FACTORS INFLUENCING FACULTY TURNOVER AT
TEN SELECTED COLLEGES OF TECHNOLOGY/
POLYTECHNICS IN NIGERIA

DISSERTATION

Presented to the Graduate Council of the
University of North Texas in Partial
Fulfillment of the Requirements

For The Degree of

DOCTOR OF PHILOSOPHY

By

Ugbo Mallam, B. A., M. B. A.
Denton, Texas
December, 1992
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Mallam, Ugbo, Factors Influencing Faculty Turnover at Ten Selected Colleges of Technology/Polytechnics in Nigeria. Doctor of Philosophy (Higher Education), December, 1992, 137 pp., 17 tables, 4 illustrations, bibliography, 90 titles.

Despite numerous studies and reviews on faculty turnover, there appeared to be no systematic investigation of factors which influenced voluntary turnover among full-time faculty members in Nigerian educational institutions such as those studied here. In addition, it appeared that Nigeria lacked faculty turnover data for use in any meaningful research study.

Therefore, this study investigated factors perceived to be influential among full-time faculty members leaving their jobs or institutions voluntarily. The six facets of the Job Descriptive Index developed by Smith, Kendall, and Hulin as well as a questionnaire about commitment development by Mowday, Porter and Steers elicited data concerning: present work, pay, promotion, supervision, coworkers, job in general, and commitment.

Two hundred and eight (84.21%) of 247 full-time faculty members from ten selected colleges of technology/polytechnics in Nigeria became involved in this
study. Means, frequencies, percentages, one-way ANOVA set at .05 level and Scheffe Test of Multiple Comparison set at .10 level were used for the analysis of data.

Based on the findings, it could be established that full-time faculty members in Nigerian Colleges of Technology/Polytechnics are dissatisfied with their conditions of service. The most influential factors for voluntary turnover were pay and opportunities for promotion. Conclusions drawn from the study indicate that the demographic characteristics (gender, age, level of education, years of college teaching experience, salary grade level, college/polytechnic of employment, and region of origin) affect full-time faculty members' work attitudes. Further studies are recommended to determine policies and practices suitable for retaining the most capable full-time faculty members in Nigerian Colleges of Technology/Polytechnics.
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Many individuals and organizations, too many to acknowledge them all individually, have contributed to this study. A few of you have played a very special role for the accomplishment of my academic dream.

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Special gratitude and love are offered to my mother, Yamma, and to Uncle Samuel, who will derive a great deal of satisfaction for my completion of this study. Appreciation is also extended to my mother-, father-, and sister-in-law for their moral and financial support.

My deepest thanks go to my wife Winifred, who patiently typed and retyped the drafts of this work. Thanks also go to our children, Ladi, Emmanuel, and Markus, who provided me with their support, faith, and love.

I would also like to express my appreciation to faculty members of the Nigerian Colleges of Technology/Polytechnics, the National Board for Technical Education, and to my employer, Plateau State Polytechnic, Barkin Ladi, Nigeria—-all of whom have contributed in various ways to the successful completion of this study.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF ILLUSTRATIONS</td>
<td>viii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td></td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td></td>
</tr>
<tr>
<td>Research Questions</td>
<td></td>
</tr>
<tr>
<td>Significance of the Study</td>
<td></td>
</tr>
<tr>
<td>Definition of Terms</td>
<td></td>
</tr>
<tr>
<td>Limitation of the Study</td>
<td></td>
</tr>
<tr>
<td>Delimitation of the Study</td>
<td></td>
</tr>
<tr>
<td>Basic Assumptions</td>
<td></td>
</tr>
<tr>
<td>2. REVIEW OF RELATED LITERATURE</td>
<td>10</td>
</tr>
<tr>
<td>The Historical Background of Nigerian Colleges of Technology/Polytechnics</td>
<td></td>
</tr>
<tr>
<td>Turnover: Concept, Theories, and Discussions</td>
<td></td>
</tr>
<tr>
<td>The Measurement of Turnover</td>
<td></td>
</tr>
<tr>
<td>Advantages of Crude Turnover Rates</td>
<td></td>
</tr>
<tr>
<td>Disadvantages of Crude Turnover Rate</td>
<td></td>
</tr>
<tr>
<td>Research Studies on Faculty Turnover</td>
<td></td>
</tr>
<tr>
<td>3. METHODOLOGY</td>
<td>42</td>
</tr>
<tr>
<td>Instruments</td>
<td></td>
</tr>
<tr>
<td>Faculty Biodata</td>
<td></td>
</tr>
<tr>
<td>Job Descriptive Index (JDI)</td>
<td></td>
</tr>
<tr>
<td>Organizational Commitment Questionnaire (OCQ)</td>
<td></td>
</tr>
<tr>
<td>Population and Sample</td>
<td></td>
</tr>
<tr>
<td>Sample</td>
<td></td>
</tr>
<tr>
<td>Data Collection</td>
<td></td>
</tr>
<tr>
<td>Data Analysis and Treatment</td>
<td></td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>4. PRESENTATION AND ANALYSIS OF DATA</td>
<td>52</td>
</tr>
<tr>
<td>Demographic Characteristics</td>
<td></td>
</tr>
<tr>
<td>Gender and Age</td>
<td></td>
</tr>
<tr>
<td>Level of Education and Salary</td>
<td></td>
</tr>
<tr>
<td>Years of Teaching Experience</td>
<td></td>
</tr>
<tr>
<td>First Research Question</td>
<td></td>
</tr>
<tr>
<td>Second Research Question</td>
<td></td>
</tr>
<tr>
<td>Third Research Question</td>
<td></td>
</tr>
<tr>
<td>Summary of Findings</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Present Pay</td>
<td></td>
</tr>
<tr>
<td>Work, Pay, Supervision, and People</td>
<td></td>
</tr>
<tr>
<td>Promotion and Job-in-general</td>
<td></td>
</tr>
<tr>
<td>Supervision and Coworkers/People</td>
<td></td>
</tr>
<tr>
<td>5. SUMMARY, IMPLICATIONS, CONCLUSIONS AND RECOMMENDATIONS</td>
<td>82</td>
</tr>
<tr>
<td>Discussion and Implications</td>
<td></td>
</tr>
<tr>
<td>Conclusions</td>
<td></td>
</tr>
<tr>
<td>Recommendations</td>
<td></td>
</tr>
<tr>
<td>APPENDICES</td>
<td>97</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>131</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Number of Questionnaires Distributed and Percentage Returned</td>
<td>54</td>
</tr>
<tr>
<td>2.</td>
<td>Personal Demographics</td>
<td>56</td>
</tr>
<tr>
<td>3.</td>
<td>Geographic Demographics</td>
<td>57</td>
</tr>
<tr>
<td>4.</td>
<td>Means and Standard Deviation for Turnover as Defined by JDI and OCQ</td>
<td>59</td>
</tr>
<tr>
<td>5.</td>
<td>Comparison of Perceived Voluntary Turnover Based On Respondents' Gender</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>(One-way ANOVA)</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Comparison of Perceived Voluntary Turnover Based on Respondents' Age</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>(One-way ANOVA)</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Pairwise Comparison (Scheffe Test) Indicating Significance by Respondents'</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Comparison of Perceived Voluntary Turnover Based on Respondents' Level of</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Education (One-way ANOVA)</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Pairwise Comparison (Scheffe Test) Indicating Significance Based on</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Respondents' Level of Education</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Comparison of Perceived Voluntary Turnover Based on Respondents' Years of</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Teaching Experience (One-way ANOVA)</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Pairwise Comparison (Scheffe Test) Indicating Significance Based on</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Respondents' Years of Teaching Experience</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Comparison of Perceived Voluntary Turnover Based on Respondents' Salary</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Grade Level (One-way ANOVA)</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Pairwise Comparison (Scheffe Test) Indicating Significance Based on</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>Respondents' Salary</td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>14. Means for Factors of Voluntary Turnover Based on Respondents' Colleges/Polytechnics of Employment</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>15. Pairwise Comparison (Scheffe Test) Indicating Significance Based on Respondents' Colleges/Polytechnics of Employment</td>
<td>74</td>
<td></td>
</tr>
<tr>
<td>16. Comparison of Perceived Voluntary Turnover Based on Respondents' Region of Origin (One-way ANOVA)</td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>17. Pairwise Comparison (Scheffe Test) Indicating Significance Based on Respondents' Region of Origin</td>
<td>77</td>
<td></td>
</tr>
</tbody>
</table>
**LIST OF ILLUSTRATIONS**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>National Educational System Chart</td>
<td>13</td>
</tr>
<tr>
<td>2.</td>
<td>A Model of Turnover</td>
<td>23</td>
</tr>
<tr>
<td>3.</td>
<td>Trends of Voluntary Turnover</td>
<td>61</td>
</tr>
<tr>
<td>B-4.</td>
<td>Map of Nigeria Showing Locations of Institutions Being Studied</td>
<td>113</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

In recent years, personnel turnover has been a problem of central concern in almost every organization, including institutions of higher learning. The literature about turnover dates back to 1900 (Price, 1977). Since then the issue has become the subject of numerous studies and the object of multiple theory development (Mowday, 1981). Various articles and reviews on turnover have been published recently (Cotton & Tuttle, 1986; Krackhardt & Porter, 1986; Mowday, Porter, & Steers, 1982; O'Reilly, Caldwell, & Barnett, 1989; Weiler, 1985).

In an unpublished doctoral dissertation, Sheehan (1988) reported over 1,000 studies on turnover alone. Most of these studies have focused on sociology, economics and social-psychology; very few studies have focused on higher education (Friedhoff, 1988). Among the early studies on this topic was the research conducted in 1909 and 1910 in Germany, leading to the publication of Sumner Slitcher's work, "The Turnover of Factory Labor in 1919" (cited in Cornog, 1957). It was at that time that the concept of personnel turnover was defined and accepted in the fields of personnel and management.
The issue of personal turnover has been studied in many areas and in many countries, however, there remain many areas and countries yet to be studied.

There are considerable turnover data about white-collar workers and non-manufacturing industries. . . . Unfortunately, there are almost no data about Latin American countries (except Peru), the countries of Africa (except South Africa), the Communist countries (except the USSR), Asia (except Japan), and the Middle East (no exceptions). . . . Data about the following important countries are needed: Argentina, Brazil, Nigeria, Egypt, China, India, Indonesia, Pakistan, and Iran. (Price, 1977, p. 43)

Price's findings, coupled with my personal interests in Nigeria and its institutions of higher education, have led to this study of full-time faculty members at certain selected institutions of higher learning in Nigeria. The events that led to the disruptions and eventual closure of several campuses in Nigeria have provided ample justification for this study. In addition, shortages of faculty/staff and other facilities have been disruptive to higher education in Nigeria. The study of faculty turnover might establish a basis by which institutions could assess the success or failure of management policies and practices, as well as providing information for making recommendations for improvement.

Statement of the Problem

The primary focus of this study was the investigation of factors influencing voluntary turnover among full-time
Purpose of the Study

The study investigated factors that have influenced voluntary turnover among full-time faculty members of 10 randomly selected Colleges of Technology/Polytechnics in Nigeria. The focus was:

1. To determine the rate of turnover among the full-time faculty members of the School of Management Studies in Nigerian Colleges of Technology/Polytechnics based on the seven facets: (a) work, (b) pay, (c) promotion, (d) supervision, (d) co-workers, (e) job in general, and (f) organizational commitment. (Mowday, Porter, and Steers, 1982; Smith, Kendall, and Hulin, 1969 & 1985).

2. To identify and report the factors that have been most influential on voluntary turnover, as perceived and reported by their colleagues—full-time faculty members and higher education administrators who remained in selected Nigerian institutions of higher learning.

3. To identify the characteristics of voluntary leavers as perceived among the remaining full-time faculty members at the selected institutions.

4. To determine if Nigerian faculty members were in significant agreement about the factors that have influenced their colleagues' voluntary turnover.
5. To compare responses concerning voluntary turnover among faculty members of Colleges of Technology/Polytechnics in Nigeria with respect to age, gender, length of teaching experience, level of education, salary level, region of origin, and geographic location of the institutions.

6. To adapt the Job Descriptive Index (JDI) of Smith, Kendall, and Hulin (1969 & 1985) and the Organizational Commitment Questionnaire (OCQ) of Mowday, Porter, and Steers (1982) as measurements of perceived voluntary turnover among full-time faculty members who have left Nigerian institutions of higher learning.

7. To recommend measures for developing effective faculty policies, practices, and conditions of service based on the findings of this study.

Research Questions

1. What factors have the greatest influence on voluntary turnover among faculty members of Colleges of Technology/Polytechnics in Nigeria?

2. What have been the trends of voluntary turnover in the Schools of Management Studies among faculty members at the 10 randomly selected Colleges of Technology/Polytechnics in Nigeria during the years 1986-1990?

3. Do significant differences exist among the demographic classifications of faculty members concerning voluntary turnover as measured by the JDI and OCQ?
Significance of the Study

High turnover among qualified full-time faculty members of Colleges of Technology/Polytechnics could undermine the institutions' goals of providing quality education and intellectual creativity. The study of turnover among full-time faculty members may be significant to the institutions of higher learning because permanent faculty members spend more time teaching, researching, advising, and preparing students for life-long careers. Answering the questionnaire might provide these loyal faculty members with the opportunity to express their feelings regarding their academic careers.

The findings might provide awareness of the motivational and environmental factors that could lead to turnover, and such awareness could assist higher education administrators when developing policies and making decisions that affect full-time faculty members at the Nigerian Colleges of Technology/Polytechnics. Friedhoff (1988) wrote that the more information administrators had about turnover among personnel the better their responses might be to this phenomenon.

Moreover, the study might help college administrators:

1. To become aware of their role in retaining committed faculty members and in avoiding conflicts between administration and and full-time faculty members.

2. To assess the impact and consequences of voluntary turnover among full-time faculty members in the School of
Management Studies of the Nigerian institutions of higher learning.

3. To develop recruitment and retention policies, which appeared to be unstable.

Without retention of the best faculty, recruitment schemes might be of little avail toward building faculties of sustained power and vitality. No useful purpose would be served in recruiting outstanding new talent if the most gifted among them might decide to leave voluntarily as a result of inadequate compensation, substandard working conditions, and discouraging prospects (Bowen & Schuster, 1986).

This study was expected to provide information that might stimulate further research concerning voluntary turnover among faculty members in other Nigerian institutions of higher learning. In addition, the results might help identify the intrinsic and extrinsic factors that have influenced full-time faculty members either to leave or to remain with their institutions. Subsequent studies to determine the most influential factors (intrinsic and extrinsic) might be necessary in the future.

Definition of Terms

Turnover: the movement across the membership boundary of a social system (Price & Mueller, 1986).
Centralization: the degree to which power is concentrated in an institution (Friedhoff, 1988)

Commitment: a state in which an individual identifies with a particular organization, appreciates its goals, and wishes to maintain membership in order to facilitate achievement of these goals (Mowday, Porter, & Steers, 1982).

Academic Rank: assistant lecturer, lecturer I-III, senior, principal, and chief lecturers (Plateau State Polytechnic, management guidelines, terms and conditions of service for staff, 1988).

National Board for Technical Education: an Agency established in 1977 by the Nigerian Federal Government to regulate and standardize all aspects of technical education, especially those offered in the Colleges of Technology/Polytechnics. These include equipment, staffing, admission requirements, curriculum, and accreditation (Plateau State Polytechnic, A decade of existence, 1988).

Organization: "Institutions that enable society to pursue goals that could not be achieved by individuals acting alone" (Gibson, Ivancevich, & Donnelly, Jr., 1985, p. G13).

Administrators: rector (president), vice rector (vice president), registrar, bursar, and director (Plateau State Polytechnic, management guidelines, terms and conditions of service for staff, 1988).
Limitation of the Study

The study is limited to differences and correlations among the variables. For example, Research Question 3 sought to determine if there is a significant difference between the categories of each of the demographic characteristics. Inferences cannot be drawn that an adjustment in the salary would necessarily bring about changes concerning voluntary turnover.

Delimitation of the Study

This study is delimited to all full-time faculty members in the Schools of Management Studies at the 10 randomly selected Colleges of Technology/Polytechnics in Nigeria. The Schools of Management Studies are composed of the following departments (a) Accounting, (b) Business Management/Administration, (c) Secretarial Administration, (d) Banking/Finance, (e) Marketing, (f) Insurance, (g) Purchasing/Supply, and (h) Cooperative Studies.

Factors such as productivity, impersonal dynamics, motivation systems, job design, growth needs, or recruitment selection were not part of this research design.

Basic Assumptions

1. Some knowledge of the factors that influence voluntary faculty turnover is important for effective administration in institutions of higher learning.
2. Effective administration and stable faculty are related to the accomplishment of institutional goals and objectives.

3. The responses of the subjects to the survey instruments used for this study represent the feelings concerning voluntary turnover held by their colleagues who remain full-time faculty members in the School of Management Studies of the Nigerian Colleges of Technology/Polytechnics.
CHAPTER 2

REVIEW OF RELATED LITERATURE

Literature concerning faculty turnover in Nigeria is as current as today's newspaper. Data for this study were collected during a trip to Nigeria in April and May, 1992. In the airport prior to departure for the return trip, I noticed the headline on the May 20 issue of The Nigerian Standard concerning an article written by Oye Fadunmoye, a Nigerian journalist, discussing an impending strike among educational professionals in Nigeria (Fadunmoye, 1992). Nothing could have been more pointed in highlighting the need for this research.

However, prior to beginning this study of factors influencing faculty turnover at 10 randomly selected Colleges of Technology/Polytechnics in Nigeria, a review of related literature had been conducted—including a computer search using the Educational Resources Information Center (ERIC). The Current Index of Journals of Education as well as the Resources in Education Index covering the period of January 1980 through June 1990 were also used.

The literature review has been presented in four parts: (a) the historical background of Nigerian Colleges of Technology/Polytechnics, (b) turnover: concept,
theories, and discussion, (c) the measurement of turnover, and (d) research studies on faculty turnover.

The Historical Background of Nigerian Colleges of Technology/Polytechnics

The historical development of higher education in Nigeria would be incomplete without mentioning the formal establishment in 1934 of Yaba College of Technology. In 1948, its first 104 students were transferred to the University of Ibadan. Initially, Ibadan University had a special relationship with the University of London. During 1985-86, there were 27 Colleges of Technology/Polytechnics (10 federal and 17 state) with a student population of over 61,136 (Aderibigbe, 1989). In 1989, there were 30 Colleges of Technology/Polytechnics owned and funded by the federal and state governments (see Appendix B).

Both the federal and state institutions were under the jurisdiction of a federal agency: The National Board for Technical Education (NBTE). The functions of this board included the accreditation and establishment of the minimum standard requirements that each institution had to meet before it would be allowed to award the National or Higher National Diploma (ND or HND) in a discipline that had been accredited.
Some of the basic requirements for the accreditation of a program included: (a) qualified full-time lecturers at senior, principal, and chief lecturer level (assistant professor, associate professor, and professor), as well as (b) adequate financial support by the owners of the institutions—the federal or state governments. At the time this study was conducted, Nigeria had no private Colleges of Technology/Polytechnics.

The accreditation of a program could be revoked or denied if, after visitation from the National Board for Technical Education, serious failures to meet the minimum requirements were found. Such deficiencies could include students who might not meet the basic entry requirement of four credits in General Certificate of Education (GCE)/Senior School Certificate (SSC), or four credit passes in relevant subjects at the preliminary levels for the program. Recruitment and retention of qualified full-time faculty members was also considered to be a factor for the granting and retention of the accreditation status of a program.

Recently, the 6-3-3-4 educational system has been developed (Figure 1). The system reflected the present National Policy on Education, including technical education, which has been aimed at giving attention to the need for the development of skills in certain basic fields such as food technology, clothing manufacturing service,
machines, and other sectors that might be urgently needed for the economic growth of the country. *National Policy on Technical Education* (1989) has stated the aims for technical education:

1. To provide trained manpower in applied science, technology, and commerce—particularly at sub-professional grades.

2. To provide the technical knowledge and vocational skills necessary for agricultural, industrial, commercial, and economic development.

3. To educate people who could apply scientific knowledge for the improvement and the development of solution to environmental problems for the use and convenience of humankind.

4. To provide an introduction to professional studies in engineering and other technologies.

5. To provide training and impart the necessary skills leading to the production of craftsmen, technicians, and other skilled personnel who would become enterprising and self-reliant.

6. To enable young men and women to have an intelligent understanding of the increasing complexity of technology.

The establishment of the Nigerian *National Policy on Technical Education* (1989) would serve no useful purpose unless the management of the various institutions as well as the federal government was prepared to take appropriate
measures toward the reduction of voluntary turnover among the full-time faculty members, especially those teaching business related courses such as: (a) accounting, (b) banking, (c) finance, (d) marketing, and (e) secretarial studies.

Meanwhile, the student population has continued to grow, while the number of the faculty members has appeared to be shrinking. For example, at the Plateau State Polytechnic from 1980-1988, twenty faculty members had been employed in a department, but twelve of them resigned (Plateau State Polytechnic: A decade of existence, 1988). In the 1985-86 session, there were 27 Colleges of Technology/Polytechnics (federal: 10; state: 17), with a student population of over 61,136 (Aderibigbe, 1989). Currently, there are 30 Colleges of Technology/Polytechnics owned and funded by the federal and state governments (Appendix B).

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Basic requirements for the accreditation of a program include: (a) qualified full-time lecturers at senior, principal, and chief lecturer levels (assistant professors, associate professors, and professors), and (b) adequate financial support by the owners of the institutions—federal or state governments. At present, there are no private colleges of technology/polytechnics in Nigeria.

The accreditation of a program could be revoked or denied if, after visitation from the National Board for Technical Education, serious failures to meet the minimum requirements were to be found. Such deficiencies could include students who might not meet the basic entry requirement of four credits in General Certificate of Education (GCE)/Senior School Certificate (SSC) or four credit passes in relevant subjects at the preliminary levels for the program. Recruitment and retention of qualified full-time faculty members has also been considered a factor affecting the granting and retaining of the accreditation status for a program.

**Turnover: Concept, Theories, and Discussions**

Several scholars have defined and discussed theories of turnover. Muchinsky and Morrow (1980) referred to turnover as an individual's voluntary termination of employment from an organization. Gaudet (1960) described the term as the
movement of workers from one geographical area to another, from one occupation to another, and from one industry to another. For example, an accounting faculty member might decide to resign from a teaching position to become a practicing accountant, or vice versa. Price and Mueller (1986) defined the term as the voluntary separation of an individual from an organization. Watts and White (1988) stated that turnover occurred when an individual voluntarily decides to leave the organization. Harper (1982) referred to labor turnover as the rate at which employees, who have to be replaced, leave an enterprise.

Price has identified two types of turnover: involuntary and voluntary. Involuntary turnover has been the movement, initiated not necessarily by the individual but by the organization. Dismissals, layoffs, retirements, and deaths have been frequently cited as examples of involuntary turnover. In a situation where a wife might have to quit her job at her husband's insistence, marriage would become a factor for the separation. Neither the member nor the organization initiated the separation; the marriage partner initiated the turnover (Price, 1977).

However, for the purpose of this study, attention has been focused on voluntary turnover defined as "the degree of individual movement across the membership boundary of a social system" (Price, 1977, p. 4). The term is frequently used interchangeably with leaves and resignations.
With respect to turnover, the development of causal models, including variables from several domains, has been a major theoretical activity. Although many of the models have emphasized different parts of the turnover process, Bluedorn (1982) wrote that they all tended to be complementary rather than contradictory.

Price's (1977) model of the turnover process began with a series of structural and individual determinants of job satisfaction, including: (a) centralization, (b) pay, and (c) communication. According to Price, an individual's satisfaction determined the probability of an individual's staying in or leaving the organization. Several empirical studies have provided support that variables such as age and length of service were important in influencing voluntary turnover (Bluedorn, 1982; Price & Mueller, 1986; Sheehan, 1988; Terborg & Lee, 1984; Weiler, 1985). Organizational commitment has also been cited as significantly related to turnover (Koch & Steers, 1978; Mowday, Porter, & Steers, 1982; Steel & Ovalle, 1984). Mobley (1982) also found that dissatisfaction could lead to job search.

Porter and Steers (1973) advocated a theory of met expectations to explain employee turnover. They posited that when an employee's prior expectations were met on the job, that person tended not to quit. In support of this claim, Porter and Steers (1973) cited the research of
Weitz (1956), Ross and Zander (1957), and Katzell (1968)—who examined the effect of fostering more realistic expectations on the part of employees and the impact of this on turnover. The met expectation theory was psychological in nature and was devoid of structural and economic factors (Muchinsky & Morrow, 1980).

The impact of structural determinants on turnover has been investigated by sociologists and organizational theorists. Economists have concentrated their studies on the relationship between turnover and other factors such as the business cycle and inter-industry turnover rates. Each discipline has concentrated on its domain of inquiry to the exclusion of others. The equity theory stated that persons might leave their jobs if the jobs were perceived to be inequitable (Pritchard, 1969). However, Muchinsky and Morrow (1980) contended that effort to integrate the studies to form broader theories of turnover has been minimal.

Price (1975) provided an inventory of four turnover determinants, all of which have received empirical support. These included pay, participation in primary groups, communication, and centralization of decision-making process. Price contended that these factors influenced a person's decision to terminate employment. He also advocated the inclusion of sociological and economic determinants in a model of turnover.
Mobley (1977) proposed an intermediate linkage system to explain the relationship between job satisfaction and turnover. The model allows for the evaluation of multiple alternatives such as the various psychological and economic factors that influence the decision-to-quit process. Using correlational and regression analyses, Muchinsky and Morrow (1980) found that the best predictor of actual turnover was the intention to quit. To explain turnover, Mobley, Griffeth, Hand, and Meglino (1979) saw the importance of search-related variables, such as relocation or job dissatisfaction as well as the perceived availability of acceptable job alternatives.

Muchinsky and Morrow (1980) grouped the determinants of turnover into three categories: (a) individual, (b) work-related, and (c) economic. Each determinant, consisted of variables which were either positively or negatively correlated to turnover. The individual determinants, or factors, consist of age, length of service, family size, vocational interest, intelligence, aptitude, personality, and biographical indices—all of which have been found to be predictive of turnover.

Work-related determinants included: (a) the receipt of recognition, (b) feedback, (c) job autonomy and responsibility, (d) supervisory characteristics, (e) job satisfaction, (f) commitment to the organization, (g) pay, (h) seniority provisions, (i) role clarity, and (j) occupa-
tional role. Bluedorn (1982) reported that employees were less likely to quit their jobs if they received positive feedback and recognition for their work. Bluedorn also reported that autonomy and responsibility were negatively associated with turnover. When investigating the relationship between supervisory characteristics and turnover, Muchinsky and Morrow (1980) reported that employees who had supervisors that were high on human relations, or consideration, were less likely to quit than those employees whose supervisors were lacking in consideration. Blake and Mouton (1964) identified concern for production and people as the most effective leadership style.

Of the three determinants of turnover, Muchinsky and Morrow (1980) held the view that economic determinants had the most forceful impact on turnover. Pettman (1975b) cited three economic variables that influence turnover: (a) were the state of the labor market, (b) the sector of activity, and (c) the geographical location of the organization. March and Simon (1958) stated that the most accurate single predictor of labor turnover was the state of the economy. With full employment, voluntary labor turnover tended to be high, and with rising unemployment voluntary turnover tended to fall (Muchinsky & Morrow, 1980). The economic situation in Nigeria has seemed to be deteriorating, with 25 percent rate of inflation in 1989 as

Muchinsky and Morrow (1980) found that economic opportunity had the capacity to limit individual turnover behavior. Their model of turnover and its consequences have been summarized in Figure 2. The cell entitled Turnover represented voluntary turnover, and the arrow extending from Economic Opportunity Factors to Turnover indicated that economic factors were the primary predictor of voluntary turnover (Muchinsky & Morrow, 1980, p. 275). The model also showed the consequences for turnover to an individual organization and to the society. However, Waters and Roach (1973) found that employees would not voluntarily leave their jobs unless alternative opportunities for employment were available and appropriate for the individual's need. In other words, the availability of alternative employment was, in most cases, a consideration affecting voluntary turnover. Thus, economic opportunity acted as a factor that delimited individual turnover behavior (Muchinsky & Morrow, 1980).

Salipante and Goodman (1976) identified (a) length of service, (b) training, and (c) counseling as factors capable of promoting the retention of employees. Muchinsky and Morrow (1980) suggested that more theoretical and empirical studies be conducted to determine if retention was the opposite of turnover.
Figure 2
A Model of Turnover
Muchinsky and Morrow also suggested that turnover should be considered as dynamic and longitudinal, rather static and cross-sectional. They proposed that "with full employment voluntary labor turnover tends to be high and with rising unemployment voluntary turnover tends to fall" (Muchinsky & Morrow, 1980, p. 273).

The question might be raised as to why turnover needed to be studied. Several reasons for studying turnover have been cited. Devanna, Fombrun, and Tichy (1981) wrote that periodic audits of an organization's human resources ensure agreement between personnel functions and organizational needs. Walker (1980) stated that a critical management audit would need to include the forecasting of the firm's labor supply and demand. Mobley (1982) emphasized that management would need to monitor turnover rates in order to take corrective action when the costs of turnover appeared to be excessive. Such measures would include the awareness of turnover rates and the development of strategy for keeping the rates at a desired level. Peskin (1973) found that voluntary turnover has cost American business billions of dollars annually. Demarco and Lister (1987) noted that turnover accounted for about 20 percent of all manpower expense.

Despite the awareness of the colossal waste involved, management has yet to develop a reliable technique for dealing with the problems associated with turnover. This
may be more obvious with respect to the Nigerian institutions of higher learning where mass exodus of academic members has continued uninterrupted for years. Data on the turnover rate in Nigerian institutions were lacking. There appeared to be no record as to why the faculty members had been leaving their academic jobs. (Friedhoff, 1988, had noted a turnover rate between 4.5 and 6 percent at certain American universities.)

Mowday (1981) examined the attributes of employees of seven agencies of state and county government who remained on the job, reporting the reasons for turnover among coworkers. His findings suggested that workers with positive job attitudes were less likely to indicate that others left because of job dissatisfaction. However, dissatisfaction was often cited in the literature as one of the reasons for leaving (Mowday, 1981; Parasuraman, 1982; Pettman, 1975; Price & Mueller, 1986; Zey-Ferrell, 1982). Taking a more attractive job elsewhere was also cited as a reason for leaving.

Although employee turnover was considered detrimental to an organization, Werbel and Bedeian (1989) wrote that the loss of predominantly poorer performers might be less cause of concern to an institution than the disproportionately higher loss of its better performer. Turnover could improve the morale of the remaining employees by creating opportunities for internal
advancement. Werbel and Bedeian (1989) found that older, poorer performing employees had a tendency to remain with an organization, due partly to difficulties in locating another job. Dissatisfaction with perceived promotion opportunities also prompted individuals to consider leaving an organization (Parasuraman, 1982).

Regardless of how turnover was viewed, it had both positive and negative ramifications. What level could be considered acceptable?

Dalton and Todor (1979) offered several suggestions for establishing an appropriate level of turnover:

1. The rate of turnover, often expressed in percentages was difficult to interpret and thus misleading. For example, an unusually high percentage of turnover in a seasonal industry, or seasonal employment, could be normal. A high rate of turnover could be expected when the cost of preventing it exceeded the cost of the turnover itself. For those working as bank tellers, waitresses, and in similar service-oriented jobs, this tendency could be considered as normal.

2. Without the consideration of the individual component, raw turnover percentages were not easy to evaluate. For example, "a relatively low percentage of turnover of one or two percent could have critical impact on an organization if the individuals that had chosen to
leave had essential or exclusive skills or information" (Dalton & Todor, 1979, p. 231). A high percentage of turnover could have little or no effect if the individuals who left were perceived to have little to offer. Thus, to compare one organization's 20 percent turnover rate with another's 40 percent turnover rate on the basis of the raw percentage alone could be misleading, and acting on that comparison might be disastrous.

3. To accurately assess turnover rate, both the costs and the benefits would have to be appraised. Estimating the impact of turnover on the organization or institution of higher learning by summing up the costs of recruiting and training would reflect only one side of the issue. This approach would ignore the possibility that turnover might also have positive consequences for an organization.

4. Because turnover would have consequences that would go far beyond its boundary and its members, the accurate evaluation of turnover would have to include a wider scope than that of a single individual institution. That has raised the issue of both the purpose and the necessity for the measurement of turnover.

The Measurement of Turnover

The measurement of turnover, one of the techniques used to determine industrial instability, has been one of the best tests of the relative value of human resource
relations policies and practices within an organization (Scheers, 1962). Measurement of turnover has also been used to analyze employees' dissatisfaction with job, remuneration, and working conditions--factors which management might be able to improve (Harper, 1982).

According to Gordon (1991), turnover measurement has provided a good indication of problems. For example, if turnover was concentrated within the first weeks or months after being hired, that could indicate that something was wrong with the selection process. In contrast, turnover that occurred after the first twelve to eighteen months would indicate problems with career progression. Gordon also suggested that turnover data needed to be collected, analyzed, and discussed to ensure that the line managers understood what the numbers meant and how they were calculated.

Chairmen, deans, and directors of the various departments, schools, or colleges could be regarded as the institutional managers who would need to be familiar with the calculation and interpretation of turnover data. Gordon contended that if managers could not measure turnover, they could not call attention to problems associated with turnover, nor could they correct those problems. He emphasized the need of exit interview of employees before their final departure (separation) from an organization. Such an exercise would enable an organiza-
tion to find out who left and why—by job-type, length of service, department manager, and source of hiring.

Nigerian institutions of higher learning could adopt a similar approach to assess the level of commitment and the rate at which faculty members left their academic jobs. Wennstrom (1970) wrote that the problems of the loss of qualified faculty members, or staff, to other professions, vocations, or institutions demanded attention. High labor turnover, according to Harper (1982), resulted in low morale among employees. Thus, it was important to keep turnover as low as possible. Dalton and Mesch (1991) wrote that the common objective of most turnover study has been to reduce the incidence of such behavior.

Pettman (1975) stated that the measurement of voluntary turnover was necessary for (a) decision-making policy, (b) comparative purposes by company and management, and (c) feedback when situations were manipulated. Champion (1991) suggested that the measurement of turnover should be a continuous rather than a dichotomous process. Unfortunately, because of inaccurate organizational turnover data, such might not always be possible. For example, "some record-keeping systems might allow only a single reason for turnover to be recorded, even though there could be several reasons; face-saving reasons may be recorded to ease an unpleasant termination" (Champion, 1991, p. 200).
Regardless of the labor turnover rates, Merwe and Miller (1971) wrote that level of employment was an important factor in determining the rate of turnover. Turnover could be measured in various ways (Harper, 1982). Merwe and Miller found more than 20 different techniques for the measurement of the turnover rate. Price (1977) examined a few that have frequently been used in empirical research studies, including: (a) crude turnover rates, (b) average length of service, (c) stability and instability rates, (d) accession and separation formulae, and (e) replacement formula. For the purpose of this study, only the crude turnover rates were discussed.

Price identified two types of crude turnover rates: (a) accession rate, and (b) separation rate. The crude turnover rate was calculated by expressing the total number of those who left within a given period, expressed as a percentage of the total work force. There have been two formulas for types of crude turnover rates:

\[
\begin{align*}
\text{Accession Rate} & = \frac{\text{Number of new members added during period}}{\text{Average number of members during period}} \\
\text{Separation Rate} & = \frac{\text{Number of members who left during period}}{\text{Average number of members during period}}
\end{align*}
\]

(Price, 1977, p. 15)

Based on these formulas, turnover has included the movement of members both into and out of an organization.
Both approaches required data collection during a certain period of time. Months and years were frequently used for the length of time. However, Price suggested that for smaller organizations, yearly rather than monthly calculations might be more appropriate. The crude turnover rates were commonly expressed in percentages. Price described crude as a direct application of a demographic term to the measurement of turnover, and stated that it had both advantages and disadvantages.

Advantages of Crude Turnover Rates

Crude turnover rates have been easy to compute. "All that is needed is the number of leavers during a period and the size of the membership at the beginning and end of the period" (Price, 1977, p 16). The number of leavers could be obtained from the personnel office or, in the case of institutions of higher learning such as the Colleges of Technology/Polytechnic in Nigeria, information could be obtained from the establishment division of the registry department.

In addition, crude turnover rates have been readily understandable. This understanding could be enhanced by the use of percentages, which could indicate how high or how low the turnover. The crude turnover rates indicated all movement into and out of the organization. The utility of the crude turnover rates is enhanced because they
indicate how much turnover characterizes an organization (Price, 1977).

**Disadvantages of Crude Turnover Rate**

The rate had no precise meaning. Merwe and Miller (1971) found that a separation rate of 100 percent could indicate that:

1. The entire labor force had turned over once during the year.
2. Half the labor force had turned over twice, and the other half had remained stable.
3. A quarter had turned over four times.

Price (1977) also found that even if 100 percent of the labor force left sometime during the year, there would still be a few experienced members in the organization. The lack of a precise meaning for the two crude turnover rates would tend to diminish their utility.

Crude turnover rates were also misleading because they did not control the factors that were related to turnover. The most important uncontrolled variable was length of service. Price stated that organizations with high separation rates were usually thought to be relatively low in effectiveness because of the negative impact that turnover was believed to have on effectiveness.

However, Marshall (1964) found that the rate of turnover rose as the scarcity of labor grew more severe and
declined during periods of slack employment opportunities. Employers viewed a high turnover rate as a sign of bad morale among workers. Thus, efforts should be made to keep workers' morale high by getting them involved in the activities of their organizations. Besides, measuring labor turnover enables the organization to know the extent employees are being lost. Harper (1982) suggested that any report of labor turnover would need to include reasons for such voluntary turnover so that management or administrators could take appropriate action to reduce turnover to an unacceptable level.

Research Studies on Faculty Turnover

One of the first quantitative studies of faculty mobility involved four institutions: Carleton College, Minnesota; the University of Chicago; Harvard University; and the University of Minnesota (Caplow & McGee, 1965). The records of these institutions were audited, and it was found that the rate of turnover among faculty members declined as the age and size of the institutions increased. Ruml and Tickton (1955) attributed the decline in academic careers to the deterioration of salaries at the top of the profession. They argued that the salary levels were inadequate to attract and retain professors of suitable quality. Weiler's (1985) survey of tenured faculty members
at the University of Minnesota suggested that salary considerations were an important determinant of faculty mobility. Nicholson and Miljus (1972) believed that promotion and salary policies were at the very core of turnover among professors at a liberal arts college.

In a study of faculty turnover at certain private liberal arts colleges, Moore (1970) classified factors influential to faculty turnover into two groups:

1. Intrinsic factors, which included: (a) achievement, (b) recognition, (c) work itself, (d) responsibility, (e) possibility of growth, and (f) advancement.

2. Extrinsic factors, which included: (a) supervision, (b) policy and administration, (c) working conditions, (d) interpersonal relations, (e) status, (f) job security, (g) salary, and (h) personal life.

Herzberg (1966) defined the concept of intrinsic factors as the process or functions which were centrally involved in the work itself. Intrinsic factor described the individual's relationship to what he or she did. Extrinsic factors, on the other hand, related to the situation, context, or environment in which an individual performed the duties he or she might be assigned. Friedhoff (1988) recognized the importance of commitment as an explanatory component of turnover among faculty members.
In a study of college teachers, Brown (1967) found that location was one of the factors that caused individuals to switch jobs. The reasons for preferring one geographic location to another were many. For example, if the new faculty members were at the advanced stage of completing their dissertation, they would be inclined to remain near their graduate school. Thus, geographic location of jobs has been considered as one of the most influential factors affecting faculty mobility. Bowen and Schuster (1986) found that non-monetary fringe benefits, such as the use of recreational facilities and scholarship funds for faculty's children, were important in making decisions to leave or remain with a particular institution.

In a study of 330 faculty members analyzing their intent to leave a major state university in the Midwest United States, Zey-Ferrell (1982) identified a number of predictor variables, including: (a) personal traits, (b) parental influence and socialization, (c) higher education, (d) occupational status, (e) personal values, and (f) professionalism and support for collective bargaining. Zey-Ferrell learned that once an individual found that his or her objectives were not being met, he or she might (a) choose to remain in the present undesirable system, (b) leave the system (exit the institution), or (c) attempt to change the system by implementing an alternative structure with the hope of achieving the desired objectives while
remaining in the institution. Zey-Ferrell argued that if one could not leave the system due to environmental constraints such as a tight labor market or organizational constraints (time, energy, and knowledge, investment in the existing system), the viable option might be to effect change in the system.

According to Zey-Ferrell, personal traits consisted of age and sex. Parental socialization consisted of parents' religious denominations as well as the educational and occupational achievements of both father and mother. The highest educational level, discipline, and occupational status (tenure, annual income, semester hour teaching load) were among the factors that influenced turnover among faculty members.

Thanagosai (1988) observed that some faculty members at six teachers colleges in Bangkok, Thailand, left teaching jobs because of their institution's failure to ameliorate between job satisfaction and dissatisfaction. He added that skilled administrators would likely realize that a high turnover rate among faculty members could result in limited commitment, ineffective curriculum development, and faculty unrest. Nicholson and Miljus (1972) wrote that high turnover could be costly to the reputation of a college and to the well-being of the students. Scheer (1962) also stated that turnover was costly and therefore worth worrying about. Sykes (1988) criticized modern
academicians as too mobile, self-interested, and without loyalty to their institutions. However, Baldwin and Blackburn (1983) wrote that a moderate degree of faculty mobility among colleges and universities was beneficial to higher education.

To maintain and enhance the academic vitality of a campus, Smith (1976) listed a number of conditions and strategies, including:

1. Decisive leadership and support that was coordinated administratively with faculty leadership which was committed to cooperation.

2. An informal academic posture which relied on personal interaction and sidewalk conservations.

3. A common understanding of mission and corresponding professional expectations among faculty members.

4. Paying attention to new faculty members facilitated vitality among them. The young academicians were said to be only beginning to become professional teachers, mentors, researchers, and authors.

5. Paying attention to mature faculty members was equally vital to prevent career dissatisfaction. They would need to recharge, refine, and extend their professional and personal development.

6. Training of academic managers to employ incentives effectively. The dean and director of faculty development
was expected to contribute significantly to such a learning process.

7. Rewards of faculty should correlate with talent. In other words, time should be granted for excelling in research, for writing books, and for exhibiting works of art.

This list might vary from institution to institution depending on the leadership, size, location, and financial resources as well as upon the ways in which faculty members perceived themselves (Baldwin, 1985).

According to Smith (1976), factors that inhibited vitality included:

1. Competitive and control posture dominance of departmental structures could generate fragmented goals and objectives, could heighten competition for limited resources, thus could result in unnecessary duplication.

2. Limited options for continuing development could also inhibit vitality.

3. An excessive number of innovative ventures in a short time period might suppress faculty effort and ideas, thus leading to frustration and exhaustion. Over indulgence in community projects could at times undermine the integrity of a college's program.

4. Poor communication could provoke charges of not being consulted, or manipulated, which could result in
failure to enlist sufficient faculty and administrative support—thus inhibiting vitality among faculty members.

This list was by no means conclusive and could be extended to suit the situation of the individual institutions. The end result of the strategies, for the benefit of all concerned, could be to improve faculty members' morale as well as productivity.

In a study to examine the interrelationships among university employees, Tanaomi (1990) found that university personnel had things in common with other occupational groups on the level of job satisfaction. He contended that the dimensions with which employees were least satisfied were promotional opportunities and pay. It was common of all employees that work satisfaction predicted the intention to quit. In addition to periodic demographic and job satisfaction surveys for forecasting losses of employees, Tanaomi recommended direct measures for employees' turnover intention. To reduce general employee turnover, he also suggested the use of various strategies, such as faculty development and periodic revision of benefits. Granting sabbatical leave to faculty members would help prevent or reduce future turnover problems.

In a study of two campuses of a state university, McCain, O'Reilly, and Pfeffer (1983) stated that two of the effects of turnover were poor communication and power struggles among employees. Thomas (1976) stated that
power struggle and conflicts within a department had the potential to erode or diminish the department's attractiveness as a place to work. In another study of why faculty members left the university, Weiler (1985) indicated that the probability of accepting an outside offer was positively associated with the expected salary gain. Weiler (1985) suggested that the institution would need to keep its salaries competitive and to acquire flexible resources in order to respond promptly to outside offers in an effort to retain its best faculty members.

In a study of academic professionals at a research university, Copur (1990) found a significant relationship between faculty dissatisfaction and decisions that affected their work and environment. More specifically, Copur (1990) concluded that (a) faculty members expected to make decisions about the content of their jobs, (b) faculty members expected to make those decisions directly related to the context of their jobs collectively in faculty committees, (c) faculty members expected administrators to make decisions pertaining to support and coordinating functions, and (d) role conflicts experienced by faculty members were negatively correlated to job satisfaction and satisfaction with academic decisions. Copur (1990) also pointed out that faculty members tended to be happy with decisions when the actual decision-making process did not violate their expectations. In other words, the faculty
members became resentful when they experienced role incompatibilities. Such resentment could result in increased turnover among faculty members.

A question might be raised as to whether a model developed to explain turnover among industrial workers could be generalizable to faculty members. Locke, Fitzpatrick, and White (1983) conducted a study of job satisfaction and role clarity among university and college faculty. They found that faculty members generally wanted the same things—such as better conditions of service, compensation, and income—from their jobs as did the employees in other types of organizations. The results of this present study were expected to provide some evidence to either support or reject the premises of Locke and his colleagues.
CHAPTER 3

METHODOLOGY

The methods used in this study included the administration of three instruments with many standardized items which have been used by national analysts. In order to give the study a comparative base within the Nigerian context, the selection of the sample was by stratified random sampling, and the instruments were administered at ten randomly selected colleges of technology/polytechnics in Nigeria in states throughout the country. (See map on page 121.)

Instruments

Three instruments were used for the study: (a) faculty biodata, (b) the Job Descriptive Index (JDI), and (c) Organizational Commitment Questionnaire (OCQ). (See Appendix D).

Faculty Biodata

A faculty biodata was developed by the researcher for the purpose of collecting the demographic characteristics of the respondents. These characteristics served as the independent variables: (a) gender, (b) age, (c) level of
education, (d) years of college teaching experience, (e) salary grade level, (f) faculty region of origin, and (g) location of the institution. Using the information sheet also developed by the researcher, data for the computation of the trends of turnover rates over the five-year period 1986-1990 were collected from official records of the various institutions.

**Job Descriptive Index (JDI)**

The JDI was the revised edition developed by Smith, Kendall, and Hulin (1985). According to Porter and Steers (1973), JDI is a good instrument for use in the studies of turnover and absenteeism. Because the instrument had been validated, and was thus reliable, it seemed to be appropriate for this study. The instrument had also been noted for internal consistency and reliability of between 0.80 and 0.88. It correlated positively with other measures of job satisfaction \( r = 0.70 \) (Smith, Kendall & Hulin, 1985). Maduagwu (1986) successfully used the JDI to measure job satisfaction among secondary school principals in the Rivers State of Nigeria. The instrument was divided into six subsections: (a) work on the present job, (b) present pay, (c) opportunity for promotion, (d) supervision, (e) co-workers, and (f) job in general.
Organizational Commitment Questionnaire (OCQ)

The third instrument administered during this study was the OCQ. The items have been modified by changing the word organization to institution or to college/polytechnic. The theory underlying commitment suggested that an employee's commitment to an organization should be a fairly reliable predictor of certain behaviors, especially turnover (Mowday, Porter, & Steers, 1982). Committed people were assumed to be more likely to remain with an organization, and to work toward the organizational goals' attainment, than were uncommitted people.

Randall, Fedor, and Longenecker (1990) stated that the OCQ was a widely used instrument for management research. Jamal (1990) found that a high score on the OCQ indicates a high degree of commitment.

The OCQ was a 15-item questionnaire designed to measure the degree to which subjects felt committed to the organization or institution for which they worked. The instrument included items that pertained to subjects' perceptions concerning their loyalty toward the organizations or institutions. The items were statements to which the subjects were expected to respond on a 7-point Likert-type scale ranging from "strongly disagree" to "strongly agree."

The overall commitment for each respondent could be derived by taking the mean score across all items. The
internal consistency of the instrument was said to range from 0.82 to 0.93, with a median of 0.90 over a period of time, based on the instrument as measured by coefficient alpha (Cronbach, 1951). Beauvais, Scholl, and Cooper (1991) wrote that the internal consistency reliability of the OCQ was 0.91 in a study of commitment among unionized faculty members at a public university in the United States. Typical mean scores tended to be slightly above the midpoint on the 7-point Likert scale. The test-retest reliability over certain periods of time were $r = 0.53$, 0.63, and 0.75, which was considered favorable when compared with other attitude measures such as the JDI, which ranged from 0.45 to 0.75 (Smith, Kendall, & Hulin, 1985). Since commitment has been considered as one of the factors that influenced performance, the OCQ was used in this study to determine the extent of faculty commitment to their teaching position or institution.

Both instruments measured employee attitude, even though they measured different aspects of behavior. The two were capable of measuring or predicting turnover among employees, although the OCQ may have had better predictive power than the JDI (Mowday, Porter, & Steers, 1982). Permission has been obtained to use these two instruments (Appendix C).
Population and Sample

Ten of a possible 30 Nigerian Colleges of Technology/Polytechnics were randomly selected. During the 1991/92 academic session, all areas of the Schools of Management Studies in these 10 institutions were studied, and all known faculty members were involved in the study. The National Board for Technical Education (NBTE) has stipulated that each discipline or department seeking accreditation for its program would need to have at least five full-time qualified faculty members of various ranks, among whom would be the senior, principal, or chief lecturers.

The School of Management Studies consisted of (a) Accounting, (b) Business Administration/Management, (c) Cooperative Studies, (d) Finance, (e) Insurance, (f) Marketing, (g) Secretarial Administration, and (h) Purchasing and Supply (National Board for Technical Education, 1977). Each discipline was represented in this study; 247 full-time faculty members from the 10 randomly selected Nigerian Colleges of Technology/Polytechnics were mailed questionnaires for completion. From these qualified faculty members has come the study population.

Sample

Questionnaires were distributed among 247 full-time faculty members of the ten randomly selected Colleges of
Technology/Polytechnics in Nigeria. (See Table 1, Chapter 4 for distribution.) Stratified random sampling was also used to select the population of the study from the Schools of Management Studies. The technique guaranteed representation of defined groups in the population (Ary, Jacobs, & Razavieh, 1972). A questionnaire return rate of 30% or higher return was expected. A follow-up was made to the institutions with less than the desired rate of return.

Data Collection

Written permission to conduct the study has been received from the National Board for Technical Education, which has been given jurisdiction over all the Colleges of Technology/Polytechnics in Nigeria. The Universities Office, Embassy of Nigeria, Washington, D.C., United States of America was also in agreement with the study. The 10 institutions randomly selected for the study have also granted their permission and expressed their willingness to participate (Appendix A).

Patricia C. Smith of the Department of Psychology at Bowling Green State University has granted permission for the use of the Job Descriptive Index (JDI). (See Appendix C.) Richard Mowday of the University of Oregon has also written to encourage the use of the Organizational Commitment Questionnaire (OCQ). (See Appendix C.)
A cover letter (Appendix D) was attached to the instruments to encourage the respondents to return the questionnaire. A statement assuring confidentiality of the data constituted part of the letter.

To ensure effective distribution and return of the questionnaires, the researcher traveled to Nigeria to distribute and collect the completed questionnaires. The official records for the computation of turnover trends over the five-year period 1986-1990 were also examined during the field assignment.

While in Nigeria, an attempt was also made to compile a list of all full-time faculty members, including their addresses obtained from the official records of the Establishment Division of the Registry. A list of those who had left was requested and has been used for compilation based on the Faculty Turnover Information Sheet (Appendix D). Personnel administrators were questioned on the personnel files of faculty leavers to determine administrative perceptions of their reasons for leaving. An envelope containing the Faculty Biodata, the JDI, and the OCQ were mailed, or handed, to all faculty members who were to be involved in this study. A cover letter explaining the importance of the study accompanied the questionnaires, and for the convenience of the respondents self-addressed stamped envelopes were enclosed for the return of the completed questionnaires.
A three-week period was allowed for the respondents to return the questionnaires. If the questionnaires had not been returned after three weeks, a follow-up express letter was mailed, or handed, to the respondents. Until a 30% or higher rate of return was obtained, personal visits were made to the institutions to collect the questionnaires.

Data Analysis and Treatment

The demographic characteristics of gender, age, level of education, years of college teaching experience, salary grade level, location of college, and region of origin of the faculty members served as the independent variables. The scores of the six facets of the JDI and one facet (commitment) from the OCQ constituted the dependent variables. Specifically, the factors included: (a) work itself, (b) pay, (c) promotion, (d) supervision, (e) co-workers, (f) job in general. Data concerning organizational commitment were obtained from the OCQ, providing an additional dependent variable. Each area of the JDI consisted of items ranging from 9 to 18. The OCQ consisted of 15 items made up of phrases or statements.

Scoring instructions for the JDI stated that both positive and negative answers should be rated "3" if answered appropriately; therefore, a score of "3" was assigned to each item if the response to a positive statement was "Y" or to a negative item if the answer was
"N." A score of "0" (zero) was awarded to an item if the response to a positive item was "N", or if the response to a negative was "Y." A score of "1" was assigned to each item if the response was "?" or if the answer was omitted. A sum of the scores for each respondent was obtained, and mean scores were computed.

For statistical analysis in this study, frequencies, means, percentages, one-way analysis of variance (ANOVA), and the Scheffe follow-up test of significance were used for the purpose of testing the significance of mean differences. This was done for each facet of the JDI as well as for the OCQ, according to each of the demographic characteristic, with significance set at the .05 level. The analysis of variance provided a flexible technique for testing differences among the means (Barry & Scotte, 1985). If a significant mean difference existed, the Scheffe method for multiple comparison was used to show levels of the independent variables that were significantly different. The level of significance was set at .10 instead of .05 as recommended by Ferguson (1981).

The conservative and rigorous nature of the Scheffe method, as compared with other methods such as those of Tukey, Duncan, and Newman-Keuls (cited in Ferguson, 1976), made it appropriate for this study because it reduced the chances of overlooking possible significance. Ferguson (1981) wrote that the Scheffe method permitted comparison
between groups of unequal numbers, whereas the other methods require equal numbers. The OCQ measurement of the relationship between commitment and turnover was compared with the relationship as identified by the JDI.

The findings were expected to be reported to each of the Chief Executive Officers (Rectors) of the 30 institutions as well as to the Minister of Education of Nigeria. These findings could be used to help develop measures and procedures for correcting high faculty turnover.
CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

Retaining a competent and stable faculty has been a problem of major concern in Nigerian institutions of higher learning. A shortage of full-time faculty members, especially in the School of Management Studies, as well as frequent faculty strikes for improved conditions of service have been disruptive to normal academic activities.

A review of literature has revealed that there has been a lack of data, supported by significant research, concerning turnover in Nigeria. Price (1977) had suggested that data about turnover in Nigeria and other African countries were needed for inclusion in future studies of turnover. Therefore, there was a need for this study.

The presentation of the research findings was generated from the analysis of the responses of the existing full-time faculty members of the School of Management Studies at the ten randomly selected Colleges of Technology/Polytechnics in Nigeria. The questionnaires administered were intended to elicit their perceptions of the possible factors that were considered most influential on voluntary turnover decisions. The collected data were
coded and analyzed by computer, using the Statistical Packages for Social Sciences (SPSS).

Demographic Characteristics

In Table 1 are shown a breakdown of the number of completed questionnaires from the 208 (84.21%) of the 247 questionnaires distributed. The table also presents the percentages of the questionnaires returned from each of the ten participating institutions. The respondents from Federal Polytechnic, Bauchi, returned 28 (93.33%) questionnaires out of the 30 sent. Ramat Polytechnic, Maiduguri, returned 27 (90.00%) of the 30 questionnaires sent. Calabar Polytechnic returned 27 (88.89%) of the 32 questionnaires sent.

The smallest number of returns came from Yaba College of Technology; only 12 (60.00%) of the 20 questionnaires were returned. Because it is the oldest institution of higher learning in Nigeria (Aderibigbe, 1989), higher returns might have been expected from Yaba College of Technology. One possible explanation for the lower return rate could be that Yaba College of Technology depends largely on part-time faculty members, who might have had many other interests and obligations and therefore have neglected to fill out the questionnaires. Yaba is an overcrowded city, living conditions can cause dissatisfaction, and the College of Technology—as will be seen from this study—has problems.
In Table 1 are presented the data showing the numbers and percentages of returned questionnaires according to the personal demographic variables which were obtained from the 208 biodata questionnaires returned by the 247 potential respondents.

Table 1

Number of Questionnaires Distributed and Percentage Returned

<table>
<thead>
<tr>
<th>Institution</th>
<th>No. Distributed</th>
<th>No. Returned</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akanu Ibiam Federal Polytechnic, Unwana</td>
<td>20</td>
<td>18</td>
<td>90.00</td>
</tr>
<tr>
<td>Federal Polytechnic, Bauchi</td>
<td>30</td>
<td>28</td>
<td>93.33</td>
</tr>
<tr>
<td>Institute of Management &amp; Technology, Enugu</td>
<td>23</td>
<td>20</td>
<td>86.96</td>
</tr>
<tr>
<td>Kaduna Polytechnic, Kaduna</td>
<td>25</td>
<td>19</td>
<td>76.00</td>
</tr>
<tr>
<td>Katsina Polytechnic, Katsina</td>
<td>18</td>
<td>12</td>
<td>66.67</td>
</tr>
<tr>
<td>Plateau State Polytechnic, Barkin Ladi</td>
<td>22</td>
<td>21</td>
<td>95.45</td>
</tr>
<tr>
<td>Ramat Polytechnic, Maiduguri</td>
<td>30</td>
<td>27</td>
<td>90.00</td>
</tr>
<tr>
<td>Rivers State Polytechnic, Bori</td>
<td>27</td>
<td>24</td>
<td>88.89</td>
</tr>
<tr>
<td>The Polytechnic, Calabar</td>
<td>32</td>
<td>27</td>
<td>84.38</td>
</tr>
<tr>
<td>Yaba College of Technology, Yaba</td>
<td>20</td>
<td>12</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Total 247 (N) 208 (n) 84.21
Demographics presented in Table 2 break down into (a) gender, (b) age, (c) level of education, (d) salary grade level, and (e) years of teaching experience. The numerical statistics will be discussed briefly.

Gender and Age

Of the 208 subjects in this study, 175 (84.13%) are male and 32 (15.38%) are female. Most of the faculty members, 54 (25.96%) are between 31 and 35 years of age. Only 5 (2.40%) of the respondents are under 25.

Level of Education and Salary

The majority of the respondents, 93 (44.71%), hold Masters degrees; and 4 (1.92%) have completed doctoral degrees. Although 55 (25.96%) of the respondents were at Salary Grade Levels 7 to 8, only 9 (4.33%) are paid at the Salary Grade Level of 14 or higher.

Years of Teaching Experience

Seventy-nine (37.98%) of the sample have been employed by the Colleges of Technology/Polytechnics for fewer than 5 years, while 14 (6.73%) have been employed for 16 years or more. Sixty-seven (32.21%) have been employed from 6 to 10 years.
Table 2

Personal Demographics

<table>
<thead>
<tr>
<th>Classifications</th>
<th>Number returned</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>175</td>
<td>84.13</td>
</tr>
<tr>
<td>Female</td>
<td>32</td>
<td>15.38</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 or less</td>
<td>5</td>
<td>2.40</td>
</tr>
<tr>
<td>26-30</td>
<td>43</td>
<td>20.67</td>
</tr>
<tr>
<td>31-35</td>
<td>54</td>
<td>25.96</td>
</tr>
<tr>
<td>36-40</td>
<td>43</td>
<td>20.67</td>
</tr>
<tr>
<td>41-45</td>
<td>37</td>
<td>17.79</td>
</tr>
<tr>
<td>46 or over</td>
<td>24</td>
<td>11.54</td>
</tr>
<tr>
<td><strong>Level of Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.A. degree</td>
<td>83</td>
<td>39.90</td>
</tr>
<tr>
<td>M.A. degree</td>
<td>93</td>
<td>44.71</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>4</td>
<td>1.92</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
<td>10.10</td>
</tr>
<tr>
<td><strong>Salary Grade Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-8</td>
<td>55</td>
<td>25.96</td>
</tr>
<tr>
<td>9-11</td>
<td>54</td>
<td>25.48</td>
</tr>
<tr>
<td>12-13</td>
<td>50</td>
<td>24.04</td>
</tr>
<tr>
<td>14 +</td>
<td>9</td>
<td>4.33</td>
</tr>
<tr>
<td><strong>Years of teaching experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 years or less</td>
<td>79</td>
<td>37.96</td>
</tr>
<tr>
<td>6-10</td>
<td>67</td>
<td>32.21</td>
</tr>
<tr>
<td>11-15</td>
<td>34</td>
<td>16.35</td>
</tr>
<tr>
<td>16 -</td>
<td>14</td>
<td>6.73</td>
</tr>
</tbody>
</table>
Table 3 lists the names of the cities/towns where the participating institutions are located, thus providing the numbers for the geographic classifications.

Table 3
Geographic Demographics

<table>
<thead>
<tr>
<th>Classifications</th>
<th>Number Returned</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College/Polytechnic Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unwana</td>
<td>18</td>
<td>8.65</td>
</tr>
<tr>
<td>Bauchi</td>
<td>28</td>
<td>13.46</td>
</tr>
<tr>
<td>Enugu</td>
<td>20</td>
<td>9.62</td>
</tr>
<tr>
<td>Kaduna</td>
<td>19</td>
<td>9.13</td>
</tr>
<tr>
<td>Katsina</td>
<td>12</td>
<td>5.77</td>
</tr>
<tr>
<td>Barkin Ladi</td>
<td>21</td>
<td>10.10</td>
</tr>
<tr>
<td>Maiduguri</td>
<td>27</td>
<td>12.98</td>
</tr>
<tr>
<td>Bori</td>
<td>24</td>
<td>11.54</td>
</tr>
<tr>
<td>Calabar</td>
<td>27</td>
<td>12.98</td>
</tr>
<tr>
<td>Yaba</td>
<td>12</td>
<td>5.77</td>
</tr>
<tr>
<td><strong>Region of origin</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern</td>
<td>95</td>
<td>45.67</td>
</tr>
<tr>
<td>Northern</td>
<td>75</td>
<td>36.06</td>
</tr>
<tr>
<td>Western/Midwestern</td>
<td>31</td>
<td>14.90</td>
</tr>
<tr>
<td>Foreign</td>
<td>4</td>
<td>1.92</td>
</tr>
</tbody>
</table>
Federal Polytechnic, Bauchi, returned 28 (13.46%) of the 208 questionnaires. Both Katsina Polytechnic and Yaba Polytechnic returned 12 (5.77%) of the questionnaires. The returns from these two institutions are the lowest of the ten participating Colleges of Technology/Polytechnics. One possible explanation for their lower rate of return could be that, like Yaba, they depend largely on part-time faculty members.

Table 3 also lists the number of returns as well as the percentages based on geographic classifications and region of origin. The majority of the respondents, 95 (45.67%), are from the Eastern region. Thirty-one (14.90%) are from the Western/Midwestern region. Four (1.92%) of the respondents are of foreign origin. Most of the institutions studied are located in the Eastern origin, and the country is dominated, educationally and economically, by the ethnic group from the Eastern region (Madunagu, 1991).

Analysis of the data is divided into three sections based on the research questions and related to demographic data.

1. What factors have the greatest influence on the voluntary turnover among faculty members of Colleges of Technology/Polytechnics in Nigeria?

2. What have been the trends of voluntary turnover among faculty members in the Schools of Management Studies
at 10 randomly selected Colleges of Technology/Polytechnics in Nigeria during the years 1986-1990?

3. Do significant differences exist among the demographic classifications of faculty members with regard to voluntary turnover as measured by the JDI and OCQ?

First Research Question

The first research question concerns the factors which existing faculty members perceive to be the most influential on their colleagues' voluntary separation—as measured by Job Descriptive Index (JDI) and Organizational Commitment Questionnaire (OCQ). Table 4 presents the means and standard deviation for turnover as defined by JDI and OCQ.

Table 4
Means and Standard Deviation for Turnover as Defined by JDI and OCQ

<table>
<thead>
<tr>
<th>Factor</th>
<th>M</th>
<th>SD</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>35.51</td>
<td>11.60</td>
<td>4</td>
</tr>
<tr>
<td>Pay</td>
<td>5.70</td>
<td>5.59</td>
<td>7</td>
</tr>
<tr>
<td>Promotion</td>
<td>12.86</td>
<td>7.88</td>
<td>6</td>
</tr>
<tr>
<td>Supervision</td>
<td>34.72</td>
<td>14.35</td>
<td>5</td>
</tr>
<tr>
<td>People (Coworkers)</td>
<td>38.31</td>
<td>13.68</td>
<td>2</td>
</tr>
<tr>
<td>Job in General</td>
<td>36.96</td>
<td>11.21</td>
<td>3</td>
</tr>
<tr>
<td>Commitment</td>
<td>66.19</td>
<td>11.39</td>
<td>1</td>
</tr>
</tbody>
</table>
An examination of Table 4 indicates the extent of turnover, as measured by the seven factors of JDI and OCQ. Commitment has the highest mean score (66.19), indicating the level of perceived commitment faculty members have toward their jobs or institutions. Next to commitment is coworkers (mean = 38.31). The mean score of 36.96 for job-in-general indicates that the faculty members in the School of Management Studies at Colleges of Technology/Polytechnics in Nigeria feel good about their jobs. However, the greatest source of perceived dissatisfaction concerning their jobs came from their pay (mean = 5.70) and promotion (mean = 12.86). Thus, pay and promotion are perceived as the most influential factors on turnover among faculty members of Nigerian Colleges of Technology/Polytechnics.

Second Research Question

Over a period of 5 years, 1986-1990, the trends of voluntary turnover among full-time faculty members of the School of Management Studies are computed using Price's (1977) Separation Rate Formula described earlier in this study. Figure 3 illustrates these trends from 1986 (20% turnover rate, dropping by 1% in 1987 and another 1% in 1988). Turnover remained steady in 1989, but rose to 22% in 1990.
Figure 3

Trends of Voluntary Turnover

Note: 1986 (20); 1987 (19); 1988 (18); 1989 (18); 1990 (22)

Third Research Question

Do significant differences exist based on demographic classifications such as (a) gender, (b) age, (c) level of education, (d) years of college teaching experience, (e) salary grade level, (f) college/polytechnic location, and (g) region of origin. Mean scores for each turnover factor have been computed for each demographic characteristic. A one-way analysis of variance (ANOVA), set at .05, has
been used to test the significance of the mean differences of each of the demographic variables on voluntary turnover. When a significant mean difference exists, the Scheffe method for multiple comparison, set at .10 level, has been used to show the pairs that are significantly different.

One-way analysis of variance (ANOVA) has been conducted to determine if gender is a factor affecting perceptions of voluntary turnover among full-time faculty members. Raw mean scores, F value, and probability values for each dependent variable are presented in Table 5.

Table 5
Comparison of Perceived Voluntary Turnover Based On Respondents' Gender (One-way ANOVA)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Male (n=175)</th>
<th>Female (n=32)</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>34.49</td>
<td>35.5</td>
<td>.0000</td>
<td>1.00</td>
</tr>
<tr>
<td>Salary</td>
<td>5.59</td>
<td>6.4</td>
<td>.62</td>
<td>.43</td>
</tr>
<tr>
<td>Promotion</td>
<td>12.83</td>
<td>13.3</td>
<td>.09</td>
<td>.77</td>
</tr>
<tr>
<td>Supervision</td>
<td>34.91</td>
<td>33.6</td>
<td>.22</td>
<td>.64</td>
</tr>
<tr>
<td>People (Coworkers)</td>
<td>38.32</td>
<td>38.3</td>
<td>.0001</td>
<td>.99</td>
</tr>
<tr>
<td>Job-in-General</td>
<td>36.87</td>
<td>37.5</td>
<td>.10</td>
<td>.76</td>
</tr>
<tr>
<td>Commitment</td>
<td>66.82</td>
<td>62.0</td>
<td>4.61</td>
<td>.03*</td>
</tr>
</tbody>
</table>

*Denotes significant difference at .05 level
The test shows a significant difference between perceptions of male and female faculty members concerning commitment. Male faculty members (mean score 66.82) reported that their former colleagues tend to be more inclined to voluntary turnover due to lack of commitment to their institutions, while their female counterparts reported lower perceptions (mean = 61.97, \( p = .03 \)).

One-way analysis of variance (ANOVA) has been conducted to determine if age is a factor influencing perceived voluntary turnover among full-time faculty members. Raw mean scores, \( F \) value, and probability values for each dependent variable are summarized in Table 6.

Table 6
Comparison of Perceived Voluntary Turnover Based on Respondents' Age (One-way ANOVA)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Age classified in years</th>
<th>25 or less</th>
<th>26-30</th>
<th>31-35</th>
<th>36-40</th>
<th>41-45</th>
<th>46+</th>
<th>( F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>( n=5 )</td>
<td>40.20</td>
<td>35.29</td>
<td>35.91</td>
<td>33.28</td>
<td>37.19</td>
<td>35.63</td>
<td>.64</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>( n=43 )</td>
<td>35.34</td>
<td>36.25</td>
<td>34.76</td>
<td>36.84</td>
<td>37.88</td>
<td>36.23</td>
<td>.89</td>
<td>.37</td>
</tr>
<tr>
<td>Pay</td>
<td>( n=54 )</td>
<td>13.80</td>
<td>6.93</td>
<td>5.40</td>
<td>3.93</td>
<td>6.84</td>
<td>4.25</td>
<td>4.33</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>( n=43 )</td>
<td>13.40</td>
<td>12.76</td>
<td>12.77</td>
<td>13.44</td>
<td>13.05</td>
<td>10.08</td>
<td>.79</td>
<td>.56</td>
</tr>
<tr>
<td>Promotion</td>
<td>( n=37 )</td>
<td>13.40</td>
<td>12.76</td>
<td>12.77</td>
<td>13.44</td>
<td>13.05</td>
<td>10.08</td>
<td>.79</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td>( n=24 )</td>
<td>44.40</td>
<td>37.10</td>
<td>35.42</td>
<td>32.91</td>
<td>32.24</td>
<td>37.71</td>
<td>1.08</td>
<td>.37</td>
</tr>
<tr>
<td>Supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>People (Coworkers)</td>
<td>( n=45 )</td>
<td>45.40</td>
<td>41.21</td>
<td>40.77</td>
<td>34.67</td>
<td>37.20</td>
<td>35.25</td>
<td>1.92</td>
<td>.09</td>
</tr>
<tr>
<td>Job in General</td>
<td>( n=40 )</td>
<td>37.80</td>
<td>37.00</td>
<td>35.25</td>
<td>35.77</td>
<td>37.17</td>
<td>42.38</td>
<td>1.48</td>
<td>.20</td>
</tr>
<tr>
<td>Commitment</td>
<td>( n=66 )</td>
<td>59.40</td>
<td>66.61</td>
<td>63.26</td>
<td>66.93</td>
<td>67.74</td>
<td>70.18</td>
<td>1.83</td>
<td>.11</td>
</tr>
</tbody>
</table>

*Denotes significant difference at .05 level
With regard to respondents' age, the test shows significant perceived differences among faculty members on the factor of present pay, at the .001 probability level. The Scheffe test set at .10 level of significance has been conducted on each factor to determine the perceived pairs of groups that were significantly different. The test results are presented in Table 7.

Table 7

Pairwise Comparison (Scheffe Test) Indicating Significance by Respondents' Age

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Age Groups</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>13.80</td>
<td>under 25 - 1</td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.93</td>
<td>26-30 - 2</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.40</td>
<td>31-35 - 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>3.93</td>
<td>36-40 - 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>6.8</td>
<td>41-45 - 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.3</td>
<td>46+ - 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Denotes pairs of groups significantly different at .10.

Table 7 also illustrates that more faculty members under 25 years, (mean = 13.80), regard pay as influencing
the tendency to leaving voluntarily than do faculty members within the age ranges between (a) 31 to 35 (mean = 5.40), (b) 36 to 40 (mean = 3.93), and (c) 46 or above (mean = 4.25).

One-way analysis of variance (ANOVA) has been conducted to determine whether level of education among faculty members influenced perception of their colleagues' voluntary turnover. Raw mean score, F value, and probability values for each dependent variable have been computed and are summarized in Table 8.

Table 8
Comparison of Perceived Voluntary Turnover Based on Respondents' Level of Education (One-way ANOVA)

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>B.A. (n=83)</th>
<th>M.A. (n=93)</th>
<th>Ph.D. (n=4)</th>
<th>other (n=21)</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>36.12</td>
<td>34.88</td>
<td>35.75</td>
<td>36.60</td>
<td>.23</td>
<td>.88</td>
</tr>
<tr>
<td>Pay</td>
<td>7.11</td>
<td>4.33</td>
<td>5.50</td>
<td>5.15</td>
<td>3.96</td>
<td>.009*</td>
</tr>
<tr>
<td>Promotion</td>
<td>12.80</td>
<td>13.30</td>
<td>13.25</td>
<td>11.60</td>
<td>.27</td>
<td>.85</td>
</tr>
<tr>
<td>Supervision</td>
<td>36.95</td>
<td>32.72</td>
<td>35.00</td>
<td>33.70</td>
<td>1.29</td>
<td>.28</td>
</tr>
<tr>
<td>People</td>
<td>39.69</td>
<td>36.63</td>
<td>39.50</td>
<td>37.10</td>
<td>.76</td>
<td>.52</td>
</tr>
<tr>
<td>General</td>
<td>36.40</td>
<td>36.65</td>
<td>40.00</td>
<td>39.35</td>
<td>.49</td>
<td>.69</td>
</tr>
<tr>
<td>Commitment</td>
<td>66.98</td>
<td>65.72</td>
<td>66.75</td>
<td>65.20</td>
<td>.23</td>
<td>.88</td>
</tr>
</tbody>
</table>

*Denotes significant difference at .05 level
Table 8 indicates significant differences among perceptions of faculty members with regard to present pay factor at probability level of .009. The Scheffe test has been performed to determine the pairs that are significantly different. The results of Scheffe test are presented in Table 9.

**Table 9**

**Pairwise Comparison (Scheffe Test) Indicating Significance Based on Respondents' Level of Education**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Group</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay</td>
<td>7.11</td>
<td>B.A. - 1</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>4.33</td>
<td>M.A. - 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.50</td>
<td>Ph.D. - 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.15</td>
<td>Other - 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Denotes pairs of groups significantly different at .10 level

In Table 9 is shown that, concerning the present pay facet, faculty members with bachelor's degrees (mean = 7.11) perceive their colleagues to be significantly more inclined to leave voluntarily than do faculty members with master's degrees (mean = 4.33).
One-way analysis of variance (ANOVA) has been conducted to determine if years of college teaching experience is perceived by respondents to be a factor in their colleagues' leaving voluntarily. Raw mean score, $F$ value, and probability values for each dependent variable have been computed and are summarized in Table 10.

Table 10

Comparison of Perceived Voluntary Turnover Based on Respondents' Years of Teaching Experience (One-way ANOVA)

<table>
<thead>
<tr>
<th>Years of Teaching Experience</th>
<th>5 or less</th>
<th>6-10</th>
<th>11-15</th>
<th>16+</th>
<th>$F$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>$n=79$</td>
<td>$n=67$</td>
<td>$n=34$</td>
<td>$n=14$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work</td>
<td>34.94</td>
<td>34.62</td>
<td>32.15</td>
<td>41.50</td>
<td>2.18</td>
<td>.09*</td>
</tr>
<tr>
<td>Pay</td>
<td>6.90</td>
<td>4.05</td>
<td>4.35</td>
<td>6.86</td>
<td>4.38</td>
<td>.005*</td>
</tr>
<tr>
<td>Promotion</td>
<td>12.78</td>
<td>13.80</td>
<td>11.06</td>
<td>11.79</td>
<td>.99</td>
<td>.40</td>
</tr>
<tr>
<td>Supervision</td>
<td>37.55</td>
<td>33.24</td>
<td>27.94</td>
<td>34.64</td>
<td>3.76</td>
<td>.01*</td>
</tr>
<tr>
<td>People (coworkers)</td>
<td>39.49</td>
<td>38.92</td>
<td>31.79</td>
<td>37.21</td>
<td>2.73</td>
<td>.05*</td>
</tr>
<tr>
<td>Job in General</td>
<td>36.27</td>
<td>36.29</td>
<td>35.21</td>
<td>41.79</td>
<td>1.18</td>
<td>.32</td>
</tr>
<tr>
<td>Commitment</td>
<td>65.11</td>
<td>66.32</td>
<td>64.56</td>
<td>71.71</td>
<td>1.51</td>
<td>.21</td>
</tr>
</tbody>
</table>

*Denotes significant difference at .05 level

Table 10 indicates significant difference among the mean scores of faculty members with regard to (a) work
The Scheffe test has been performed to determine the pairs of groups that are significantly different. The results are presented in Table 11, which illustrates that with regard to work facet, faculty members with 16 years or more college teaching experience (mean = 41.50) perceive their colleagues as being significantly more inclined to leave their work voluntarily due to work, while those with between 11 to 15 years of college teaching experience (mean = 32.15) have different perceptions. Table 11 also illustrates that with the present pay facet, faculty members with fewer than 5 years of college teaching experience perceive that their colleagues (mean = 6.90) have the propensity to leaving voluntarily, while those faculty members with between 6 to 10 years of teaching experience (mean = 4.05) have different perceptions. With regard to supervision, faculty members with fewer than 5 years of teaching experience (mean = 37.55) also perceived their colleagues as being more inclined to voluntary turnover. While faculty members with 11 to 15 years of teaching experience (mean = 27.94) have different perceptions. With regard to the people or co-workers facet, faculty members with fewer than 5 years of college
Table 11

Pairwise Comparison (Scheffe Test) Indicating Significance Based on Respondents' Years of Teaching Experience

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Groups for Years of Teaching Experience</th>
<th>Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1   2   3   4</td>
</tr>
<tr>
<td>Work</td>
<td>34.94</td>
<td>5 or less - 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.62</td>
<td>6 - 10 - 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32.15</td>
<td>11 - 15 - 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>41.50</td>
<td>16+ - 4</td>
<td></td>
</tr>
<tr>
<td>Pay</td>
<td>6.90</td>
<td>5 or less - 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.05</td>
<td>6 - 10 - 2</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>4.35</td>
<td>11 - 15 - 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.86</td>
<td>16+ - 4</td>
<td></td>
</tr>
<tr>
<td>Supervision</td>
<td>37.55</td>
<td>5 or less - 1</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>33.24</td>
<td>6 - 10 - 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>27.94</td>
<td>11 - 15 - 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.64</td>
<td>16+ - 4</td>
<td></td>
</tr>
<tr>
<td>People (Coworkers)</td>
<td>39.49</td>
<td>5 or less - 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>38.92</td>
<td>6 - 10 - 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31.79</td>
<td>11 - 15 - 3</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>37.21</td>
<td>16+ - 4</td>
<td></td>
</tr>
</tbody>
</table>

*Denotes pairs of groups significantly different at .10 level
teaching experience (mean = 39.49) perceive their colleagues as having the tendency to leaving voluntarily due to coworkers than do faculty members with 11 to 15 years of teaching experience (mean = 31.79).

One-way analysis of variance (ANOVA) set at .05 level of significance has been conducted to determine whether salary grade was a factor in the perceptions full-time faculty members have concerning their colleagues leaving voluntarily. Raw mean scores, F value, and probability values for each dependent variable have been computed and are summarized in Table 12, which shows significant differences among faculty members perceptions with regards to pay facet (p = .04).

The Scheffe test has been performed to determine the pairs of groups that are significantly different. The results of the Scheffe Test have been presented in Table 13, which illustrates that concerning perceptions of the relationship of the pay factor and voluntary turnover, faculty members with salary grade level 7 to 8 (mean = 7.60) perceive their colleagues to be significantly more inclined to voluntary separation than do faculty members with salary grade level 9 to 11 (mean = 4.73).

One-way analysis of variance (ANOVA) set at .05 level of significance has been conducted to determine whether respondents' college/polytechnic of employment is a factor in the perceptions of full-time faculty members concerning their colleagues leaving voluntarily. Raw mean scores, F
Table 12
Comparison of Perceived Voluntary Turnover Based on Respondents' Salary Grade Level (One-way ANOVA)

<table>
<thead>
<tr>
<th>Factor</th>
<th>7-8</th>
<th>9-11</th>
<th>12-13</th>
<th>14+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>34.78</td>
<td>36.19</td>
<td>35.76</td>
<td>39.44</td>
</tr>
<tr>
<td>Pay</td>
<td>7.60</td>
<td>4.73</td>
<td>5.14</td>
<td>6.67</td>
</tr>
<tr>
<td>Promotion</td>
<td>11.42</td>
<td>14.67</td>
<td>14.42</td>
<td>8.67</td>
</tr>
<tr>
<td>Supervision</td>
<td>38.58</td>
<td>34.81</td>
<td>31.52</td>
<td>37.22</td>
</tr>
<tr>
<td>People (Coworkers)</td>
<td>41.95</td>
<td>38.40</td>
<td>36.90</td>
<td>40.56</td>
</tr>
<tr>
<td>General</td>
<td>36.20</td>
<td>35.37</td>
<td>38.94</td>
<td>40.44</td>
</tr>
<tr>
<td>Commitment</td>
<td>65.73</td>
<td>65.25</td>
<td>66.06</td>
<td>69.75</td>
</tr>
</tbody>
</table>

\*Denotes significant difference at .05 level

values, and probability values for each dependent variable were computed and summarized in Table 14, which shows that the mean scores of faculty members are significantly different in two areas, (a) promotion (p = .0005) and (b) job-in-general (p = .008). The Scheffe test set at .10 was performed to determine the groups that were significantly different. The results of the Scheffe test are presented in Table 15, which illustrates that, concerning promotion
Table 13

Pairwise Comparison (Scheffe Test) Indicating Significance
Based on Respondents' Salary

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Groups for Salary Grade Level</th>
<th>Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Pay</td>
<td>7.60</td>
<td>7 - 8 - 1</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>4.73</td>
<td>9 - 11 - 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.14</td>
<td>12 - 13 - 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.67</td>
<td>14+ - 4</td>
<td></td>
</tr>
</tbody>
</table>

*Denotes pairs of groups significantly different at .10 level

opportunity, faculty members at Yaba College of Technology (mean = 21.33) perceive their colleagues to be significantly more inclined to turnover than do faculty members at (a) Calabar Polytechnic (mean = 9.67), and (b) Federal Polytechnic, Unwana (mean = 9.94). Concerning job-in-general factor, faculty members at Enugu (IMT) (mean = 40.00) perceive their colleagues as being significantly more inclined toward voluntary turnover than do faculty members of Katsina Polytechnic (mean = 23.25). Faculty members at Plateau State Polytechnic, Barkin Ladi, (mean = 38.43) perceive their colleagues as being significantly more inclined toward voluntary turnover than do faculty
<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>6</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>35.39</td>
<td>32.99</td>
<td>39.50</td>
<td>33.58</td>
<td>28.50</td>
<td>32.00</td>
<td>37.31</td>
<td>37.13</td>
<td>39.96</td>
<td>43.25</td>
<td>.97</td>
<td>.04</td>
</tr>
<tr>
<td>Pay</td>
<td>4.33</td>
<td>6.11</td>
<td>7.75</td>
<td>7.58</td>
<td>2.42</td>
<td>5.00</td>
<td>7.12</td>
<td>6.52</td>
<td>4.44</td>
<td>3.01</td>
<td>1.93</td>
<td>.05</td>
</tr>
<tr>
<td>Supervision</td>
<td>41.22</td>
<td>37.46</td>
<td>33.95</td>
<td>39.37</td>
<td>24.38</td>
<td>26.28</td>
<td>35.86</td>
<td>36.98</td>
<td>37.37</td>
<td>27.06</td>
<td>2.87</td>
<td>.078*</td>
</tr>
<tr>
<td>People (Co-workers)</td>
<td>40.78</td>
<td>42.71</td>
<td>36.30</td>
<td>38.11</td>
<td>27.17</td>
<td>37.06</td>
<td>39.46</td>
<td>34.87</td>
<td>38.30</td>
<td>44.40</td>
<td>1.40</td>
<td>.07</td>
</tr>
<tr>
<td>General</td>
<td>36.22</td>
<td>39.14</td>
<td>40.00</td>
<td>35.44</td>
<td>23.25</td>
<td>38.43</td>
<td>37.81</td>
<td>36.83</td>
<td>37.26</td>
<td>39.08</td>
<td>2.60</td>
<td>.008*</td>
</tr>
<tr>
<td>Commitment</td>
<td>44.28</td>
<td>67.22</td>
<td>70.16</td>
<td>67.71</td>
<td>71.58</td>
<td>65.29</td>
<td>65.40</td>
<td>61.96</td>
<td>65.68</td>
<td>65.42</td>
<td>1.07</td>
<td>.39</td>
</tr>
</tbody>
</table>

*Denotes significant difference at .05 level

Location of Colleges/Polytechnics:
1. Umuna
2. Bauchi
3. Enugu
4. Kaduna
5. Katsina
6. Barkin Ladi
7. Maiduguri
8. Bori
9. Calabar
10. Yaba
Table 15

Pairwise Comparison (Scheffe Test) Indicating Significance Based on Respondents' Colleges/Polytechnics of Employment

<table>
<thead>
<tr>
<th>Factor</th>
<th>College/Polytechnic of Employment/Groups</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unwana - 1</td>
<td>Bauchi - 2</td>
<td>Enugu - 3</td>
<td>Kaduna - 4</td>
<td>Katsina - 5</td>
<td>Barkin Ladi - 6</td>
<td>Maiduguri - 7</td>
<td>Bori - 8</td>
<td>Calabar - 9</td>
<td>Yaba - 10</td>
</tr>
<tr>
<td>Job in General</td>
<td></td>
<td>36.22</td>
<td>39.14</td>
<td>40.00</td>
<td>35.44</td>
<td>23.25</td>
<td>38.43</td>
<td>37.81</td>
<td>36.83</td>
<td>37.26</td>
<td>39.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unwana - 1</td>
<td>Bauchi - 2</td>
<td>Enugu - 3</td>
<td>Kaduna - 4</td>
<td>Katsina - 5</td>
<td>Barkin Ladi - 6</td>
<td>Maiduguri - 7</td>
<td>Bori - 8</td>
<td>Calabar - 9</td>
<td>Yaba - 10</td>
</tr>
</tbody>
</table>

*Denotes pairs of groups significantly different at .10 level
members at Katsina Polytechnic (mean = 23.25). Faculty members of Federal Polytechnic, Bauchi, (mean = 39.14) are more significantly inclined toward perceiving their colleagues' voluntary turnover being due to the job-in-general factor than do faculty members of Katsina Polytechnic (mean = 23.25).

One-way analysis of variance (ANOVA) set at .05 level of significance has been performed to determine if region of origin was a factor in full-time faculty members' perceiving their colleagues as leaving voluntarily. Raw mean scores, F-values, and probability values for each dependent variable have been computed and are summarized in Table 16, which illustrates that the mean scores of faculty respondents are significantly different in two areas: (a) supervision ($p = .04$) and (b) people (coworkers) ($p = .02$).

The Scheffe test set at .10 was performed to determine the groups that are significantly different. The results of the Scheffe test are presented in Table 17, which illustrates that concerning supervision, faculty members from Eastern region (mean = 37.69) are more inclined to perceive voluntary turnover as being due to supervision than do faculty members from Northern region (mean = 32.15). With regard to people (coworkers), faculty members from Eastern region (mean score 38.70) are significantly more inclined to perceive voluntary turnover as being
Table 16

Comparison of Perceived Voluntary Turnover Based on Respondents' Region of Origin (One-way ANOVA)

<table>
<thead>
<tr>
<th>Region of Origin</th>
<th>Eastern</th>
<th>Northern</th>
<th>Midwestern/Foreign</th>
<th>Western</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
<td>n=95</td>
<td>n=75</td>
<td>n=31</td>
<td>n=4</td>
</tr>
<tr>
<td>Work</td>
<td>37.28</td>
<td>33.50</td>
<td>35.19</td>
<td>30.00</td>
</tr>
<tr>
<td>Pay</td>
<td>5.60</td>
<td>6.27</td>
<td>5.29</td>
<td>4.50</td>
</tr>
<tr>
<td>Promotion</td>
<td>11.91</td>
<td>14.08</td>
<td>13.84</td>
<td>10.25</td>
</tr>
<tr>
<td>Supervision</td>
<td>37.69</td>
<td>32.15</td>
<td>31.51</td>
<td>29.25</td>
</tr>
<tr>
<td>People (Coworkers)</td>
<td>38.70</td>
<td>36.78</td>
<td>42.45</td>
<td>21.00</td>
</tr>
<tr>
<td>General</td>
<td>37.95</td>
<td>35.74</td>
<td>36.68</td>
<td>35.00</td>
</tr>
<tr>
<td>Commitment</td>
<td>65.13</td>
<td>67.43</td>
<td>66.32</td>
<td>59.67</td>
</tr>
</tbody>
</table>

*Denotes significant difference at .05 level

due to coworkers than do foreign faculty members (mean = 21.00). Table 17 also shows that concerning people, faculty members from Midwest/Western region (mean = 42.45) tend to view coworkers as a factor in their colleagues' voluntary turnover than do foreign faculty members (mean = 21.00).
Table 17
Pairwise Comparison (Scheffe Test) Indicating Significance
Based on Respondents' Region of Origin

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Groups</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision</td>
<td>37.69</td>
<td>Eastern - 1</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32.15</td>
<td>Northern - 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31.51</td>
<td>Midwestern/Western - 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29.25</td>
<td>Foreign - 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coworkers (People)</td>
<td>38.70</td>
<td>Eastern - 1</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td>Midwestern/Western - 3</td>
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<td>21.00</td>
<td>Foreign - 4</td>
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*Denotes pairs of groups significantly different at .10 level

Summary of Findings

As perceived by their colleagues responses to the study's questionnaires, the two most influential factors on voluntary turnover among full-time faculty members of the Nigerian Colleges of Technology/Polytechnics are (a) pay, and (b) opportunity for promotion. In 1990, the highest
rate of turnover was recorded. The study's findings also reveal the existence of significant perceived differences, based on demographic classifications of faculty members, concerning the seven facets influencing their colleagues' voluntary turnover.

Gender

Concerning the relationship between the gender of the respondents and perceptions of voluntary turnover due to gender: More male than female faculty members perceive gender to be a factor in their colleagues leaving voluntarily.

Present Pay

Concerning the relationship between the age of the respondents and perceptions of voluntary turnover due to present pay: Significant differences exist in the perceptions of the present pay factor. Faculty members 25 or younger are more likely to perceive that their colleagues leave voluntarily due to present pay than do those faculty members within the age ranges (a) 31 to 35 years, (b) 36 to 40 years, and (c) over 46 years of age.

Concerning the relationship between the level of education of the respondents and perceptions of voluntary turnover due to present pay: Significant differences exist among faculty members' perceptions concerning the influence
of present pay. Faculty members with a Bachelor Degree are significantly more likely to perceive of their colleagues leaving voluntarily due to present pay than do those with M.A. and Ph.D. respectively.

Concerning the relationship between the salary grade level of the respondents and perceptions of voluntary turnover due to present pay: Significant differences exist concerning the perceptions of the influence of present pay. Faculty members with salary grade level 7 to 8 are significantly more inclined to perceive their colleagues' voluntary turnover as due to present pay than their counterparts within 9 to 11 grade level.

Work, Pay, Supervision, and People

Concerning the relationship between the years of college teaching experience of the respondents and perceptions of voluntary turnover due to work, pay, supervision, and people: Significant differences exist concerning perceptions of the influence of (a) work, (b) pay, (c) supervisor, and (d) coworkers (people). Faculty members with 16 or above years of college teaching experience are significantly more inclined to perceive their colleagues as leaving due to these four factors than do faculty members with between 6 to 10 and between 11 to 15 years of teaching experience.
Promotion and Job-in-general

Concerning the relationship between the college of employment of the respondents and perceptions of voluntary turnover due to promotion opportunities and job-in-general: Significant differences concerning perceptions of the significance of promotion and job-in-general. Faculty members of Yaba College of Technology are significantly more inclined to perceive their colleagues' voluntary turnover as due to these two factors than do their counterparts at Calabar Polytechnic and Federal Polytechnic, Unwana.

The results show that faculty members from Plateau State Polytechnic, Barkin Ladi, are significantly more inclined to perceive their colleagues' voluntary turnover as due to promotion and job-in-general than do faculty members from Katsina Polytechnic. In addition, faculty members at Federal Polytechnic, Bauchi, are significantly more inclined to perceive their colleagues' voluntary leaving as due to job-in-general than do faculty members at Katsina Polytechnic.

Supervision and Coworkers/People

Concerning the relationship between region of origin of the respondents and perceptions of voluntary turnover due to supervision/coworkers: The test results show significant differences concerning perceptions of the
influence of supervision and coworkers (people). Faculty members from Eastern region are significantly more inclined to perceive their colleagues' voluntary turnover due to problems concerning supervision than do their counterparts from Northern region. In addition, the faculty members from Eastern region are significantly more inclined to perceive their colleagues' voluntary turnover as due to problems with coworkers than do the foreign faculty members. The study also shows that faculty members from Midwestern/Western region perceive their colleagues as significantly more inclined to voluntary separation due to coworkers than do the foreign faculty.

Thus, it can be seen that demographic factors have significant influence on how full-time faculty members view the reasons behind the critical problem of faculty turnover in Nigerian institutions. Whether or not these perceptions are accurate is open to question due to the tendency of faculty members to share, or not to share, their feelings of frustrations prior to making these life-changing decisions. Some degree of accuracy may be assumed; however, only a study directed to those who leave could provide the answers.
CHAPTER 5

SUMMARY, IMPLICATIONS, CONCLUSIONS
AND RECOMMENDATIONS

The front page headline in The Nigerian Standard for Wednesday, May 20, 1992, read: "ASUU may strike--over poor working conditions." ASUU is the acronym for the Academic Staff Union of Universities, an organization of educational professionals whose president, Dr. Atahiru Jega, "told journalists that unless government showed willingness to negotiate, the decision to embark on an indefinite strike action would not be compromised" (Padunmoys, 1992).

The article went on to predict the collapse of the Nigerian university system unless issues were resolved. Thus, even while this investigation was still underway and before the results had been statistically evaluated and reported, the need for such a study was made evident.

During the months of April and May, 1992, information about demographic characteristics and perceived factors of voluntary turnover had been gathered using questionnaires returned by 208 (84.21%) of 247 randomly selected respondents who are professionals at 10 Colleges of Technology/Polytechnics in Nigeria. Answered from the perspective of those remaining with these institutions,
these questionnaires have been used to analyze factors perceived to be influential for voluntary turnover among full-time faculty members. The primary purposes of this investigation has been:

1. To determine the extent of turnover among full-time faculty members of the School of Management Studies in ten randomly selected Colleges of Technology/Polytechnics in Nigeria, and to investigate perceived causes for this turnover based on seven factors: (a) work, (b) pay, (c) promotion, (d) supervision, (e) coworkers (people), (f) job in general, and (g) commitment (Mowday, Porter, & Steers, 1982; Smith, Kendall, & Hulin, 1985).

2. To discover the most important factors contributing to faculty turnover as perceived by the remaining faculty members and higher education administrators.

3. To determine the perceived characteristics of faculty members who voluntarily separate from their job or institution.

4. To determine whether the remaining Nigerian faculty members are in significant agreement concerning the factors that influence their colleagues' voluntary separation from their institutions.

5. To compare perceived voluntary turnover among faculty members of Nigerian Colleges of Technology/Polytechnics with respect to respondents' (a) gender, (b) age, (c) level of education, (d) years of college teaching
experience, (e) salary grade level, (f) college/polytechnic of employment, and (g) region of origin.

6. To speculate on the possibility that the Job Descriptive Index (JDI) of Smith, Kendall, and Hulin (1985) and the Organizational Commitment Questionnaire (OCQ) of Mowday, Porter, and Steers (1982) are adaptable for the measurement of voluntary turnover among full-time faculty members in Nigerian institutions of higher learning.

7. To recommend measures to develop effective faculty policies, practices, and conditions of service based on the findings of this study.

The instruments used for the collection of data were (1) the faculty biodata questionnaire developed by the researcher, (2) the Job Descriptive Index (JDI) developed by Smith et al. (1985), and (3) the Organizational (Institutional) Commitment Questionnaire (OCQ) developed by Mowday, et al. (1982). The instruments were distributed to 247 School of Management Studies full-time faculty members of the ten randomly selected Nigerian Colleges of Technology/Polytechnics located at: (a) Unwana, (b) Bauchi, (c) Enugu, (d) Kaduna, (e) Katsina, (f) Barkin Ladi, (g) Maiduguri, (h) Bori, (i) Calabar, and (j) Yaba (see Figure B-4). Questionnaires were completed and returned by 208 of 247 faculty members.

To determine the extent of separation based on each facet of JDI and OCQ, statistical analysis has been
conducted and frequencies, percentages, means, and ranking of the factors are being reported. One-way analysis of variance set at .05 level has been performed to determine whether significant differences exist concerning each facet of JDI and OCQ. When a significant difference was found, the Scheffe Test of Multiple Comparison has been used to identify the pairs that indicate significance. To reduce the chances of leaving out possible significant pairs, the level of significance was set at .10 level, using the conservative technique developed by Scheffe and cited in Ferguson (1981).

Discussion and Implications

Analysis of the data, discussion and implications of the findings of this study are being presented in relation to the extent of voluntary turnover among faculty members, the trend of that turnover, and the relationship between selected demographic variables and respondents' perceptions of reasons for voluntary turnover. The discussion incorporates concepts and theories of voluntary turnover, examined within the context of the educational system in Nigeria (Mowday et al., 1982; Smith et al., 1985).

The findings of this study can be compared with the conclusions of research studies cited in the literature review in Chapters 1 and 2. Price (1977) reported that most findings suggest that female members have higher rates
of turnover than their male counterparts; however, March and Simon (1958) disagreed, reporting that male members were more likely to have higher rates of turnover than females. Because this Nigerian study did not elicit information from those who had left, gender and other factors reported are perceptions colleagues left behind have concerning reasons for leaving. Because faculty members everywhere tend to share thoughts, feelings, hopes, and dreams these perceptions may be surprisingly accurate; on the other hand, they may only reflect the discouragements or the satisfactions of the respondents.

The findings presented here indicate that full-time faculty members of the School of Management Studies at the ten randomly selected Colleges of Technology/Polytechnics in Nigeria perceived their colleagues to be less satisfied due to pay and promotion opportunities than any other factor. The study also shows that personal and geographic variables affect the perceptions of respondents' concerning the their colleagues' work attitudes.

Thus, this study supports that of Nicholson (1970) who identified salary and promotion as the most important out of twenty-nine factors influencing the departure of faculty members from Liberal Arts Colleges in Ohio. Commitment is also identified by this present study as being one of the most influential factors on turnover. This is consistent with the findings of Mowday et al. (1982), who wrote that
when compared with other JDI job-related measures (Smith et al., 1985) commitment was a more stable predictor of turnover.

Concerns and dissatisfactions with pay and promotion can also be found in the results of other studies:

1. Tanash (1987) has indicated promotion to be the source of least satisfaction among faculty members at Yarmark University in Jordan.

2. Schmidt (1976) at high schools in Chicago as well as Haughley and Murphy (1983) among rural teachers in British Columbia, Canada, identified opportunity for promotion as unsatisfactory to both administrators and teachers.

Within the Nigerian context, promotions are supposed to be based on qualifications, years of working experience, and contribution to the system (Taiwo, 1982). The possible explanation for the dissatisfaction of faculty members concerning promotion opportunity could be due in part to the manner in which the policies are administered, especially where favoritism might play a dominant role in the promotion process. At times, policies and practices have been waived, negatively or positively, thus obviating both promotion criteria and procedures.

With regard to perceptions of salary grade level and voluntary turnover, the findings are similar to those concerning promotion; pay is perceived to be inadequate. An examination of Scheffe test results indicates that
faculty members within salary grade level 7 to 8 are more likely to perceive their colleagues as leaving their jobs voluntarily due to inadequate pay than are their counterparts within 9 to 11 salary grade level. The most likely reason for this difference could be that the higher the salary level the more secure one feels with one's work, and therefore, the more committed one is to one's work and to one's institution. Hence, these satisfied people might tend to view pay as an unimportant factor in their colleagues' decisions to leave. In spite of upward revision of salary structures for faculty members in Nigerian institutions of higher learning, faculty income has not kept pace with inflation—which is currently at double digits (Obadina, 1992). Ruml and Tickton (1955) also argued that the salary levels in the United States were inadequate to attract and retain professors of suitable quality. The same can be said of Nigerian faculty members who feel that they are being underpaid when compared with their counterparts in other parts of Africa (Fadunmoye, 1992).

Analysis of Scheffe test results with regard to age indicate that the younger the faculty members the more likely they are to perceive of their colleagues' leaving being due to inadequate income. However, with regard to the pay facet, faculty members 31 to 35, 36 to 40, and over 46 years of age perceived of their colleagues' as being
significantly more stable in regard to their jobs. One possible explanation for these older faculty members' perceptions concerning their colleagues' remaining could be the respondents' having resigned themselves to the lack of acceptable job alternatives elsewhere (Mobley, Griffeth, Hand, and Meglino, 1979).

With regard to educational level of the respondents, faculty members with B.A. are more likely to perceive of their colleagues leaving due to pay than are those with master or doctoral degrees. However, one would have expected those with bachelor degrees to expect to remain within the system and grow academically before moving out elsewhere. One possible explanation for this perception among respondents at this level could be that most of them might not be interested in teaching as a career. Price (1977) found that better educated members are more likely to leave their organization than are less well educated members. Zey-Ferrell (1982) also identified higher education, or the lack thereof, to be a predictor of voluntary separation.

With respect to years of college teaching experience, the test results reveal that faculty members with over 16 years of college teaching experience are more likely to perceive of their colleagues leaving due to (a) work, (b) pay, (c) supervision, and (d) coworkers (people) than are faculty members who have 6 to 10 and 11 to 15 years of
teaching experience. This suggests that the more college teaching experience Nigerian faculty members have the more likely they are to have considered moving on to do something else in preparation for retirement. The results also suggest that faculty members may become resentful whenever they experience role incompatibilities. Such dissatisfaction is expected to increase the perception of turnover as influential upon fellow faculty members (Copur, 1990). However, Price (1977) has expressed the view that members with short lengths of service tend to have higher rates of turnover than do members with long lengths of service. Nicholson (1970) also found that the mobility of faculty members declines with the increase in the number of years of teaching experience.

With regard to the college or polytechnic institution where respondents are employed, the results of this present study indicate significant differences concerning perceptions of voluntary turnover, due to promotion and job-in-general, among faculty of the colleges of technology/polytechnics. The Scheffe test results indicate that faculty members of Yaba College of Technology are more likely to perceive of their colleagues' leaving their institutions than are their counterparts of Calabar Polytechnic and Federal Polytechnic, Unwana. One possible explanation could be that Yaba College of Technology, Lagos is located in the crowded former capital of Nigeria where
the rainy and swampy atmosphere might not be considered suitable by those left behind. On the other hand, Calabar and Federal Polytechnic, Unwana, are less crowded and have more suitable climatic conditions.

Findings about Yaba contradict Hoppock (1935), who wrote that teachers in cities were more satisfied. These present findings also contradict Carplow and McGee (1965), who found that the rate of turnover among faculty members declined as the age and size of the institutions increased. Yaba College of Technology is the oldest institution of higher learning in Nigeria (Aderibigbe, 1989).

Concerning the facet of job-in-general, the Scheffe test results show that faculty members of Plateau State Polytechnic, Barkin Ladi, are more likely to perceive of their colleagues' leaving voluntarily than do their counterparts of Katsina Polytechnic. Financial constraints and the management instability of Plateau State Polytechnic, Barkin Ladi, at various stages of its development—when compared to Katsina Polytechnic' stability (Plateau State Polytechnic: A Decade of Excellence, 1988)—could be a possible explanation for Barkin Ladi faculty members' perceptions of their colleagues' tendencies toward voluntary separation. Scheffe test results performed on the present study also show that, concerning the factor of job-in-general, faculty
members of Federal Polytechnic, Bauchi, are more inclined to perceive their colleagues as significantly more likely to leave voluntarily than do the faculty members of Katsina Polytechnic.

Regarding region of origin, the present study shows significant differences, concerning voluntary turnover, among faculty members from the various regions when considering two variables: supervision and coworkers (people). Faculty members from the Eastern region perceive their colleagues as being significantly more inclined to voluntary turnover due to the factor of supervision than do those from Northern region. Faculty members from Eastern region are also more likely to perceive the reason for their colleagues' leaving to be coworkers than do the foreign faculty members.

One possible explanation could be that faculty members from the Eastern region account for 45.67% of the overall respondents of this study. Another possible explanation could be that faculty members of Eastern origin tend to be more mobile. Because of the current rate of inflation, which has risen from 13 to 27 percent in 1991, former Eastern faculty members can be found all over Nigeria in search of alternative opportunities (West Africa, 1992). Faculty members of the Midwestern/Western region are also more inclined to perceive of their colleagues' leaving voluntarily than are foreign faculty members, who accounted for only 1.92% of the respondents in this study.
Conclusions

As a result of the findings of this study, some conclusions can be drawn concerning the factors influencing faculty turnover at the ten randomly selected Colleges of Technology/Polytechnics in Nigeria.

1. Among full-time faculty members in Nigeria, present pay, opportunities for promotion, and lack of commitment to the institution are perceived to be the most influential factors concerning their colleagues' voluntary turnover.

2. All the variables considered in this study (work, pay, promotion, supervision, coworkers/people, job in general, and commitment) have some relationship to perceived voluntary turnover.

3. The theories propounded and the definitions developed by Mowday et al., (1982) and Smith et al., (1985) concerning voluntary turnover can be adapted for use in a study of faculty member turnover in Nigerian Colleges of Technology/Polytechnics.

4. The economic instability of the country under study forces individuals to move around in search of alternative opportunities.

Recommendations

To address the problem of faculty turnover in Nigerian institutions, tentative recommendations can be made:

1. There appears to be a need for further research concerning administrative practices and conditions of
service in Colleges of Technology/Polytechnics and concerning how these practices affect the process of attracting, retaining, and developing a competent and stable faculty in these Nigerian institutions.

2. Faculty members should be actively involved in the negotiation of their salary levels and conditions of service. Their involvement could minimize strike actions.

3. The pay structure and conditions of service for faculty members should be competitive with those in government and industry. The salary structure should relate adequately to the inflation rate in the country.

4. Promotion policies, which have been predicated on the basis of years of teaching experience and academic achievement should be enforced. Federal and state governments need to monitor and encourage promotion in Nigerian Colleges of Technology/Polytechnics--especially in those where favoritism tends to dominate decisions in promotion process.

5. To offset the effect of rising inflation on the educational program in Nigeria, further research should be conducted to determine appropriate salary structures and conditions of service for the retention of faculty members.

6. Further research should be conducted to determine the factors that encourage retention of full-time faculty members at the Colleges of Technology/Polytechnics and other Nigerian institutions of higher learning.
7. A replication of this study should be conducted, with additional personal and geographic characteristics, in order to determine other possible factors that might be influencing faculty voluntary turnover.

8. As a means of validating the study's findings, a subsequent study using alternative instruments should be conducted to identify additional factors relevant to the Nigerian environment.

9. Research study should be conducted on voluntary turnover in Nigerian institutions of higher learning from the perspective of those who have left their institutions voluntarily.

10. The Nigerian government should formulate a policy authorizing its embassy and high commission overseas to actively register the professional profiles of all qualified and experienced Nigerians living or working abroad. Thus, a relocation package could be formulated for Nigerians who are willing and able to contribute to the educational and economic development of Nigeria and of Africa as a whole.

The timeliness of this investigation has been brought into sharp focus by the lead article in Daily Sketch (Monday, September 14, 1992), a Nigerian newspaper dated two weeks before the writing of these conclusions. "STRIKE FEVER GRIPS VARSITIES [universities] AGAIN," reads the headline. This time the strike has been called for by the
Senior Staff Association of Universities, Teaching Hospitals, Research Institutes, and associated Institutions (SSAUTHRIA). Mr. Clarkson A. O. Abu, national secretary of SSAUTHRIA stated that the federal government of Nigeria had been notified of the trade dispute and had done nothing about it, and affirming that the strike action would begin at "12 midnight of Sunday, September 13, 1992."

The strike did occur, which pointed up the crisis caused by dissatisfaction among college faculty—a situation which this study helped identify. What is most relevant is that Nigerian educational institutions have multiple problems without immediate solutions. Perhaps the findings of this and other suggested studies can contribute to solving Nigeria's pressing educational dilemma.
APPENDIX A

LETTERS REQUESTING PERMISSION

LETTERS OF PERMISSION TO CONDUCT THE STUDY
May 2, 1991

Dr. A. Yabani  
The Executive Secretary  
National Board for Technical Education  
P. M. B. 2239  
Kaduna  
Kaduna State, Nigeria

Regarding: Request for Permission

Dear Sir:

I am a principal lecturer in the Department of Accounting and Finance at Plateau State Polytechnic, B/Ladi currently studying at the University of North Texas, Denton, Texas, U. S. A.

The purpose of this letter is to request your permission in order to embark on a doctoral dissertation research project involving the Nigerian Colleges of Technology and Polytechnics, which are under your jurisdiction. The topic of my study is "Factors Influencing Faculty Turnover and Retention at Ten Selected Colleges of Technology and Polytechnics in Nigeria". The research is being conducted to fulfill a requirement for the completion of doctoral studies at the University of North Texas.

Your letter of permission will clear the way for me to proceed with the dissertation study. Your early and favorable response will be highly appreciated.

Yours sincerely,

Ugbo Mallam  
Ph.D. Candidate  
UNT P.O. Box 9103  
University of North  
Denton, TX 76203

Dr. John Eddy  
Professor of Higher Education  
Student's Academic Advisor
Regarding: Request for Permission

Dear Rector:

I am a Principal Lecturer at Plateau State Polytechnic, B/Ladi currently pursuing doctoral studies at the University of North Texas, Denton, Tx., U.S.A. One of the requirements for the completion of my Ph.D. is a dissertation. The topic of my study is "Factors Influencing Faculty Turnover and Retention at Ten Selected Colleges of Technology and Polytechnics in Nigeria".

The purpose of this letter is to request for your written permission to distribute a questionnaire for completion by your full-time faculty members and randomly selected administrators at your College/Polytechnic.

Your permission and prompt response will be highly appreciated.

Yours sincerely,

Ugbo Mallam
Ph.D. Candidate
University of North Texas

Dr. John P. Eddy
Professor of Higher Education and Student Academic Advisor
Mr. Igbo Mailam  
Ph.D. Candidate  
UNT P.O. Box 9103  
The University of North Texas  
Denton, TX, 76203.

Dear Sir,

Re: Permission to Undertake Ph.D. Study of Selected Colleges of Technology and Polytechnics in Nigeria

I wish to thank you for your letter dated 2nd May, 1991.

I am glad to convey to you approval to proceed with your study on "Factors Influencing Faculty Turnover and Retention at Ten Selected Colleges of Technology and Polytechnics in Nigeria".

We wish you luck as you proceed with this study. Should you find it possible, please, send us a copy of your dissertation for reference in our library.

Yours faithfully,

T. DOSUNMU  
Director Planning Research & Statistics
20 May, 1991

To Whom It May Concern

Re: Mr. Ugbo MaiIan

This is to say that the topic, "Factors Influencing Faculty Turnover and Retention at Ten Selected Colleges of Technology and Polytechnics in Nigeria", is relevant to the higher-education situation in Nigeria.

[Signature]

Professor Romanus N. Egudu
Education Attaché
(Universities)

NIGERIAN UNIVERSITIES OFFICE
EMBASSY OF NIGERIA
2010 MASSACHUSETTS AVENUE, N.W.
4TH FLOOR
WASHINGTON, D.C. 20036
REQUEST FOR PERMISSION


I am directed to convey the Rector's approval for you to distribute your questionnaire for completion by our full-time faculty members and randomly selected administrators.

Yours sincerely,

[Signature]

E. E. EDE
for: REGISTRAR.
RE: REQUEST FOR PERMISSION

Refer to your letter concerning above.

I am directed to inform you that permission is granted to you to distribute your questionnaire as indicated. It might be of help to know that apart from the Registry, Medical Centre, Central Library, Bursary and Works Departments (all service departments), the institution has five Schools (Faculties). These are the Schools of Business Studies, Engineering, Technology, Environmental Studies and General Studies.

I wish you success in your studies.

Yours sincerely

Registrar
Mr M. U. Kallam  
UNT P.O. Box 9103  
University of North Texas  
Benton, TX 76203,  
USA.

Dear Sir,

Regarding: REQUEST FOR PERMISSION

I wish to refer to your letter dated June 3, 1991, on the above subject matter and to convey an approval for you to include our Institution among the "Ten Selected Colleges of Technology and Polytechnics in Nigeria", which you are using for your Ph.D. dissertation study on the "Factors Influencing Faculty Turnover and Retention".

In this regard, therefore, you should feel free to distribute your questionnaire for completion by our full-time Faculty members and randomly selected administrators.

Thank you very much for your interest in our Institution.

Yours faithfully,

[Signature]

C. N. ANDY-AGBAI (Mrs)  
Ag. Registrar
29th July, 1981

W. Ugoz Mallam,
UNT F. E. Box 9103,
University of North Texas,
Denton, TX 76209, U.S.A.
(917) 362-4692,

Ref: REQUEST FOR PERMISSION

I have been directed to refer to your letter of 18th June, 1981 on the above matter and to inform you of receipt of copy of the questionnaire.

You are requested to send it promptly please.
Your Ref: W ----------

Our Ref: ADM/166/Vol.1/158.

Date: 13th January, 1992

(Office of the Registrar)

Ugbo Mallam,
Ph.D. Candidate,
UNT P.O. BOX 9103,
The University of North Texas,
Denton, TX 76203, U.S.A.

Dear Mr. Ugbo,

RE: REQUEST FOR PERMISSION

With reference to your letter on the above dated 23rd December, 1991 requesting for permission to distribute a questionnaire for completion by our full-time faculty members and randomly-selected administrators, I am pleased to inform you that the permission has been granted.

You should therefore proceed with the distribution at your earliest convenience. We do assure you our full co-operation.

Wishing you all the best in the laudable undertaking.

Looking forward to hearing/receiving from you soon.

Yours Sincerely,

Abdul-Basit Amadu, P.O. Box 158
For: Establishment Secretary
Mr. U. Mallam,
UNT P. O. Box 9103,
University of Texas,
Denton, Tx 76203, USA.
817-382-4863.

I refer to your letter of 3rd June, 1991 on above
and to convey approval to you to distribute question-
aires to academic and administrative staff of the
Polytechnic in respect of your Ph.D dissertation.

Thank you.

TIMOTHY A. ANJIDE,
REGISTRAR.
REQUEST FOR PERMISSION

Your letter dated June 3rd, 1991 on the above subject refers.

I am directed to convey approval of your request for permission to distribute questionnaire for completion by our full-time academic staff and randomly selected administrators for your dissertation as a requirement for the completion of your Ph.D.
Mr U Mallam
UNT P O Box 9103
University of North Texas
Denton, Tx 76203 U S A
(817) 382-4863

Dear Mr Mallam

RE: REQUEST FOR PERMISSION
TO DISTRIBUTE QUESTIONNAIRE

With regard to your letter of 3 June 1991 on the above subject, I am directed to inform you that approval has been granted to your request to distribute questionnaire relating to your doctoral programme, to members of this Institution.

Yours faithfully

[Signature]

E I Nna (Mrs)
for: Rector
24 July 1991

Mr U Hallam
UNT P O Box 9103
University of North Texas
Denton, TX 76203, U.S.A
(817) 382-4863

Dear Sir

CIRCULATION OF QUESTIONNAIRE

I refer to your letter dated 3rd June 1991 and convey the Rector's approval for you to distribute your questionnaire in our institution.

We appreciate your interest in our institution and hope to be of assistance to you towards the completion of your noble course. We wish you success in your endeavours.

Yours faithfully

F R INIANG
for REGISTRAR
23rd January, 1992

Mr. Ugbo Mallam,
UNT P. O. Box 9103,
University of North Texas,
Denton,
TX 76203,
U. S. A.

Dear Mr. Mallam,

Re: Permission To Distribute Questionnaire Among Selected Members Of The College Community

I am directed to refer to your letter of 23rd December, 1991 on the above subject matter and to convey approval for your request to administer questionnaire among selected members of the College Community.

Wishing you success in your endeavours.

Yours sincerely,

G. A. Ogunsanwo
for: Ag. Registrar
Population

Colleges of Technology/Polytechnics in Nigeria

1. Institute of Management and Technology
   Enugu, Anambra State

2. Anambra State Polytechnic
   Oko, Anambra State

3. Federal Polytechnic
   Bauchi, Bauchi State

4. Bauchi State Polytechnic
   Bauchi, Bauchi State

5. Auchi Polytechnic
   Auchi, Bendel State

6. Federal Polytechnic
   Idah, Benue State

7. Benue State Polytechnic
   Ugbokolo, Benue State

8. Ramat Polytechnic
   Maiduguri, Borno State

9. The Polytechnic
   Calabar, Cross River State

10. Federal Polytechnic
    Mubi, Gongola State

11. The Polytechnic
    Nekede, Owerri
    Imo State

12. Federal Polytechnic
    Uwana-Afikpo, Imo State

13. Kaduna Polytechnic
    Kaduna, Kaduna State

14. Kaduna State Polytechnic
    Kaduna, Kaduna State

15. Kano State Polytechnic
    Kano, Kano State

16. Katsina Polytechnic
    Katsina
    Katsina State

17. Kwara State Polytechnic
    Ilori, Kwara State

18. Lagos State Polytechnic
    Isolo, Lagos State

19. Yaba College of Technology
    Yaba, Lagos State

20. Federal Polytechnic
    Bida, Niger State

21. Federal Polytechnic
    Ilaro, Ogun State

22. Ogun State Polytechnic
    Abeokuta, Ogun State

23. Federal Polytechnic
    Ado-Ekiti
    Akure, Ondo State

24. The Polytechnic
    Ibadan, Ondo State

25. The Polytechnic
    Owo, Ondo State

26. Federal Polytechnic
    Nasarawa Plateau State

27. Plateau State Polytechnic
    Barkin Ladi Plateau State
28. Rivers State Polytechnic  
    Bori, Rivers State

29. Federal Polytechnic  
    Kaura Namoda  
    Sokoto State

30. Sokoto State Polytechnic  
    Birnin Kebbi  
    Sokoto State
APPENDIX C

PERMISSION TO USE: JOB DESCRIPTIVE INDEX

and

ORGANIZATIONAL COMMITMENT QUESTIONNAIRES
September 17, 1991

Ugbo Mallan
PO Box 9103
University of North Texas
Denton, TX 76203

Dear Mr. Mallan:

We hereby grant you permission to include the JDI in your published research provided you include the notation "Copyright, 1985, Bowling Green State University".

Sincerely,

[Signature]

Patricia C. Smith, Ph.D.
Professor Emerita
Mr. Ugbo Mallam  
U.N.T Box 9103  
University of North Texas  
Denton, TX 76203  

Dear Mr. Mallam:

The Organizational Commitment Questionnaire (OCQ), developed by Professor Lyman Porter of the University of California, Irvine, is not copyrighted and thus exists in the public domain. It is unnecessary to secure permission for its use in research. In fact, Professor Porter has actively encouraged researchers to use his instrument.

You should not hesitate to use the OCQ in your dissertation research or to modify it to fit your particular study needs. I wish you every success in your research project.

Sincerely,

Richard T. Mowday
APPENDIX D

COVER LETTER AND

DATA COLLECTING INSTRUMENTS
Dear Faculty Member,

I am a principal lecturer at Plateau State Polytechnic, Barkin Ladi, currently pursuing doctoral studies at the University of North Texas, Denton, Texas, U.S.A. I am asking for your assistance in conducting a research study entitled, "Factors Influencing Faculty Turnover at Ten Selected Colleges of Technology/Polytechnics in Nigeria". The study is being conducted to fulfill a requirement for the completion of my Ph.D.

Kindly complete the enclosed questionnaire which is in three parts: Faculty Biodata, Job Descriptive Index (JDI), and Organizational Commitment Questionnaire (OCQ).

Your information and responses will be held strictly confidential and individual faculty members will not be identified. The questionnaire or form does not need to be signed. Return the completed questionnaire in the stamped addressed envelope or as you may be directed.

Your assistance is highly appreciated.

Yours sincerely,

Ugbo Mallam
Ph.D. Candidate, U.N.T.

Dr. John P. Eddy
Professor of Higher Education and Student Academic Advisor
DATA COLLECTION INSTRUMENT

Part 1

FACULTY BIODATA

Please provide the information requested in the spaces below by checking all that apply to you.

1. Your Gender
   ____ 1. Male  ____ 2. Female

2. Marital Status
   ____ 1. Married  ____ 2. Single

3. Your Age
   ____ 1. Less than 25  ____ 4. 36-40
   ____ 2. 26-30  ____ 5. 41-45
   ____ 3. 31-35  ____ 6. 46 and above

4. Your Highest Level of Education
   ____ 1. Bachelor’s Degree  ____ 3. Doctoral Degree
   ____ 2. Master’s Degree  ____ 4. Other
   Specify __________

5. Your Cadre/Grade Level
   ____ 1. Assistant Lecturer  ____ 4. Lecturer I - III
   ____ 2. Senior Lecturer  ____ 5. Principal Lecturer
   ____ 3. Chief Lecturer  ____ 6. Other
   Salary Grade Level  ____  Specify __________

6. Name of Your Polytechnic/College ____________________

7. Your State of Origin ____________________

8. Years of Teaching Experience at Polytechnic/College ___
### Faculty Turnover Information Sheet

**Total Number**

<table>
<thead>
<tr>
<th>Full-time Faculty</th>
<th>1985-6</th>
<th>1986-7</th>
<th>1987-8</th>
<th>1988-9</th>
<th>1989-90</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>S</td>
<td>T</td>
<td>L</td>
<td>S</td>
</tr>
<tr>
<td>Chief Lecturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Lecturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer II</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer III</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant Lecturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dean</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty with some administrative responsibility (eg. Coordinator or Director of Research)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Code:**  
- **L** -- Leave  
- **S** -- Stay  
- **T** -- Total
THE JOB DESCRIPTIVE INDEX

Think of the work you do at present. How well does each of the following words or phrases describe your work? In the blank beside each word below, write

---Y--- for "Yes" if it describes your work
---N--- for "No" if it does NOT describe it
---?--- if you cannot decide

Work on Present Job

_____ Fascinating
_____ Routine
_____ Satisfying
_____ Boring
_____ Good
_____ Creative
_____ Respected
_____ Uncomfortable
_____ Pleasant
_____ Useful
_____ Tiring
_____ Healthful
_____ Challenging
_____ Too much to do
_____ Frustrating
_____ Simple
_____ Repetitive
_____ Gives sense of accomplishment

Go on to the next page . . .

Copyright, 1985, Bowling Green State University
Think of the pay you get now. How well does each of the following words or phrases describe your present pay?

--- Y --- for "Yes" if it describes your pay
--- N --- for "No" if it does NOT describe it
--- ? --- if you cannot decide

Present Pay

[Blank] Income inadequate for normal expenses
[Blank] Fair
[Blank] Barely live on income
[Blank] Bad
[Blank] Insecure
[Blank] Less than I deserve
[Blank] Well paid
[Blank] Underpaid

Go on to the next page . . . .
Think of the opportunities for promotion that you have now. How well does each of the following word or phrases describe these? In the blank beside each word below, write

---Y--- for "Yes" if it describes your opportunities for promotion
---N--- for "No" if it does NOT describe them
---?--- if you cannot decide

<table>
<thead>
<tr>
<th>Opportunities for Promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good opportunities for promotion</td>
</tr>
<tr>
<td>Opportunities somewhat limited</td>
</tr>
<tr>
<td>Promotion on ability</td>
</tr>
<tr>
<td>Dead-end job</td>
</tr>
<tr>
<td>Unfair promotion policy</td>
</tr>
<tr>
<td>Infrequent promotions</td>
</tr>
<tr>
<td>Regular promotions</td>
</tr>
<tr>
<td>Fairly good chance for promotion</td>
</tr>
</tbody>
</table>

Go on to the next page . . . .
Think of the kind of supervision that you get on your job. How well does each of the following words or phrases describe this? In the blank beside each word below, write

---Y--- for "Yes" if it describes the supervision you get on your job
---N--- for "No" if it does NOT describe it
---?--- if you cannot decide

Supervision

Asks my advice
Hard to please
Impolite
Praises good work
Tactful
Influential
Up-to-date
Doesn't supervise enough
Tells me where I stand
Annoying
Stubborn
Knows job well
Bad
Intelligent
Poor planner
Around when needed
Lazy

Go on to the next page . . . .
Think of the majority of the people that you work with now or the people you meet in connection with your work. How well does each of the following words or phrases describe these people? In the blank beside each word below, write

---Y--- for "Yes" if it describes the people you work with
---N--- for "No" if it does NOT describe them
---?--- if you cannot decide

Coworkers (People)

Stimulating  Boring
Slow
Helpful
Stupid
Responsible
Fast
Intelligent
Easy to make enemies
Talk too much
Smart
Lazy
Unpleasant
Gossipy
Active
Narrow interests
Loyal
Stubborn

Go on to the next page . . .
Think of your job in general. All in all, what is it like most of the time? In the blank beside each word below, write

---Y--- for "Yes" if it describes your work
---N--- for "No" if it does NOT describe it
---?--- if you cannot decide

Job in General

Pleasant
Bad
Waste of time
Good
Undesirable
Worthwhile
Worse than most
Acceptable
Superior
Better than most
Disagreeable
Makes me content
Inadequate
Excellent
Rotten
Enjoyable
Poor
Part III

Organizational Commitment Questionnaire (OCQ)

Instructions:

Listed below are a series of statements that represent possible feelings that individuals might have about the institution for which they work. With respect to your own feelings about your College/Polytechnic, please indicate the degree of your agreement or disagreement with each statement by circling one of the seven alternatives against each statement.

1 - strongly disagree  2 - moderately disagree
3 - slightly disagree  4 - neither disagree nor agree
5 - slightly agree    6 - moderately agree
7 - strongly agree

1 2 3 4 5 6 7 1. I am willing to put in a great deal of effort beyond that normally expected in order to help this institution be successful.

1 2 3 4 5 6 7 2. I talk up this institution to my friends as a great institution to work for.

1 2 3 4 5 6 7 3. I feel very little loyalty to this institution.

1 2 3 4 5 6 7 4. I would accept almost any type of job assignment in order to keep working for this institution.

1 2 3 4 5 6 7 5. I find that my values and the institution's values are very similar.

1 2 3 4 5 6 7 6. I am proud to tell others that I am part of this institution.
7. I could just as well be working for a different institution as long as the type of work were similar.

8. This institution really inspires the very best in me in the way of job performance.

9. I would take very little change in my present circumstances to cause me to leave this institution.

10. I am extremely glad that I chose this institution to work for over others I was considering at the time I joined.

11. There's not too much to be gained by sticking with this institution indefinitely.

12. Often, I find it difficult to agree with this institution's policies on important matters relating to its employees.

13. I really care about the fate of this institution.

14. For me this is the best of all possible institutions for which to work.

15. Deciding to work for this institution was a definite mistake on my part.
REFERENCES


