AFRICA UNIVERSITY

(A United Methodist-Related Institution)

AN ASSESSMENT OF THE EFFECTIVENESS OF INFORMATION PLATFORMS AT AU

BY

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A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN COMPUTER INFORMATIN SYSTEMS (HONOURS) DEGREE IN THE COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE.

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ABTRACT

His study intends to assess the performance of the information platforms at Africa University. The study will look into the many information channels offered by the university, including its website, social media accounts, email, and other online channels but manly focusing on moodle platform. Surveys, interviews, and content analysis are just a few of the qualitative and quantitative research techniques that will be used. The study's findings will show how well the information platforms work and point out areas where they might be strengthened. The study will add to the corpus of knowledge already available on information platforms such as Moodle used in higher education institutions and offer suggestions for improving these platforms' efficiency at Africa University.

DECLARATION

I declare that this proposal is my original work except where sources have been cited and acknowledged. The work has never been submitted, nor will it ever be submitted to another university for the award of a degree.

_____ _____

Student's Full Name Student's Signature (Date)

_____ _____

Main Supervisor's Full Name Main Supervisor’s Signature (Date)

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I would like to express my sincere gratitude to my supervisor Mr. Mukhalela for his continued and unwavering support from the beginning to the end of this research project .I also owe a debt of gratitude to the faculty of Business, Peace, Leadership and Governance and staff at Africa University who took the time to contribute to this study by offering their insightful opinions and first and knowledge of the institution's information platforms.

In addition, I would like to express our gratitude to the Africa University administration for approving the conduct of this study and for giving us with the tools and assistance, we needed.

Finally, we would like to thank our friends and family for their support and encouragement, which helped us stay motivated and inspired to complete this research project to the best of our abilities.

Dedication

To my beautiful family, thus my husband, mother father and my three supporting siblings Hazel, Lorraine and Nadia

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The chapter introduced the whole study. It revealed the research problem and its setting. The chapter contains the background of the study, statement of the problem, aim of the study, research objectives and the justification of the study. The chapter went on to highlight the questions and objectives guiding

CHAPTER 1 INTRODUCTION

1.0 Introduction

This chapter presented the Background of the study, the Problem of the statement, Research objectives, Research questions, Justification of the study, Research assumptions, Delimitations, and Limitations to the study.

1.1 Background of the Study

As digital distortion engenders significant revolution in both the teaching and learning processes and methodologies, trends in technology dissemination ignite evolving changes in every area of human learning. These trends in technology adoption and its ability to drive organizational operations through ICT and associated technologies are popular in most developed and developing country organizations. The education sector remains an important business with considerable responsibilities in a nation's growth. Many ICT-induced changes in the operation and management of higher education, particularly universities, polytechnics, and colleges, are more significant in the way personnel communicate, engage in school administration, and students use institutional facilities and get excellent learning. Because of the many evolving trends in technology use, tertiary education institutions are now embracing the use of ICT to accomplish their fundamental duties of teaching, research, and learning, as well as providing services (Jayanetti, 2014). The development and usage of telecommunication technologies has offered enormous opportunities for the use of information and communication devices for teaching and learning at all levels of education (Nnaekwe&Ugwu, 2019). Thus the research assessed the effectiveness of information platforms used at African universities, with a particular focus on Moodle.

Moodle is an abbreviation for Modular Object-Oriented Term Developmental Learning Environment and is an Internet-based course management system (Course Management System -

CMS), often known as a Learning Management System (LMS) or a Virtual Learning Environment (VLE) (Ahmad and Alkangani, 2011). It is a free web application that may be used by educators to build effective online learning sites. One of its key advantages is that it is open source, allowing any user with programming expertise to change and adjust the environment to their own needs. Moodle can be installed at no cost at many servers. How has code opened there are no maintenance costs need to pay for upgrades. Nobody can force you to make updates, buy tools that you do not want or determine how many users should possess; the teacher manages the platform according to their needs.

This platform is frequently utilized by colleges, communities, schools, instructors, courses, teachers, and even corporations throughout the world. Martin Douglas created this system, and because to his knowledge in both education and computers, he was able to create a tool with both technological and pedagogical aspects that were satisfying. According to Badge et al. (2005), the number of users and developers working in collaborative communities to add new features to Moodle has risen. Moodle has swiftly grown popular in a wide range of organizations throughout the world for entirely online courses as well as to supplement face-to-face teaching and learning. In truth, Moodle provides a less complex and organized environment than, say, a full-fledged commercial LMS like WebCT. Moodle seems to be a group of tools that share an environment as a result of the OS development paradigm, but commercial LMS support a comprehensive development process and give complicated administration capabilities. The question is whether, given the simple needs of our potential customers and the lack of a specific management procedure for online courses, a collection of tools was sufficient for our needs.

On the other hand, the efficacy of e-learning systems has been a major focus of research in recent decades. The views on the usefulness of e-learning are numerous and diverse. There is other more aspects that impact the success of e-learning, some of which are related to technology/technics and others to people. According to Upadhyaya and Mallik (2013), each

aspect of e-learning efficacy cannot be considered as a separate topic, either as a technological or a people issue. E-learning involves interaction between people and processes, so it must be viewed as a socio-technical system rather than a social system focusing solely on people (e.g., students, teachers, and other stakeholders) or a technical system focusing solely on standards and processes (e.g., course content, technology, Learning Management System (LMS), content management tools). E-learning is a complicated process that is dependent not just on these factors in isolation, but also on their interplay. The study explained how the introduction of the Moodle e-learning system increased the students' performance on the faculty level and discusses the variances among the different subgroups. The study also looked at the relationship between introduction of Moodle and student performance.

1.3 Statement of the Problem

As the usage of technology in education has become increasingly important in this day and age, it was necessary for academics at AU to include technology into their teaching and learning. Several studies on the influence of information platforms on student academic performance have been conducted internationally, such as that conducted on Nile University students by Mowafy (2018), but few have been conducted in Africa, particularly in Ghana (Asare-Donkoh, 2018). More of these studies focus on the usage of information platforms, but few on the influence on student performance. Most academics wonder if information systems like Moodle are successful in improving learning circumstances at the tertiary level. There is little information on this topic in Africa since few studies have been conducted to assess the usefulness of information platforms such as Moodle. In this regard, the research seeks to considerably contribute to the previously existing literature by explicitly zooming in on the influence and amount of impact information technology has on the academic performance of students in Zimbabwe, especially at Africa University.

1.4 Research Objectives

The research was guided by the following objectives

1. To assess the influence of Moodle site on student academic performance in Africa University
2. To evaluate challenges associated with the usage of Moodle platform as an information platform at AU.
3. To explore solutions that can be proffered to improve the efficiency of Moodle as an information platform at AU.

1.5 Research Questions

The research was guided by the following questions

1. What is the influence of Moodle site on student academic performance in Africa University?
2. What are the challenges associated with the usage of Moodle platform as an information platform at AU?
3. What solutions can be proffered to improve the efficiency of Moodle as an information platform at AU?

1.6 Research Assumptions

The study assumed that

- The sample taken was a true representative of the population under study in the cluster.
- Use of Moodle as an information platform at tertiary level can be affected by various factors.
- That the response rate on the questionnaires was so significant that the researcher would obtain complete, accurate and relevant data and thus draw valuable conclusion.

- Use of information platforms has impact on the performance of students.

1.7 Significance of the Study

Just like any other research the study was significant to various stakeholders. Firstly, the study is significant to the academia and intellectuals because it helps to understand the relationship between technology use and student performance. It will fill in the gap in literature on the effectiveness of information platforms on student performance. Moreover, the study is important to the Africa University as an institution because it will offer recommendations that will be used to improve information platforms at university. The study is also important to the students at AU because it will highlight their concerns with the regards to the challenges, they experience in using Moodle.

1.8 Delimitations of the study

The study focuses on the effectiveness of information platforms at tertiary universities in Zimbabwe. It narrows the conclusions from Africa University specifically focusing with the department of Business management. The student discovered that there are many information platforms at Africa University which includes the Moodle, library and the portal used for registration. The study only uses Moodle to make inferences to.

1.9 Limitations of the study

As every research is bound to face challenges, this study is likely to have a share of limitations. The study is likely to face challenge of reluctance and resistance of some participants to provide data. In order to tackle the challenge, the researcher will guarantee confidentiality to respondents and state that the information will be provided anonymously. Respondents' viewpoints might differ at times from the researchers; however, the researcher will explain that the study is conducted primarily for academic objectives, hence the responses provided will be accurate and reliable.

1.10 Chapter Summary.

This chapter was a general introduction to the research. The introduction illustrated the company's problem which is the less of clients. The objectives of the study, benefits of the study to the researcher and university were also pointed out in this chapter. The end of the chapter then presented the various challenges that the researcher might encounter whilst conducting the research.

CHAPTER 2 REVIEW OF RELATED LITERATURE

2.0 Introduction

The deployment of information and communication resources and tools in education has given birth to a new mode of learning which does not necessarily require the physical presence of participants; hence, making learning goals easily achievable not only in a classroom environment. The adoption of such teaching and learning modes capable of achieving qualitative and much-desired learning should be the focus of contemporary educational institutions. The development and expanding significance of varied advanced innovations for teaching and learning in higher education has prompted web-based learning through applications and resources like the web, mixed media tools, electronic mail, etc. This chapter looks at the theory guiding the study, the important components related to the study and the background of information platforms at University.

2.1 Theoretical Framework

The study was premised on the Technology Acceptance Theory. The adoption and use of Moodle LMS by students was treated as technology adoption. Technology Acceptance Model (TAM) is perhaps the most widely applied theoretical model in technology use research. TAM explains the potential users' behavioural intentions when using a technological innovation. It explains the causal links between beliefs (the usefulness of a system and ease of use of a system) and users' attitudes, intentions, and the actual usage of the system. The goal of TAM is to provide an explanation of the determinants of technology acceptance capable of explaining end user behaviour (Davis, 1989). TAM specifies the causal linkages between two key sets of constructs:

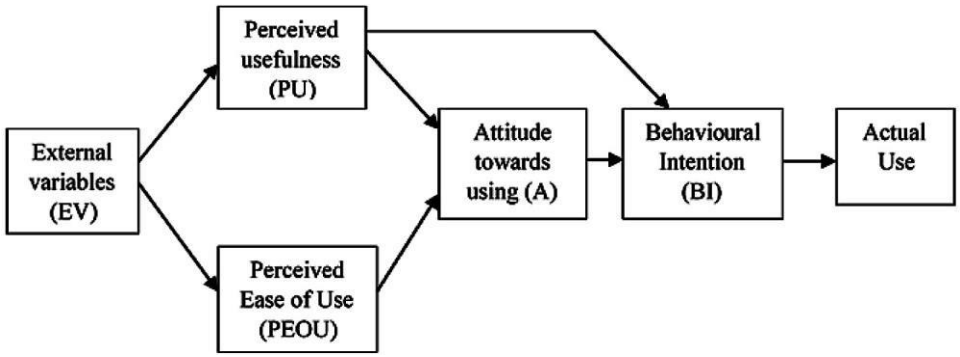
1. Perceived Usefulness (PU) and Perceived Ease of Use (PEOU), and

2. Users' attitude (A), behavioural intentions (BI) and actual technology usage behaviour (see Figure 1).

2.1.1 Perceived Usefulness (PU)

Perceived Usefulness (PU) is the degree to which the student believes that using Moodle would enhance his or her grade performance. Most of the students in UEW are adult learners. It has found

Figure 1. Technology Acceptance Model (TAM) *Adapted from: Davis (1989).*



out that adult learners require more flexible and self-paced learning that match their individual characteristics (Papastergiou, 2006). Moodle is a powerful tool that can be used to address the need of these adult learners by providing access to course content at their convenience. Several studies have revealed that perceived usefulness can play an important role in students' attitude towards using an e-learning system such as Moodle (Lee, Cheung & Chen, 2005, Liu, Liao & Pratt, 2009, Toe, 2009, Ngai, Poon & Chan 2007). This means that students will use Moodle if they find it useful in their learning process. Accordingly, students' perception about the usefulness of Moodle might have a significant effect of their rate of Moodle use in their cause of study.

2.1.2 Perceive Ease of Use (PEoU)

Perceived Ease of Use (PEOU) is the degree to which the student believes that using Moodle is free of effort. This is an important aspect for students since an easy-to-use system will lead to more satisfaction and more frequent use. A confusing system will require more effort from students to use. This may make students feel unsatisfied and not participate in activities on Moodle. Perceived ease of use is related the challenges associated with using a system. Students' perceptions regarding the challenges of using Moodle are also reflected by their comprehensions about how easy it is to use the system (Sumak, Hericko, Pusnik, &Polancic, 2011). Thus, perceive challenge associated with the use of Moodle can be used to represent perceived ease of use in the TAM model. In a study by Sumak, Hericko, Pusnik, &Polancic, (2011) that used structural equation modelling (SEM), it found that Perceived ease of use has a strong and significant impact on perceived usefulness. Thus, the less challenging it is to use Moodle, the more students will perceive it to be useful.

Various studies have revealed some challenges associated with the use of Moodle. A study by Carvalho, Areal, & Silva (2011) found that difficulties in logging into Moodle, registering, navigating, opening files, submitting assignments and finding target materials were the most frequent faced by student in using Moodle. Sanchez-Santamaria, Ramos, & Sanchez-Antolin (2012) also found that students identified lack of training, technical problems, low use of Moodle by some teachers, Internet connectivity and lack of regular updates as some challenges associated with their use of Moodle. By investigating and addressing these challenges, educational institutions can increase the students' rate of use of Moodle.

2.2 Defining E-learning Platforms

E-learning is the utilization of ICT innovations in wide-range approaches of educations to support and facilitate learning in institutions of higher learning. This includes the deployment of ICT apparatuses in addition to customary classroom learning, internet-enabled learning or

blending the two modes (Muthuchamy&Thiyagu, 2011; Organization for Economic Cooperation and Development, 2005). To Zare et al (2016), e-learning entails the use of electronic systems - computer, internet and multimedia resources, virtual magazines and newscasts, etc. to achieve faster, easier and better teaching and learn at reduced cost and time. Guragain (2016) posit that e-learning is a significant change from traditional classroom teaching and learning to ICT-based customized and flexible learning methods.

According to Imran & Malik (2017), the term e-learning covers the use of different kind of information and communication technologies (ICT) and electronic devices in education. According to them, with web-based learning, learners from remote places can communicate easily, knowledge could be acquired and shared among the learners, there are possibilities of open discussion and students can learn according to their schedule. All these facilities offer opportunities and abilities that cannot be utilised in conventional learning. This shows that elearning is a form of learning in which electronic technologies are utilized to access curriculum content delivery outside a traditional classroom setting. It involves the use of information and communication technologies to enable and facilitate access to learning and teaching (Muthuchamy&Thiyagu, 2011; Arkorful&Abaidoo, 2014) and the delivery of courses happen specifically via a form of connectivity to somewhere other than the classroom.

E-learning offers the advantage to enable students in higher institutions to acquire education and also pursue other personal objectives and maintain their careers, thereby overcoming the rigid schedule of classroom setting (Borstorff& Lowe, 2007). With e-learning, consideration is given to cost, content delivery, service satisfaction, quality and speed (Liaw& Huang, 2003). With elearning, the restriction of time and place is eradicated whereas interactivity among students and teachers is enhanced (Holmes & Gardner, 2006) and learning objectives can easily be achieved within a short time and with little efforts from both the learners and the lecturers (Rabah, 2005).

It is a mode of learning that offers teachers several ways of interacting with their students and gives room for instantaneous feedback (Brown, Cromby&Standen, 2001).

According to Arkorful and Abaidoo (2014), e-learning is revolutionary and is mostly centred on the learner as well as its design involving a system that is interactive, repetitious, self-paced, and customizable. Hence, the design and the accessibility to the institutional web portal or e-learning portal is significant in achieving the elearning objectives. In Nigeria, educational institutions are investing heavily in the creation of e-portals to take advantage of the possibilities offered by eportals technology (Omotunde, Babalola, &Omotunde, 2014) and to provide quality educational services (Mohamed, James & Sayed, 2011). An e-learning portal is a website that offers users and organisations enhanced access to a wide range of learning resources from diverse sources. It may also include a rating system, search functionality, bookmarking ability, and more (Imran & Malik, 2017).

Higher education organisations in developed countries are passionately using e-portal as a necessary means to facilitate communication and service delivery between administrative staff, faculty members and most importantly the students. The rapid growth in internet applications like web portals particularly has led to various efforts in research with the aim of understanding service satisfaction on the internet. A portal looks more like a normal web when it has a wide range of sophisticated resources such as blogs, e-mails, search functions, news and directories (Muslim & Ahmad, 2018).

According to Sharma (2019), the five major components of an e-learning portal that are crucial for a thriving online learning environment are (i) the audience/users (the students who are the audience, their expectations, learning abilities and capacities to access and view materials, and their preferences and needs), (ii) course structure (course structure is an important factor in how learners will learn. This includes the organization of course content, module development, length

of materials, use of illustrations and pictures, to achieves learning goals), (iii) Web Page Design (navigation should be easy, appearance should be friendly, balanced use of text and graphics, visual style, pop-ups, formatting and filters should be simple. These can affect the learning experience of the learners), (iv) Content Engagement (Learning experience will be improved when exercises and class activities are included in the learning process, hyperlinks are provided for additional concepts, and explanations. The content should incorporate quizzes and tests, and skill assessment exercises should focus only on the course objective) and (v) Usability (Ease of use depicts the effectiveness of e-learning contents and resources. All links should work as intended, graphics should be clear and visible and the course objectives should be achievable and learners' expectations are met).

According to Li (2015), an electronic learning platform should provide easy access for learners to navigate through the content, be flexible, make content discoverable, allow for personalised learning activities, ensure both synchronise and asynchronised learning and be accessible from all forms of compatible devices. The present study looks at the adoption of a web portal for elearning and the implication of e-portal use on the effectiveness of learning in a higher educational institution with particular reference to the Federal Polytechnic, Ilaro.

There are different expressions used to describe educational computer applications, such as elearning Systems, Learning Management Systems (LMS), Course Management System (CMS) or even Virtual Learning Environment (VLE). In these systems, students can access courses' contents in different formats (text, image, sound), as well as interact with teachers and/or colleagues, via message boards, forums, chats, video-conference or other types of communication tools. These platforms provide a set of configurable features, in order to allow the creation of online courses, pages of subjects, work groups and learning Community. In addition to the pedagogical dimension, these systems have a set of features for registering, monitoring and evaluation activities of students and teachers, enabling the contents' management

Via Internet. According to the approach of Piotrowski an e-learning platform represents a system, which provides integrated support for six different activities: creation, organization, delivery, communication, collaboration and assessment. In a technical perspective, there are different types of LMS, some of them representing commercial solutions (such a Blackboard/WebCT) and others open-source solutions (such as Moodle). Regardless the type, several studies revealed the existence of strong advantages on using e-learning platforms [4-6], however, their adoption involves some challenges to the institutions as well as an appropriate choice of the technologic platform. Concerning open-source solutions, there are some studies that identify the Moodle (Modular Object-Oriented Dynamic Learning Environment) as the most used platform in higher education, as well as the most easy to manage.

2.2.1. Moodle platform

The Moodle represents one of the most widely used open-source e-learning platforms, that enables the creation of a course website, ensuring their access only to enrolled students . This platform allows the exchange of information among users geographically dispersed, through mechanisms of synchronous (chats) and asynchronous communication (discussion forums). In a functional perspective, it has easily configurable features, allowing the creation of student assessment processes (quizzes, online tests and surveys), as well as managing their tasks with their timetable besides offering a wide variety of complementary tools to There are different expressions used to describe educational computer applications, such as e-learning Systems, Learning Management Systems (LMS), Course Management System (CMS) or even Virtual Learning Environment (VLE). In these systems, students can access courses' contents in different formats (text, image, sound), as well as interact with teachers and/or colleagues, via message boards, forums, chats, video-conference or other types of communication tools. These platforms provide a set of configurable features, in order to allow the creation of online courses, pages of subjects, work groups and learning communities.

In addition to the pedagogical dimension, these systems have a set of features for registering, monitoring and evaluation activities of students and teachers, enabling the contents' management via Internet. According to the approach of Piotrowski [3], an e-learning platform represents a system, which provides integrated support for six different activities: creation, organization, delivery, communication, collaboration and assessment. In a technical perspective, there are different types of LMS, some of them representing commercial solutions (such as Blackboard/WebCT) and others open-source solutions (such as Moodle). Regardless the type, several studies revealed the existence of strong advantages on using e-learning platforms, however, their adoption involves some challenges to the institutions as well as an appropriate choice of the technologic platform. Concerning open-source solutions, there are some studies that identify the Moodle (Modular Object-Oriented Dynamic Learning Environment) as the most used platform in higher education, as well as the most easy to use.

2.2.2 History of Moodle

Moodle was created in the Australian outback and first published in 2002. Martin Dougiamas, the founder and CEO, grew up in the desert and learned via distance education through radio. His experiences sparked the idea for a more immersive and collaborative distance learning approach. His vision was for educators to have an online platform they could use to create personalised learning environments. With the worldwide community of teachers and designers in mind, Martin imagined Moodle as an open source venture, so that engineers, teachers and associations around the world may share information and contribute to upgrading Moodle. Taking after the ethos of open source, it would donate everybody the opportunity to alter and adjust the Moodle computer program to precisely the way they

required it.

2.3Students' Use Information Platforms: Moodle

Notwithstanding the increase in Moodle adoption in schools and universities, concern has been expressed as to whether they are being used as effective learning tools (Badge, Cann& Scott, 2005; Hall, 2006). A study by Norris, Sporre, and Svendsen (2013) found that the three most commonly used features of Moodle by students are:

1. Accessing lecture notes and materials,
2. Uploading coursework and
3. Accessing grades.

These findings show that Moodle is currently not used as a web 2.0 tools where users interact and create content. Students predominantly use the non-interactive functions to extract information from the site and upload coursework. This way of using Moodle limits its true potential of adding value to the teaching through knowledge sharing. Other studies have shown that students predominantly use Moodle as a repository of materials and information (SanchezSantamaria, Ramos, & Sanchez-Antolin, 2012; Costa, Alvelos& Teixeira., 2012). In Costa,

Alvelos& Teixeira (2012) study, it was found that the reason students predominantly use Moodle as a repository of materials and information could be due to a lack of teacher engagement and system knowledge, this challenge the has been identified by other studies. To address this problem, Norris, Sporre, and Svendsen (2013) indicated that Moodle should be integrated with timetables and made accessible through mobile devices.

2.4Advantages of Moodle

Among the advantages of Moodle platform as a Virtual learning environment (VLE), is that teaching staff have a more facile contact with the students that applied for the course, by the virtual classes created. Moreover, it may constitute an environment where courses, topics of

laboratories and seminars or necessary bibliography can be posted. Also, it is considered as a space where students' data can be easily dealt with (virtual secretariat) may be constituted. It provides knowledge assessment and self-assessment opportunities by online testing. Hence, it enables good communication and socializing by means of chat or forum, both between trainees and with the teaching staff. Individual communication with the teaching staff can be achieved or topics can be debated on by all members that access the platform (Oproiu, 2014).

2.5Chapter Summary

This chapter looked at the definition of E–learning and provided an in-depth exposition on the use of information platforms used by students such as Moodle. The chapter also looked at the theory guiding the study. The next chapter looks at the research methods used by the study.

CHAPTER 3 RESEARCH METHODOLOGY

3.0 Introduction

This chapter presented a description of the various research methods that were used for data collection and analysis. This chapter focused on the research design, population figures of respondents, sample size, sampling procedures, sources of data, research techniques, data presentation and analysis, and ethical considerations.

3.1 Research Design

Sigmund (2000) defined a research design as a basic plan that guides data collection and analysis phases of the research project. It is a brad framework that specifies the type of data to be collected, the source of data, and the data collection procedure. The research design used in the research was a Descriptive Research Design. A descriptive research design was used for a better understanding of the problem, which were challenges associated with the use of information platforms at Africa university. The research method was to help provide answers as to who, what, when, how, and where part associated with the research problem. The researcher used quantitative data. Quantitative data involves the use of average percentages and tables to describe and summarize responses to the research questions. The researcher used the descriptive research method because it collected a large amount of data for detailed analysis and it is was easy to use in gathering and comprehending data.

3.2 Population.

According to Yin (2008) population refers to the number of objects which a researcher is interested in when conducting a research project. A population contains all variables of interest to the researcher often referred to as the target population. In this research, the target population consisted of 40 people, which were students at Africa University and Lecturers using information systems.

3.3 Sample Size.

Moreover, Sapsford (2007), also defined a sample as a subset of a population that usually represents the total population under study. The researcher was not able to collect data from every member of the target population hence it was necessary to come up with sample size. Using the use Yamane formula to calculate the ideal sample size where $n=N/1+N\ (e)^2$. N being the population of the study, e being the degree of error expected and n the sample size. Hence the

sample size is calculated as follows n = 40/1+40 (0.05) ²= 40/1+40(0.0025) = 40/1.1= 36. Therefore, n = 36.

3.4 Sampling Techniques.

According to (Bryman A & Bell E, 2007) sampling is a process of segmenting a group of people from a mass population for research investigations. There are two types of sampling techniques which are probability and nonprobability sampling. In this research, the researcher used both probability and nonprobability sampling.

3.4.1 Convenience Sampling.

Convenience Sampling describes a sample in which elements are selected from the target population based on their accessibility. It includes participants who are readily available and willing to participate (Saunders M., 2009). The researcher used this method to obtain data from lecturers who were present at the University during that very day and this technique was a faster method of collecting data.

3.4.2 Purposive Sampling.

Purposive Sampling involves the selection of suitable units who have the knowledge concerning the research topic. The researcher used this technique where she selected students who were supposed to participate in the research. The researcher chose the sample basing on the expertise and knowledge that students have on the topic of information platforms.

3.5 Sources of Data.

There are two types of data sources which are secondary and primary. The researcher derived data from both secondary and primary sources.

3.5.1 Primary Sources.

Primary data refers to the information that is gathered by the researcher for the specific reason of carrying. The researcher used university students and lecturers to derive primary data. The researcher chose this method as it exposes the truth that is causing the research problem. Moreover, this method gathers high-quality data because data is collected for the specific reason of carrying out the research.

3.5.2 Secondary Sources.

Secondary data refers to the information that was gathered by someone else for some other purpose. The researcher used Journal articles and other publications that were relevant to the research. The researcher used secondary sources because the information was readily available and also the method was cheaper and more convenient because the information is already available for use.

3.6 Research Techniques

Research instruments are tools used for collecting data to obtain a better understanding of the research problem, for this study the researcher used questionnaires.

3.6.1 Questionnaires

A questionnaire is a document containing questions designed by the researcher to derive the required information from participates (Yin 2008). A questionnaire can however be defined as a technique of collecting data in which each element is asked to respond to the same set of questions in a predetermined order. The researcher used a semi-structured questionnaire that comprised of both unstructured and structured questions to collect data from customers and employees.

3.7 Data Analysis.

Data analysis refers to the breaking up of data into manageable patterns and trends. The researcher used an inductive research method to analyze data, moving from the specific information obtained to broader generalizations and theories. Data was categorized into similar responses and after categorizing similar data, the researcher then compiled all responses that came from the respondents.

3.8 Ethical Considerations.

Research ethics is concerning questions on how to formulate and clarify the research topic and design, the research findings morally and responsibly. Avoiding plagiarism, the researcher acknowledged and recognized the authors of secondary data which were used in this study. Also, the collection of primary data is not to subject participants to harm or victimization. To avoid victimization, the researcher provided anonymity of the participants. The researcher only collected data from volunteers and also respected the respondent's willingness and unwillingness to participate in the research.

3.9 Chapter Summary

This chapter focused on the methodology used by the researcher in conducting the research. The target population was identified as well as the sampling techniques and sampling method used in the collection of data.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.1 Introduction

The previous chapter discussed the methodology of the study. It looked at the research instruments that were used to collect data from the targeted population which were students and lecturers. This study presents the data collected on charts and tables for better analysis. The study used questionnaires and interviews to collect data from the participants. This chapter thus interprets and analyzes the data. The data was presented in line with the research questions which sought to understand the influence of Moodle site on student academic performance, the challenges associated with the usage of Moodle platform as an information platform at AU and the solutions can be proffered to improve the efficiency of Moodle as an information platform at AU.

4.2 Response Rate

Response rate as stated by Yin (2008) refers to the number of participants who responded to the data collection issued by the researcher. For a research to be valid and reliable it has to at least reach 75% of the targeted participants. In total this research targeted 36 participants on which 30 were students and 6 were lectures. Of the 30 students only 2 did not manage to respond and all the lectures were interviewed. This means that the research attained response rate that is above 75% validating the findings and the conclusions of the study.

4.3 Demographic Data

Demographic data refers to the various characteristics which were used to classify people and such are gender, age, level of education and work experience.

4.3.1 Gender

Participants were classified as either male of females. This means that the research collected data from both males and females striking a gender balance. The segregation of data according to gender is indicated in the figure below.

Figure 4.1: Participant's Gender

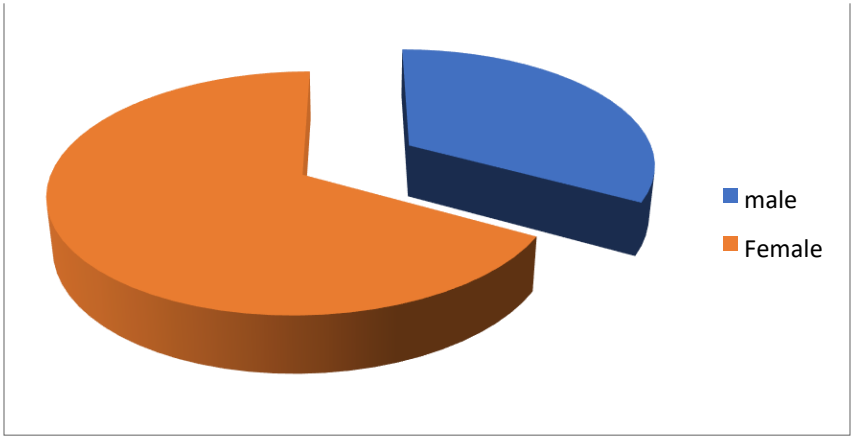


Figure 4.1 shows the distribution of participants according to their gender. Females participated much in the research than males. From the 34 participants 33% were males whilst 67% were females. This means that the research collected data from all angles and each gender was represented.

4.3.2 Age

Moreover participants were also grouped according to their age categories. Since the research targeted students at tertiary institution participant's age ranged from 19-55 years. The table below shows the distribution of participants according to their age.

Table 4.1: Showing participants Age

Age category	**Frequency**	**Percentage**
19-25 years	21	62
25-35 years	9	26
35-55 years	4	12
Total	34	100

The table above indicates that most of the participants were youths that are people below the age of thirty five. The research targeted undergraduates so as to understand their perceptions of

effectiveness of information platforms at AU. Participants who were below 25 years were 21 (62%) whereas participants who were above 25 years were 9 (26%). Only 4 participants were above 35years of age.

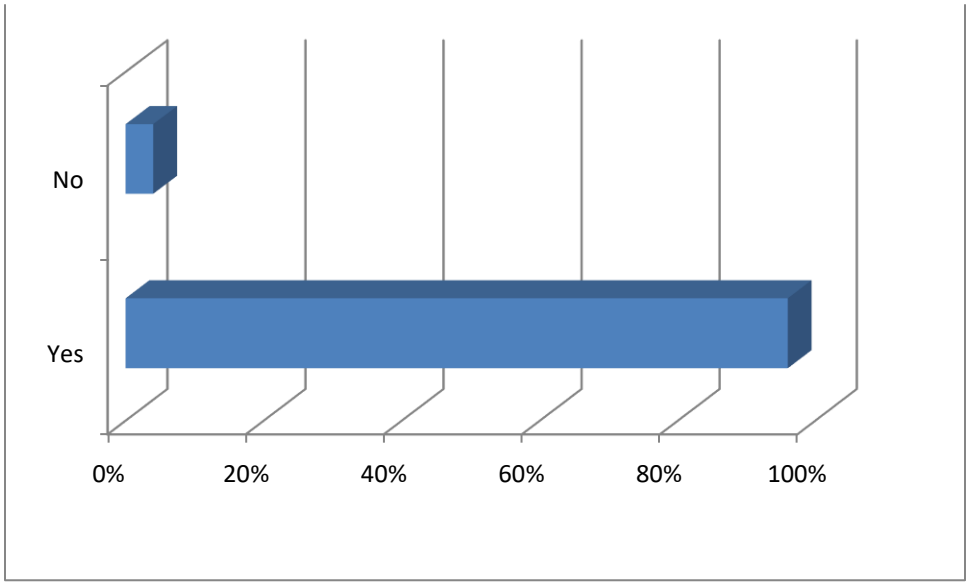
4.3.3 Level of Education

Participants were also grouped according to their level of education. The research targeted mostly the undergraduates at Africa University meaning that all the research participants were at tertiary level in their academic journey. Only the six lectures who were interviewed had completed doing their PHDs.

4.4 Use of Moodle at Africa University

To determine the use of Moodle by the participants the researcher asked on the accessibility of the platform to the students. The figure below shows the accessibility of Moodle to both the students and the lectures.

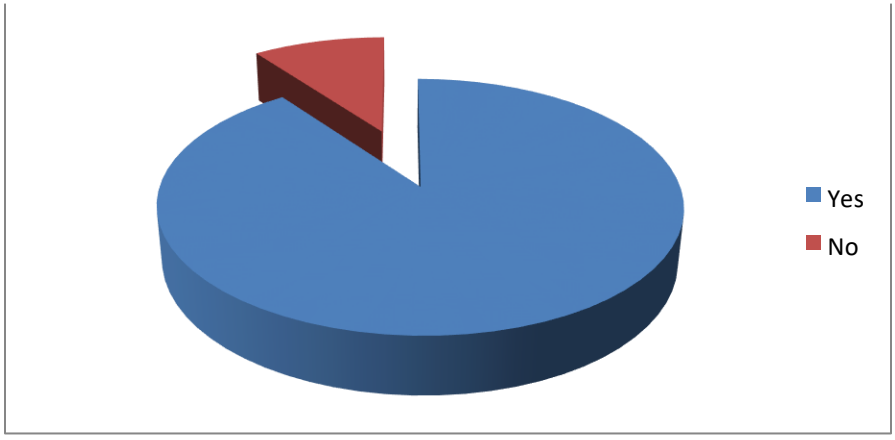
Figure 4.2: Accessibility of Moodle



In terms of accessibility, 27 of the 28 students in the said that they were able to access the Moodle course platform while one said that he could not. Moreover, all respondents reported that they were able to access the Moodle platform whenever they needed to. When it

comes to submission of assignments and to in classes 100% of respondents said that they were able to submit their assignments and to take in classes properly and efficiently.

Figure 4.3: Moodle Usability



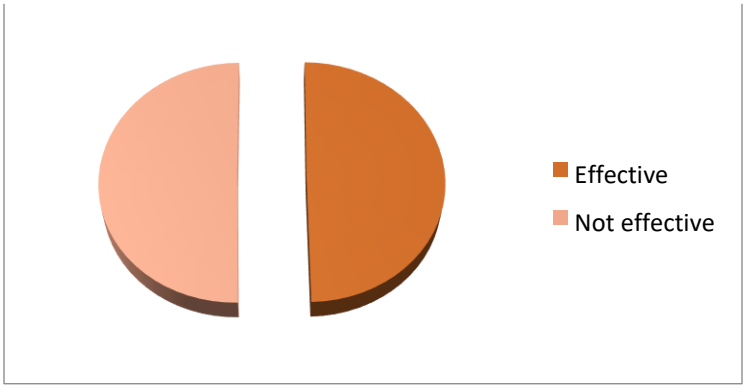
In terms of usability, 90% of the student said that using Moodle helped them become more organized while the remaining 10% said that Moodle did not help them become more organized as indicated in the figure above.

From the pie chart indicated above, it shows that most of students are accustomed with the use of Moodle platform. These could be a result of training and exploration to the online platform at the universities.

4.5 Effectiveness of Using Moodle as an information Platform

Participants were also asked on their perceptions on the usefulness of Moodle to achieve high academic performance at the university. Different views were given by the participants as indicated in the pie chat below.

Figure 4.4: effectiveness of Moodle



The pie chart shows that very few who think that Moodle is useful to them. 49% think it is not useful and 46.9% think it is effective. This could be explained by the tendency itself of students towards online learning. The easiness to access any time to courses may make students feel comfortable and decrease their anxiety. However, those who are extrovert and social enough make them feel demotivated and frustrating because of their learning style.

4.6 Challenges associated with the usage of Moodle platform

The study also looked at some of the challenges experienced by students in their use of Moodle. More than 50 % of students face difficulties while dealing with Moodle platforms at AU. Some of the participants could not get access to the platform and when they did, they could not find the lecture because of some technical problems. Interviews from the lectures indicated that some of the lectures didn't know how to post the lectures and many students face difficulties in accessing the lectures on the Moodle platform. Other problems which were sighted included lack of interaction and Problems with the internet.

This emanates from the fact that many students did not consider learning at information platforms an aspect of the course important. They were only motivated to do well when a task counted for marks, pointing to the need for intrinsic motivation. One of the lecturer interviewed indicated that

The problem is that students do not take e-learning serious. They only want to do things for marks." (Lecturer 5)

But many students actually do not turn up for these lessons conducted on Moodle. (Lecturer 1)

The lecturers' interview data revealed how technical problems were sometimes a constraint to the effective use of the system. The use of the system was sometimes negatively affected by constant changes to the LMS that sometimes also interfered with the interface, as pronounced in the excerpts by the lecturers..

We do not have much difficulty, except when we've got Internet interruptions, when some of our computers are not working. (Lecturer 3)

Sometimes it's system problems, like the activity bounces out, or the marks are not recorded. So, it's basically technical problems I suppose.(Lecturer 1)

The findings thus indicates that technical challenges are a common complaint in diverse contexts where integration of technology in education has been practiced (Al Zumor et al 2013:102; Nenge et al 2012:119), yet it is a matter that should not be overlooked due to its negative impact on the effective use of technology at classroom level.

The data also shows that most crucial challenge is internet because without it no one can get access to the courses. A lecturer argued that:

Our infrastructure is not well developed to deal with online learning..

It should be assured that only effective Integration of ICT can result in effective learning which provides a sense of understanding and is connected to the personal experience or other knowledge which learner' posses. Elkhayyat (2011) suggests that effective learning opportunities for interaction with other learners in sharing, discussing, constructing and negotiating meaning leads to knowledge construction. Nowadays, teachers have the opportunity

to use technology in different way: drill and practice (i.e. learning new English language vocabulary), tutorials, simulations, problem-solving and productivity tools (Ibid).

Ammann and Aparanjani (2016) advocates that successful integration of ICTs depends essentially on teachers' support for innovation. It is therefore important to provide effective professional development and ICTs training to teachers to help them select the appropriate ICTs, instructional strategies, and information systems that allow students to benefit from technology whether virtually or in real contexts. In fact, some EFL teachers are still reluctant to use technology as Barnawi (2009) argued. Thus, adequate infrastructure and technical support are paramount factors to support the integration of ICTs. Teachers must have access to on-site technical support personnel who are responsible for troubleshooting and assistance after the technology and lessons are in place. All in all, to facilitate ICT integration, it is important to integrate ICT component in the national curriculum which will open the gates not only to enhance their use of technologies by teachers but also will be beneficial for student learning and future careers (Ammann&Aparanjani, 2016).

However, scholars'claims are inconsistent with our findings. Respondents' argued about the availability of the least crucial component which is internet whether in their mobiles or home internet. Also, the absence of any well-equipped classrooms or laboratories prevents the process of trial that provide an overview to students and teacher about what Moodle platform is, when and how to use it.

4.7 Solutions to improve the efficiency of Moodle as an information platform at AU

When the students were asked about the improvements, they wanted to make to the current platform, some of the most significant suggestions included, adding variety to the exercises and activities on Moodle; adding more video exercises particularly on the listening part; improving the design of the current platform; discouraging the idea of copying and

pasting (plagiarism); adding some hints on the question; and adding more dynamic contents. All in all, the responses of the students on the use of the platform were more positive than negative. 100% of the students reported that using Moodle as an e-learning tool helped them become more organized in doing the course requirements even if it meant having no supervision.

4.8 Chapter Summary

The chapter presented and analyzed data collected from the responses. The data indicates that most students at Africa University are aware of the Moodle platform and that they relied on it for their academic performance. The chapter also indicates that most of the students found the Moodle effective in improving their academic performance. The chapter also discussed some of the problems encountered in the use of Moodle by both the students and the lecturers. The chapter ended by offering solutions to the identified challenges. The next chapter gives conclusions of the study, summarizes the study and offers recommendations.

CHAPTER 5: SUMMARY CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter presented the findings of the study. This chapter gives a summary of the study. It also offers conclusions drawn from the study and also offers recommendations. The chapter highlights areas for further study that can be used by future academics.

5.2 Summary of the Project

5.2.1 Chapter 1

The chapter introduced the whole study. It revealed the research problem and its setting. The chapter contains the background of the study, statement of the problem, aim of the study, research objectives and the justification of the study. The chapter went on to highlight the questions and objectives guiding the study. Also, the chapter looked at the limitations and the delimitations of the study and defined the key terms.

5.2.2 Chapter 2

Chapter two of the study looked at the theoretical framework guiding the study. It also looked at the literature review of the study. The chapter conceptualized Information Platforms such as Moodle.

5.2.3 Chapter 3

Chapter four presented methodology of the study. It looked at the procedures which were taken by the study to collect the data and to arrive at the findings. The study employed a mixed methodology. The chapter defined the target population as well as sample of the study. Chapter three looked at the sampling technique employed by the study. Data collection tools were also mentioned and the procedures for data analysis.

5.2.4 Chapter 4

Chapter five presented the main findings of the study. The findings were presented based on the questions and objectives of the study.

5.2.5 Chapter 5

Chapter five summarized the whole study and highlights the conclusions drawn from the study. It also looked at the recommendations that can be utilized by other institutions to attain great results in netball sport.

5.3 Conclusions

The implication of Moodle platform in the Zimbabwean context has not given much importance in the higher educational system until the emergence of the Covid-19 pandemic. Thus, the rush to use this virtual learning environment without preparatory phase lead to many issues such as lack of materials, limited access to the World Wide Web, and students negative attitudes towards the use of this system.

This study aims at spotting the light on these issues at AU university and what systematic ways to improve its implication. Hence, lectures and students training would be of great importance to increase the technical awareness of these technologies..

To conclude, this research was not a longitudinal study and the sample taken may not represent all students but it is crucially exclusive to same setting and context. Moreover, the notion of elearning composes of a wide range of factors and we may not tackle all of them. However, all the results obtained may help researchers to design general framework about factors, strategies and the implementation of Information platforms such as Moodle platform in teaching courses. Hence, the attempt of following the instructions and recommendations obtained may mitigate these problems and factors. Finally, researchers are hereby invited to make use of the results obtained in this study and evaluate them according to their knowledge and experiences.

5.4 Recommendations

From the findings of the study the following recommendations were made.

- Lecturers and students may enroll in virtual or actual courses to obtain more knowledge about how to use Moodle platforms and other information platforms at AU
- The absence of trainings at the level of university may decrease the professional level of lectures. Hence, they are responsible for their own development by updating their

knowledge because teaching methods are developing every day and should meet the requirements of different generations

- The government should supply universities by sophisticated materials and laboratories to allow both lectures and students to use ICT tools efficiently.
- The outflow of internet in Zimbabwe is very low. The unexpected disconnection hinders the use any kind of virtual learning environment. Thus, developing a web of solid connecting pieces and high access would make e-learning feasible and accessible.

5.5 Recommendation's for further Study

The study looked at the effectiveness of information platforms in universities specifically Africa University. Reference was made to information platforms such as Moodle Platform. The study is however not exhaustive, there still a need to cover much ground as far as information platforms are concerned. The research thus recommends that other researchers loot at the effectiveness of information platforms during national crisis such as covid-19. Others may also be interested in knowing the relationship between the use of information platforms by students and performance.

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APPENDIX

Appendix A : QUESTINNAIRE

QUESTIONNAIRE FOR USERS OF STUDENTS AT AFRICA UNIVERSITY

My name is Ashley R Marira .I am a Computer information systems students at Africa University carrying out a research as part of a requirement for my degree competition .

The title of the research Project is**AN ASSESSMENT OF THE EFFECTIVENESS OF**

INFORMATION PLATFORMS AT AU

.

The objective of this research is toto assess the influence of Moodle site on student academic performance in Africa University.

Section A; General information Instructions to respondents

1. Feel free to ask questions of your choice
2. Provide accurate information

NB; the information is only needed for academic purposes hence identities are not required.

1. How frequently do you access the moodle learning management system at Africa University?

   ……
   …
……
……..

2. What kind of information do you normally search for on Moodle?

……
……
…….

3. How simple is it for you to find the information you require on this platform?

……
……
……..

1. What improvements do you suggest for the information platform such as moodle at Africa University?

……
……
……

2. Overall, how satisfied are you with the quality and effectiveness of the information platform such as moodle at Africa University?

……
……

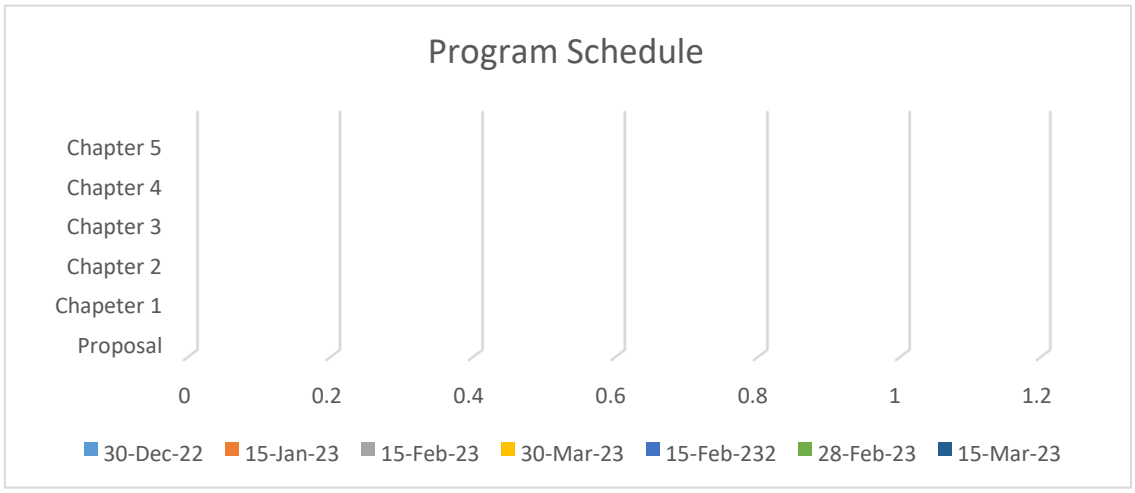
……

Thank you for your cooperation

Appendix B Table 1: Budget

Item	**Quantity**	**Cost**
Bond Paper	2 packs	$12
Printing	All draft copies and final copies	$50
Traveling cost		$20
Data collection refreshments	2	$50
Total	-----	$132

Appendix C: Time line Table



Appendix D: AUREC APPROVAL

File Tools View AUREC approval note - Word (Product Activation Failed)

AFRICA UNIVERSITY
A United Methodist-Related Institution

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

07/11/2022

Africa University Research Ethics Committee

Ref: Approval for AUREC Proposal Submission

ASHLEY RUTENDO MARIRA has worked on the proposal and I can confirm that it is ready for review by your esteemed committee.

Respectfully submitted,

Mr B.U Mukhalela

Supervisor's Name Supervisor's Signature

End of document

AFRICA UNIVERSITY
A United Methodist-Related Institution

Investing in Africa's future

AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE (AUREC)

P.O. Box 1320 Mutare, Zimbabwe, Off Nyanga Road, Old Mutare-Tel (+263-20) 60075/60026/61611 Fax: (+263 20) 61785 website: www.africau.edu

Ref: AU2401/22 17 November, 2022

ASHLEY MARIRA

C/O CBPLG
Africa University
Box 1320
MUTARE

RE: AN ASSESSMENT OF THE EFFECTIVENESS OF INFORMATION PLATFORMS AT AU

Thank you for the above titled proposal that you submitted to the Africa University Research Ethics Committee for review. Please be advised that AUREC has reviewed and approved your application to conduct the above research.

The approval is based on the following.
a)Research proposal

- **APPROVAL NUMBER** AUREC 2401/22

This number should be used on all correspondences, consent forms, and appropriate documents.

- **AUREC MEETING DATE** NA
- **APPROVAL DATE** November 17, 2022
- **EXPIRATION DATE** November 17, 2023
- **TYPE OF MEETING** Expedited

After the expiration date this research may only continue upon renewal. For purposes of renewal, a progress report on a standard AUREC form should be submitted a month before expiration date.

- **SERIOUS ADVERSE EVENTS** All serious problems having to do with subject safety must be reported to AUREC within 3 working days on standard AUREC form.
- **MODIFICATIONS** Prior AUREC approval is required before implementing any changes in the proposal (including changes in the consent documents)
- **TERMINATION OF STUDY** Upon termination of the study a report has to be submitted to AUREC.

AFRICA UNIVERSITY
RESEARCH ETHICS COMMITTEE (AUREC)
APPROVED
P.O. BOX 1320, MUTARE, ZIMBABWE

Yours Faithfully

MARY CHINZOU
ASSISTANT RESEARCH OFFICER: FOR CHAIRPERSON
AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE