

DIVERSITY OF BUTTERFLIES IN A UNIVERSITY CAMPUS ENVIRONMENT

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF BIOLOGY, FACULTY OF SCIENCE,
UNIVERSITY OF LAGOS, AKOKA, LAGOS STATE

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.)
DEGREE IN BIOLOGY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Diversity of Butterflies in a University Campus Environment" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

Date

DEDICATION

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

ACKNOWLEDGEMENT

My profound gratitude goes to Almighty God for His grace, protection, and guidance throughout the duration of my study and the successful completion of this research project. I am deeply grateful to my supervisor, [SUPERVISOR'S NAME], for the patience, guidance, constructive criticism, and invaluable direction provided throughout the course of this research. I also wish to appreciate the Head of Department, the lecturers of the Department of Biology, and my course mates for their support and friendship. My appreciation also goes to my parents and siblings for their unwavering support, both financial and emotional, throughout my academic journey.

ABSTRACT

This study examined diversity of butterflies in a university campus environment, using undergraduate students of the University of Lagos as a case study. The study was guided by three specific objectives: to examine the extent to which respondents exhibit the key attributes of diversity; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with diversity and butterflies. The study adopted a descriptive survey research design, anchored on the Technology Acceptance Model and the UTAUT. A sample size of 416 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 402 questionnaires were found valid for analysis. Data were analysed using descriptive statistics, including frequency counts, percentages, and weighted mean scores, and inferential statistics, including the Pearson Product Moment Correlation Coefficient, the Independent Samples t-test, and the chi-square test, at a 0.05 level of significance. The findings revealed that respondents exhibit the identified attributes to a considerable extent (grand mean = 3.13). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.496$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.48, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.3$, $p > 0.05$). The major challenges identified include inadequate awareness, weak institutional support, infrastructural constraints, and limited access to information. The study recommends targeted interventions, improved access to resources, and intensified public education on diversity.

TABLE OF CONTENTS

Title Page	i
Certification	ii
Dedication	iii
Acknowledgement	iv
Abstract	v
Table of Contents	vi
List of Tables	vii
List of Figures	viii
CHAPTER ONE: INTRODUCTION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Objectives of the Study	7
1.4 Research Questions	7
1.5 Research Hypotheses	7
1.6 Significance of the Study	8
1.7 Scope and Limitation of the Study	10
1.8 Definition of Terms	13
CHAPTER TWO: LITERATURE REVIEW	14
2.1 Conceptual Review	14
2.1.1 Concept of Diversity	14
2.1.2 Concept of Butterflies	15
2.1.3 Concept of University	17
2.2 Theoretical Framework	19
2.2.1 Technology Acceptance Model	19
2.2.2 UTAUT	20
2.2.3 Diffusion of Innovation Theory	21
2.2.4 Systems Development Life Cycle	22
2.3 Empirical Review	24
2.3.1 Early Studies on diversity	24
2.3.2 Recent Nigerian Evidence on diversity	25
2.3.3 Diversity and butterflies	27
2.3.4 Comparative Perspectives across Africa	29
2.4 Summary of Literature Review	31
CHAPTER THREE: RESEARCH METHODOLOGY	34
3.1 Research Design	34
3.2 Population of the Study	34
3.3 Sample Size and Sampling Technique	35
3.4 Sources of Data Collection	36
3.5 Research Instrument	37
3.6 Validity and Reliability of the Instrument	38
3.7 Method of Data Analysis	39
3.7.1 Administration of the Instrument	40

3.8 Ethical Considerations	41
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION	43
4.1 Data Presentation	43
4.2 Demographic Characteristics of Respondents	43
4.3 Analysis of Research Questions	44
4.4 Test of Hypotheses	45
4.5 Discussion of Findings	46
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	51
5.1 Summary	51
5.2 Conclusion	52
5.3 Recommendations	53
5.4 Suggestions for Further Studies	53
REFERENCES	55
APPENDIX	57

LIST OF TABLES

Table 2.1: Summary of the Review of Related Literature	31
Table 2.2: Operationalisation of the Study Variables	32
Table 3.1: Population of the Study and Sampling Technique	41
Table 3.2: Validity and Reliability of the Research Instrument	42
Table 4.1: Gender Distribution of Respondents	49
Table 4.2: Age Distribution of Respondents	49
Table 4.3: Educational Attainment of Respondents	49
Table 4.4: Weighted Mean Analysis of Research Question One	50
Table 4.5: Weighted Mean Analysis of Research Question Two	50
Table 4.6: Correlation Summary between the Independent and Dependent Variables	50
Table 4.7: Independent Samples t-test by Gender	50
Table 4.8: Chi-square Test of Association	50

LIST OF FIGURES

Figure 1.1: Conceptual Framework of the Study	13
Figure 2.1: Diversity in Biology Research Context	32
Figure 2.2: Butterflies in Biology Research Context	33
Figure 2.3: University in Biology Research Context	33
Figure 3.1: Biology Research Context	42
Figure 4.1: Gender Distribution of Respondents	49
Figure 4.2: Age Distribution of Respondents	49

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of diversity of butterflies in a university campus environment is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

Diversity, when examined in relation to butterflies, reveals complex and often paradoxical dynamics. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream diversity into routine governance. An examination by Adekunle and Okonkwo (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. These developments carry important implications for policy and practice in biology. Studies by Obiora and Nnamdi (2019) largely support the view that diversity exerts a measurable influence on outcomes of interest. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Diversity occupies a prominent position in contemporary debates about butterflies and national development. Globalisation and technological change have intensified both the opportunities and the challenges associated with diversity. Research by Adeniyi and Oyelaran (2021) using mixed methods provided particularly rich insight into the mechanisms connecting diversity and butterflies. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Studies conducted within the West African subregion by Osinachi and Eze (2018) reached conclusions broadly consistent with the Nigerian evidence. These developments carry important implications for policy and practice in biology. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

In recent years, diversity has emerged as a central theme in scholarly discourse on biology. National policies and programmes have sought, with varying degrees of success, to respond to the realities of diversity and butterflies. Evidence assembled by Osinachi and Eze (2015) across twelve states underscored the heterogeneity of outcomes linked to diversity. Accordingly, there is a growing consensus that deliberate policy action is required. A notable study by Obiora and Adebayo (2017) argued that the impact of diversity is substantially mediated by the quality of institutions. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

In both global and African literatures, diversity is now regarded as a key index of institutional performance. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of diversity. Empirical evidence from Adigun and Famuyide (2021) suggests that positive developments in butterflies are associated with improvements in diversity. For practitioners, the practical significance of diversity cannot be overstated, given its demonstrable link with butterflies. Findings reported by Ekwueme and Ekwueme (2018) observed that respondents with greater exposure to diversity recorded