

# PATH ANALYSIS OF THE RELATIONSHIPS AMONG UNDERGRADUATE STUDENTS' LEARNING OUTCOMES AND LECTURERS' USE OF PEDAGOGIC STRATEGIES IN ECONOMICS IN SOUTHWESTERN NIGERIA

BY

# **BOSEDE ABIMBOLA ADESINA**

#### EDP 12/13/H/2309

B. Sc. (Ife) M. Sc. (Ibadan) (Economics) M. Ed., M. A. Ed. (Ife) (Curriculum Studies)

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF
PHILOSOPHY IN EDUCATION (CURRICULUM STUDIES)

TO THE DEPARTMENT OF ARTS AND SOCIAL SCIENCE EDUCATION, FACULTY OF EDUCATION, OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE, NIGERIA

2016



# OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE

# HEZEKIAH OLUWASANMI LIBRARY

#### **POSTGRADUATE THESIS**

#### **AUTHORIZATION TO COPY**

TITLE:	Path Analysis of the Relationships among Undergraduate Students' Learning
	Outcomes and Lecturers' Use of Pedagogic Strategies in Economics in
	Southwestern Nigeria

**DEGREE:** Ph. D. (Curriculum Studies)

Signature

**AUTHOR:** Bosede Abimbola ADESINA

**YEAR:** 2016

I, Bosede Abimbola ADESINA, hereby authorize the management of

Hezekiah Oluwasanmi Library to copy my thesis, in whole or in part, in

response to requests from individual researchers and organizations for the

purpose of private study or research.

Date



# **CERTIFICATION**

This is to certify that this study was carried out by Bosede Abimbola ADESINA (EDP12/13/H/2309) in the Department of Arts and Social Science Education, Faculty of Education and has been read, approved and adjudged to meet part of the requirements for the award of Doctor of Philosophy in Education (Curriculum Studies) degree of Obafemi Awolowo University, Ile-Ife, Nigeria.

Prof. Y. A. Ajibade	Prof. P. A. Olomola
Supervisor	Co-supervisor

-----

Prof. Y. A. Ajibade

**Head of Department** 



# **DEDICATION**

I dedicate this work to my Father – Almighty God; my Lord and Saviour – Jesus Christ, the Son of God; and my Teacher and Comforter – the Holy Spirit.



# **ACKNOWLEDGEMENTS**

All glory, honour, adoration, praise and worship to the Almighty God for granting me good health, wisdom, journey mercies, favour and financial means - all on a platter of supernatural grace and mercy - for the successful completion of this research thus bringing me to the acme of my dissertations in Curriculum Studies. I am deeply indebted to my supervisor, Prof. Y. A. Ajibade who is also my Head of Department for providing me with invaluable academic and professional mentoring needed for this study. Her untiring efforts to assist me in the successful completion of this research are very much appreciated. My co-supervisor, Prof. P. A. Olomola, is deeply appreciated for always offering corrections and materials for this dissertation. I was greatly encouraged to forge ahead with this study by his counsel.

Special thanks go to the authority of Obafemi Awolowo University, Ile-Ife, Nigeria for the tuition-free post-graduate programme for staff as well as the opportunity given to me to pursue the course that culminated in this study. I am so grateful for the strong support I received from my colleagues in the Department of Arts and Social Science - Mr. E. O. Awopetu, Dr. A. J. Obadiora and Mr. O. S. Oyetoro - throughout the course of carrying out this study. My appreciation also goes to Prof. O. J. Ehindero, Prof. M. A. Adeleke, Dr. E. O. Oloyede, Dr. E. F. Bamidele, Dr. (Mrs.) M. O. Salami, Dr. I. A. Ojediran and Miss O. A. Fawole for their various roles in facilitating the successful completion of this research. I acknowledge the efforts of the non-academic staff of the Department of Arts and Social Science Education in persons of Mrs. C. O. Olaniran, Mr. S. Akinwunmi and Mr. S. O. Afolayan. They assisted in handling official correspondence pertaining to this study.



I really appreciate the memory of my late father, Mr. Abraham O. Aro, who ensured that I had a solid educational foundation upon which various teachers built a solid academic edifice up to this level. I am very grateful to my mother, Mrs. Grace O. Aro, for always selflessly sacrificing her time, goods and prayers for the success of every aspect of my life including my academic life, even at this level! This note of acknowledgements will be incomplete if I fail to mention the support of my late husband, Joseph A. Adesina, who relentlessly contributed towards my academic pursuit, including the early stage of this study. I had looked forward to more of his contributions to the completion of this study but God knows best. I am deeply indebted to all the lecturers and students that participated in this study. Special thanks go to the authorities of all the universities and their departments, used for this study, for allowing me to collect data in their universities.

I cannot forget the prayers and godly counsel of Pastor Taiwo Babalola and Evangelist Festus Fajobi towards the successful completion of this work. I acknowledge the commitment and hard work of all my research assistants, viz, Abiola Tedimola, Olufowobi Adetayo, Oluwakemi Oke, Noah Abbah and Rosaline Robert. I very much thank them and wish them a very bright future. Dr. A. T. Onabamiro, with his family, is appreciated for his concerted and untiring efforts towards the analysis of data for this research. His family's hospitality during the data analysis is highly commendable. I will always be grateful to Dr. and Mrs. A. I. Odiwe for constantly taking excellent care of the children, with no strings attached, while I was away collecting and processing data for this study. I also extend my heartfelt thanks to my siblings — Dr. Olugbemiga O. Aro, Engr. Olubunmi O. Aro, Engr. Opeyemi O. Aro and Mrs. Folasade O. Owolabi. They rendered constant and whole-hearted support for the successful completion of this work. I very much appreciate my children - Temitope Favour, Tolulope Mercy and



Oluwatobi Goodness - and a host of others for supporting, encouraging and believing in me. I am grateful to the many authors whose works were consulted for this thesis. Nevertheless, I take responsibility for whatever mistake that may be found in this report.

**Bosede Abimbola ADESINA** 



# TABLE OF CONTENTS

Content	Page
Title Page	i
Authorization to Copy	ii
Certification	iii
Dedication	iv
Acknowledgements.	V
Table of Contents	viii
List of Tables.	xi
List of Figures	xiii
List of Appendices.	xiv
List of Abbreviations	XV
Abstract	xvi
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	6



Purpose of the Study	7
Research Hypotheses	8
Delimitation of the Study	9
Significance of the Study	9
Theoretical Framework	10
Operational Definition of Terms	18
CHAPTER TWO: REVIEW OF LITERATURE	
Economics as a Discipline	19
Teaching and Learning of Economics in Nigerian Universities	21
Meaning, Significance and Categories of Learning Outcomes	23
Factors/Variables Influencing Learning Outcomes	24
Factors Influencing Undergraduate Economics Students' Learning Outcomes	26
Pedagogy and Pedagogic Strategies	42
Meaning and Uses of Path Analysis	46
Empirical Studies that used Path Analysis	50
Appraisal of Literature	52



# **CHAPTER THREE: METHODOLOGY**

Research Design	54
Population, Sample and Sampling Procedure	54
Research Instruments	55
Validation of Research Instruments	62
Procedure for Data Collection	63
Method of Data Analysis	63
CHAPTER FOUR: RESULTS AND DISCUSSION	
Research Hypothesis 1(a)	79
Research Hypothesis 1(b)	84
Research Hypothesis 2(a)	87
Research Hypothesis 2(b)	92
Research Hypothesis 3	95
Research Hypothesis 4.	97
Research Hypothesis 5	99
Discussion	101

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMENDATIONS



Summary	107
Conclusion	109
Recommendations	109
Contribution to Knowledge	110
Limitations of the Study	111
Suggestions for Further Studies	111
REFERENCES	112
APPENDICES	118



# LIST OF TABLES

	Table	Page
1	The Original and Reproduced Correlations among the Student and	
	Environmental Variables and Undergraduate Economics Students'	N
	Performance	76
2	The Original and Reproduced Correlations among the Student and	
	Environmental Variables and Undergraduate Economics Students'	
	Attitude	77
3	The Original and Reproduced Correlations among Teacher Variables	
	and Undergraduate Economics Students' Performance	78
4	The Original and Reproduced Correlations among Teacher Variables	
	and Undergraduate Economic Students' Attitude	78
5	Strengths of the Pathways among Student and Environmental Variables	
	and Performance	81
6	Strengths of the Pathways among Teacher Variables and Performance	86
7	Strengths of the Pathways among Student and Environmental Variables	
	and Attitude	89



8	Strengths of the Pathways among Teacher Variables and Attitude	94
9	Influence of Explanatory Variables on Undergraduate Students'	
	Performance in Economics	96
10	Influence of Explanatory Variables on Undergraduate Students'	<b>~</b>
	Attitude to Economics	98
11	Significance of Variables Influencing Lecturers' Use of Pedagogic	
	Strategies in Economics	101



# LIST OF FIGURES

	Figure	
1.	Input Path Model of the Relationships among Student and	1
	Environmental Variables and Performance	66
2.	Input Path Model of the Relationships among Teacher Variables and Performance	68
3.	Input Path Model of the Relationships among Student and	
	Environmental Variables and Attitude	70
4.	Input Path Model of the Relationships among Teacher Variables and Attitude	72
5.	Input Path Model of the Relationships among Variables Influencing Pedagogic Strategies	74
6.	Output Path Model of the Relationships among Student and	
	Environmental Variables and Performance	80
7.	Output Path Model of the Relationships among Teacher Variables and Performance	85
8.	Output Path Model of the Relationships among Student and	
	Environmental Variables and Attitude	88



9.	Output Path Model of the Relationships among Teacher Variables	
	and Attitude	93
10.	Output Path Model of the Variables Influencing Lecturers' Use of	
	Pedagogic Strategies in Economics	100



# LIST OF APPENDICES

Aį	Appendix		Page
	I	Questionnaire on Students' Socio-economic Status (QSES)	118
	II	Adapted Coopersmith Self-esteem Inventory (ACSEI)	120
	III	Adapted Cornell Critical Thinking Test (ACCTT)	123
	IV	Adapted Hazard and Nadeau Study Habits Inventory (AHNSHI)	132
	V	Memletics Learning Style Inventory (MLSI)	135
	VI	Martin Cognitive-style Inventory (MCI)	140
	VII	Questionnaire on Students' Attitude to Economics (QSAE)	144
	VIII	Observation Inventory for Lecturers' Pedagogic Strategies and	
		Materials (OILPSM)	146
	IX	Letter of Introduction	149
	X	Letter of Request for Cumulative Grade Point Average (CGPA)	
	V	of Participants	150



# LIST OF ABBREVIATIONS

# **ABBREVIATION MEANING** 1. MB Mathematics Background 2. SB Science Background 3. LB Language Background 4. SSex Students' Sex 5. SES Socio-economic Status 6. SE Self Esteem Critical Thinking Ability 7. CTA 8. SH Study Habit 9. LS Learning Style 10. CS Cognitive Style 11. ST School Type 12. LQ Lecturers' Qualification 13. MT Method of Teaching 14. PS Pedagogical Strategies 15. LSex Lecturers' Sex 16. IM **Instructional Materials** 17. S Significant 18. NS Not Significant 19. Questionnaire on Students' Socio-economic Status QSES 20. Adapted Coopersmith Self-esteem Inventory ACSEI

ACCTT

21. Adapted Cornell Critical Thinking Test



# ABBREVIATION 22. Adapted Hazard and Nadeau Study Habits Inventory AHNSHI 23. Memletics Learning Style Inventory MLSI 24. Martin Cognitive-style Inventory MCI 25. Questionnaire on Students' Attitude to Economics QSAE 26. Observation Inventory for Lecturers' Pedagogic Strategies and Materials OILPSM



#### **ABSTRACT**

This study analysed the strength of the pathways among some explanatory variables (student, environmental and teacher factors); and undergraduate students' performance in Economics; determined the strength of the pathways among the explanatory variables and undergraduate students' attitude to Economics; analysed variables with significant direct and indirect influence on undergraduate students' performance in Economics; identified variables with significant direct and indirect influence on undergraduate students' attitude to Economics; and determined variables influencing lecturers' use of pedagogic strategies in Economics. These were with a view to examining factors influencing undergraduate Economics students' learning outcomes and lecturers' use of pedagogic strategies, using path analysis.

The ex- post facto research design was used for this study. The population for the study consisted of the undergraduate Economics students and their lecturers in public universities located in the six states of southwestern Nigeria. Of the 15 public universities in the six states of southwestern Nigeria (seven federal and eight state universities), four universities comprising two federal universities and two state universities were sampled using federal/state stratification. From each of these four universities, 50 undergraduates at 400 level were selected by convenient sampling to make up a study sample of 200 students. All the available sixty-two lecturers in the Economics Department of the selected universities were also used for the study. Eight instruments were used namely: Questionnaire on Students' Socio-economic Status (QSES), Adapted Coopersmith Self-Esteem Inventory (ACSEI), Adapted Cornell Critical Thinking Test



(ACCTT), Adapted Hazard and Nadeau Study Habits Inventory (AHNSHI), Memletics Learning Style Inventory (MLSI), Martin Cognitive-style Inventory (MCI), Questionnaire on Students' Attitude to Economics (QSAE) and Observation Inventory for Lecturers' Pedagogic Strategies and Materials (OILPSM). QSES was used to collect data on students' demographic characteristics and socio-economic status; ACSEI was used to collect data on students' self-esteem; ACCTT was used to collect data on students' critical thinking ability; AHNSHI was used to collect data on students' study habits; MLSI was used to collect data on students' learning style; MCSI was used to collect data on students' cognitive style; QSAE was used to collect data on students' attitude to Economics; OILPSM was used as a guide for observing lecturers' use of pedagogic strategies and choice of instructional materials; and for collecting data on lecturers' qualifications

Results showed that the strengths of 33 out of 80 pathways among the explanatory variables and undergraduate students' performance in Economics were significant (0.097  $\leq \beta \leq$  0.903,  $\rho < 0.05$ ); strengths of 30 out of 80 pathways among the explanatory variables and undergraduate students' attitude to Economics were significant (0.109  $< \beta < 0.905$ ,  $\rho < 0.05$ ); variables with significant direct and indirect influence on undergraduate students' performance in Economics were school type ( $\beta = 0.507$ ,  $\rho < 0.05$ ), mathematics background ( $\beta = -0.393$ ,  $\rho < 0.05$ ), cognitive style ( $\beta = 0.219$ ,  $\rho < 0.05$ ), study habits ( $\beta = 0.196$ ,  $\rho < 0.05$ ), lecturers' qualification ( $\beta = -0.139$ ,  $\rho < 0.05$ ), pedagogic strategies ( $\beta = 0.369$ ,  $\rho < 0.05$ ), method of teaching ( $\beta = -0.417$ ,  $\rho < 0.05$ ) and instructional materials ( $\beta = -0.273$ ,  $\rho < 0.05$ ); and students' sex ( $\beta = 0.063$ ,  $\rho < 0.05$ ), school type ( $\beta = 0.008$ ,  $\rho < 0.05$ ), language background ( $\beta = -0.016$ ,  $\rho < 0.05$ ), mathematics background ( $\beta = 0.010$ ,  $\rho < 0.05$ ), science background ( $\beta = 0.017$ ,  $\rho < 0.05$ ), self-esteem ( $\beta = 0.068$ ,  $\rho < 0.05$ ), cognitive style ( $\beta = 0.045$ ,  $\rho < 0.05$ ), learning style ( $\beta = 0.05$ ), cognitive style ( $\beta = 0.045$ ,  $\beta < 0.05$ ), learning style ( $\beta = 0.05$ ), cognitive style ( $\beta = 0.045$ ,  $\beta < 0.05$ ), learning style ( $\beta = 0.05$ ), cognitive style ( $\beta = 0.045$ ,  $\beta < 0.05$ ), learning style ( $\beta = 0.05$ )



0.040,  $\rho < 0.05$ ), lecturers' sex ( $\beta = 0.110$ ,  $\rho < 0.05$ ), lecturers' qualification ( $\beta = 0.087$ ,  $\rho < 0.05$ ), pedagogic strategies ( $\beta = -0.091$ ,  $\rho < 0.05$ ) and method of teaching ( $\beta = 0.036$ ,  $\rho < 0.05$ ); and variables with significant direct and indirect influence on undergraduate students' attitude to Economics were language background ( $\beta = 0.277$ ,  $\rho < 0.05$ ), self-esteem ( $\beta = 0.120$ ,  $\rho < 0.05$ ), cognitive style ( $\beta = 0.508$ ,  $\rho < 0.05$ ), study habits ( $\beta = 0.209$ ,  $\rho < 0.05$ ), lecturers' sex ( $\beta = -0.150$ ,  $\rho < 0.05$ ) and instructional materials ( $\beta = 0.367$ ,  $\rho < 0.05$ ); and students' sex ( $\beta = 0.001$ ,  $\rho < 0.05$ ), school type ( $\beta = 0.003$ ,  $\rho < 0.05$ ), socio-economic status ( $\beta = 0.001$ ,  $\rho < 0.05$ ), language background ( $\beta = -0.013$ ,  $\rho < 0.05$ ), mathematics background ( $\beta = 0.020$ ,  $\rho < 0.05$ ), science background ( $\beta = 0.015$ ,  $\rho < 0.05$ ), self-esteem ( $\beta = 0.101$ ,  $\rho < 0.05$ ), learning style ( $\beta = 0.040$ ,  $\rho < 0.05$ ), lecturers' sex ( $\beta = -0.003$ ,  $\beta < 0.05$ ), lecturers' qualification ( $\beta = -0.027$ ,  $\beta < 0.05$ ). Also, lecturers' sex ( $\beta = 0.107$ ,  $\beta < 0.05$ ) and method of teaching ( $\beta = 0.062$ ,  $\beta < 0.05$ ), lecturers' qualification ( $\beta = -0.008$ ,  $\beta < 0.05$ ), method of teaching ( $\beta = 0.067$ ,  $\beta < 0.05$ ), lecturers' qualification ( $\beta = -0.008$ ,  $\beta < 0.05$ ), method of teaching ( $\beta = 0.007$ ,  $\beta < 0.05$ ) and instructional materials ( $\beta = 0.134$ ,  $\beta < 0.05$ ) are the variables with significant influence on lecturers' use of pedagogic strategies in Economics.

The study concluded that factors affecting undergraduate students' learning outcomes in Economics and Economics lecturers' use of pedagogic strategies vary in strength and direction of influence. Furthermore undergraduate Economics students' performance and attitude to Economics can be improved by making decisions on planning and executing pedagogic interventions in teaching and learning of Economics based on the varying strengths and directions of influence of significant explanatory variables on undergraduate students' performance in and attitude to Economics. Also undergraduate Economics learning outcomes



and Economics lecturers' use of pedagogic strategies can be planned, predicted and explained based on the models built by the study.



#### **CHAPTER ONE**

#### INTRODUCTION

#### **Background to the Study**

Economic problems such as unemployment, inflation, poverty, deficit and low standard of living are inherent problems of human beings. Economists study and try to explain these and many other social, political and environmental problems that have important economic consequences by collecting and analysing relevant data. Economic analyses provide insights into individual and aggregate behaviour as relationships between innumerable ends and scarce means, which have alternative uses. The limited nature or scarcity of resources necessitates the study of Economics. Resources are considered scarce because of the tendency of various economic units to demand more resources than are available. Scarcity is the basic economic problem therefore available resources must be used efficiently. Economicsstudies and explains how individuals, households, firms and governments allocate limited or scarce resources, which have alternative uses to satisfy unlimited wants (Robbins in Jhingan, 2011; Queen's University Department of Economics, 2014; Vassar College Department of Economics, 2014). Ultimately, the study of Economics should help improve individual and societal living conditions. Effective teaching of Economics is a gateway to a country's attainment of economic greatness.

Even though Economics is offered at different levels of education in Nigeria, its greatest impact is seen at the tertiary level as observed in the objectives of Economics curricula for tertiary institutions. At the tertiary level, the study of Economics was designed to train students not only to be familiar with conventional economic theories but also to be conscious of the limitations of the theories



as they relate to economic development in a setting like Nigeria; develop analytic skills in students for designing and formulating economic policies which are of social relevance; and produce economists who are thoroughly familiar with the Nigerian economic scene and its relation to the international economic environment.

Others are to: develop students' critical judgment, ability to observe, understand, analyze and synthesize data on socio-economic problems; provide appropriate environment that will enable the students to raise their level of creativity and promote the spirit of self-reliance; stimulate students to be able to observe, understand and critically analyze data on the multifarious socio-economic problems of the world and Nigeria in particular, so as to effectively contribute objectively to solving the problems; and create a desirable milieu for positive behavioural changes which will enable students develop values like hard work, probity, discipline, creativity and self-reliance, dedication and patriotism essential to fulfilling Nigeria's national development objectives thereby producing graduates who can easily fit into several fields of human endeavour in both the public and private sectors (Adekunle Ajasin University Department of Economics, 2014; Ambrose Ali University Department of Economics, 2014; Obafemi Awolowo University Department of Economics, 2014; University of Nigeria Department of Economics; 2014).

The objectives of teaching Economics at the university level are based on Nigeria's philosophy of education which believes that there is need for functional education (Federal Republic of Nigeria (FRN), 2008). Furthermore, the objectives are founded on some of the goals of tertiary education as stipulated by the National Policy of Education (NPE) (FRN, 2008). Such goals includebut are not limited to contributing to national development through high level relevant manpower training; developing and inculcating proper values for the survival of the individual and society; and developing the intellectual capability of individuals to understand and appreciate their local and



external environments. Others are acquiring both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society; and promotingnational and international understanding and interaction.

Although Economics attracts many students at the university level, Economics curriculum objectives at the university level have not been well achieved, and students' performance is not as good as expected, as indicated by studies such as Dolado and Morales (2009); Olayiwola, Oyenuga, Oyekunle, Olajide and Agboluaje (2011); Orlov and Roufagalas(2012); and Opstad and Fallan (2014). Effective implementation of undergraduate Economics curricula should lead to the achievement of learning outcomes which would help realize the undergraduate Economics curricula objectives thus ensuring the improvement of individual and societal living conditions in Nigeria. Achieved learning outcomes i.e. learners' achievements are measured after exposing learners to the implementation of a curriculum usually through the teaching/learning process. This implies that undergraduate Economics curriculum objectives should be achieved if effective pedagogic strategies are used in Economics teaching and learning at the tertiary level. Pedagogic strategies are the knowledge, skills and values a teacher needs to possess and command in order to effectively justify, make, implement, evaluate and improve on the many different kinds of decisions that make teaching effective. The use of effective pedagogic strategies can help ensure desired results of teaching – achievement of curriculum objectives (Brown & McIntyre; and Shulman in Cogill, 2008).

Achieved learning outcomes have been classified by Bloom, Engelhart, Furst, Hill and Krathwohl (1956) into three domains: cognitive, affective and psychomotor. Cognitive learning outcomes are demonstrated by knowledge recall and intellectual skills; psychomotor learning outcomes are demonstrated by physical skills while affective learning outcomes are demonstrated by feelings and attitude. Gagne (1985) also provided a classification of learning



outcomes similar to those developed by Bloom et al (1956). Gagne identified five categories of learning outcomes: (1) intellectual skills, (2) cognitive strategies, (3) verbal information, (4) motor skills, and (5) attitudes.

For more information, please contact ir-help@oauife.edu.ng