FACTORS INFLUENCING LECTURERS' INTENTION TO USE ASSISTIVE TECHNOLOGIES FOR TEACHING STUDENTS WITH SPECIAL NEEDS IN COLLEGES OF EDUCATION IN NORTH-WEST NIGERIA

BY

ABUBAKAR, Ibrahim Bello
PhD/SSTE/FT/2018/8029

DEPARTMENT OF EDUCATIONAL TECHNOLOGY
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA,
NIGERIA,

JUNE, 2023

FACTORS INFLUENCING LECTURERS' INTENTION TO USE ASSISTIVE TECHNOLOGIES FOR TEACHING STUDENTS WITH SPECIAL NEEDS IN COLLEGES OF EDUCATION IN NORTH-WEST NIGERIA

BY

ABUBAKAR, Ibrahim Bello
PhD/SSTE/FT/2018/8029

A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, NIGERIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATIONAL TECHNOLOGY

JUNE, 2023

The global practice of training students with special needs requires the integration of assistive technologies, provided that lecturers recognize their usefulness, ease of use and technological self-efficacy in their intention to use assistive technology (AT). Therefore, the study investigated the Factors Influencing Lecturers' Intention to Use Assistive Technologies for Teaching Students with Special Needs (SWSN) in Colleges of Education (COE) in North-West Nigeria. A descriptive survey design and specifically quantitative correlation was adopted. The population of the study was 493 lecturers of SWSN in COE, North-west, Nigeria. The sample size of the study was 210 lecturers which comprised of males (128) and females (82). The instrument for data collection was a 5-point Likert-type questionnaire made up of section (Demographic Information) and section B (the predictors and criterion variables) was used for data collection. Nine objectives which were translated into 9 research questions and 6 formulated hypotheses guided the study. The research questions were analysed using Mean and Standard deviation. The null hypotheses were tested using regression analysis and Point Biserial. The findings of research questions 1, 2 & 3 show the mean and standard deviations (X=3.49, SD=1.35; X=3.51, SD=1.37 and X=3.53, SD=1.35 respectively) showing that lecturers perceived AT to be useful, easy to use and Teachers self-efficacy towards the use of Assistive technology for teaching students with special needs is high. The result of null hypotheses (Ho) 1, 2, 3 & 6 shows that the standardized Beta coefficient of lecturers Perceived Usefulness (PU), Perceived ease of use (PEU) and TSE on BI to use of AT are statistically significant and positive relationship. The result also revealed (B=.944, t=41.16, p(0.00)<0.05) for hypothesis one (H_{01}); (B=.953, t=45.16, p(0.00)<0.05) for hypothesis two (H_{02}); and (B=.964, t=51.94, p(.89)>0.05) for hypothesis (H_{03});. Based on the outcomes of the study, the researcher however recommended that National Commission for Colleges of Education (NCCE) and COE administration should prioritize the provision of adequate funding and resources to ensure the availability and accessibility of assistive technology devices (ATDs) in COEs. This includes allocating budgetary resources specifically dedicated to acquiring and maintaining a wide range of ATDs. COE administration should collaborate with assistive technology developers to ensure a wide range of electronic aids is readily available for lecturers to use in their teaching.

TABLE OF CONTENT

CHAPTER TWO

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ABREVIATIONS

Abbreviations	Meanings
AAC	Alternative and Augmentative Communication
AAL:	Ambient Assistive Living
AT:	Assistive Technology
ATQSD	Assistive Technology Questionnaire for Students with Special needs
ASD:	Autism Spectrum Disorder
AUAT:	Attitude to Use Assistive Technology
BI:	Behavioral Intention
BIUAT:	Behavioral Intention to use Assistive Technology
CCTV:	Computer Camera Television
CD:	Computer Disc
CFA	Confirmatory Factor Analysis
CUSE:	Computer Use Self Effigy
EFA	Exploratory Factor Analysis
DVD:	Digital Video Disc
HAAT:	Human Activity Assistive Technology
Ho:	Null Hypothesis
ICT:	Information Communication Technology
IDEA:	Individual with Disability Education Act
ISO:	International Standard Organization
ITBI:	Individual with Traumatic Brain Injury
LD:	Learning Disabilities
MOOC:	Massive Open Online Course

NCCE:	National Commission for Colleges of Education
NGO:	Non-Governmental Organization
NPE:	National Policy on Education
OSEP:	Office of Special Education Programmed
PECS:	Picture Exchange Communication System
PEU:	Perceive Ease of Use
PEUAT:	Perceive Ease of Use of Assistive Technology
PU:	Perceive Use fullness
PUAT:	Perceive Usefulness Assistive Technology
SPSS	Statistical Package for Social Science
SWD:	Students with Disability
TAM:	Technology Acceptance Models
TSE:	Technological Self Efficacy
UN:	United Nations
UNESCO:	United Nations Education, Science and Cultural Organization
USB	Universal Serial Bus
WHO:	World Health Organization