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

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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 (H₀₁); (B=.953, t=45.16, p(0.00)<0.05) for hypothesis two (H₀₂); and (B=.964, t=51.94, p(.89)>0.05) for hypothesis (H₀₃). 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.

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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