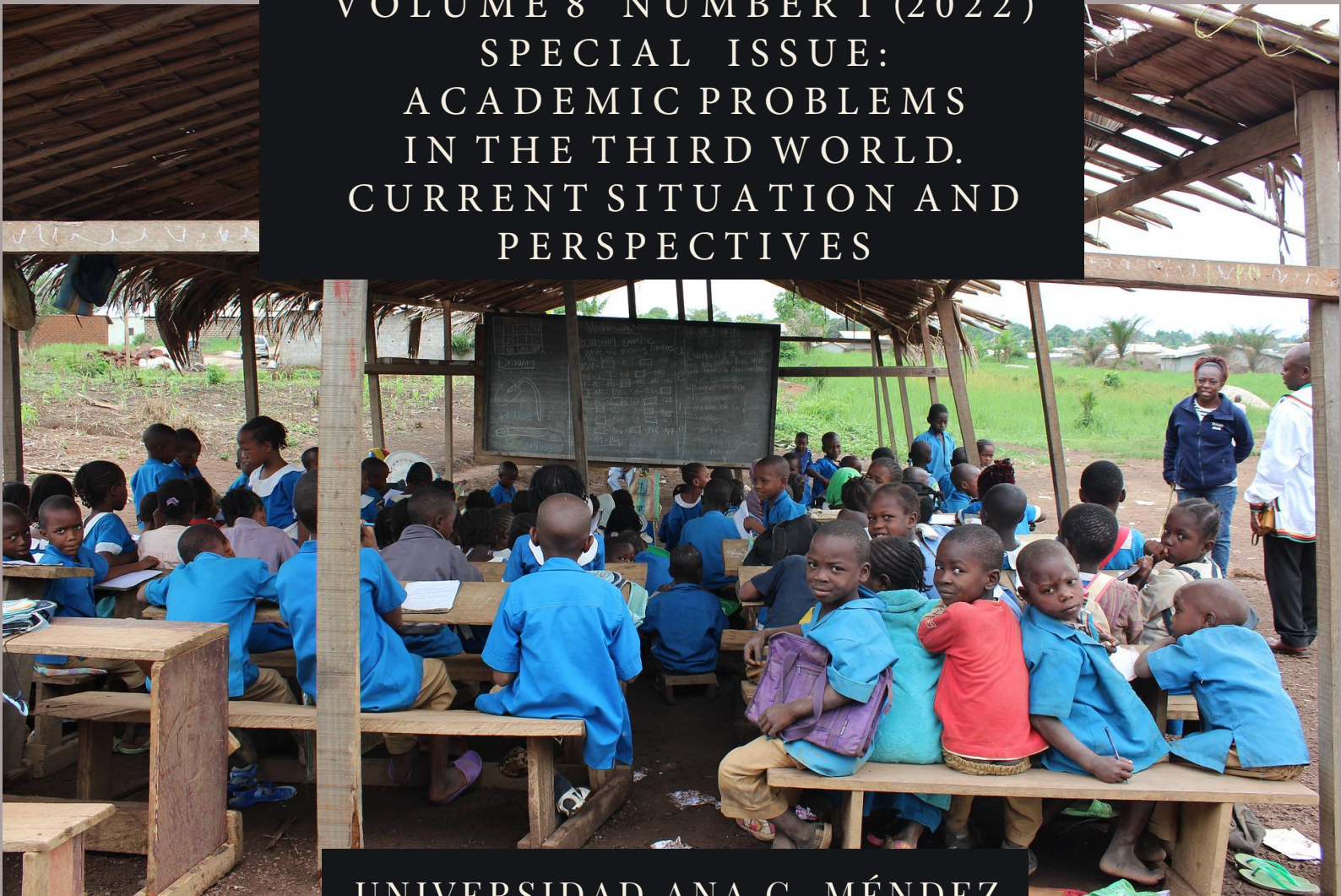


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VOLUME 8 NUMBER 1 (2022)
SPECIAL ISSUE:
ACADEMIC PROBLEMS
IN THE THIRD WORLD.
CURRENT SITUATION AND
PERSPECTIVES



UNIVERSIDAD ANA G. MÉNDEZ

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Editor-in-Chief: **José Gómez Galán**

International Journal of Educational Excellence

DESCRIPTION

The *International Journal of Educational Excellence* (ISSN 2373-5929) is a multidisciplinary scientific journal which main objective is the dissemination of studies that provide answers to the main educational scientific and social problems present in higher education, in order to achieve excellence quality in all their areas. Papers will be welcomed, regardless of the subject area to which they belong as long as they entailed a contribution, innovation or breakthrough in the development of models of teaching or scientific research in the scientific world which lead to a social improvement. Research work performed in other educational levels may also be considered, if they demonstrate a strong and justified relationship to higher education. All papers submitted for publication must be unpublished and originals, and should not be under any evaluation procedure for publication in other journals. Theoretical work as well as work based on field studies and empirical laboratory experiments are accepted. All kinds of strategies and methodological approaches may have been used for the study. They have to comply within the parameters of current scientific and technological research. The review criteria and selection process will take into account mainly the quality of the work under consideration: if it makes a significant contribution to the object of interest, main interests of the journal and if it offers a breakthrough or significant contribution to the current scientific knowledge and, ultimately, if it contributes to the progress of our society. This journal is of free and direct access (Open Access, OA), and it serves the international scientific community and open knowledge.

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Original submissions to the *International Journal of Educational Excellence* (IJEE) will be reviewed by external referees, a process known as peer review. Reviewers are academics and researchers who are experts in the corresponding specialized field of knowledge. Their main task will be to study all submitted papers critically and constructively. For a paper's evaluation a "double-blind" system will be used. This method consists of one in which authors and reviewers are not known to each other, aiming at a maximum objectivity in the evaluation of the manuscript. Those articles that are considered by the editorial and scientific committee of the journal with high possibilities for publication will be submitted to referees who will determine the relevance of their acceptance. It may be the case that they be sent back to the authors with suggested changes and then back again to the journal to continue with the evaluation process, which ultimately will assess the relevance of the article to be published or rejected.

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The periodicity of the *International Journal of Educational Excellence* will be two issues per year, and these will form a volume. The first issue is published in the first half of the year, the second issue in the second half. There is no deadline for the submission of manuscripts, which will remain open during the whole year and publication of the

article will possibly appear in the following issue after a positive evaluation of the work. For monographs, in which contributions to a specific topic will be requested, the deadline for receipt of manuscripts for evaluation corresponds to June 30 for the first issue and December 31 for the second issue, both referred to volume of the year following the call of articles.

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AUDIENCE

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For all parties involved in the act of publishing (the author, the journal/publisher and the peer reviewer) it is necessary to agree upon standards of expected ethical behavior. The ethics statements for the International Journal of Educational Excellence (IJEE) are based on the Committee on Publication Ethics (COPE) Editors (www.publicationethics.org).

The value of scientific publishing relies on everyone involved behaving ethically. The publication of an article in the International Journal of Educational Excellence, a peer-reviewed journal, is a direct manifestation of the quality of work of the author and the institutions that support them. Peer-reviewed articles support and embody the scientific method. Ethics topics to consider: Authorship: Authorship should be limited to those who have made a significant contribution to the reported work. The authors should ensure that their study is original and written by them and their work has not been previously published and has been submitted only to the journal. / Originality: The authors should ensure that where material is taken from other sources (including their own published writing) the source is clearly cited and that where appropriate permission is obtained. / Data access: Authors may be asked to provide the raw data in connection with a manuscript for editorial review, and should be prepared to provide public access to such data. / Acknowledgement of sources: Proper acknowledgment. / Conflicts of interest: The authors should ensure that any real or apparent conflicting or competing interest is clearly stated on submission of their manuscript. / Reporting standards: Authors of reports of original research should present an accurate account of the work performed. / Human or animal subjects: The authors should ensure that they adhere to all research ethics. / Confidentiality and impartiality of the reviewers: The reviewers must maintain the confidentiality of the review process and conduct themselves fairly and impartially; immediately alert the editor-in-chief of any real or potential competing interest that could affect the impartiality of their reviewing and decline to review where appropriate.

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1. Introduction

The *International Journal of Educational Excellence* (IJEE) is open to all scientific articles which provide answers to the main educational and scientific problems currently impacting higher education with the purpose of achieving quality excellence in all areas. Papers will be welcome, regardless of the subject area to which they belong, as long as they entail a contribution, innovation or breakthrough in the development of models for teaching or scientific research within the university environment leading towards social improvement. Research work performed in other educational levels may be also taken into account, as well as they provide an adequate justification and a valid relationship with higher education issues.

All papers submitted for publication must be unpublished and original, and should not be under evaluation for publication in other journals. Theoretical work as well as those based on field studies and empirical laboratory experiments contributions, are accepted. All kinds of strategies and methodological approaches may be employed; however, the selected method for each research has to be in compliance within the parameters of current scientific and technological research. The review criteria and selection process will mainly assess the quality of the work under consideration in terms of the following criteria: significant contribution to the object of interest of the journal, a breakthrough to the current scientific knowledge and, ultimately, the contribution to the progress of our society.

2. Details for Submission

Manuscripts should be sent preferably sent in digital format. All manuscripts should be addressed to the journal Editor-in-Chief (email: jogomez@suagm.edu). Prior to submission, publishing standards should be carefully read at the following web site http://www.suagm.edu/umet/oa_pe_edu_ijee.asp. Only those articles that meet all the requirements and characteristics described at the web site will be accepted.

Submission of original digital file will preferably be in RTF format. The .ODF format is also accepted. Other formats (such as DOC, .PDF, etc.) are excluded.

In the rare event that the author (s) of an article cannot submit manuscripts electronically, the article shall be traditionally mailed. However, it should include a copy of the article in the previously outlined digital formats. Manuscripts will be sent by postal mail to the following address: International Journal of Educational Excellence (IJEE), Escuela de Educación, Universidad Ana G. Méndez (UAGM), Recinto de Cupey, PO Box 21150 San Juan, Puerto Rico, 00928-1150. The attention should be directed to: Editor in Chief.

3. Authorship and Responsibility

The author (s) of the article should submit one copy of the original article and a statement certifying that the work is original and has not been published before and that it has not been evaluated by another journal editorial committee.

The author (s) must also declare that [a] all named authors have materially participated in the development of the research or study that has led to the article, [b] any conflict(s) of interest, and [c] the sources of funding of research presented in the article or of the preparation of the research.

They shall also explicitly accept the journal rules of publication and the decision regarding the publication or rejection of an article. The *International Journal of Educational Excellence* (IJEE) assesses and requires all high international standards of ethical conduct of research and journal publication.

4. Preparation of Manuscripts

Articles should be submitted in proper English (British or American, however, but a mixture of both will not be allowed), whose length will be at least 3500 words and a maximum of 12,000, including references, notes, tables and figures. Exceeding this amount of words will be a major negative factor in evaluating the article, although articles exceeding this extension can be exceptionally published if they are properly justified and the work stands out for its quality.

The article must be preceded by an abstract thereof with a minimum of 150 and a maximum of 300 words. It must also be submitted in English language along with Spanish and Portuguese translated versions. The summary should also include five to seven key words in English, Spanish and Portuguese.

Articles of theoretical nature as well as those based on field studies will be accepted, and they will be considered as a positive evaluation element if those articles maintain the classical structure in scientific research papers, consisting of separate sections and subsections (eg. Introduction, Objectives, Methodology, Analysis, Results, Discussion, Conclusions, Appendices and Annexes, etc.). However, freedom is offered to the authors to establish the most appropriate structure, depending on the nature and characteristics of their research (and is especially significant in the case of theoretical articles). What is required in all cases is that the division of the article be clearly defined and numbered by the structure 1 (with 1.1, if 1.1.1, 1.1.2, etc.), 2, 3, etc. Each title and subtitle of the sections and subsections should be clearly identified through the use of spaces.

Standards of quotation, including references, must be governed by the style of the APA (American Psychological Association), contained in the *Publication Manual of the American Psychological Association*. Please see the following examples which are explained within the next paragraph:

Citations to text:

Whenever there is a quote of the author or authors of a publication, it should appear in the text in parenthesis followed by the year -for example if a single author is cited (Smith, 2014), if the citation refers to two to five authors (Smith & Brown, 2011 / Smith, Brown & Torrero, 2009), or if there are more than six authors (Smith et al, 2014) - and the full reference will appear in the list of references at the end of the article. If two or more works are cited, they will appear in the same order in the reference list separated by a semicolon (James, 2001, Smith, 2014). If in the article two or more references by the same author published in the same year are cited, they should be differentiated by lowercase letters (a, b, c, d, etc.) added to the year; in the text quote, the corresponding lower case letter will be used in each specific reference (Smith, 2014a).

If the citation refers to a general idea of the work, or if it is a general reference to an article, book or full investigation, but is not literally quoting a portion of the reference, it is only necessary to refer to the author and year of publication, without specifying the page intervals.

If the citation is literally quoting a text from a specific work, the author, year of publication and the page intervals should be entered preceded by "p" for example, according to Smith (2014) "the university teachers with many teaching hours have difficulty in carrying out research work" (p. 379), / in his study he argued that "university teachers with many teaching hours have difficulty in carrying out research work" (Smith, 2014, p. 379) but the author did not show the statistical analysis of the survey results.

In case the direct quotations exceed 40 words it is necessary to set up them within a separate text block, and quotation marks are omitted. It is recommended to begin the quotation on a new line with a tab on the left margin

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of ½ inch or 1.25 cm, maintaining this margin along the length of the cite. Page intervals should be indicated as described in the preceding paragraph.

Sometimes, in the work, it may be necessary to refer to indirect quotations, i.e. presenting information or ideas of an author who has been picked up and quoted by some other one. In this case, the two authors are cited; starting with the indirect reference, for example, Brown (cited by Smith, 2014, p. 179) suggests that research is essential in university teaching. It is also recommended to find out and cite the original source.

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The list of references should appear at end of the article. With this information, the reader may access any of the sources that have been cited in the main body of the work. Each and every one of the sources cited should appear in the reference list. Similarly, each of the references that appear in this list should appear in the main text of the article at some point.

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At present, the rules of APA citation are widespread in the field of social research, and its style is the most currently used to cite sources in this area. Therefore, in case of any doubt regarding citations, we recommend consulting the *Publication Manual of the American Psychological Association* (6th edition), where it multiple examples of formats of research papers, text citations, footnotes, references, etc. can be found; here we have offered only general guidelines.

General Format of Manuscripts:

The manuscript should follow the general format not only meeting the scientific requirements requested by this journal but also identifying the best possible characteristics of the article. Submission the manuscript in digital format, or RTF .odf, double-spaced in a standard size paper (8.5 "x 11") or A4 (21 x 29.7 cm) 1 "(or 2 cm) margins, is recommended. Although any easily readable source may be used, the use of Times New Roman 12 point is recommended. The manuscript should include a header at the beginning of the page, providing the main scientific information of the author and the work. These data are:

Title: should be as concise as possible, reporting the content of the article. It should be taken into account that quite often titles are used by scientific database systems and information retrieval, so it is advisable that it contain words directly related to the content of work. It must not contain abbreviations or acronyms that are not widely known. The title should be centered as the first element of the header. The APA recommends that it does not exceed 12 words in length, but if it were required by the nature of the work, it shall not prevent the acceptance of the manuscript.

Name of author (s) and affiliation: should appear in full below the title, separated by a double space using the following format: First Name, Middle Initial (if applicable) and last name (both names if Latin American author (s). Titles (Dr.) or degrees (PhD) may not be used. In order to allow the precise localization of the institution where the research was performed, its full address should appear below the name of each author (City, country, zip code). Finally, below the institution's address, the e-mail of each author should appear.

Mailing address of the corresponding author: In addition to email, full address for correspondence is recommended but not mandatory (telephone numbers, country and local codes). It may appear as a footnote.

Abstract: It should be placed after the name, affiliation and email address of the corresponding author separated by double space. As indicated above, it should have a length between 150 and 300 words. It will be sent in English, Spanish and Portuguese and should summarize the main features of the research work (as a minimum it is advisable to include a summary of the objectives, methodology and results, especially if it is based on fieldwork research). Future research may be included, especially if it has given rise to different questions that invite subsequent effort.

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Article: Below the keywords, the author will place the main body of the text submitted for publication in the International Journal of Educational Excellence (IJEE), in accordance with the recommendations given in this Guide for Authors.

Scientific and professional record of author (s): Placed below the main body of the manuscript leaving three lines and as the last element of the manuscript to be submitted. The scientific and professional background of each author should not be longer than 300 words, specifying recent published papers.

Notwithstanding the guidelines outlined above, it is strongly recommended for preparing manuscripts, to follow the APA style compiled in *Publication Manual of the American Psychological Association* (6th edition).

5. Publication of Articles

Submission of a manuscript to the *International Journal of Educational Excellence* (IJEE), implies a previous statement by the authors that the work submitted to the journal is original and unpublished, that it has been the result of the authors' work, that all the signatories have materially participated in its preparation, and that the manuscript is not under evaluation for publication elsewhere, whatever the media, especially that it is not under evaluation by other scientific journals. All journal rules are also accepted, as well as final the opinion resulting from the academic evaluation of Article whether it is accepted or rejected for publication.

The editorial staff of the *International Journal of Educational Excellence* (IJEE) is not responsible for the opinions, analysis, or results collected by the authors in their articles. It is also assumed that all material in articles are free of copyright rights and therefore it is not responsible for any disputes or claims related to intellectual property rights, which are the sole responsibility of the authors.

The decision to accept or reject the publication of the manuscript will be notified within a maximum period of four months. The notification will be sent electronically (e-mail) to the corresponding author. If accepted for publication, the paper will appear in the next volume of the journal.

The articles published in the *International Journal of Educational Excellence* (IJEE) are digitally edited and will retained all the characteristics of those published in traditional print journals. The articles appear in PDF format, conveniently typeset and numbered as classical journals. Therefore, in this sense the editors facilitate their distribution of the journal and articles and the scientific citation or its contents according to all current standards, making available to the scientific community, valuable contributions resulting from the research. We can say, that in general, this is a publication that takes advantage of all the benefits that ICT offers for easy editing and distribution, considering also the ecological side of publishing without paper. This means that only those parts that are needed should be printed if the case arises. In addition, the digital format of the articles of the *International Journal of Educational Excellence* (IJEE) is adapted to the new computer and telematics tools used in scientific and academic contexts, easily allowing information searching, online and bases data indexing, etc. Access to the content of the *International Journal of Educational Excellence* (IJEE) is free, thereby contributing to the globalization of science and culture.

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**THE THREAT OF HIV/AIDS ON ADOLESCENT ACADEMIC
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Assessment of the Availability of E-Learning Resources for African Undergraduates: An Approach to the Issue

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Abstract: E-Learning has become an increasingly popular learning approach in higher educational institutions due to the vast growth of internet technology. However, some schools do not even have the technologies needed to explore e-learning. The main purpose of this research was to assess the availability of e-learning resources for African undergraduates with an approach to the issue. Specifically, the study examined the available e-learning resources and examined the adequacy of the available e-learning resources. This research was a descriptive research of the survey method and the respondents comprised 320 undergraduate students of the University of Ilorin, Ilorin, Nigeria. The findings established that internet facilities, multimedia projectors, computers, e-books, e-mails, and virtual classrooms are e-learning resources available for learning, while internet facilities, multimedia projectors, computers, e-books, e-mails, and virtual classrooms are e-learning resources available for learning. It was however recommended that Universities should improve on the infrastructural facilities to make e-learning resources more available to all their students and Universities should monitor the e-learning resources and check their adequacy to the students.

Key-words: availability; e-learning resources; adequacy; supporting; teaching-learning process.

1. Introduction

It is a popular saying that knowledge is wealth. This is very true as no meaningful development takes place without the application of knowledge. According to Adeola, Adewale, & Alese, (2013), one of the major differences

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between primordial man and the modern man is that the latter possesses a body of knowledge through education that the former lacks. Education in its general sense is a form of learning in which the knowledge, skills, and habits of a group of people are transferred from one generation to the next through teaching, training, or research (Atiyah, Sherbiny, & Guirguis, 2015). Innovations to the educational system are vital to improving the schools' efficiency and productivity in the 21st century (Syariff, Dayang, Musa, Khalip & Yusof, 2021).

Education can be delivered using various methods (which give various types of learning) including Traditional lecturing, E-learning, M-learning, D-learning, and B-learning. Traditional lecturing is usually defined as actions under the guidance of the teacher aiming at bringing some relatively permanent change in the way students think, feel or act. E-learning (Electronic Learning) is usually defined as education based on modern methods of communication including the computer and its networks, various audio-visual materials, search engines, electronic libraries, and websites, whether accomplished in the classroom or at a distance; M-learning (Mobile Learning) is usually defined as learning employing wireless technology devices that can be pocketed and utilized wherever the learner's device can receive unbroken transmission signals; D-learning (Distance Learning) is usually defined as all learning that takes place where there is no face to face interaction between students and between students and teachers; B-learning (Blended Learning) is usually defined as enriched, student-centered achieved by combining face to face interaction with information and communication technology (Atiyah et-al, 2015). Education should not only be extensive, affordable, and excellent but should also be continually developing to address the demands of a quickly shifting and volatile globalized environment. (Serdyukov, 2017)

Since the immediate solution to the problem of population explosion confronting the universities should be the introduction of means of sharing the limited professionals to maximize the limited resources available, It becomes pertinent, therefore, that a new scheme is evolved where the remaining number of experts and professionals in the university system could be retained and their potential optimized. To arrest these ugly trends in our educational system, Technology immediately becomes the reference point. The advent of technology has changed the way things are being done. Adeola et al (2013), describes Information and Communication Technology (ICT) as a generic term referring to technologies that are being used for collecting, storing, editing, and passing information in various forms. In the last ten years, researchers have looked at how innovation affects performance in a variety of contexts. They discovered a favorable correlation between these factors (Adam et al., 2021). Other recent research has found that the level of

creativity or innovation used in the organizational process also affects how well an organization performs (Adelowotan, 2021).

E-learning is technology-based learning such as computer-based learning, virtual classroom, and digital collaboration. It is the general term used to refer to computer enhance learning (Adeola et al, 2013). E-Learning has become an increasingly popular learning approach in higher educational institutions due to the vast growth of internet technology. Nowadays E-learning has a competitive advantage and many universities have implemented it this has an impact on student's performance or GPA. Traditional classroom settings with a teacher in charge and students and teachers present have been the mainstay of education for millennia (Coman et al., 2020). Even before the COVID-19 pandemic era, several universities were already using open distance and e-learning as a method of delivering educational content to their distance and open learning students. The use of a flipped classroom model, in which teachers provide assignments and student responses are submitted via the school's learning management system, could promote fruitful intellectual conversation (Hew et al., 2018). Technology is a tool used to remove geographical barriers and facilitates everybody to learn anytime and anywhere without the presence of a lecturer. The main purpose of E-Learning is to increase the accessibility of education and reduce costs and time as well as improve students' academic performance. This approach to learning facilitates different students on different continents to attend the same classes almost at the same time.

Akogun & Arowona, (2016) establish that the University of Ilorin has introduced a new policy of one-student-one-IPAD beginning from the 2013/2014 academic session; the policy is aimed at boosting the University's ICT drive and enhancing e-communication between the students and their lecturers. The PC tablet would be a virtual classroom with all the curriculum and courseware pre-uploaded on it as e-learning resources for learning.

2. Statement of the Problem

Even though the Millennium Development Goals (MDGs), as well as the transformation agenda of the Nigerian government, placed a premium on education as a vital tool towards the realization of the objectives of national development, greater attention has been given to e-learning and the richness of its content and resources in recent times, especially in the area of teaching and learning (Ogunkunle & Adekola, 2014). The Nigerian university system is still far from ICT compliance. It looks incredible that many universities are still using of traditional blackboard and chalk teaching method in Nigeria. The closest to e-learning is the case of Nigeria Open University. The conventional universities in Nigeria are still far behind in taking advantage of huge opportunities in e-learning (Nwabufo, Umoru, & Olukotun, 2011).

Purpose of the Study

The main purpose of this research was to evaluate the availability of e-learning resources for African undergraduates: An approach to the issue.

Specifically, the study;

1. Examined the available e-learning resources within the University of Ilorin.
2. Examined the adequacy of the available e-learning resources.

Research Questions

This study provided answers to the following research questions:

1. What are the available e-learning resources at the University of Ilorin?
2. Are the available e-learning resources adequate for the students?

3. Literature on the Availability of E-learning Resources

Before the advent of the internet and computer, people generally make use of printed forms of books, journals, magazines, directories, maps, and dictionaries, recently most of these printed materials have been replaced electronically and available in digital forms, hence e-version is available to users that can be easily accessed at user's pace. E-learning has proven to be the best and fastest means of exposing learners to newer technology (Obara & Abulokwe). The availability of E-learning resources allows the teacher to train students on how to study independently and conduct research (Ayere, Odera, & Agak, 2010).

Daramola, (2016) believed the availability of e-resources has changed what learners read and utilize as a learner only makes use of what is easily available and accessible to them. Her study further shows that the major reason why undergraduate uses e-learning resources are majorly for assignment and research, the e-resources available are e-journals, e-books, manuscripts, e-data, archives, e-mail, and e-database among others but the rates at which students make use of the e-resources varies. Berzins & Hudson, (2011) explain that e-resources include: Virtual Learning Environments (VLEs), platform, research software, websites, mobile phone, and social networking that facilitates teaching and learning.

Ajadi, Salawu, & Adeoye, (2008) stated that although some Nigerian institutions had adopted the use of intranet facilities, this is not well maintained because of incessant power problems and the high cost of running generating sets. Most students in Nigeria go to the cyber café, but because there are people of diverse intentions on the net at the same time, and the bandwidth problem, a multimedia interactive session times cannot be done. Despite all these and other challenges facing e-learning in Nigeria's

educational institutions, institutions such as the University of Ibadan, Ibadan, University of Ilorin, Ilorin, Obafemi Awolowo University, Ile-Ife, University of Benin, Benin, University of Abuja, Abuja, University of Lagos, Lagos, the National Open University of Nigeria among others has the e-learning facilities. The number of Universities with e-learning facilities however seems very low compared to other parts of the world and the usefulness of e-learning in economic development. Location of the institutions, bandwidth issues and mostly the challenge of electricity are major constraints hindering the use of e-learning facilities. Hence, the Nigeria university system is still far from ICT compliance (Ajadi et al, 2008)

The closest to the usage of e-learning is the case of Nigeria Open University. The Nigeria Open University combined the traditional learning paradigm with visual-assisted tools and teaching materials in form of video and projectors. Web-based instruction resources compliment these. This mode of learning ensures the students obtain maximum knowledge from the facilitators. Most conventional universities in Nigeria are however still far behind in taking advantage of the huge opportunities in e-learning. Most Universities are still lagging in taking advantage of the recent revolution in Information and Communicating Technology. They are still using the traditional mode of chalk and blackboard approach to teaching. Most of the school libraries are full of outdated books. Sometimes the books would have been stored for more than two years before it is made available for students' use. In addition, the libraries are not computerized. In most cases when they are computerized, it is only restricted to searching for materials on the shelf. Also, most of the library has no direct link with the subject lecturers in the acquisition of books. As a result, a tangible percentage of the books are outdated and irrelevant (Adeola, Adewale, & Alese, 2013).

Though e-learning has been given much prominence in Nigeria recently, Nigerian tertiary institutions however can be said to be behind in the adoption of these technologies as there is an extremely low rate of diffusion of e-learning and as a consequence, a low rate of usage. The reasons for this are not far-fetched; As Nigeria, apart from being a developing country and having an inadequate education finance policy, is also highly deficient in the area of engineering and technological development (Nwabufu et al, 2011).

4. Methodology

This research was a descriptive research of the survey method. The descriptive research method connotes describing the event(s), exactly as they appear without the manipulation of external researchers. This study employed a research-designed questionnaire to obtain necessary information from the respondents. The outstanding advantage associated with the use of

questionnaires is the accessibility given to a large population within a very short period.

The population for this study was all undergraduate students of the University of Ilorin, Ilorin, Nigeria. The target population for this study consists of all undergraduate students from the Faculty of Agricultural Science, Faculty of Education, Faculty of Engineering and Technology, and Faculty of Management Sciences. Simple random sampling was used to select respondents across the departments. Three hundred and twenty undergraduates were randomly selected from all the faculties. The numbers of undergraduates that were sampled from each faculty were shown in table 1. 1.2% of the total population of each faculty was sampled.

S/No	Faculties	Estimated Population	Sample Size
1	Agricultural science	5,740	74
2	Education	10,495	134
3	Engineering & Technology	4,430	56
4	Management sciences	4,445	56
	Total	25,110	320

Table 1. List of Faculties in the University, Estimated Population, and Sample Size.
Source: Registrar 's office

The instrument that was used to gather data for this research was a researcher-design questionnaire. The questionnaire is titled "Assessment of Available E-learning Resources for Learning. It comprises three sections, sections A, B, and C. Section A consists of the demographic information of the respondents. The respondents are to provide information regarding their faculty, departments, and gender. Section B consists of the availability of e-learning resources. Six different e-learning resources are provided for the respondent to tick the ones available. Respond mode of Available and Not available are used for the variable of Availability. Section C contains the adequacy of the available e-learning resources. Six items were generated and response modes of the 4likert scale of *Strongly agree*, *Agree*, *Disagree*, and *Strongly disagree* were employed.

Five educational technology experts in the Department of Educational Technology, the University of Ilorin for face and content validated the research instrument. The validation process dealt with face validity that comprises the appropriateness of the title of the instrument, and compliance with the grammatical standard in constructing and arranging the items of the instruments. The content validity deals with the adequacy and coherence of items of the instrument concerning the research questions posed to ensure that the instrument remains valid. All correction made by the validators was used to produce the final draft of the research instrument. The reliability of the

research instrument was carried out by trial testing the research instrument on 50 undergraduate students of the Bamidele Olumilua University of Education, science and technology, Ikere-Ekiti, Ekiti State, Nigeria. The research instrument was administered to them and collected after being attended to. However, out of the 50 research instruments, responses from 47 were properly filled and returned and were subjected to Crombach's Alpha Statistical tool. The result was 7.86 for the section on the availability of e-learning resources and 7.49 for the section on the adequacy of e-learning resources. This indicated that research is reliable and can be adapted/adopted by future researchers

The researchers presented a letter of introduction and permission was sought from the authorities of the faculties where the research was conducted. The data was collected by administering the questionnaire by the researchers. The completed copies of the questionnaire were retrieved for further analysis. Ethical issues were considered in which all information provided by the respondents was used for research purposes only and treated with the utmost confidentiality. In addition, respondents were not compelled to fill out the questionnaire as this was done willingly and at their own convenient time. The analysis of data obtained through the questionnaire was done using descriptive and inferential statistics. Frequency and percentage were used to present the demographic information of the respondents and used to answer the research questions.

5. Results

This section deals with data presentation, and analysis. Three hundred and twenty (320) questionnaires were distributed out of which three hundred and six (306) were retrieved across four different faculties and analyzed based on the retrieval questionnaire with a return rate of 95.6%.

Research Question 1. What are the available e-learning resources at the University of Ilorin?

S\N	Items	Available	Not Available
1.	Internet facilities	306(100%)	00.0
2.	Multimedia projector	306(100%)	00.0
3.	Computer	306(100%)	00.0
4.	E-book	306(100%)	00.0
5.	E-mail	306(100%)	00.0
6.	Virtual classroom	306(100%)	00.0

Table 2. Available E-learning Resources

Table 2 examined the above table and shows that 306(100%) of the respondent's e-learning resources are available to undergraduates at the university of Ilorin. It established that internet facilities, multimedia projector, computer, e-book, e-mail, and virtual classroom are e-learning resources available for learning at the University of Ilorin.

Research Question 2. Are the available e-learning resources adequate for the students?

S\N	Items	Adequate	Not Adequate
1.	Internet facilities	180(58.8%)	126(41.2%)
2.	Multimedia projector	104(34.0%)	202(66.0%)
3.	Computer	160(52.3%)	146(47.7%)
4.	E-book	178(58.2%)	128(41.8%)
5.	E-mail	224(73.2%)	82(26.8%)
6.	Virtual classroom	104(34.0%)	202(66.0%)

Table 3. Adequacy of e-learning resources for the undergraduates.

Table 3 examined whether the e-learning resources are adequate for learning by undergraduates at the University of Ilorin. The results showed that the response frequency of the respondents on the adequacy of e-learning resources revealed that 180(58.8%) of the respondents claimed that internet facilities are adequate while 126(41.2%) of them claimed it is not adequate, 104(34.0%) of the respondents claimed that multimedia projector is adequate while 202(66.0%) of them claimed it is not adequate, 160(52.3%) of the respondents claimed that computer is adequate while 146(47.7%) of the respondents claimed not adequate, 178(58.2%) of the respondents claimed access to the e-book is adequate while 128(41.8%) of them claimed it is not adequate, 224(73.2%) of the respondents claimed access to email is adequate while 82(26.8%) of them claimed it is not adequate, 104(34.0%) of the respondents claimed virtual classroom is adequate while 202 (66.0%) of them claimed it is not adequate. From the findings, it can be deduced that Internet facilities, computers, E-books, and E-mail were e-learning resources that were adequate while Multimedia projectors and Virtual classroom e-learning resources were not adequate.

6. Discussion

The research sought to find out what are e-learning resources available to undergraduate students; the results obtained showed that internet facilities, multimedia projectors, computers, e-books, e-mail, and virtual classrooms are the most available e-learning resources for undergraduate students of the University of Ilorin among others. Doung (2016), students can study at home,

work, or even on the street by using multi-electronic devices such as computers, laptops, or smartphones. E-learning resources are available to the undergraduate students at the University of Ilorin; this means that there are available e-learning resources that, Internet, multimedia projectors, computers, e-books, emails, and the Institution provides all visual classrooms. All the available e-learning resources are accessible to the Undergraduate students of the University of Ilorin except Virtual classroom. Internets, multimedia projectors, computers, e-books, and emails are accessible to the students. The digital library allowed the University community to access over 250 academic and medical journals, over 30,000 e-books, 57 educational software programs, and 60 computer software applications. This boosted the availability of e-resources to faculty and students of the University of Ilorin, Nigeria (Bashorun et al, 2011).

University decision-makers must concentrate on the new and novel concepts by which they can give the organization high-quality services to harvest creativity and efficiency among organizations (Gleason et al., 2017). The e-learning instructional technique is one of these advances in education. Due to the technological advancements made by the 4IR, educational institutions can now implement several innovative strategies for effective and efficient teaching and learning, such as e-learning (Abidah et al., 2020). Another crucial idea is creativity, which takes into account the perspectives of an organization, a team, and an individual. In times of educational crisis, the effectiveness and performance of the educational organization are primarily assessed by originality and innovation (Acar et al., 2019).

The adequacy of the available e-learning resources at the University of Ilorin was discussed in research question three; the result indicated that not all the available e-learning resource is adequate for use. For instance, internet facilities and computers are more adequate than multimedia projectors and e-books. This is a reflection of the emphasis being placed on e-learning in the university. Pirani, (2004) states that for an institution to be able to adopt e-learning, it must provide adequate and reliable technical infrastructures. From the above, it can be seen that e-learning infrastructures are not adequately provided in Unilorin for effective teaching and learning. Not all the available e-learning resources at the University of Ilorin are adequate for the undergraduate students; this means that even though these e-learning resources are available and accessible they are not enough to serve the number of undergraduate students in the university that is, not all of them have equal access to it.

7. Conclusions

This research examines the assessment of the availability of e-learning resources for African undergraduates: An approach to the issue. The results

obtained from the data gathered and analyzed in this study indicated e-learning resources are available in the university and established the fact that most of them are not adequate. Based on the findings and conclusions of this study, the following recommendations were made: (1) Universities should improve on the infrastructural facilities to make e-learning resources more available to all their students; (2) Universities should monitor the e-learning resources and check their adequacy for the students; (3) Teachers should be allowed to acquire appropriate and needed e-learning resources to boost the teaching activities.

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Quality Assurance of Online Teaching, Learning, and Assessment during COVID-19 Pandemic in South Africa

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Abstract: Quality in education remains crucial and is held dear. This has brought about the establishment of offices in learning institutions overseeing quality assurance regarding teaching, learning, and assessment. However, with the COVID-19 pandemic outbreak and the sudden transition of teaching, learning, and assessment from onsite to online, quality has become a more debatable subject. This paper explores quality assurance of online teaching, learning, and assessment during the COVID-19 pandemic. A literature review was adopted; thus, previously conducted research and published articles relevant to the study were reviewed. The study showed that online teaching, learning, and assessment could be synchronous and asynchronous. In addition, while quality assurance in online teaching and learning is possible following the outbreak of the COVID-19 pandemic, formative assessment should be more desired and considered one of the most preferred forms of evaluation. However, educators need to be trained in handling teaching, learning, and assessment synchronously and asynchronously.

Key-words: COVID-19 pandemic, online quality assessment, quality in education, formative assessment; online learning.

1. Introduction

The outbreak of the COVID-19 pandemic brought about an impromptu transformation in the teaching, learning, and assessment of students following the move from onsite (face-to-face) to online space (Hargreaves, 2021;

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Elfirdoussi, Lachgar, Kabaili, Rochdi, Goujdami, & El Firdoussi, 2020; Liberman, Levin & Luna-Bazaldua, 2020; Quality and Qualifications Ireland, 2020). Various options, research, and studies have sprung up in the quest for the most suitable solution to the challenge and possible way out for the education system of different nations. This has led to impromptu designs of new policies and adjustments to existing ones. However, the challenge of ensuring quality teaching, learning, and assessment in the online space continues to linger. Liberman, Levin, and Luna-Bazaldua (2020), reporting for the World Bank, asked whether students are still learning during the COVID-19 pandemic. Liberman, Levin, and Luna-Bazaldua (2020) proposed a possible solution to such a question by offering formative assessment as a preference for a proffering answer(s).

Meanwhile, according to Liberman, Levin, and Luna-Bazaldua (2020), formative assessment is conducted by educators in classroom situations as an influential part of the teaching process. The formative assessment encompasses educator observation and continuous homework feedback (Liberman, Levin & Luna-Bazaldua, 2020). Suffice it to the state from the preceding that continuous formative assessment is needed in an online teaching and learning situation. As Gomez Galan (1998) argues, the best driver for improving the quality of education is formative assessment. However, how can quality be assured in assessment?

Darling-Hammond et al. (2013) highlight five criteria for quality student assessment. The criteria are (1) assessment of higher-order cognitive skills capable of allowing students' transfer of learning to new emerging problems and life situations; (2) High-Fidelity Assessment of Critical Abilities useful in the real-life situation rather than through artificial substitutions (this includes skills in using new technologies, research, collaboration, experimentation, and oral, written, and multimedia communication skills); (3) Internationally Benchmarked Assessments; (4) Use of educationally valuable and instructional Sensitive Items; and (5) Use reliable and valid items that accurately evaluate students' abilities.

Thus, online quality student assessments would include every assessment meeting the identified criteria using an online platform(s). In the context of this study, online quality student assessments imply every form of assessment meeting the identified criteria using an online platform(s).

Liberman, Levin, and Luna-Bazaldua (2020) state that formative assessment can be synchronous and asynchronous. Meanwhile, online learning, in some instances, is categorized as synchronous or asynchronous (Khalil et al., 2020). According to Liberman, Levin, and Luna-Bazaldua (2020), the synchronous manner is a situation whereby both the educator and the student simultaneously work on a common online platform. Khalil et al. (2020) describe synchronous technology as allowing live contact/communication between an educator and a student. Typical platforms

include Zoom, Skype, Microsoft Teams, and direct phone conversations for providing feedback to students (Lieberman, Levin & Luna-Bazaldua, 2020).

On the other hand, examples of synchronous technology include audioconferencing, videoconferencing, and web chats (Khalil et al., 2020). Conversely, an asynchronous manner is a situation whereby there is a separation between both students and educators in space and time; thus, online tools like Moodle, Blackboard, and Google Classrooms help educators in providing students with feedback through class activities, quizzes, questions, and tasks (Lieberman, Levin & Luna-Bazaldua, 2020). Asynchronous technology, according to Finkelstein (2006) and Khalil et al. (2020), in some instances, is not timeous and allows substantial delays between the time of the teaching and the reception.

Examples are pre-recorded video(s), discussion forums, and e-mail (Finkelstein, 2006; Khalil et al., 2020). Also, different online applications like Recap: Reflection for Education, Screencastify, WURRLYedu, and Video Response are considered pivotal and helpful in recording students' performance tasks and sharing them with educators (Lieberman, Levin & Luna-Bazaldua, 2020). However, the question remains: how many schools, especially in developing nations, have such facilities to cope with COVID-19?

Meanwhile, teaching, learning, and assessment continued during COVID-19 in different parts of the world, including underdeveloped, developing, and developed nations. Thus, Lieberman, Levin, and Luna-Bazaldua (2020) state that in the context of low-connectivity and low-resource environments, as in many developing and underdeveloped nations, formative assessments remain possible through the adoption and use of Messaging platforms such as WhatsApp and Messenger. In this regard, educators provide students with feedback using WhatsApp and Messenger. However, regardless of how formative assessment is communicated, it needs to be timely, valid, constructive, and precise to students' learning needs (Lieberman, Levin & Luna-Bazaldua, 2020).

The validity of the test is hinged on its alignment with the knowledge content expected to be acquired by the student as part of the learning process. The timeliness of the assessment refers to the appropriate use of the assessment to take swift action and make available curative support where necessary and possible. The capacity of educators to provide feedback to students, who in turn are expected to gain information capable of helping them get guidance on how to improve, identify and tackle misunderstandings, and understand the goals of the learning process, is described as the constructiveness of assessment.

Lieberman, Levin, and Luna-Bazaldua (2020) opine that in times of crisis such as the COVID-19 pandemic, educators can use different resources in conducting the formative assessment, and various companies are making tools more available to a broad range of users; however, checking the contract

terms and confirming that the use is in alignment with all applicable laws and regulations are essential when choosing any specific tool. "DreamBox Math (which provides math instruction based on performance and enables educators to create targeted activities using the AssignFocus option), Questbase (a free online tool to create quizzes compatible with most browsers and IOS), and Woot Math (a free application that automatically generates and assesses thousands of problems to meet each student's learning needs)," amongst others are examples of applications for formative assessment use (Lieberman, Levin & Luna-Bazaldua, 2020, p. 1)." Printed materials supporting early reading skills for younger children and providing support for educators and families are encouraged to be developed in low-resource environments where access to technological devices and connectivity remain challenging.

2. Conceptualization of Terms

Quality in Education (QiE): Monyooe (2021), reporting on the speech of minister Angie Motshekga – the South African minister of Basic Education, attributes quality in education to training received by educators. This corroborates the finding of the work of Uleanya, Uleanya, and Oluyemi (2019), who states that there is a need for the education of high school educators to be revisited for quality to be experienced in education. Quality in Education (QiE), according to Nafukho (2021), encompasses a system that emphasizes the prominence of focusing on five significant elements known as a quality learning environment, quality processes, quality content, quality outcomes, and quality learners. In other words, combining the above five elements culminate in quality education.

Similarly, following the work of Olatokun and Omuinu (2021), quality in education can be considered a system enabling individuals to improve all their different skills and attributes to accomplish their potential in life as humans and as members of society. Following the preceding, quality in education is not concerned about the issue of online or onsite. Thus, the most crucial issue with quality in education is that students are taught in such a manner that learning takes place and their real-life potential is realized. Hence, in the context of this study, quality in education is used to mean a system that supports students in various ways to ensure that their full potential is realized, thereby making them beneficial to themselves and their society. This could mean learning onsite or through online platform(s).

Online Quality Students' Assessment (OQSA): Students' learning assessment, according to Lieberman, Levin, and Luna-Bazaldua (2020, p. 1), is "the process of gathering and evaluating the information on what students know, understand, and can do in order to make an informed decision about the next steps in the educational process." Adapting from the idea of Lieberman, Levin, and Luna-Bazaldua (2020) on students' learning assessment, Online

Quality Students' Assessment (OQSA) in the context of this study is used to mean using an online platform(s) to gather and evaluate information based on the knowledge, understanding, and ability of students in order for an informed decision to be made about further phases in the educational process.

Sequel to the previous, quality in education is essential and a significant determinant in ensuring that the goals of education are achieved regardless of the location and level of the institution of learning. However, the way and manner in which quality of education and quality in any education can be explored are through assessment.

Suffice it to state that assessment is pivotal both students, educators, and other various education stakeholders. Meanwhile, with the outbreak of the COVID-19 pandemic, assessments of students have become a difficult hurdle and almost impossible in some instances. In this particular similitude, ensuring quality in assessment, teaching, and learning during the COVID-19 pandemic remains challenging. Thus, this study explores the quality assurance of online teaching, learning, and assessment during the COVID-19 pandemic by reviewing relevant literature.

3. Methodology

This study explores issues revolving around assuring the quality of online teaching, learning, and assessment during the COVID-19 pandemic. A systematic review was adopted for the study. A literature search focused on quality assurance of online teaching, learning and assessment during the COVID-19 pandemic was conducted. Suitable search engines were used for them according to the proposal of Chris (2022). After the search, a corpus of 18 relevant documents was found, adopted and analyzed for the study.

According to Thomas G. Carpenter Library (2021), a literature review allows researchers to assess current argument trends in a topical area. Moreover, reviewing literature also permits the identification of central topics and key question(s) around a particular topic in the area of focus (Thomas G. Carpenter Library, 2021). A literature review can identify other areas requiring more research (Thomas G. Carpenter Library, 2021; Snyder, 2019). Thus, relevant literature was reviewed for this study, and the findings are reported accordingly in the discussion section using different identified headings.

4. Results and Discussion

The study's findings following the review of relevant literature are presented in this section using headings such as quality assurance of online teaching during the COVID-19 pandemic, quality assurance of online learning

during the COVID-19 pandemic, and quality assurance of online assessment during the COVID-19 pandemic.

4.1. Quality Assurance of Online Teaching during COVID-19 pandemic

Assuring the quality of online education programs is a significant challenge faced by institutions of learning (Marciniak, 2018). With the outbreak of COVID-19, the challenge is likely to increase. Nakweya (2021), reporting on the views of experts regarding the issue of quality assurance in online learning, states that "pedagogy in higher education during the current COVID-19 period requires an understanding of the technical aspects of online teaching to enhance quality from all stakeholders in university education, including students, and especially from academic and non-teaching staff (Nakweya, 2021, p. 1)."

This implies that quality assurance in online learning following the outbreak of COVID-19 is expected to be a concern for all stakeholders in education. Additionally, to improve the quality of online teaching, teaching and non-teaching staff are to be furnished with the required skills to support students in online teaching (Nakweya, 2021). Thus, contrary to the view of Monyooe (2021), reporting the speech of the South African minister of Basic Education and the work of Uleanya, Uleanya, and Oluyemi (2019) attributing quality in education to the training received by educators, quality assurance in online teaching goes beyond educators' efforts but includes the support of non-teaching staff.

For instance, Nakweya (2021) reported in the words of the vice provost of quality teaching and learning at Kenya's Aga Khan University, in the person of Professor Tashmin Khamis, states following the sudden transition from onsite to online teaching after the outbreak of the COVID-19 pandemic: "We learned that you need a coordinated effort between IT, instructional designers, e-learning developers, and educational technologists as well as education developers (Nakweya, 2021, p. 1)." This suggests that the role(s) of Information Technology (IT) specialists in ensuring smooth online teaching is pivotal.

In congruence with the findings of the work of Liberman, Levin, and Luna-Bazaldua (2020) on the need for a synchronous and asynchronous environment in online teaching situations from the perspective of formative assessment, Nakweya (2021) reporting Professor Tashmin Khamis reports that institutions of learning need to possess a good blend of the synchronous, asynchronous and independent learning environment while putting to use whatever the digital environment provides. According to Khamis, reported by Nakweya (2021), Technology and learning management systems remain mere tools; it is, therefore, necessary for teaching staff to introduce quality into their teaching using such tools. Nakweya (2021), reporting Khamis, further states that educators need to be innovative in creating and using different

mechanisms to ensure constant interaction between them and their students and feedback and interaction among students.

Pedro and Kumar (2020) studied institutional support for online teaching in the quality assurance framework. Using a scoping review, the study analyzed the different types of needed support of higher education faculty who teach online. This was done using thirteen (13) online education quality frameworks. The study's findings show that lecturers need professional development on different topics in relation to online teaching. These topics include interactions, course design, communication, assessment, and learning management system.

The study's findings also show that there is a need for enabling an institutional environment that recognizes and rewards lecturers' engagement in online teaching and, at the same time, promotes lecturers' development of skills and knowledge about online teaching. Other areas needing attention regarding online teaching following the findings of the study of Pedro and Kumar (2020) include: instructional design and technical support, online education research support, and online program management support.

Additionally, it is essential to note that according to the South African Council on Higher Education (CHE) (2020), while online teaching and learning are encouraged and to be promoted, especially following the outbreak of the COVID-19 pandemic, caution is to be taken. Thus, specific guidelines are issued by the Council on Higher Education (CHE) (2020) to guide online teaching and learning activities. Table 1 below shows the guidelines to be followed as issued by the Council on Higher Education (CHE) (2020) while undertaking teaching and learning activities.

S/No	Quality area	Quality measure	Supporting evidence
1	Program management	Active and consultative management of programs taking the restrictions of the pandemic into consideration	Evidence of consultation with academic staff
			Evidence of communication with students
			Evidence of consultation with students
			Evidence of identifying students at risk and the implementation of appropriate interventions
2	Teaching and learning	Clear and consistent communication to students of existing (and adjusted) module outlines and outcomes	Substantive evidence of relevant information, emergency remote formative assessment, and feedback to students on the institutional LMS
		Clear and consistent planning and communication to students (including motivations and ex-	Records of academic reflections and evaluations of the learning

		planations of changes) of revised timetables, adhering to notional hours	material developed in emergency remote teaching mode
		Regular and authentic engagement with students in various forms, including emergency remote formative assessments, to create community as well as a presence rather than an absence	
		Reflection and evaluation on learning material developed in emergency remote teaching mode with quality feedback loops to second-semester material	
3	Student support	Multiple channels of communication with students, e.g., on social media	Varied student support plans and implementation reports
		A student support plan using tutors or other support staff	Student feedback with reports and interventions, and responses based on the feedback
		A specific support plan for students with disabilities, which includes identification, support, and interventions	
		A specific support plan for students who have not had access to devices or data	
		Feedback opportunities for students	
		Interventions based directly on the student feedback	
4	Staff capacity development and well-being	Academic staff trained to create digital learning materials	Training materials
		Academic staff trained to create a remote emergency assessment	Training schedules
		Staff access to devices and data and how to use them	Reports on staff access to devices and data and their digital literacy
		Workload and performance agreements re-negotiated for new conditions	Revised workload allocations and performance agreements
			Evidence of engagement with staff concerning their ability to cope and general well-being

Table 1. Emergency remote teaching and learning quality-assurance guidelines for 2020. Source: Quality Assurance Guidelines for Emergency Remote Teaching and Learning and Assessment during the COVID-19 Pandemic in 2020, Council on Higher Education (CHE) (2020)

Table 1 shows that to adapt online teaching and learning as the new practices following the transition from onsite to online; certain areas are to be considered and well handled. The highlighted areas, as enumerated in the guidelines by the CHE (2020), include: ensuring sound management of the program, teaching, and learning, providing support for students, as well as developing staff capacity and ensuring their well-being. Suffice it to state that attempting to ensure smooth running of online teaching and learning activities may be futile if the highlighted areas are poorly handled.

Thus, online teaching and learning do not only entail and involve students and educators but many other education stakeholders who have various roles to perform. Meanwhile, in support of the need for capacity building with regards to ensuring and promoting quality in online teaching and learning, Cirlan and Loukkola (2021) state that there is a need for investment in capacity building for both staff and students and for different digital tools to be used more efficiently.

4.2. *Quality Assurance of Online Learning during COVID-19 Pandemic*

No schemes or formulas explain the components that should be included in online learning programs (Marciniak, 2018). According to Pannen (2021), following the virtual and flexible nature, the need for evidence of quality in online learning is higher than with the traditional approach. Huertas et al. (2018) explain that several learning institutions are moving to online learning. However, contrary to this, "the quality assurance of such provision has been given far less consideration (Huertas et al. 2018, p. 1)." This suggests that adequate attention seems not to be given to the quality provided in online learning. Nakweya (2021) reports following an online study conducted at Aga Khan University on the satisfaction of students and teaching staff with online teaching and learning during the COVID-19 pandemic.

The result showed that 88% of the students expressed satisfaction with their online learning experience; however, lack of access to interact with their peers and not having good bandwidth were their paramount dissatisfaction. According to the Australian Government, Department of Education and Training, in conjunction with Asia-Pacific Economic Cooperation (2017), there is a need for specific areas to be examined regarding online learning programs. The areas include teaching and learning, student assessment, student support service, staffing and staff development, financial and physical resources, and quality assurance.

Meanwhile, Jung, Wong, and Belawati (2013), quality assurance issues in online learning evolve around the following: designing policies to accommodate the needs of students, giving opportunity for students to study and progress at their own pace following the flexibility of online learning, swiftly increasing staff size/strength and quality, especially educators and IT

staff, supply of quality teaching resources, and strengthening leadership, amongst others.

According to Cirlan and Loukkola (2021), the size of the institution of learning, the model of governance, the rate of discipline, and the status of the provision for online teaching and learning prior to the outbreak of the COVID-19 pandemic are factors that affect online teaching and learning practices of different institutions of learning during the era of the crisis of the COVID-19. Sequel to the preceding, while there may be no schemes or formulas that explain the components that should be included in online learning programs, quality assurance of online learning during the COVID-19 pandemic and lack of infrastructure also contribute to challenges experienced during online learning.

4.3. Quality Assurance of Online Assessment during COVID-19 pandemic

Assessment of online learning programs has no formulas or schemes for defining the components that need to be included or excluded (Marciniak, 2018). Though, this study focuses on assessing students using online platforms, which is pivotal, rather than assessing the entire online program. According to Blackstock, Al Shamsi, and Bajammal (2021), since around the time of the outbreak of the COVID-19 pandemic and the sudden transition of several institutions of learning from onsite to online, adopting virtual methods of assessment and quality assurance have been questionable, especially concerning issues revolving around the maintenance of academic integrity.

However, in the works of Alsadoon (2017) and Elzainy, El Sadik and Al Abdulmonem (2020), the online assessment allows students to display their critical thinking and problem-solving competencies. These are some of the identified significant benefits of the shift from onsite (traditional) teaching, learning, and assessment practices to online, where educators are expected to mainly facilitate, as opposed to teaching (Elzainy, El Sadik & Al Abdulmonem, 2020; Alsadoon, 2017).

Moreover, online assessments help to reflect the type and level of learning that takes place online and allow students to take more responsibility for and in their learning (Elzainy, El Sadik & Al Abdulmonem, 2020; Liang & Creasy, 2004). A review of the work of Kelo (2021) shows that online training and guidelines on topics related to e-assessment are paramount. This shows the importance of assessing quality in online programs, especially following the sudden shift from onsite to online practices in teaching and learning.

Conversely, according to Gamage, de Silva, and Gunawardhana (2020), online assessment is a recent trend and experience in many learning institutions regardless of the level, following various challenges, especially as safeguarding academic integrity is involved. For instance, Gamage, de Silva,

and Gunawardhana (2020) assert that take-home assignments make assessment possible.

Nevertheless academic integrity in this instance is at stake, whereas Bearman, Dawson, O'Donnell, Tai, and Jorre de St Jorre (2020, 4) state, "Academic integrity focuses on equipping learners with the capabilities and values necessary to conduct ethical scholarship. In contrast, assessment security focuses on hardening assessment against attempts to cheat and detecting any cheating that has occurred (Bearman et al. 2020, p. 4)." Also, students are not physically present as the case is in the traditional classroom situation (Gamage, de Silva & Gunawardhana, 2020). For instance, Zalat, Hamed, and Bolbol (2021), as well as Oncu and Cakir (2011), in congruence, state that due to the absence of face-to-face contact, assessment such as information can be challenging to educators using online platforms.

Following the review of the work of Blackstock, Al Shamsi, and Bajammal (2021), the sequel to the outbreak of the COVID-19 pandemic, between the space of three months, precisely March and May 2020, the number of recorded online lectures 61,000, however, the number of online assessments was 115. This suggests the swiftness and ease for educators to conduct online lectures, but online assessment remains an issue. Blackstock, Al Shamsi, and Bajammal (2021) yet posit that there is a need for diversifying the method of assessment by institutions of learning.

Meanwhile, Zalat, Hamed, and Bolbol (2021) believe that practicable adaptable techniques for conducting secure online assessments are possible. Thus, from the previous, diversifying the adopted assessment methods following the transition from onsite to online is possible and should be desired. The South African Council on Higher Education (CHE) (2020) supports using online platforms for formative and summative assessments. Such is, however, to be conducted following specific guidelines. Table 2 below shows the necessary guides to be followed in the advent of the adoption of the online assessment.

S/No	Quality area	Quality measure	Supporting evidence
1	Assessment plans and communication for both formative and summative assessment	All assessment activities should be explicit, clear, unambiguous and implementable	Communication of emergency remote assessment plans to students
		A clear link between the assessment activity to the module outline and the expected outcomes	
		Clear information about the weight and value of the activity in terms of the module's overall assessment plan and the relationship of a formative activity to the final summative assessment.	

		Transparent mark allocation or rubrics upfront	
		Clear range statements	
		A variety of activities on different cognitive levels	
		Technical submission information and technical instructions, as well as technical support, are available	
2	Formative assessment	Formative assessments should be regular and directly linked to the module outcomes	Actual emergency remote formative assessment activities from students and feedback and results on the LMS
		Flexible or alternate submission dates for activities should be the norm	
		Formative assessments should have personalized, timeous and clear feedback	
3	Summative assessment	Summative assessment strategies should be planned within the institutional policies and procedures, which may have been amended for remote emergency assessment	Records of revised emergency remote assessment plans
		Summative assessment is designed, implemented, marked, and moderated by adequately trained staff	Staff and moderators' CVs
		All levels of summative assessment should have gone through a process of internal moderation	Actual emergency remote assessment activities from students and feedback and results on the LMS
		Exit-level summative assessment should have gone through a process of external moderation	Internal and external moderation reports
		Summative assessment outcomes should be reliable	
		Summative assessment plans should be explicit and communicated to students in good time	
		Summative assessment should be authentic, i.e., the assessment should be real-world tasks that demonstrate meaningful application of essential knowledge and skills	

4	Assessment administration	A secure and reliable assessment management system is in place at the institutional level that provides accurate, consistent, and credible results	
		Student communication on formative and summative assessment must be timeous, explicit, clear, and unambiguous, with guidance on their rights and responsibilities, at institutional level, at the program level, and module level	Assessment system Student communication Appeals report
		A student dispute and complaints mechanism should be in place that is explicit, fair, and effective	

Table 2. Emergency remote assessment quality-assurance guidelines for 2020. Source: Quality Assurance Guidelines for Emergency Remote Teaching and Learning and Assessment during the COVID-19 Pandemic in 2020, Council on Higher Education (CHE) (2020)

Table 2, which presents the guidelines put forward by the Council on Higher Education (CHE) (2020), shows that the successful adoption of online assessment would involve collaborative efforts from academic and administrative staff members of institutions of learning. This corroborates the works of Nakweya (2021) and Jung, Wong and Belawati (2013), who believe that quality online teaching, learning, and assessment practices involve various education stakeholders, not only academic staff members and students.

5. Conclusions

The study explored the quality assurance of online teaching, learning, and assessment during the COVID-19 pandemic. Consequently, relevant literature was reviewed and reported. The study showed that quality online teaching, learning, and assessment are possible. The study further showed that ensuring quality in teaching, learning, and assessment in a traditional classroom situation is critical and much more in online situations following the sudden transition from onsite to online during the COVID-19 pandemic. Despite various efforts to ensure quality online teaching, learning, and assessment are upheld, several challenges tend to affect and hamper such. These challenges include the institution's size, online teaching, learning, and assessment practices before the COVID-19 pandemic, governance, infrastructure, availability of support systems, and issues revolving around the students themselves. Sequel to the findings of the study, the following recommendations are made:

1. Educators should embrace online teaching, learning, and assessment, regardless of location.
2. Students should be motivated to see the need for and embrace online teaching, learning, and assessment practices.
3. Integrity in online assessment should be upheld. This can be done through organizing various periodic trainings capable of capacitating educators on ensuring integrity in online assessment practices: either formative or summative.
4. The guidelines put forward by the Council on Higher Education and other relevant association(s) on ensuring quality and integrity in online assessment should be upheld and duly put to use.
5. Provision of the necessary infrastructure needed to ensure quality online teaching, learning, and assessment should be made by the government, institutions of learning, and other relevant education stakeholders where necessary and possible.
6. Monitoring how online teaching, learning and assessment are conducted should be done promptly.

Acknowledgments: The study was limited to a review of relevant literature. Thus, further studies on the same or similar subject using quantitative, qualitative or mixed methods approaches are suggested.

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Academic Performance in Online Classes of Undergraduates in Education: A Descriptive Study in Africa

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Abstract: This study investigated the academic performance in online classes of undergraduates in education: a descriptive study in Nigeria. The quantitative data from the study was analysed with descriptive and inferential statistics, and appropriate statistical tools were used to test the generated hypotheses. The statistical analysis determined the mean and the standard deviation. Pearson Product Moment Correlation coefficient (PPMC) was used to establish the magnitude and direction of the relationship between the two variables in hypotheses one and two, while one-way ANOVA was applied to compare the mean effects of the existing groups in the variable. All hypotheses were tested at a 0.05 level of significance using Statistical Software for Social Sciences (SPSS). Concerning online lectures, the finding showed a calculated r-value of 0.58, which is positive and more significant in magnitude than r-critical ($r_{\text{crit.}} = 0.195$) at 0.05 significance level and 199 degrees of freedom. It indicated a positive relationship between online lectures and students' academic performance because both variables are correlated positively. For the learner characteristics, the calculated r-value of 0.36 is positive and more significant in magnitude than r-critical ($r_{\text{crit.}} = 0.195$) at 0.05 significance level and 189 degrees of freedom. It has further indicated a positive relationship between learner characteristics and students' academic performance because both variables are correlated positively.

Key-words: online learning; student academic performance; learner characteristics; e-learning; self-directed learning; teaching technology.

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1. Introduction

In Nigeria, education is one of the most valued industries which touches every area of human life. It is the bedrock of economic and personal development, and it drives economic, social, and personal development, and all levels of governments proclaim its importance. It is also a way to achieve political change in the country; since it acts as the agent of change that revives a nation's economy and improves personal and social growth (FGN, 2004). The continuous growth of Nigeria's population heightens the demand for education at all levels. According to the National Population Commission, Nigeria has a population of about 140 million people (NPC, 2010); it is the most populous country in sub-Saharan Africa. The country occupies a landmass of nearly 923,768 square kilometers with more than 275 ethnic groups that make up the nation. Consequently, the dwindling financial and economic circumstance within the country makes it economically and socially challenging to provide quality education to the students (Jegede & Sadeq, 2003).

More than 1.5 million students in Nigeria write Jamb exam and meet the required cut-off mark, but only about half of them are admitted into the university. The major reason most students are denied admission is that the universities do not have enough space, resources, and facilities to accommodate all the qualified students. In the federal universities, the students are packed like sardine in the lecture rooms filled at overcapacity (Alonge, 2020). Additionally, students take longer time to complete their degrees because of strike which keeps them out of campus for long school periods. Unfortunately, the dispute between the university staff and the federal government of Nigeria extends the academic calendar by at least one or two years, as a result the students stay longer in school and there is even less space and resources for new batch of students to be admitted (Ojo, 2018).

The difficulty of funding Education for All (EFA) irrespective of social, environmental, cultural, and ethnic background through the traditional face-to-face means has compelled the need to implement appropriate and cost-effective mode of education. These situations necessitate the use of more reliable, efficient, and cost-saving mode of education (Sadeq, 2004). The logical means to achieve standard educational goals is to adopt online education (Jegede, 2003).

In Nigeria, most conventional universities are implementing the use of one mode of ICT or another to carry out their academic activities, hence the increased usage of ICT in education has promoted distance education in Nigerian universities (Jegede, 2007). Online education has increased the students' access to learning opportunities, created convenient time to learn, made available greater learning resources, improved opportunities for students

to learn individually and created more powerful cognitive tools for students (Khan, 1996, Pierre, 1998).

The use of technology in education helps to remove geographical barriers and encourage everyone to learn from anywhere at any time in the world without physically attending classroom. Students from different geographical locations can attend the same lecture online at the same time. It increased accessibility of education and reduced costs and time spent on attending classroom lectures (Ho, Chun-Ling, & Ren-Jye Dzung, 2010; Sharpe, Rhona, Greg, & Richard, 2006; Draper, Stephen & Brown, 2004). Therefore, it is believed to improve students' academic performance, (Rogers, 2008). The adoption of ICT in teaching and learning has a significant influence on the students' academic performance and achievement; it has been associated with increased academic performance. Online lectures have competitive advantage over face-to-face classroom instruction, and this positively impacts student's academic performance and their GPA (Hughei, 2010).

Despite the increasing popularity of online learning among Nigerian universities, full online learning is still regarded with ambivalence because of mixed views from a large body of research findings. Some researchers conclude that students engaged in online education, learn as much as those in the traditional face-to-face classroom instruction, they earn comparable grades and are justly satisfied (Zhao, et al., 2005; Jahng, Krug, & Zhang, 2007; Sitzmann, et al., 2006; Phipps & Merisotis, 1999;). Contrarily, other researchers claim that students are not likely to complete their courses with the online mode of education (Beatty-Guenter, 2003; Carr, 2000; Chambers, 2002; Moore, Bartkovich, Fetzner, & Ison, 2003).

The application of ICT in higher institutions has changed teaching and learning processes. E-learning is the use of technological mode to enhance and promote teaching and learning (Oye, N.D., Iahad et al., 2012). According to Sale, (2002), online learning is the application of electronic technology to deliver learning training instructions, as well as monitor, assess and report learners' progress. It is also defined as an ingenious mode for transferring electronically designed, student-centered learning environment to the learner anytime and anyplace using the internet and other digital technologies (Hedge & Hayward, 2004). Online education and face-to-face classroom instruction are similar, they follow the same syllabus, textbooks, class size, same assignments, quizzes, tests, and grading guideline. The main difference is basically on the mode of instruction and communication; with online education, instructions occur online through standardized videos and audios. Several pedagogical, social, and economic factors necessitate the adoption of ICT techniques to classroom instructions. These include increased access to information, increased communication through electronic media, cost effectiveness, synchronous learning and increased collaboration and

cooperation, including improvement in pedagogy through simulation. Both teachers and students use applications that are flexible in time and place (Oye & Iahad, 2011).

2. Statement of Problem

Globally, educators believe that the COVID-19 pandemic is a prototypically adaptive and transformative challenge and so a swiftly designed response is needed in the form of alternative teaching methods (OECD, 2020). There is no preconfigured manual that will guide educators to take appropriate steps as they allow the pandemic to run its course while students continue learning, the only option in this situation is for higher institutions to embrace online lecture mode of teaching (UNESCO, 2020). In Nigeria, the traditional mode of education has been challenged recently because of the COVID-19 pandemic, therefore, online learning has speedily become an essential means to teach in higher institutions (Njoku, 2020).

Online learning or distance education (learning) has revolutionized the education system globally for some time. Most higher institutions have recognized that the physical presence of the learners and instructors in a classroom is not critical for learning to take place, with the rise in technology and Internet (Parajuli, 2020). In addition to offering higher institutions an alternative means to learning and teaching during period of COVID-19 pandemic, enabling students to continue with their studies, online lectures allow students acquire new cognitive and technical skills or improve old learning skills (United Nations, 2020). Online lecture avails the learning instructors the opportunity to take advantage of all forms of teaching technology for virtual classrooms such as videos, audios, slides, PDFs, and word documents (Godson, 2017).

Educators worldwide have diverse view and varying degrees of enthusiasm concerning online education. This is reflected in numerous studies that fail to arrive at a consensus; some conclude that there exist significant differences in students' academic performance between online learning and traditional classroom learning (Mason, Robin, & Weller, 2000; Gholamhosseini, 2008; Ellis, Robert, Ginns, & Piggott, 2009). How well students thrive and achieve academic success under online lecture method depends on how the students and teachers are facilitated and encouraged to appreciate the learners' innate potentials and the numerous advantages of online education.

3. Purpose of the Study

Several quantitative studies have investigated the effectiveness of online learning (Bennett & Bennett, 2002; Goodwin, 1993; Hara & Kling, 1999).

Despite the increase in literature about the increase in online education, few studies have focused on the impact of online education on student's academic performance. There is need to investigate how online lectures influence students' academic performance. This study proposed to study the quality of online lectures received by the students of the Faculty of Education, University of Lagos. The study will investigate how online lectures influence students' academic performance.

The findings of this study will contribute to majority of literature focused on online lectures and how online learning affects students' academic performance. The results will enable institutions evaluate their online lectures based on the students' learning styles.

Aim of the Study

Previous studies have investigated the effectiveness of online learning and distance education very few studies have focused on the impact of online lectures on academic performance of undergraduate students. Therefore, this study investigates the academic performance in online classes of undergraduate students in education: a descriptive study in Nigeria.

The following research questions governed this current study:

1. How significant is the relationship between online lectures and students' academic performance?
2. To what degree does an online lecture correlate with learner characteristics?
3. Does an online lecture impact students' academic performance?
4. The study tested the following generated hypotheses.
5. There is no significant relationship between online lectures and students' academic performance.
6. There is no significant relationship between learner characteristics and students' academic performance.

Scope of the Study

The scope of this study covers the academic performance in online classes of undergraduate students in education: a descriptive study in Nigeria. Therefore, the investigation is limited to examining the academic performance in online classes of undergraduate students in education: a descriptive study in Nigeria.

4. Review of Related Literature

This study reviewed works of literature in three significant areas: online lectures; learner characteristics, and students' academic performance.

Online Lectures and Academic Performance

Contemporary learning theories emphasize constructivism, whereby students construct new knowledge based on their previous knowledge and experiences. Supporters of constructivism oppose the belief of the objectivists which states that students are passive learners while the teachers know what the students need (Creswell, 2009; Cobern, 1996). According to William (2004), students individually construct and socially negotiate new knowledge. They emphasize how learning takes place instead of the way learning develops (Yager, 1991; Cobern, 1996). Constructivists focus on the content of the learner's thoughts, with the learners as primary actors. Integrating ICT with learning facilitates students to individually construct knowledge (Kenny, 2001). Fisser & Fellicione (2002), emphasized that development in Information and Communication Technology (ICT) has influenced all aspects of human life, even education. The objective of online education is to increase and improve students' access to quality education in the country (Parsad & Lewis, 2008).

Online education is an old practice that promotes distance education, life-long learning, and e-learning in most parts of the world, including in Nigeria (Sale, 2012). It is usually used to refer to internet education, e-learning, virtual education, cyber-learning, and asynchronous learning (Allen & Seaman, 2003; Office of Sustainable Development, 2000). Choi (1995) argues that knowledge is naturally constructed when students interact with their environment and context. Wilson (1995) suggests that constructivism is a holistic approach to learning; it involves making sense of the world through information from the surrounding. What the student does is more important and crucial to learning than what the teacher does (Shuell, 1988). Additionally, students rely on what they perceive, interpret and plan to do (Biggs, 1999); hence, ICT integrated learning gives learners the opportunity to enhance learning through interaction. Perking (1991) argues that constructivist learning is reinforced when the student engages in play-oriented activities more than task-oriented activities such as in electronic-supported learning.

There are conflicting research findings in literature about the influence of online or electronic learning on students' academic performance, these findings range from positive, negative to no significant difference in students' academic performance between online education and traditional face-to-face classroom learning. Research studies have confirmed that online learning is as good and maybe better than the regular face-to-face classroom learning, even though experts claim that it is mentally, emotionally, and academically challenging to the students (Bintliff, 2011). Online education forces the students to think critically and be active participants in their learning activities, they are self-motivated, self-disciplined, independent, and goal-oriented learners (Kerr, Rynearson, & Kerr, 2006; Wojciechowski & Palmer,

2005). Students become conversant with modern technology as they learn new things at their convenience (Hachey et al., 2013; Parsad & Lewis, 2008).

Contrarily, other researchers suggest that students who engage in online education are naturally stronger at academic preparedness than average students (Xu & Jaggars, 2011). They claim that these students possess time-management, multitasking and critical thinking skill which enable them to be self-disciplined, self-motivated, responsible, organized and goal-oriented learners (Kiely, et al., 2004; Johnson & Berge, 2012; Kerr et al., 2006; Neuhauser, 2002; Rovai, 2004; Kenner & Weinerman, 2011; Wojciechowski & Palmer, 2005). These students possess the potential to take responsibility for their own learning experiences and work independently. According to Shea & Bidjerano (2014), when students participate in online learning during their first year in university, they have higher rate of completing their degrees than those that did not engage in online education during their first year in college. In addition, Oye, et al., & Keshaverz (2012) claim that online education impacts positively on students' academic performance due to reduced costs, time saving and increased accessibility to learning materials which increases academic achievement (Oye N. A., et al., 2012; Maleki, Shahab, & Zohre Sanisales, 2015).

Most students need the flexibility offered by online education so they can balance school with family demands, but others struggle with online education due to low levels or lack of self-directed learning skills (Jaggars & Smith, 2014). Despite these benefits, most studies suggest contrarily that online learning negatively affects students' academic performance, they claim that students become isolated, those with language deficiency become disadvantaged in text-laden circumstances and parents fear for the children's social development. The opposers of online learning report that students cannot develop motivation skills when they are to complete a task on their own under the pressure of time (Ruiz, Jorge, Mintzer, & Leipzig, 2006; Bernard, Robert M., et al., 2004; Jahng, Namsook, Don Krug, & Zhang, 2007). Opponents of online learning are concerned if the method can provide the same face-to-face interaction between students-instructors and students-students as found in the traditional classroom setting (Roblyer & Ekhaml, 2000).

The opposers believe that students need to attend real classrooms and be physically present in a classroom with a teacher to guide their learning activities. Hence, they argue that the major disadvantage of online learning is the lack of interpersonal skills development, lack of student motivation and lack of memory and learning development, (Cantoni, Virginio, Cellario, & Porta, 2004; Al-Alawneh & Muhammad 2014). These researchers believe that face-to-face classroom learning provides live interactions between the students and the teachers, which helps the learners become organized with

their studies (Berge, Zane, Muilenburg, & Haneghan, 2002; Fann, & Lewis, 2001).

Opposers of online education are concerned about the quality of learning instruction delivered to the students, because instructors would simply transfer their traditional classroom pedagogy to the online format, missing out on the advantages of computer-mediated education (Cox, 2005). Other skeptics argue that there is limitation on student-teacher and student-student interactions and relationships (Bambara, Harbour, Davies, & Athey, 2009). These opposers argue that online education is bound to cause non-completion of courses; this contradicts the view of the supporters of online education who claim that it leads to superior learning outcomes and that the high rate of online dropouts is attributed to the characteristics of individual students and not due to the method of delivering instruction (Howell, Laws, & Lindsay, 2004). Bennett et al., (1999) suggest that one major disadvantage of online education is that both learners and teachers do not receive immediate feedback (Bennett, & Maniar, 1999). Ross & Schulz add that online education requires students to be self-disciplined for them to succeed academically (Ross & Schulz, 2009).

Learner Characteristics and Academic Performance

Learner characteristics refer to numerous aspects of the learners' psychological, social, behavioral, and natural attitudes towards learning. It is broad and comprised of situational, affective, and demographic characteristics that cut across the population of learners. Research has demonstrated that earlier online learner, who were engaged in distance education shared common broad demographic and situational characteristics, such as adults and active workers, but no data findings showed that they were homogeneous or unchanging (Thompson, 1998). The profile of earlier online learners was based on classic distance education settings, such as home study or correspondence, where majority of the learners are adults with family, social and occupational responsibilities (Hanson et al., 1997). Hence, the archetypal profile of a learner has not been converged, but its specific elements can be operationally defined as the constructs that forecast the probability of learners' success under a given condition (Cronbach & Snow, 1977). The groups were largely characterized by the constructs of independence, adulthood, self-motivated, self-disciplined, self-starters and goal-oriented learners (Anderson & Garrison, 1998; Dabbagh & Bannan-Ritland, 2006).

The process of globalization has changed the range of online learners' population from profile of homogeneous adults, who are employed, geographically bound at a place, goal oriented and self-motivated to heterogeneous youths, who are dynamic and responsive to technological advancement. According to Swan (2004), the several constructs of learner's characteristics, for instant, motivation, learning style, attitude, study habit,

ethnic and cultural background influence online learning and academic performance. Although academic success of online learners is not determined by their perceived skills, characteristics, and educational needs, but the knowledge will enable teachers, administrators, and instructional planners to understand the behaviors of online learners, how they can be motivated and potential barriers that hinder online learners from successfully completing their program (Galusha, 1997).

According to Song et al., (2004) there are several factors that influence students' online learning experiences (Song, Singleton, Hill, & Koh, 2004). These factors affect students' perception of online lectures through their difficulty understanding the online learning goals, technical problems associated with use of technology, and lack of community interaction. Additionally, the learners' characteristics and the design of learning environment affect students' perception of online lectures, which in turn influence their academic performance (Howland & Moore, 2002; Clark, 2002; Dwyer, 2003; Song et al., 2004).

Learners' online learning experiences are heavily influenced by the individual characteristics of the learners (Howland & Moore, 2002). The key characteristic that affects online learners is the learner's perception of themselves. When the learner is positive about their online learning, they become constructivist learners. Positive learners are highly independent, proactive and they take responsibility for their learning. On the other hand, students with negative self-perceptions about their online lectures have the same goals, expectations, structures, and information as they did with the face-to-face classroom learning. These students needed more feedback and structure from the lecturers (Howland & Moore, 2002).

Students' academic self-concept has been proposed as one of the key determinants of academic success for online learners (Dille & Mezack, 1991). The researchers investigated the locus of control of students enrolled in distance education, focusing on internal and external attribution of academic successes and failures and the students' learning style (verbal, visual, and kinesthetic). They concluded that students' locus of control significantly influenced the success and persistence of online students (Dille & Mezack, 1991). When online students attribute their academic success and failure to internal locus of control, they were more likely to get a C grade or better and they persevered longer on tasks than students with external locus of control, who attributed success and failure to externally uncontrollable factors like task difficulty and luck.

Self-directed learning is another key characteristic of online learner; it refers to the learners' skill and ability to "learn how they learn" or to be metacognitively aware of their own learning (Olgren, 1998). According to Cheurprakobkit et al., (2002), students engaged in online lectures need to exhibit "self" behaviors, such as self-starter, self-motivated, self-discipline,

self-monitoring, self-initiative, and self-management, these are components of self-regulated and self-directed learning.

These behaviors of self are vital for online learning given that an instructor will be absent, and the learner needs to critically monitor and regulate his own learning.

Numerous studies investigated other aspects of online students' attitudes, personality, study habits, rate of completing program, psychological, academic, and social integration factors that hinder persistence in online learning and predict academic success (Stone, 1995; Laube, 1992; Bernt et al., 1995; Fjortoff, 1995; Garland, 1993; Pugliese, 1994). Generally, the studies concluded that when online learner are intrinsically motivated, and they possess internal locus of control, coupled with high positive attitude towards the online instructor, and a high expectation for academic success, they were more likely to earn higher academic performance (Dille & Mezack, 1992).

5. Methodology

Research Design

Descriptive survey design was used in this study. The survey method was used to collect information on existing data without manipulation. The technique adopted the use of a questionnaire to collect data from respondents. The dependent variable is students' academic performance, while independent variables are online lectures and learner characteristics.

Population and Sample of the Study

The study's target population comprised undergraduate students of Faculty of Education in University of Lagos. The study involved a total number of 200 respondents. They included 115 male and 85 female students, randomly selected from different areas of specialization in the department. A simple random sampling technique was used to determine the respondents, where every participant had an equal chance of being selected.

Validity of the Instrument Reliability of the Instrument

The study used a researcher-constructed questionnaire. It measured quality of online lectures, learner characteristics, and students' academic performance. Construction of the questionnaire emerged from reviewed literature. A portion of each questionnaire dealt with the personal data of respondents such as gender, age, class, etc., and it employed a Likert-type of 4 rating scales. The instrument was validated with content validity and a table of specification displayed the items gathered. A pilot study was conducted to establish the degree of reliability, consistency, stability, and accuracy of the measurement. It was to ensure the consistency and reliability of test scores. A pilot study was carried out using randomly selecting 40 students from a senior

secondary school in Surulere Local Government Area of Lagos State. A test-retest method was conducted after a week by re-administering the same test to the same 40 respondents. The two tests' scores were correlated, and the reliability value was determined to give 0.72 using Statistical Software for Social Sciences (SPSS). The questionnaires were administered personally by the researcher. The support of the students was employed to facilitate quick retrieval—the students selected at random comprised both males and females from high, moderate, and low socio-economic status.

Data Analysis

The study made use of descriptive and inferential statistics in the analyses of the data. The generated hypotheses were tested with Pearson Product Moment Correlation coefficient (PPMC) in other to determine the magnitude and direction of the relationship between the variables in the hypotheses. One-way ANOVA was used to compare the mean effects of the existing groups in the variable. The analysis was used to determine the mean and the standard deviation and all hypotheses were tested at a significant level of 0.05 using the Statistical Software Package for Social Sciences (SPSS).

6. Results and Discussion

Description of data (Respondents)

Sex	Frequency	Percentage
Male	85	42%
Female	115	58%
Total	200	100

Table 1. Distribution of Respondents by the Gender

From the above table, the percentage of the respondents was 42% male and 58% female.

This means that female students participated more in the research than their male counterparts.

Religion	Frequency	Percentage
Islam	77	38%
Christianity	118	59%
Others	5	3%
Total	200	100%

Table 2. Religious Background of Respondents

The above shows that the number of respondents who participated in the research process was majorly Christians with 59%. In comparison, 38% of participants were Muslims, and 3% belonged to other religions apart from Islam and Christianity.

Age group	Frequency	Percentage
Below 20 years	43	21%
20– 23years	109	55%
23 – 26years	34	17%
Above 26years	14	7%
Total	200	100%

Table 3. Distribution of Respondents by Age

Concerning age bracket, participants below 20 years of age constituted 21%; those between the ages of 20 – 23years were 55%; those between the ages of 23 and 26 were 17%, while those above 26years old were 7%. Hence, most of those who participated in this research were between the ages of 20 – 26 years.

Departments	Frequency	Percentage
Science Tech. Edu	30	15%
Adult Edu.	28	14%
Edu. Admin.	34	17%
Human Kinetics & Health Edu.	25	12%
Edu. Foundations	38	19%
Arts & Social Sciences	45	23%
TOTAL	200	100

Table 4. Distribution of Respondents by Department

Testing of Hypotheses

Hypothesis one- The hypothesis states that there is no significant relationship between *online lectures and students' academic performance*. This hypothesis was tested using Pearson's Product Moment Correlation coefficient (PPMC), and the result is presented in the table below.

Variables	Mean	SD	Df	r-cal
Online Lecture	16.19	4.07	199	0.58
Stud. Acad. Perf.	14.27	2.76		

P < 0.05. R-critical = 0.195

Table 5. An r-test showing the relationship between online lectures and students' academic performance.

Evidence in the above table has indicated a relationship between online lectures and students' academic performance. The calculated r-value of 0.45 is positive and more significant in magnitude than r-critical (r-crit. = 0.195) at 0.05 significance level and 199 degrees of freedom. It has further indicated a positive relationship between online lectures and students' academic performance because both variables are correlated positively. That is, the more often the students are exposed to online lectures, they become more conversant and comfortable with online learning, and will begin to gain all the benefits associated with online education, such as refined critical thinking and technical skills. These skills enable students to study effectively. The calculated value (r-cal) is greater than the critical value (R-crit), therefore the relationship between the two variables is significant. It can be concluded that there is a meaningful relationship between online lectures and students' academic performance because the null hypothesis was rejected.

Hypothesis two- The hypothesis states that there is no significant relationship between *learner characteristics and students' academic performance*. This hypothesis was tested using Pearson's Product Moment Correlation coefficient (PPMC), and the result is presented in the table below.

Variables	Mean	SD	Df	r-cal
Learner charact.	16.04	3.35	189	0.36
Stud. Acad. Perf.	15.57	3.76		

P < 0.05. R-critical = 0.195

Table 6. An r-test showing the relationship between learner characteristics and students' academic performance

Evidence in the above table has indicated a relationship between learner characteristics and students' academic performance. The calculated r-value of 0.36 is positive and more significant in magnitude than r-critical (r-crit. = 0.195) at 0.05 significance level and 189 degrees of freedom. It has further indicated a positive relationship between learner characteristics and students' academic performance because both variables are correlated positively. That is, positive learner characteristics portrayed by students positively influenced their academic performance. Moreover, the calculated value (r-cal=0.36) is greater than critical value (R-critical=0.195), hence there is a significant relationship between the two variables. Therefore, it can be concluded that there is a substantial relationship between learner characteristics and students' academic performance because the null hypothesis was rejected.

Summary of findings

The findings of the research conducted are summarized as follows:

- There is a significant relationship between online lectures and students' academic performance.
- There is a significant relationship between learner characteristics and students' academic performance.

Discussion of Findings

Hypothesis one

This hypothesis states that there is no significant relationship between online lectures and students' academic performance. The result showed that there is a meaningful and positive relationship between online lectures and students' academic performance because both variables are correlated positively. The findings concur with the view expressed by Olaussen et al., (1999), they argued that electronic integrated learning is self-regulatory and purposeful because the learner strategically generates and directs their own learning rather than wait for the teacher to externally control their learning (Olaussen & Barten, 1999). It follows the findings of several researchers who

concluded that online or electronic learning scales up students' individual learning experiences. Online education positively affects students' academic performance due to reduced costs, time saving and increased accessibility to learning materials which increases academic achievement (Oye N. A., et al., 2012; Maleki, Shahab, & Zohre Sanisales, 2015). Student's academic achievement increases when they use electronic support to enhance learning opportunities and independently construct new knowledge through self-regulated learning (Yizengaw, 2007; Mayer, 2003; Descamps, 2006; Couco & Goldenberg, 1996).

The education system that harmonizes learning with the changing needs of the technological world will support and promotes learner's creativity and academic achievement (Young, 2009). The ICT infused education system improves the learner's thinking skills, ability to understand the world and their need for constructive innovations (Payne, 2009). The purpose of education is to nurture individuals with high academic ability, who are creative and thoughtful; this can only be achieved with the implementation of online learning process (Zare et al., 2014). Mothibi (2015) concluded that the effective application and use of ICT techniques to facilitate learning helps to improve and enhance students' learning and overall academic achievement. Therefore, the use of electronic techniques in teaching and learning substantially influence online lectures and students' academic performance positively.

Hypothesis two

This hypothesis states that there is no significant relationship between learner characteristics and students' academic performance. The result showed that there is a meaningful relationship between the two variables. Positive attitudes portrayed by students influence their academic performance positively because both variables are correlated positively. This finding concurs with Adeolu's (2010) view that developing positive learner characteristics are crucial in achieving academic excellence. It conforms to Moore and Flick (2007) that showed that the students' characteristics are closely correlated to their academic success in higher institutions. The finding is in line with the view of Kimberlie et al., (1996) that students with positive characteristics were more successful than the students who had negative learner characteristics in achievement tests at the beginning of the year. The present finding also supports Mendine's (2013) report that students who have positive characteristics successfully complete their online courses than their counterparts who exhibited negative attitudes towards online learning.

7. Conclusions

Based on the result obtained the researcher was able to deduce that university lecturers are more familiar with the use of technological tools because most lecturers and students have a smart phone which they used for banking transactions, access to social media sites among other things. Also it was deduced that technological tools have a significant effect on the students because they were able to learn from home through other means of learning and it also equipped them with usage of electronic gadgets for learning.

In relation to the findings obtained, we can make the following recommendations: (a) There is need to introduce online learning to classroom teaching, so that the students will be used to both learning method; (b) Government and education ministries should work together to introduce other online applications that will facilitate smooth learning for the students; and (c) The government as well as school owners should provide alternative means of learning for the students, so that issues with epileptic power supply, service interruption by service providers and high rate of data consumption for classes will not be a barrier to online classes.

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The Work-Life Balance and Turnover Intentions in South African Higher Education

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Abstract: The orientation of this research study is toward work-life balance and its effect on turnover intention in an institution of higher learning in South Africa. Work-life balance is a topic of interest for both researchers and management all over the globe. A quantitative research methodology was implemented in this study, and a descriptive research design was carried out. A stratified random sampling of 160 employees. Psychometric instruments were used to measure the variables: the work-life balance questionnaire (WLB Q) and the turnover intention questionnaire (TI Q). Correlational analysis was utilized to investigate the relationships between the two variables. The results suggest that work-life balance is essential for organizational survival and that the institution should promote it. Management should focus mainly on enhancing the work-life balance to retain their employees.

Key Words: work-life balance; turnover intention; higher education; management; universities; family.

1. Introduction

As the world of work changes rapidly, work-life balance has gained currency with the view to protect family life in an increasingly competitive workplace and career-driven. Twaronite (2015) adds that several indicators

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present the current policy mix regarding work-life balance (WLB), i.e., health and safety at work, equality, flexible labour market, and international competitiveness. With the new policies introduced nowadays, men and women can balance work and life simultaneously because those policies force the organization to provide its employees with flexible work hours so that they can have time to spend with their families while managing even their work. A recent report by Ugwu, Enwereuzor, and Mazei (2022) noted that when the COVID-19 pandemic made its incursion into the world of work in early 2020, many employees were compelled to work from home to slow down the transmission of the disease and this had an impact on various employment aspects such as turnover and stress levels.

The Chartered Institute of Personnel and Development (2015) reports that in the 1980s, companies began introducing family-friendly policies such as telecommuting and flexible work scheduling. Those policies focused on women in practice, but they also accommodated even men's needs.

Work-life balance has been an important issue that gained currency among employees and employers over the past years all over the globe. According to O'Connell, Russell, Watson, and Byrne (2010), the economic downturn of 2008, increased competition, and evolving technology that continues in the world of work have put pressure on the employee's professions and institutional work-life issues globally. Furthermore, it affects organizational members' satisfaction, resulting in stress and job dissatisfaction, and subsequently makes them intend to leave their institutions or careers.

According to Kodikal (2017), the issue arises when employees leave the organization, decrease productivity, exhibit negative behavior toward their jobs or personal lives, or experience other problems that have an impact on work-life balance because they are not satisfied with their jobs or the workplace due to issues like motivation, job satisfaction, or stress.

This study will further investigate the main reason(s) why employees in an institution of higher learning keep on not availing themselves in the workplace and, together with the reason(s) why institutions of higher learning do not provide complete WLB initiatives regulated by the government to its employees.

2. Literature Review

Over the past two decades, the boundaries between individuals' work and non-work life have become narrow (Kinnunen, Rantanen, Mauno, & Peeters, 2014). In the work environment, academics must work hard and fast to accomplish their numerous and complex tasks within a limited period (Bakker & Demerouti, 2017; Ingusci et al., 2021); hence, to accomplish their work, academics often work long hours and overtime (Houston, Meyer, &

Paewai, 2006). Work-life balance is a canopy term involving different social concepts, including work, life, family, home, balance, harmony, equilibrium, conflict, enrichment, and integration (Braun & Peus, 2018). More recently, the thinking is that the term work-life balance (WLB) has gained increasing popularity in the public discourse (Kelliher, Richardson & Boiarintseva, 2019). Over the past few years, the discourse around work-life balance (WLB) has gained widespread attention from researchers and management practitioners (Nicklin, Seguin & Flaherty, 2019; Kaya & Karatepe, 2020).

According to Munyeka (2021), work-life balance is about forming and preserving supportive and healthy work environments, enabling employees to balance work and personal responsibilities, thus strengthening employee loyalty and productivity. Maintaining work-life balance is crucial for their well-being and relationships, as it can improve efficiency in their work performance.

Downes and Koekemoer (2011) believed that organizations that invested heavily in work-life balance reported lower employee turnover. Bothma (2011) believes turnover intentions are a concept that does not function alone but occurs when employee(s) within the organization become influenced by personal, contextual factors such as employability and labor market conditions. Turnover intentions can be voluntary or involuntary. Rahman and Rahman (2013) define voluntary turnover as a type of turnover that occurs when employees willingly choose to vacate their jobs for various reasons, while involuntary turnover usually involves employees being let go for unsatisfactory performance or stress. Furthermore, Bothma (2011) reports that intentions to leave are positively related to actually leaving due to, for example, being unable to balance work and life domains.

Rahman and Rahman (2013) claim that employees leave their organizations because their employers do not encourage and help them to develop their careers or support them, for example, to balance their work and life roles. Jha (2014) further explains that their decision to leave their organization can negatively affect the business to the extent that the organization may find it challenging to achieve its goals. In addition, it will make the organization experience high costs associated with recruiting and hiring new employees.

3. Materials and Methods

3.1. Theoretical framework of the study

Affective Events Theory (AET) of Weiss and Cropanzano (1996) provides a theoretical basis for explaining the antecedents and consequences of affective states at work and, in this case, turnover intentions. According to Erol Korkmaz (2010), AET focuses on the structure, causes, and consequences of affective experiences at work, and according to the theory,

events experienced at the workplace are the proximal causes of affective reactions of employees and these affective experiences, in turn, have a direct influence on the behaviors and attitudes of employees. Moreover, individual dispositions of the employees are proposed to influence both affective states experienced at work and affect-driven behaviors of the employees.

Erol Korkmaz (2010) added that AET suggests that events experienced at the workplace are the proximal causes of affective states of employees and these affective experiences directly influence employees' attitudes and behaviors. AET also considers time since affect levels fluctuate over time, and these affective states influence overall feelings about one's job and discrete behaviors at work. Furthermore, the theory considers the multidimensional structure of affective experiences and proposes that different psychological reactions, such as anger, frustration, joy, etc., have different behavioral implications.

3.2. Study objectives

The study's primary purpose is to investigate work-life balance and its effects, such as stress on the turnover intention on all the employees in an institution of higher learning: (a) To determine the relationship between work-life balance and turnover intention in a university setting; and (b) To determine the impact of stress, satisfaction, and production reduction on work-life balance on the employees in an institution of higher learning. In addition to these objectives, we put forward two hypotheses: H_0 : Work-life balance does not affect turnover intention in an institution of higher learning.; and H_1 : Life domain characteristics such as family role expectations can positively influence perceived work-life balance.

3.3. Methodology

The approach for this study was quantitative research, and the research design used is experimental and survey research design. The methods for collecting data from the research participants will be questionnaires. The study used a non-probability sampling method. Non-probability method is a method in which the chance of selecting a sample is unknown. The convenience non-probability sampling method was used to select a sample size for the study.

The statistical analysis was conducted using IBM-SPSS Program SPSS 26 software (Statistical Package for the Social Sciences SPSS, 2016). The questionnaires consisted of two sections, and section I consisted of demographics like Gender, Age, Marital Status, and education or level of qualification, and section II included items to measure the perception of work-life balance.

3.4. Data collection tools

This study consisted of two questionnaires, one for work-life balance and another for turnover intentions. Work-life balance was measured using the 5-point Likert scale in which the questions on work-life balance ranged from strongly disagree, disagree, neutral, agree, and strongly agree to get information from respondents making it easier for respondents to complete the questionnaire in time. Cronbach's alpha criterion was applied to test the reliability and validity of the questionnaires. Furthermore, 20 statements connected to work-life balance on employees in the institution of higher learning were analyzed to determine the underlying factors and their appropriateness.

On the other questionnaire, Scale-6 was used to measure turnover intentions. Turnover intention scale-6 can importantly distinguish leavers from the stayers and again confirm the predictive criterion validity.

3.5. Procedures

Data were collected voluntarily, and informed consent was obtained from each participant. Participants of the study completed two questionnaire packages two weeks apart. Measures on demographic information and work attitudes (i.e., turnover intentions) were collected at Time 1. To avoid response sets, items from different scales were presented in a mixed format. Work events, affective reactions to work events, and affective states and behaviors (i.e., work-life balance) were measured at Time 2. Due to the longitudinal nature of the study, the two questionnaires filled out by a participant needed to be matched through a mechanism that would still ensure anonymity.

A total of $N = 160$ academic staff members and a sample size of $n = 114$ was drawn from the population, calculated at a 95% confidence level, and it is assumed that there will be a 50% response rate, as shown below. In the equation, n is the sample size, N is the population size, and e is meticulousness.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{160}{1 + 160(0.05)^2}$$

$$n = 114$$

3.6. Ethical considerations

Questionnaires have been requested from the participants; consent was distributed to the participants for data gathering. The participants completed

the questionnaires based on anonymity for personal purposes. For ethical reasons, a permission letter was submitted to the consent University requesting permission to conduct the study. After the approval of the letter and permission was given, the questionnaire was distributed among employees.

3.7. Data analysis

The preliminary analysis involved the calculation of frequency distributions to describe the sample. The Pearson product correlation moment was utilized to test the relationship between work-life balance and turnover intentions, and mean scores were also used. The Statistical Package for Social Sciences Version 26 (SPSS 26) was used for statistical analysis.

3.8. Reliability and validity

Cronbach's Alpha criterion will be applied to test the reliability and validity of the questionnaires. The work-life balance was measured in the form of the work-to-family conflict (WFC—three items, $\alpha = 0.79$) and family-to-work conflict (FWC—three items, $\alpha = 0.72$) with the abbreviated version of the measure of work-family conflict developed by Matthews and Barnes-Farrell (2010).

On the other questionnaire, turnover intentions Sclale-6 will be used to measure turnover intentions, and Bothman and Roodt (2013) claim that TIS-6 is a reliable and valid measure that can be used to measure turnover intentions and predict actual turnover.

3.9. Bias

This study chose the stratified random sampling method because Andale (2015) that the method reduces the potential bias of the research participants when they are selected for the sample size for the study reported it. Furthermore, Andale (2015) indicates that when the sample has been selected, it becomes representative of the population being studied because of the inclusion of different participants.

3.10. Participants and response rate

The target population for this study is 160 employees and a sample of 114 from the institution of higher learning (HRM department staff and HRM and Labor Relations lectures). Furthermore, the level of confidence in selecting a sample was 90%.

For characteristics and response rate of participants (See Tables 1 and 2 respectively).

Item	Category	Frequencies	Percentage (%)
Gender	Female	57	57
	Male	43	43
Age	18 to 24 years	13	13
	25 to 31 years	13	13
	32 to 38 years	13	13
	39 to 45 years	14	14
	46 to 60 years	20	20
	61 and older	27	27
Position	Lecturers	100	100

Table 1. Characteristics of the Participants (N = 100).

A response rate of 88 percent was achieved from the appropriate sample of 114, which was reflected by the 100 responses from the questionnaires.

Category	Frequency
Sample	100
Unusable responses	1
Usable responses	100
Total responses	100
Response Rate (%)	88

Table 2. Response Rate (N=100).

4. Results

4.1 Correlation Between Work-life balance and turnover intentions

Correlation results in Table 3 show a significant direct relationship between turnover intentions and power culture ($r = 0.274^*$; $p = 0.042$) because the p -value is less than 0.05. Consequently, the study rejects the hypothesis (H_0) that work-life balance does not affect turnover intentions. (See Table 3).

		Turnover	Turnover	Turnover	Turnover	Turnover
Work-life balance	R-value	1	.248*	-.176	.023	.281*
	p-value		.043	.134	.867	.042
Turnover	R-value	.274*	.038	-.229	-.510**	1
	p-value	.048	.723	.076	.011	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3. Correlation between Work-life balance and turnover intentions.

4.2. Descriptive Statistics and Intercorrelations

Table 4 reported the descriptive statistics and intercorrelations among the study variables. All the personal variables (i.e., gender, marital status, number of children, and age) did not significantly correlate with WLB, and they were, thus, dropped from subsequent analyses. All the key variables significantly correlated with WLB. Specifically, stress ($r=-0.50$, $p<.001$) and home demands ($r=-0.46$, $p<.001$) were negatively correlated with WLB. (See Table 4).

Variable	M	SD	1	2	3	4	5	6
Gender	-	-	-					
Marital Status	-	-	0.01	-				
No. of children	-	-	-	0.89**	-			
Age	44.55	5.56	-	0.56**	0.79**	-		
Stress	42.26	4.87	-	0.04	-0.06	0.02	-	
Home demands	33.19	3.81	-	0.01	-0.03	0.01	0.46**	-
Work-life balance	8.91	1.23	0.01	-0.04	-0.01	-	-0.50**	-0.48**

N= 100. ***= $p <.001$ (two-tailed). Gender was coded 0=male was coded 1, female was coded 2, marital Status was coded: 1=single, 2=married; no. of children was coded based on the actual number of children that each participant has such that higher scores represent a more significant number of children; age was coded using the number of years, such that higher scores represent older age. The remaining variables were coded such that higher scores represent higher values of the particular construct.

Table 4. Means, Standard Deviations, and Correlations among the Study Variables

Hypothesis (H_1) was accepted as life domain characteristics such as family role expectations can positively influence perceived work-life balance. Houston and Waumsley (2003) believe that the more conflict that arises between work and personal life, the more employees will struggle to maintain a balance and eventually quit their jobs. Waumsley (2010) says this also holds

for staff without caregiving duties. Hughes and Bozionelos (2005) state that the consequences could be costly to organizations that neglect such practices. On a more positive note and the contrary, work-life friendly arrangements are rewarded with direct financial benefits, lower turnover ratios, and better recruitment options through employing highly skilled employees who cherish flexibility.

5. Discussion

The study's primary purpose is to determine the relationship between work-life balance and turnover intention in a university setting. The results showed that work-life balance affects turnover intention at the University of Venda. This means that lecturers at the university perceive the work-life balance practices at the University of Venda to be supportive and regard the university as caring and valuing them and their contribution making the employees more engaged and committed. This is consistent with a study conducted by Fontinha, Van Laar, and Easton (2008) on academic staff and researchers in the UK. The results show that Job and Career Satisfaction (JCS) are significantly related to Employee Engagement (ENN) among permanent workers but not among temporary workers. The absence of Stress at Work (SAW) is a strong predictor of GWB for permanent workers compared to temporary workers. Furthermore, a balanced HWI is negatively related to EEN. However, EEN is positively related to General Well-Being (GWB). The permanent status of the job has a significant impact, as seen in the current study.

The effects of occupational stress influence an individual employee and the organization. Beheshtifar and Nazarian (2013) assert that the consequences of occupational stress on an organization can be grouped into two; the symptoms and the costs. The symptoms refer to poor morale among the workforce, performance/ productivity losses, low-quality products, and services, poorer relationships with clients, suppliers, regulatory authorities, losing customers, bad publicity, high accident rates, high labor turnover, increased sick leave, loss of valuable staff, more internal conflicts and dysfunctional workplace climate. Beheshtifar and Nazarian (2013) add on to say that, the costs to the company are related to costs of reduced performance/ productivity, high replacement costs in connection with labor turnover, increased sick pay, increased health-care costs and disability payments, higher grievance and compensation costs and costs of equipment damage.

As to whether life domain characteristics, such as family role expectations, can positively influence perceived work-life balance, the results showed that work-life predicts employee stress at a higher education institution. Given the hectic schedules of academics nowadays, they have to lecture, attend conferences, and conduct academic research. It is even more

stressful for females as they have overlapping roles, perform home chores, and have a lecturing career. This is in contrast to a study conducted in Nepal by Biswakarma (2015), where there were lower levels of stress at work in the non-financial sector than in the financial sector. In the literature, Easton, Van Laar, and Marlow-Vardy (2013) stated that stress had been recognized as a substantial issue for employees and employers.

In as much as the academics are not working in financial institutions, the stress is natural in academic institutions, and the WHO (2004) mentions that the home-work interface includes issues like conflicting demands of work and home. Although the sample was small for the current study and only focused on one university, it is significant because it reflects the perceptions of an essential sub-group of academics in the country.

6. Conclusion

The study investigated if there is a connection between work-life balance and turnover intentions in a higher education institution in South Africa. This study has two grounding objectives finding the relationship between work-life balance and turnover intentions. The findings imply that maintaining a work-life balance is crucial for an organization's survival, and the organization should concentrate on doing so. To keep personnel, management should pay special attention to improving the work-life balance. Research results support attempts to enhance models that depict the association between work-life balance and intention to leave a job.

Based on this study's outcomes and findings, the following recommendations are made: (a) Management and practice: The university management should take work-life balance seriously to enhance or alter the turnover intentions of their employees. (b) For future research: The study used only a small sample at the university, an exploratory study; therefore, it is recommended that a longitudinal study be conducted to cover other faculties/schools and other universities to provide conclusive results about the university and the academic fraternity in general. Furthermore, a broader study is proposed, which could use mixed methods approaches.

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The Threat of HIV/AIDS on Adolescent Academic Achievement: A Case Study in Nigeria

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Abstract: This study examined the menace of HIV/AIDS on the academic performance of adolescents in contemporary society in Nigeria using a survey research design. The population for the study consists of the entire adolescents in Remo North Local Government Area, Ogun State. A simple random sampling technique was adopted in selecting a sample size of one hundred and fifty (150) respondents. Adolescent Menace on HIV/AIDS (AMOHA) questionnaire, developed and validated by the authors, was used to source primary data. Test re-test of the instrument on a similar population outside the study gave a reliability coefficient of 0.854 alpha level. Chi-square and t-test statistical tools were used to analyze the data. Findings revealed that HIV/AIDS affects the academic performance of adolescents in public secondary schools. It was recommended that youth-friendly centers be established in secondary schools with well-trained professionals to handle issues relating to HIV/AIDS.

Key-Words: human immunodeficiency virus (HIV); acquired immunodeficiency syndrome (AIDS); discrimination; adolescents, secondary schools.

1. Introduction

HIV/AIDS has become a topical issue in Nigeria. Since the first case was registered in 1982, the epidemic has continued to increase. More than 3

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million Nigerians are estimated to be living with HIV/AIDS (Aanu and Olatoye, 2011). Today, most people are aware of the illness known as AIDS (Acquired Immune Deficiency Syndrome). This is because it has spread across virtually the entire nation. AIDS impairs the immune system; its victims are helpless against deadly diseases. When doctors in Los Angeles and New York discovered it in 1981, they called the symptoms immunological consequences of some unknown process. All the victims were either young male homosexuals or drug addicts. AIDS has become a disease of consequence since there is no cure yet. Millions of lives are claimed despite the combined efforts of individuals, governments, and non-governmental organizations to find a solution to the disease.

Adolescence is a developmental period marked by discovery and experimentation that comes with myriads of physical and emotional changes. During this time of growth and change, young people get mixed messages (Adebule, 2012). Most teenagers undergo hormonal and physiological changes and are tempted to test their sexual inclinations and put them into practice. They engage in sexual activity without having sufficient knowledge or awareness of the risks involved. Teenagers may act in ways that put them at risk for sexually transmitted illnesses (STIs) (Abu and Akerele, 2006).

The number of newly acquired cases of HIV/AIDS among adolescents and young adults is continuing to rise. Health programs typically cover adults and small children, but adolescents are primarily disregarded. Governments must emphasize teenagers more by addressing their social, educational, and health needs holistically (Oyo-Ita, 2005). According to Ekundayo and Oyeniyi (2008) and Adebule (2012), society is struggling with several student behavior issues, including truancy, disobedience, drug offenses, smoking, flirting, stealing, and armed robbery, as well as violent conduct and demonstration, vandalism, examination malpractice, cultism, and thuggery. Dotonu (2011) claimed that, in addition to the previously mentioned, widely publicized behavioral issues, sexual behavior are also seen as contributing to the behavioral issues common in Nigerian secondary schools: sex abuse is one of the most severe crimes perpetrated by teenagers. In literature, they are referred to as sexual assault, sexual offenses, sexual misbehavior, immoral behavior, and maladjustment (Omoteso, Adeniyi, and Bada, 2010; Anise, 2011).

Sexual promiscuity and immorality, has been demonstrated by researchers (Omoteso, Adeniyi, and Bada, 2010; Anise, 2011; Odebiyi, 2001) to have thousands of negative impacts on pupils. They include unplanned and unwanted pregnancies and infections brought on by STIs and subsequent poor academic performances. Ajayi (2006) and Adebule (2012) confirmed that the prevalence among young people in Nigeria has alarmingly increased. The future of Nigerian society is unclear. Due to this finding, parents and the local community are becoming less interested in teaching their children. They see

investing in education, where no results are anticipated, as a waste of their limited resources. Many people are likely reluctant to send their children to school, given the pervasive view among Nigerians that doing so is not a reliable investment. Therefore, developing effective measures to combat this significant pandemic in the nation is urgently needed.

2. Methods

2.1. Statement of the problem

The spread of AIDS and other linked diseases is killing people. It has worsened poverty and the number of orphans in the nation, endangering overall national development and resulting in poor academic performance among adolescents. The scourge of HIV/AIDS has developed into a significant social issue and has a detrimental effect on many facets of society. This study, therefore, examines the menace of HIV/AIDS on the academic performance of adolescents in secondary schools in the Remo Local Government of Ogun State. The following research hypotheses were adopted for the study: (a) There is no significant relationship between sexual immorality and HIV/AIDS infection; (b) There is no significant difference between male and female adolescents regarding the effects of HIV/AIDS on the academic performance of adolescents.

2.2. Research design

The descriptive research design of the survey type was adopted in the study to assess the menace of HIV/AIDS on the academic performance of adolescents. The study population consists of Remo North Local Government Area, Ogun State students. There are eight (8) public secondary schools in Remo North Local Government, and samples were drawn from five schools. The simple random sampling technique was used to select five schools for the study. The same technique was used to select a sample size of hundred and fifty (150) students for the study.

2.3. Instrument for data collection

The instrument used for data collection is a self-designed questionnaire, the Adolescent Menace on HIV/AIDS (AMOHA) questionnaire. It is divided into two sections: A and B. Section A elicits bio-data and personal information of the respondents, while section B deals with questions on the menace of HIV/AIDS on students' performance. The content of the questionnaire was strengthened by the content validity of the questionnaire. In order to determine the reliability of the instrument, the test-retest reliability technique was adopted. The instrument was pre-tested on thirty (30) students comprising both male and female, and after three weeks, the same questionnaire was administered to the same set of students, similar

to the population but outside the population. An alpha coefficient of 0.854 was obtained. The data sourced from the field survey was subjected to statistical tools. A regression analysis statistical tool was used to analyze the data.

3. Results

3.1. Testing of Hypotheses

Hypothesis 1: There is no significant difference between sexual immorality and HIV/AIDS infection.

	Academic Performance				df	X ²	Sig	P
	SD	D	A	SA				
Sexual count immorality	360	300	554	436	3	87.24	0.00	P<0.05
Expected count	412.5	412.5	412.5	412.5				

Table 1. Chi-square analysis of the difference between sexual immorality and HIV/AIDS infection

Table 1 indicates that the chi-square value of 87.24 is significant at a 0.05 level, implying a significant difference between sexual immorality and HIV/AIDS infection. Therefore, null hypothesis one is, at this moment, rejected.

Hypothesis 2: There is no significant difference between male and female adolescents regarding the effects of HIV/AIDS on the academic performance of adolescents.

Group	N	Mean	Std. Deviation	Df	t _{cal}	t _{cri}	Remark
Male	96	42.6667	5.9252	148	3.549	0.04	Significant
Female	54	43.9259	4.8597				

Table 2. Independent t-test statistics of male and female adolescents on the effects of HIV/AIDS

The table above shows that the t-calculated value of 3.549 is significant at 0.05 levels with 148 degrees of freedom. This implies a significant difference between male and female adolescents regarding the effects of HIV/AIDS on academic performance. Therefore, null hypothesis two is a result of this rejection. The following is a summary of the results presented above: (a) There was a significant difference between sexual immorality and

HIV/AIDS infection; (b) There was a significant difference between male and female adolescents on the effects of HIV/AIDS on academic performance.

4. Discussion

The study investigated the menace of HIV/AIDS on the academic achievement of adolescents in Remo Local Government, Ogun State. Hypothesis one states no significant difference between sexual immorality and HIV/AIDS infection. The result in table 1 above indicates a significant difference between sexual immorality and HIV/AIDS infection. The HIV/AIDS infection is among the causes of death among adolescents. Adolescents can easily contract HIV/AIDS due to unprotected sexual behaviors. Most adolescents do not abstain from sexual relationships; they indulge in risky behaviors like unprotected sex, hence the increased prevalence of HIV/AIDS among adolescents. The study reports that the prevalence of STDS in Nigeria was between ages 15-19. This is in congruence with Gueilla and Madise (2007), who affirmed that the prevalence rate was highest among adolescents and young adults, aged 15-22. Manyara, Kisilu, and Wokabi (2013) referenced AMREF (1994) as evidence that young people's justifications for having sex include peer pressure, curiosity, and the desire for pleasure.

Hypothesis two states that there is no significant difference between male and female adolescents regarding the effects of HIV/AIDS on the academic achievement of adolescents. The result in Table 2 above indicates a significant difference between male and female adolescents on the effects of HIV/AIDS on the academic achievement of adolescents. This finding agrees with Adeniyi and Okewole (2014), who believed that understanding sexual behavior patterns is crucial to comprehend the possible spread of STDs. The results of this study support Aanu and Olatoye's (2011) finding that there was no significant difference in students' understanding of the cause and method of HIV/AIDS transmission between male and female students.

5. Conclusions

HIV/AIDS represents the most significant single threat to the education process. Numerous difficulties confront the infected and impacted students at school and in the greater community. Adolescents develop in a home setting intertwined with socio-cultural behaviors that are detrimental to their health and play a significant role in HIV and AIDS infection. On the other hand, the school, which is meant to support children as they develop and search for their identities, also faces difficulties, including stigma, prejudice, a lack of support, and the risk of infection. Social and cultural norms, poor food due to poor health, and inability to pay for necessary medication all significantly

impact how adolescents function socially and academically in secondary schools.

The following recommendations are made based on the findings of the study. Secondary schools should set up youth-friendly centers with qualified staff to deal with HIV and AIDS-related issues. Principals and other stakeholders should get service training on HIV and AIDS. With the full participation of the stakeholders, structures should be built to support expert teachers, particularly school guidance counselors, Family Life and Health Education (FLHE), and quality assurance officers. Non-governmental organizations, in conjunction with government agencies, may organize seminars, workshops, advocacy, and other programs targeting adolescents to achieve the set goals.

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