in turn stimulates enthusiasm, dynamism, and satisfaction in their job (Bhatti, Maitlo & Shaikh, 2012). A democratic system promotes both professional and personal growth of the lecturers throughout the university and they welcome new ideas and change. As revealed in the second order analysis in this research finding, it was revealed that democratic leadership style enhances HODs leadership more than other leadership style. This was in support of Bhatti, Maitlo & Shaikh (2012) whose study revealed that while most leadership styles have strengths that positively affect a variety of situations. According to Bhatti, Maitlo & Shaikh, (2012) leader should demonstrated expertise action in their separate fields and as such may be excellent leaders as well as decision makers within their opportunity of influence.

### **5.3.3 The Relationship between Head of Departments' Leadership Behaviour and Job Satisfaction of University Lecturers in North Eastern States of Nigeria**

In determining the relationship between HODs leadership behaviour and lecturer job satisfaction in public universities in north-east, Nigeria; the result of the analyses using Smart PLS 3 revealed that leadership behaviour is positive and significantly related to lecturer job satisfaction. As revealed in the effect outcomes of this analysis, three independent variables are significantly related to lecturer job satisfaction, leadership behaviour has effect on lecturer job satisfaction as it is adjudged to have small effect on lecturer job satisfaction amounting to 6.4%. The path analysis also

revealed that a unit improvement in HODs leadership style will bring about .158 increase in lecturer job satisfaction

The finding from this study is in line with several previous studies that examine the relationship between leadership style and job satisfaction (Satope, Akintunde & Olopade, 2014; Fernandez, 2008). According to Satope, Akintunde and Olopade (2014) when leadership behaviour is being studied from an academic perspective, it is often linked with employee job satisfaction that is an overall attitude of liking one's job. The presence of high levels of job satisfaction is frequently accepted as an outcome of leadership behaviour.

The result of this study aligned with Fernandez (2008), which revealed leadership behavior to have positive relationship to job satisfaction. According to Fernandez (2008) leaders showing good behaviours such as confidence, trust, and appreciation for subordinates, consulting and involving subordinates in decision making; providing recognition and feedback as well as allowing subordinates discretion are expected to have a positive effect on subordinates 'satisfaction and performance to their job.

Mehmeh-Sahin and Busra (2016) stressed that leadership behaviour takes place when leaders express concern for followers' needs and preferences as well as taking account of their needs and preferences when making decisions. Leader that cares for the well-being of his or her subordinates need performance and as such, there is a positive effects of leadership behaviour on job satisfaction (Fernandez, 2008).

However, leadership behaviour have a significant influence on lecturer job satisfaction (Satope, Akintunde & Olopade, 2014). Also, Klein and Takeda-Tinker (2009) explored the impact of leadership on the job satisfaction of community

college faculty. Leadership style of community college administrators remains a vital area of study. As the main point of their study, Klein and Takeda-Tinker (2009) considered whether a relationship existed between the satisfaction of full-time business faculty and the leadership of their direct supervisor.

The findings present a persuasive case for the association between faculty members' job satisfaction and the leadership of their direct supervisor (Klein and Takeda-Tinker, 2009), a strong association between the faculty members' satisfaction and their supervision. Specifically, the higher the level of satisfaction, the higher the ratings the respondents awarded their supervisors (Klein & Takeda-Tinker, 2009). Klein and Takeda-Tinker found that there were distinct relationships between job satisfaction and leadership.

#### **5.3.4 The Relationship between Head of Departments' Decision Making and Job Satisfaction of University Lecturers in North Eastern States of Nigeria**

The present study also hypothesized that HODs decision making style positively related to lecturer job satisfaction (Hypothesis 3). The finding indicates that HODs decision making has a positive and significant relationship on lecturer job satisfaction (Bamidele & Ella, 2013; Olcum & Titrek, 2015; Perkasa, 2012; Bat-Erdene, 2016).

According to Bamidele and Ella (2013) that examined the relationship between workers' participation in decision making and academic staff job satisfaction in Nasarawa State university, Nigeria. The findings from their study revealed that lecturers' participation in decision making has a positive and significant relationship with their job satisfaction. As such, the level of lecturers' job satisfaction increases proportionately with their level of participation in school decision making. This was

also in line with Olcum & Titrek (2015) whose study revealed that employee involvement in decision making tends to enhance their job satisfaction, because they feel more involved and accepted in their organization.

From the effect size analysis, HODs decision making has a medium magnitude effect of 22.1% on lecturers' job satisfaction. The path analysis of this study also revealed that a unit improvement in the decision-making process will bring about .358% increase in lecturer's job satisfaction. As such, the decision-making style of the head of departments significantly influences lecturer job satisfaction. This was also revealed in the study conducted by Perkasa (2012), that there is a strong evidence of positive effect of decision making on job satisfaction.

Also, a study on the relationship between academic staff participation in decision making and their job satisfaction in university of Mongolian revealed that academic staff participation in decision making have a positive and significant relationship with their job satisfaction (Bat-Erdene, 2006).

Table 5.1

*Effect size and Path analysis*

<b>Constructs</b>	<b>f<sup>2</sup> effect size</b>	<b>Path analysis</b>
Leadership Style→ Job Satisfaction	36.2%	.427
Leadership Behaviour→ Job Satisfaction	6.4%	.158
Decision Making Style→ Job Satisfaction	22.1%	.358

#### **5.4 Implication of the Study**

In the context of implications of this study as revealed in the conceptual framework and the findings of this study. HODs leadership style, leadership behaviour and

decision making have a significant relationship on lecturer job satisfaction. Thus, specification of any conceptual framework has both theoretical practical and methodological implications (Hallinger, 2010).

#### **5.4.1 Theoretical Contribution**

The conceptual framework of this study was based on previous research evidences as well as theoretical gaps identified in the literature. The kurt lewin leadership theory, path-goal theory, contingency theory as well as the Herzberg's motivator-hygiene theory and the supporting theory of Job Characteristics Model were used to support the influence of HODs leadership style, leadership behaviour and decision making on lecturer job satisfaction. Base on the outcomes of this study, several theoretical contributions of this study were identified

This research work enriched the literature reviewed as well as contribute to improvement of daily activities of HODs in universities. Literature were reviewed regarding the relationship between HODs leadership style, behaviour and decision making on job satisfaction, this study identified the gap as further studies were suggested to clarifies the relationship between HODs leadership style and decision making on lecturer job satisfaction. This current study has also substantially enriched the understanding of how HODs leadership style, leadership behaviour and decision making can affect lecturer job satisfaction. As the four main variables in this study are second order (multi-dimensional) constructs it will serve as a substantial contribution to HODs and lecturers in the universities.

Furthermore, this study has contributed an empirical study that examine the combined role of HODs leadership styles, behaviour and decision making on lecturer job satisfaction in university context and most especially in Nigeria. Even though,

several studies have examined the individual contribution of either HODs leadership style, leadership behaviour or decision making towards lecturers' job satisfaction; this study examined the combined efforts of the three constructs toward lecturers' job satisfaction.

#### **5.4.2 Practical Implication**

As lecturers' are vital for the success of university education, their increased job satisfaction will bring about higher retention which will directly reduce the cost of selecting and hiring lecturers into the university system. As such, this study revealed how head of department can enhance the job satisfaction of their lecturers. As revealed in this study, of all the three exogenous constructs; head of department leadership style in terms of autocratic, democratic and laissez-faire leadership style are more influential towards lecturer job satisfaction followed by HODs decision making. Therefore, the result of this study provides a framework for heads of department and university administrators to predict how leadership style, leadership behaviour and decision making influence lecturers' job satisfaction.

The results of this study revealed that there is a significant relationship between HODs leadership styles and lecturers' job satisfaction. These results may be of interest to academic researchers' who study how lecturers' satisfaction can be enhanced. The university key stakeholders such as university lecturers and administrators may also be interested in how the findings can contribute to improving the work environment as well as lecturers' retention. Head of departments may take further action by adjusting their leadership styles based on their lecturers indicated preferences which may help to attain or enhance possible best lecturers' job



satisfaction. Based on the analysis, democratic leadership style is the key determinant for improving lecturers' job satisfaction.

As revealed in the outcome of this study, lecturers were most likely to be satisfied and motivated in their job thereby willing to exert extra effort when their HODs displays democratic leadership style. Therefore, the results of this study provided a process for HODs to predict how their leadership styles will impact job satisfaction of faculty members.

#### **5.4.3 Methodological Contribution**

Aside the practical and theoretical contributions of this study, few methodological contributions were also highlighted:

In examining the relationship between the identified variables of this study, some research work examined decision making and job satisfaction as a unidimensional construct but the four major variables of this study were examined as a second order (multi-dimensional constructs). As such, the findings of this study will serve as a reference point to research study that are intended using hierarchical model of structural equation modelling. Another methodological contribution of this study is the usage of partial least square techniques to assess the psychometric properties of each latent construct in terms of item indicator and composite reliability; discriminant validity as well as convergent validity. The study also performs importance matrix analysis that distinguished this study from previous studies that was carried out on the variables of this study.

As all the four main constructs in this study are second order construct, the use of PLS-3 for the analysis techniques helps to revealed the contribution of each of the

first order constructs to the unobservable construct in this study which will help future researchers who intend to study the four main variables in this study. However, leadership behaviour has been conceptualized differently by previous scholars but this study re-conceptualizes them into supportive and non-supportive leadership behaviour which makes this study significant to head of department in the university, researchers and practitioners.

### **5.5 Future Research**

Certainly, this study has provided support for the hypothesized relationship between HODs leadership style, leadership behaviour, decision making and lecturers job satisfaction; some limitations are identified which may guide future researchers.

Firstly, this present study adopted a cross-sectional design and causal inferences where not allowed. Therefore, future researchers are encouraged to consider a longitudinal approach to measure the theoretical constructs at different points in time in order to confirm the outcomes of this study.

Secondly, as obtained in the coefficient of determination, 66.3% of variation in lecturers' job satisfaction as explained by head of departments' leadership style, leadership behaviour and decision making. The remaining 33.7 % are determined by other factors or variables. Further studies could be carried out to find out other variables that could influence lecturer job satisfaction such as lecturers stress management and institutional effectiveness.

Thirdly, this study was carried out among public universities in North-East, Nigeria and this region is one of the regions with lower numbers of public universities in Nigeria. As such, for the generalization of the outcomes of this study, further study

should be carried out to involve other regions of the country as well as using the same instrument. Also further study can be conducted in other countries of the world.

Furthermore, leadership style has been categorized differently by different scholars in relation to organizational theories. This study using the Kurt Lewin leadership styles, path-goal theory and contingency theory of leadership and well as the Herzberg's motivator-hygiene theory and the supporting theory of Job Characteristics Model; the leadership styles theory are classified into autocratic, democratic and laissez-faire leadership style and lecturers job satisfaction encompasses 16 components. Future study using different theories can re-conceptualize the main variables of this study using different theories. Lastly, as the head of departments' leadership style, leadership behaviour and decision making are related to lecturer job satisfaction in this study; further study can be carried out to include non-academic staff in various academic departments as respondents.

## **5.6 Conclusion**

Overall, this study was carried out to determine the relationship of HODs leadership style, leadership behaviour and decision making on lecturers' job satisfaction. The study adopted quantitative research design using questionnaire to gathered data from the respondents. Analysis was done using SPSS (version 22) and Smart PLS 3 in the study. As revealed in the result of this study, lecturers' were moderately satisfied with their job; leadership styles, leadership behaviour and decision making were moderately practised by the HODs and; HODs leadership styles, leadership behaviour and decision making have a significant and positive relationship with lecturers' job satisfaction. This implies that lectures' job satisfaction is determined by various factors among which are HODs leadership style, leadership behaviour and

decision making. As revealed in the analysis of this study where,  $R^2$  value is 0.663 which shows that 66.3% of variation in lecturers' job satisfaction are explained by HODs leadership style, leadership behaviour and decision making respectively.



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## Appendix A

### Research Questionnaire (RQ)

#### Demographic Questionnaire (for Lecturers)

This section contains questions that require your demographic data.

Please circle and write the one that best describes your status.

1. Gender.                      1. Male                      2. Female
2. Age \_\_\_\_\_ years
3. Marital status.   1. Single                      2. Married                      3. Divorce
4. Education level.   1. First degree                      2. Masters                      3. Ph.D
5. How long have you worked with your current head of department \_\_\_\_\_ years
6. Working experience as a lecturer \_\_\_\_\_ years
7. What is your present grade level \_\_\_\_\_
  1. Graduate Assistant
  2. Assistant Lecturer
  3. Lecturer II
  4. Lecturer I
  5. Senior lecturer
  6. Associate Professor
  7. Professor

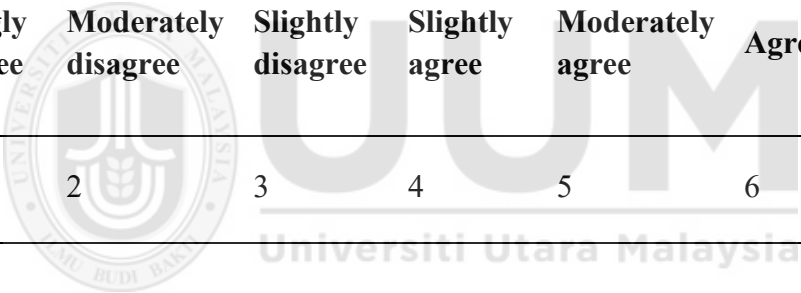
## Leadership Style Questionnaire (MMLSQ)

This questionnaire is used to describe the leadership styles of your current head of department. Answer all items on this answer sheet. Please answer this questionnaire anonymously. Eighteen descriptive statements are listed on the following pages. Judge how each statement fits your head of department. Please circle the best option of each question that reflects your opinion. Use the following rating scale:

---

<b>Strongly disagree</b>	<b>Moderately disagree</b>	<b>Slightly disagree</b>	<b>Slightly agree</b>	<b>Moderately agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5	6	7

---



### Autocratic Style

1. My head of department re-examines critical assumptions to question whether they are appropriate.

1    2    3    4    5    6    7

2. My head of department retain the final decision on authority with in my department.

1    2    3    4    5    6    7

3. My head of department tells lecturers what has to be done and how to do it.

1    2    3    4    5    6    7

4. My head of department caution lecturers over slight mistakes.

1    2    3    4    5    6    7

### **Democratic Style**

7. My head of department provides me with assistance in exchange for my efforts.

1      2      3      4      5      6      7

8. My head of department and lecturers always vote when a major decision has to be made.

1      2      3      4      5      6      7

9. My head of department consider suggestion made by lecturers.

1      2      3      4      5      6      7

10. My head of department send information through email, memos to all lecturers on departmental issues.

1      2      3      4      5      6      7

11. My head of department closely monitor lecturers to ensure accuracy.

1      2      3      4      5      6      7

12. My head of department delegate task in order to implement new procedure.

1      2      3      4      5      6      7

### **Laissez-faire Style**

13. My head of department fails to interfere until problems become serious.

1      2      3      4      5      6      7

14. My head of department avoids getting involved when important issues arise.

1      2      3      4      5      6      7

15. My head of department ask for lecturers ideas and input in departmental plans.

1      2      3      4      5      6      7

16. My head of department allows lecturers to set priorities under his or her guidance.

1      2      3      4      5      6      7

### **Leadership Behaviour Questionnaire (LBQ)**

This questionnaire is used to describe the leadership behaviour of your current head of department. Answer all items on this answer sheet. Please answer this questionnaire anonymously. Sixteen descriptive statements are listed. Judge how each statement fits your head of department. Please circle the best option of each question that reflects your opinion. Use the following rating scale:

<b>Strongly disagree</b>	<b>Moderately disagree</b>	<b>Slightly disagree</b>	<b>Slightly agree</b>	<b>Moderately agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5	6	7

### **Supportive Behaviour**

1. My head of department explain the departmental mission, goals and priorities to lecturers clearly.  
1    2    3    4    5    6    7
2. My head of department is good at providing work structure and system to lecturers.  
1    2    3    4    5    6    7
3. My head of department always encourage and show support to lecturers.  
1    2    3    4    5    6    7
4. My head of department is good at sensing and understanding lecturers' needs.  
1    2    3    4    5    6    7

### **Non-Supportive Behaviour**

5. My head of department do not delegate well to lecturers in the department.  
1    2    3    4    5    6    7
6. My head of department do not gives lecturers' feedback on their request.  
1    2    3    4    5    6    7
7. Lecturers' have commented on my head of department non-supportive behaviour.

1      2      3      4      5      6      7

8. My head of department assigned task to individual than team.

1      2      3      4      5      6      7

9. My head of department prefer to work alone than to work in teams.

1      2      3      4      5      6      7

10. My head of department have confidence on some departmental lecturers.

1      2      3      4      5      6      7

### Decision-making Style Questionnaire (DMSQ)

This questionnaire is used to describe the decision-making styles of your current head of department. Answer all items on this answer sheet. Please answer this questionnaire anonymously. Please circle the one number for each question that comes closest to reflecting your opinion; it ranges from 1 (Strongly disagree) to 7 (Strongly agree). Use the following rating scale:

---

<b>Strongly disagree</b>	<b>Moderately disagree</b>	<b>Slightly disagree</b>	<b>Slightly agree</b>	<b>Moderately agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5	6	7

---

### Rational Decision-Making

1. My head of department double-checks information sources to be sure he/she has the right facts before making decisions.

1      2      3      4      5      6      7

2. Head of department usually has a rational basis for making decision.

1      2      3      4      5      6      7

3. Head of department makes appropriate decision more important to the department.

1      2      3      4      5      6      7



4. Head of department likes to seek advice from lecturers for right directions when he/she is faced with important decisions.

1 2 3 4 5 6 7

5. Head of department generally makes clear decisions.

1 2 3 4 5 6 7

### **Intuitive Decision-Making**

7. Head of department makes decisions in a logical and systematic way.

1 2 3 4 5 6 7

8. When making a decision, head of department considers various options in terms of specific goal.

1 2 3 4 5 6 7

9. When making a decision, head of department relies upon his/her instincts.

1 2 3 4 5 6 7

10. Head of department sometime makes difficult decision on job task.

1 2 3 4 5 6 7

11. Head of department often inquired when it comes to make important decisions.

1 2 3 4 5 6 7

12. Head of department makes quick decisions.

1 2 3 4 5 6 7

### **Avoidance Decision-Making**

13. Head of department often needs the assistance of other people before making important decisions.

1 2 3 4 5 6 7

14. Head of department rarely makes important decisions without consulting widely.

1 2 3 4 5 6 7

15. Head of department avoid other people input in making important decisions.

1 2 3 4 5 6 7

16. Head of department avoids making important decisions until the pressure is on.

1 2 3 4 5 6 7

18. Head of department postpones decision making whenever possible.

1 2 3 4 5 6 7

19. Head of department generally makes important decisions at the last minute.

1 2 3 4 5 6 7

### **Job Satisfaction Questionnaire (MJSQ) for Lecturers**

This section consists of 31 items used to describe your level of job satisfaction.

Please circle the one number for each question that comes closest to reflecting your opinion; it ranges from 1 (Strongly disagree) to 7 (Strongly agree). Please use the following rating scale:

<b>Strongly disagree</b>	<b>Moderately disagree</b>	<b>Slightly disagree</b>	<b>Slightly agree</b>	<b>Moderately agree</b>	<b>Agree</b>	<b>Strongly agree</b>
1	2	3	4	5	6	7

### **Pay**

1. I feel I am being paid a fair amount for the work I do.

1 2 3 4 5 6 7

2. The pay i received is as good as most other organisation offer.

1 2 3 4 5 6 7

### **Status**

3. My head of department is unfair to me.

1 2 3 4 5 6 7

4. I am happy with the status accorded to me by my head of department.

1 2 3 4 5 6 7

### **Promotion**

5. There is really too little chance for getting promotion on my job.

1 2 3 4 5 6 7

6. Those that do well on the job stand a fair chance of being promoted.

1 2 3 4 5 6 7

### **Recognition**

7. When I do a good job, I receive the recognition for it that I should receive.

1 2 3 4 5 6 7

8. I am satisfied with the recognition accorded to me in department.

1 2 3 4 5 6 7

### **Environment**

9. Communications seem good within the department.

1 2 3 4 5 6 7

10. The environment is quite conducive for working.

1 2 3 4 5 6 7

### **Responsibility**

11. My head of department is quite competent in doing his/her job.

1 2 3 4 5 6 7

12. I feel sense of pride in doing my job.

1 2 3 4 5 6 7

### **Working Condition**

13. I am clear with the working condition in the department.

1 2 3 4 5 6 7

14. Many of my head of department rules and procedures make doing a good job difficult in the department.

1      2      3      4      5      6      7

### **Supervision**

15. The supervision process of this department is not clear to me.

1      2      3      4      5      6      7

16. There is strict supervision at work.

1      2      3      4      5      6      7

### **Achievement**

17. I have to work harder in my job in order to meet departmental objectives.

1      2      3      4      5      6      7

18. Lecturers achieved success here as they do in other institutions.

1      2      3      4      5      6      7

### **Work itself**

19. I sometimes feel my job is meaningful.

1      2      3      4      5      6      7

20. I have too much of task to do at work.

1      2      3      4      5      6      7

### **Job Security**

21. I feel that the work i do is been appreciated in the department.

1      2      3      4      5      6      7

22. I feel satisfied with the job security in this university.

1      2      3      4      5      6      7

### **Growth**

23. There is less development training for those who work here.

1      2      3      4      5      6      7

24. There is chance of skills development in the department.

1      2      3      4      5      6      7

**Co-worker**

25. I enjoy the company of my co-workers.

1            2            3            4            5            6            7

26. I like the people I work with.

1            2            3            4            5            6            7

**Policy**

27. I am conversant with the departmental policy and regulations.

1            2            3            4            5            6            7

**Personal life**

28. My head of department shows little interest in the feelings of subordinates.

1            2            3            4            5            6            7

29. I enjoy my personal life with the job am doing.

1            2            3            4            5            6            7

**Salary**

30. I am satisfied with the salary I received.

1            2            3            4            5            6            7

31. Raises in salaries enhance job satisfaction.

1            2            3            4            5            6            7



## APPENDIX B

### List of sampled universities

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S/N	UNIVERSITIES
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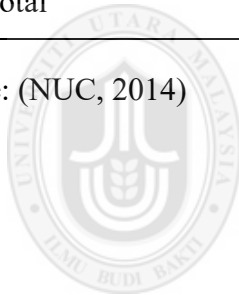
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1. Federal University Kashere (FUK)
2. Federal University Wukari (FUW)
3. Federal University Geshua (FUG)
4. Modibbo Adama University of Technology Yola (MAUTECH)
5. Abubakar Tafawa Balewa University (ATBU)

Total

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Source: (NUC, 2014)



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## APPENDIX C

### Respondents Distribution by University

<b>Demographic Profile</b>	<b>Dimensions</b>	<b>Frequency</b>	<b>Percent</b>
<b>Sampled Universities</b>	University A	67	15.47
	University B	66	15.24
	University C	66	15.24
	University D	95	21.94
	University E	139	32.10
	Total	433	100.00
<b>Gender</b>	Male	287	66.28
	Female	146	33.72
	Total	433	100.00
<b>Age Bracket</b>	21 - 30 years	73	16.86
	31 - 40 years	153	35.33
	41 - 50 years	128	29.56
	51 - 60 years	54	12.47
	61 years and above	25	5.77
	Total	433	100.00
<b>Qualification</b>	Ph.D.	179	41.34
	Master	198	45.73
	Bachelor	56	12.93
	Total	433	100.00
<b>Work Experience</b>	1-5years	91	21.02
	6-10years	137	31.64
	11-15years	105	24.25
	16-20years	47	10.85
	21-25years	43	9.93
	26 years &above	10	2.31
	Total	433	100.00
<b>Ranks</b>	Graduate Assistant	24	5.54
	Assistant Lecturer	77	17.78
	Lecturer II	121	27.94
	Lecturer I	96	22.17
	Senior Lecturer	64	14.78
	Associate Professor	32	7.39
	Professor	19	4.39

Total	433	100.00
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## APPENDIX D

### Descriptive Statistics for all Research Constructs (Variables) of the Study

Research Variable	Mean	Std. Deviation
Autocratic Leadership style	3.74	0.89
Democratic leadership style	4.28	1.27
Laissez-faire leadership style	3.73	0.86
<b>Leadership style</b>	<b>3.81</b>	<b>0.87</b>
Supportive Behaviour	3.64	0.77
Non-Supportive Behaviour	3.57	1.68
<b>Leadership Behaviour</b>	<b>3.51</b>	<b>0.66</b>
Rational Decision Making	4.12	1.05
Intuitive Decision Making	3.66	0.71
Avoidant Decision Making	3.54	0.68
<b>Decision Making</b>	<b>3.61</b>	<b>0.65</b>
Pay	3.64	1.16
Status	3.58	1.15
Promotion	3.88	1.21
Recognition	3.92	1.16
Environment	3.87	1.07
Responsibility	4.20	1.26
WC	4.04	1.15
Supervision	4.11	1.00
Achievement	3.79	1.12
Work itself	3.70	1.22
JB	3.83	1.05
Growth	4.00	1.16
Co-worker	4.15	1.14
Policy	4.55	1.19
PL	4.15	1.22
Salary	4.01	1.11
<b>Job Satisfaction</b>	<b>3.97</b>	<b>0.86</b>

Note: 1.00-2.20 (Very low); 2.21-3.40 (Low); 3.41-4.60 (Moderate); 4.61-5.80 (High) and 5.81-7.00 (Very high)



## APPENDIX E

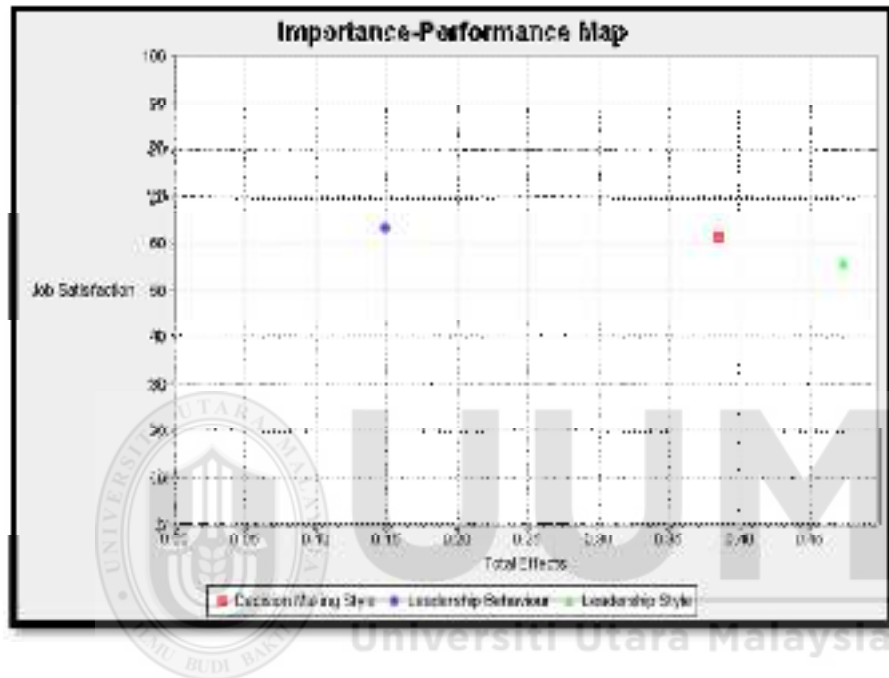
### Assessment of higher order construct validity and reliability

Construct	Dimensions	Loadings	t value	Composite Reliability	Average Variance Extracted
<b>Leadership Style</b>	AL	0.734	21.197**	0.782	0.624
	DL	0.915	56.947**		
	LL	0.674	19.144**		
<b>Leadership Behaviour</b>	SB	0.728	18.763	0.794	0.616
	NSB	0.712	17.961**		
<b>Decision Making Style</b>	RDM	0.79	39.819**	0.768	0.613
	IDM	0.77	26.879**		
<b>Job Satisfaction</b>	ADM	0.72	12.346**	0.947	0.748
	Achievement	0.782	40.317**		
	Coworker	0.737	21.907**		
	Environment	0.825	58.484**		
	Growth	0.789	43.552**		
	JB	0.823	44.701**		
	Pay	0.874	45.372**		
	PL	0.701	14.675**		
	Policy	0.605	11.859**		
	Promotion	0.696	23.618**		
	Recognition	0.751	22.628**		
	Responsibility	0.692	28.669**		
	Salary	0.764	20.835**		
	Status	0.763	33.825**		
	Supervision	0.674	22.777**		
	WC	0.843	54.49**		
Workitself	0.713	25.131**			

\*\*P < 0.001

## APPENDIX F

### IPMA Results of IE as Target Construct



## APPENDIX G

### Pilot study result for Leadership Style measurement

Constructs	Dimensions	Items	Loadings	Composite Reliability	AVE		
Leadership Styles	Autocratic Leadership Style	Aut1	0.741	0.806	0.647		
		Aut3	0.849				
		Aut3	0.806				
		Aut4	0.807				
	Democratic Leadership Style	Laissez faire	Democ1	0.773	0.812	0.661	
			Democ2	0.832			
		Democ3	0.841				
		Democ4	0.823				
		Democ5	0.861				
		Democ6	0.876				
		Laise1	0.811	0.802			0.641
		Laise2	0.803				
Laissez faire	Laise3	0.773					
	Laise4	0.751					

## APPENDIX H

### Pilot study result for Leadership Behaviour measurement

Constructs	Dimensions	Items	Loadings	Composite Reliability	AVE
Leadership Behaviour	Supportive Behaviour	SB1	0.819	0.823	0.713
		SB2	0.809		
		SB3	0.883		
		SB4	0.819		
	Non Supportive Behaviour	NSB1	0.828	0.816	0.722
		NSB2	0.794		
		NSB3	0.819		
		NSB4	0.822		
		NSB5	0.789		
		NSB6	0.823		



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## APPENDIX I

### Pilot study result for Decision Making measurement

Constructs	Dimensions	Items	Loadings	Composite Reliability	AVE
Decision Making Style	Avoidant Decision	ADM1	0.842	0.853	0.717
		ADM2	0.813		
		ADM3	0.822		
		ADM4	0.811		
		ADM5	0.849		
		ADM6	0.851		
	Intuitive Decision	IDM1	0.864	0.876	0.742
		IDM2	0.849		
		IDM3	0.815		
		IDM4	0.861		
		IDM5	0.871		
		IDM6	0.814		
		RDM1	0.857	0.867	0.734
		RDM2	0.862		
		RDM3	0.867		
		RDM4	0.858		
		RDM5	0.869		

## APPENDIX J

### Pilot study result for Job Satisfaction measurement

Construct	Dimensions	Items	Loadings	Composite Reliability	AVE
Job Satisfaction	Achievement	Achievement1	0.822	0.811	0.716
		Achievement2	0.824		
	Coworker	Coworker1	0.851	0.849	0.744
		Coworker2	0.848		
	Environment	Environment1	0.821	0.838	0.723
		Environment2	0.847		
	Growth	Growth1	0.837	0.825	0.757
		Growth2	0.831		
	JB	JB1	0.789	0.812	0.704
		JB2	0.823		
	Pay	Pay1	0.823	0.826	0.715
		Pay2	0.831		
	PL	PL1	0.875	0.874	0.761
		PL2	0.882		
	Policy	Policy1	0.954	0.954	0.954
	Promotion	Promotion1	0.853	0.846	0.741
		Promotion2	0.841		
	Recognition	Recognition1	0.883	0.864	0.744
		Recognition2	0.889		
	Responsibility	Responsibility1	0.873	0.855	0.743
Responsibility2		0.867			
Salary	Salary1	0.871	0.862	0.742	
	Salary2	0.864			
Status	Status1	0.882	0.876	0.759	
	Status2	0.872			
Supervision	Supervision1	0.835	0.833	0.721	
	Supervision2	0.831			
WC	WC1	0.771	0.766	0.673	
	WC2	0.763			
Workitself	Workitself1	0.866	0.864	0.744	
	Workitself2	0.862			

## AP PENDIX K

### Breakdown for the measurement items during and after pilot study

Section	Construct	Dimension	Initial items	Items deleted	Final items	Total
A.	Demography		7	-	7	<b>7</b>
B.	Leadership Style	Autocratic Leadership Style	6	2	4	<b>14</b>
		Democratic Leadership Style	7	1	6	
C.	Leadership Behaviour	Laissez faire Supportive Behaviour	5	1	4	<b>10</b>
		Non Supportive Behaviour	5	1	4	
		Non Supportive Behaviour	11	5	6	
D.	Decision Making Style	Avoidant Decision	9	3	6	<b>17</b>
		Intuitive Decision	8	2	6	
		Rational Decision	6	1	5	
E.	Job Satisfaction	Achievement	2	Nil	2	<b>31</b>
		Co-worker Environment	2	Nil	2	
		Growth	2	Nil	2	
		JB	2	Nil	2	
		Pay	3	1	2	
		Personal life	2	Nil	2	
		Policy	1	Nil	1	
		Promotion	2	Nil	2	
		Recognition	2	Nil	2	
		Responsibility	2	Nil	2	
		Salary	2	Nil	2	
		Status	2	Nil	2	
		Supervision	2	Nil	2	

WC	2	Nil	2	
Work-itself	2	Nil	2	
TOTAL	96	17	79	79

## APPENDIX L

### Assessment of outliers

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	183.81	251.43	215.00	11.874	433
Std. Predicted Value	-2.543	3.068	.000	1.000	433
Standard Error of Predicted Value	6.012	24.703	11.419	3.559	433
Adjusted Predicted Value	181.55	252.47	214.96	11.945	433
Residual	-221.061	238.910	.000	123.416	433
Std. Residual	-1.783	1.929	.000	.996	433
Stud. Residual	-1.807	1.942	.000	1.001	433
Deleted Residual	-225.465	242.241	.037	124.548	433
Stud. Deleted Residual	-1.811	1.949	.000	1.002	433
<b>Mahal. Distance</b>	<b>.011</b>	<b>16.030</b>	<b>2.993</b>	<b>2.632</b>	<b>433</b>
Cook's Distance	.000	.022	.002	.003	433
Centered Leverage Value	.000	.037	.007	.006	433

a. Dependent Variable: ID



## APPENDIX M

### Demographic Data

<b>Demographic Profile</b>	<b>Dimensions</b>	<b>Frequency</b>	<b>Percent</b>
<b>Sampled Universities</b>	University A	67	15.47
	University B	66	15.24
	University C	66	15.24
	University D	95	21.94
	University E	139	32.10
	Total	433	100.00
<b>Gender</b>	Male	287	66.28
	Female	146	33.72
	Total	433	100.00
<b>Age Bracket</b>	21 - 30 years	73	16.86
	31 - 40 years	153	35.33
	41 - 50 years	128	29.56
	51 - 60 years	54	12.47
	61 years and above	25	5.77
	Total	433	100.00
<b>Qualification</b>	Ph.D.	179	41.34
	Master	198	45.73
	Bachelor	56	12.93
	Total	433	100.00
<b>Work Experience</b>	1-5years	91	21.02
	6-10years	137	31.64
	11-15years	105	24.25
	16-20years	47	10.85
	21-25years	43	9.93
	26 years &above	10	2.31
	Total	433	100.00
<b>Ranks</b>	Graduate Assistant	24	5.54
	Assistant Lecturer	77	17.78
	Lecturer II	121	27.94
	Lecturer I	96	22.17
	Senior Lecturer	64	14.78
	Associate Professor	32	7.39
	Professor	19	4.39
	Total	433	100.00

## APPENDIX N

### Descriptive Statistics for all Research Constructs (Variables) of the Study

Research Variable	Mean	Std. Deviation
Autocratic Leadership style	3.74	0.89
Democratic leadership style	4.28	1.27
Laissez-faire leadership style	3.73	0.86
<b>Leadership style</b>	<b>3.81</b>	<b>0.87</b>
Supportive Behaviour	3.64	0.77
Non-Supportive Behaviour	3.57	1.68
<b>Leadership Behaviour</b>	<b>3.51</b>	<b>0.66</b>
Rational Decision Making	4.12	1.05
Intuitive Decision Making	3.66	0.71
Avoidant Decision Making	3.54	0.68
<b>Decision Making</b>	<b>3.61</b>	<b>0.65</b>
Pay	3.64	1.16
Status	3.58	1.15
Promotion	3.88	1.21
Recognition	3.92	1.16
Environment	3.87	1.07
Responsibility	4.20	1.26
WC	4.04	1.15
Supervision	4.11	1.00
Achievement	3.79	1.12
Work itself	3.70	1.22
JB	3.83	1.05
Growth	4.00	1.16
Co-worker	4.15	1.14
Policy	4.55	1.19
PL	4.15	1.22
Salary	4.01	1.11
<b>Job Satisfaction</b>	<b>3.97</b>	<b>0.86</b>

*Note: 1.00-2.20 (Very low); 2.21-3.40 (Low); 3.41-4.60 (Moderate); 4.61-5.80 (High) and 5.81-7.00 (Very high)*

## APPENDIX O

### Psychometric properties for leadership style components

Dimensions	Items	Loadings	Composite Reliability	Average Variance Extracted (AVE)
<b>Autocratic Leadership Style</b>	Aut1	0.711	<b>0.880</b>	<b>0.552</b>
	Aut2	0.679		
	Aut3	0.824		
	Aut4	0.867		
<b>Democratic Leadership Style</b>	Democ1	0.74	<b>0.930</b>	<b>0.656</b>
	Democ2	0.862		
	Democ3	0.824		
	Democ4	0.817		
	Democ5	0.841		
	Democ6	0.784		
<b>Laissez faire</b>	Laise1	0.794	<b>0.903</b>	<b>0.653</b>
	Laise2	0.8		
	Laise3	0.853		
	Laise4	0.745		

## APPENDIX P

### Psychometric properties for leadership behaviour components

Dimensions	Items	Loadings	Composite Reliability	AVE
<b>Supportive Behaviour</b>	SB1	0.819	<b>0.928</b>	<b>0.720</b>
	SB2	0.809		
	SB3	0.883		
	SB4	0.916		
	NSB1	0.919		
	NSB2	0.872		
<b>Non Supportive Behaviour</b>	NSB3	0.815	<b>0.966</b>	<b>0.722</b>
	NSB4	0.885		
	NSB5	0.816		
	NSB6	0.767		



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## APPENDIX Q

### Psychometric properties for decision making components

Dimensions	Items	Loadings	Composite Reliability	AVE
Avoidant Decision	ADM1	0.834	0.941	0.641
	ADM2	0.783		
	ADM3	0.812		
	ADM4	0.831		
	ADM5	0.731		
	ADM6	0.781		
Intuitive Decision	IDM1	0.864	0.939	0.659
	IDM2	0.849		
	IDM3	0.815		
	IDM4	0.861		
	IDM5	0.791		
	IDM6	0.734		
Rational Decision	RDM1	0.858	0.928	0.683
	RDM2	0.902		
	RDM3	0.787		
	RDM4	0.759		
	RDM5	0.872		

## APPENDIX R

### Psychometric properties for job satisfaction dimensions

<b>Dimensions</b>	<b>Items</b>	<b>Loadings</b>	<b>Composite Reliability</b>	<b>AVE</b>
Achievement	Achievement1	0.831	0.811	0.683
	Achievement2	0.821		
Coworker	Coworker1	0.951	0.933	0.874
	Coworker2	0.918		
Environment	Environment1	0.806	0.838	0.721
	Environment2	0.891		
Growth	Growth1	0.917	0.911	0.837
	Growth2	0.913		
JB	JB1	0.797	0.83	0.71
	JB2	0.886		
Pay	Pay1	0.712	0.794	0.566
	Pay2	0.665		
PL	PL1	0.964	0.964	0.931
	PL2	0.966		
Policy	Policy1	0.97	0.95	0.91
Promotion	Promotion1	0.961	0.953	0.91
	Promotion2	0.947		
Recognition	Recognition1	0.971	0.972	0.946
	Recognition2	0.974		
Responsibility	Responsibility1	0.962	0.958	0.92
	Responsibility2	0.957		
Salary	Salary1	0.96	0.952	0.908
	Salary2	0.946		
Status	Status1	0.93	0.925	0.86
	Status2	0.925		
Supervision	Supervision1	0.775	0.843	0.73
	Supervision2	0.926		
WC	WC1	0.856	0.821	0.697
	WC2	0.814		
Work itself	Workitself1	0.947	0.947	0.899
	Workitself2	0.949		

**APPENDIX S**  
**Effect Size and Path Analysis**

<b>Constructs</b>	<b>f<sup>2</sup> effect size</b>	<b>Path analysis</b>
Leadership Style→ Job Satisfaction	36.2%	.427
Leadership Behaviour→ Job Satisfaction	6.4%	.158
Decision Making Style→ Job Satisfaction	22.1%	.358



## APPENDIX T

### Assessment of higher order construct validity and reliability

<b>Construct</b>	<b>Dimensions</b>	<b>Loadings</b>	<b>t value</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted</b>
<b>Leadership Style</b>	AL	0.734	21.197**	0.782	0.624
	DL	0.915	56.947**		
	LL	0.674	19.144**		
<b>Leadership Behaviour</b>	SB	0.728	18.763	0.794	0.616
	NSB	0.712	17.961**		
<b>Decision Making Style</b>	RDM	0.79	39.819**	0.768	0.613
	IDM	0.77	26.879**		
	ADM	0.72	12.346**		
<b>Job Satisfaction</b>	Achievement	0.782	40.317**	0.947	0.748
	Coworker	0.737	21.907**		
	Environment	0.825	58.484**		
	Growth	0.789	43.552**		
	JB	0.823	44.701**		
	Pay	0.874	45.372**		
	PL	0.701	14.675**		
	Policy	0.605	11.859**		
	Promotion	0.696	23.618**		
	Recognition	0.751	22.628**		
	Responsibility	0.692	28.669**		
	Salary	0.764	20.835**		
	Status	0.763	33.825**		
	Supervision	0.674	22.777**		
	WC	0.843	54.49**		
Workitself	0.713	25.131**			

\*\*P < 0.001