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Readiness Level Towards E-Assessment among Human Kinetics and Health Education Lecturers in Bayelsa State

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Abstract. This study assessed readiness level towards e-assessment among human kinetics and health education lecturers in Bayelsa State. The study used a descriptive survey research approach. To direct the investigation, two research questions and associated hypotheses were posed. All lecturers in the human kinetics and health education units of the several tertiary institutions in Bayelsa State made up the study population. "The study employed a sample of 97 professors from the three (3) higher education institutions that house the department of human kinetics and health education." The instrument for data collection was a *Readiness to Adopt E-assessment Questionnaire (RAEQ)*, created by the researcher and approved by professionals. Using the Cronbach Alpha formula, "the reliability coefficient of the instrument was determined, and a value of 0.79 was achieved, which was deemed suitable for the study. Mean and standard deviation were used to respond to the research questions, and t-test statistics were used to evaluate the null hypotheses." It was discovered that the lecturers were not very ready to implement e-assessment, and neither gender nor the kind of institution had a major impact. It was suggested that professors in human kinetics and health education be properly taught on how to use e-assessment technologies.

Keywords: Readiness, Adopt, E-assessment, Lecturers, Human Kinetics, Health Education

Introduction

One of the most effective tools for education is assessment, which may be used for a variety of objectives, including maximising learning and inspiring students to raise their game and achieve predetermined objectives and standards. As a result, assessments are more frequently seen as measures of academic success and performance than as instruments for determining what factors led to learning successes or failures (Omeodu & Charles-Owaba, 2020). Teaching and learning have always included assessment as a crucial component.

To gather data that may be utilised to change teaching and learning, as well as to report on student progress and success, instructors and students engage in assessment. These include of the teachers' observations, discussions in the classroom and marking/grading of the students' assignments, including tests and homework (Clarke, 2018). The majority of stakeholders use an assessment strategy where teachers first instruct before giving exams (Manir, 2011).

Osunde (2019) succinctly described the Nigerian university using the traditional assessment approach thus:

> *Since the establishment of the universities in Nigeria, the administration of exams and the procedure for producing results have been complicated by a number of issues that make it difficult "to release results on time, prevent certain students from receiving their results," and produce a number of incomplete results. These issues, such as the inability to graduate undergraduate students since the program's commencement and the delay in the publishing of exam results, have made colleges seem bad.*

In a bid to overcome these limitations associated with the traditional approach of assessment has triggered the adoption of e-assessment in the educational sector.

E-assessment is a catch-all word for any evaluation that relies on internet communication (Edo, 2016). All learning that is supported by various technical tools, as well as associated software and hardware, is included in e-assessment. E-assessment definitions are more explicit in that they state that an experience must incorporate electronic technology in order to come under this heading. E-assessment was initially described as including the use of electronic media to improve teaching strategies that depended on more traditional procedures.

At wealthy nations, e-assessment integration at tertiary institutions is expanding quickly. In industrialised nations, the majority of postsecondary institutions have websites where students may attend online classes and engage in other educational activities. According to Omo-Ehu (2011) and Okereke (2015), electronic, mail, constant text, conferencing, and online instructional exercises have been utilized in the educating and educational experience for many years in industrialised nations. When children must stay at home due to inclement weather or illness, schools utilise the internet to distribute homework, assignments, and other information. Some schools permit students to use their personal computers to get material from textbooks, verify work, and complete assignments. Students have constant access to their teachers' emails, study materials, daily worksheets, and assignments from the classroom.

These technologies have given organisations the ability to reach out to distant learners, improve convenience, and boost educational options (Weller, 2017). Assessment of educational achievements is no longer only dependent on face-to-face interaction, paper and pencil, and the excruciating stress of marking scripts. E-assessment has frequently been recommended in the literature as the best option for addressing barriers to accessing education (Clarke, 2018). In other words, it is referred to the assessment made easy and effective via web-inability (Weller, 2017).

Regardless of the merits of e-assessment over the traditional assessment approach, teachers and lecturers from most developing and underdeveloped countries, of which Nigeria is a part, have continued to wallow and drawn in outdated educational practices such as the traditional assessment approach. Only a small number of educational institutions in Nigeria have been able to fully explore the inherent advantages of e-assessment. Manir (2011) stated that integration of e-assessment tools in our institutions has grown slowly in Nigeria, which may result from a low level of awareness by a majority. However, Manir posited that many people still need to learn about using e-assessment in education. Aduwari-Ogah, (2022) disclosed that awareness is understanding of reality and the significance of a computer- or web-based evaluation. It will benefit the educational system if people are aware of contemporary developments in e-assessment. Agboola (2016) stated that in order for an educational system to remain competitive, it must be tailored to the needs of the technology era. If educational institutions are to keep up, they will need to alter and adapt to their surroundings often. The saying "what you don't know is greater than you" is a frequent one. This suggests that a person cannot control something they do not understand.

Human Kinetics and Health Education (HKHE) promotes individuals' physical, mental, and social well-being. In tertiary institutions, the curriculum for HKHE is aimed to provide students the information and skills they need to become competent professionals in various health and fitness-related fields. The rationale for human kinetics and health education is in line with “the philosophy according to the national policy on education,” education FRN (2013), which aimed at: Providing students with a professional physical and Health Education knowledge and skills that will positively facilitate Physical Education, Games and Sports and Health Education changes in the community which could lead to the attainment of healthful living and productive society. The primary objectives of this program is to:

- cultivate mental and physical qualities that may be used to issues with human mobility.
- train physically education and health education instructors for post-primary institutions.

- train qualified individuals required for positions as sports administrators, coaches, and organisers in sports councils, educational institutions, and the corporate sector.
- establish a solid foundation for future courses in sports, health, recreation, and physical education (NUC, 2021).

Bayelsa State, located in the Niger Delta region of Nigeria, faces unique health and environmental challenges, such as communicable diseases, sedentary lifestyles, and environmental degradation. Human Kinetics and Health Education programs in the state are vital for preparing future health professionals, educators, and community leaders who can address these issues effectively.

However, Adata-Dickson (2023) submitted that more than the traditional teaching methods employed in these programs may be needed to meet the demands of a rapidly evolving world. Also, Edo (2016) and Omeodu and Charles-Owaba (2020) disclosed that integrating emerging technologies into the curriculum can enhance learning experiences, promote engagement, and produce graduates with the skills and knowledge necessary to contribute to sustainable development in the region. Many variables had been identified as responsible for underutilization of e-assessment, which includes; lack of computer related skills to operate device, lack of devices in schools and inability to acquire devices, low readiness level, little or no access to internet, cost of data and ignorance of the existence of tools. However, they noted that one of the greatest barriers to the effective and timely implementation of e-assessment is low readiness level. Also, Edo (2016) observed that low level of readiness is the factor that has kept stakeholders from acquiring the required skills and competence.

E-assessment readiness is the degree to which institutions or stakeholders are ready to use e-assessment (Ehlers, Sammour, & Schreurs, 2018). It should be evaluated before being introduced because it has multiple diverse elements. The ability of students to master the skills of information search, selection, analysis, and evaluation rather than only the technical use of technological equipment is a substantial obstacle (Edo, 2016). To generate, publish, and market their research, materials, and information, they must be inventive and proficient with digital technologies, as well as communicative and collaborative with others.

Research efforts concerning e-assessment have focused on awareness, the extent of usage, and the challenges associated with its use among students. However, there needs to be more evidence in the literature on readiness level and size of utilization among adult education practitioners in Nigeria. Hence, this study assessed readiness level towards e-assessment among human kinetics and health education lecturers in Bayelsa State.

Purpose of the Study

The primary purpose of this study is to assess readiness level towards e-assessment among human kinetics and health education lecturers in tertiary institutions in Bayelsa State. Specifically, the study achieved the following;

i. Determine the lecturers' readiness level towards e-assessment based on gender in Bayelsa State.
ii. Determine the lecturers' readiness level towards e-assessment based on institution type in Bayelsa State.

Research Questions

1) What is the difference in the mean rating of the responses of male and female human kinetics and health education lecturers' readiness level towards e-assessment in Bayelsa State?
2) What is the difference in the mean rating of the responses of state and federal human kinetics and health education lecturers' readiness level towards e-assessment in Bayelsa State?

Research Hypotheses

HO_1: There is no significant difference in the mean ratings of the responses on male and female human kinetics and health education lecturers' readiness level towards e-assessment in Bayelsa State.

HO_2: There is no significant difference in the mean ratings of the responses on the readiness level of lecturers in state and federal institutions towards e-assessment in Bayelsa State.

Methodology

This study adopted a descriptive survey research design. According to Lawrant (2018), since information would be acquired from a sample of the population (human kinetics and health education instructors in Bayelsa State), who are familiar with the concepts pertaining to the objective of the study to generalise the results for the full population, this approach is acceptable for this study. The population of the study comprised all human kinetics and health education lecturers in Bayelsa State. A purposive sampling technique was used to select the only 3(1 federal and two state) tertiary institutions with human kinetics and health education unit. All the 97 lecturers in the three departments of various institutions. This resulted in 97 respondents which formed the sample of the study. The instrument for data collection was a questionnaire developed by the researcher, tagged; *"Readiness To Adopt E-assessment Questionnaire (RAEQ)*" "It consists of two (2) sections, namely; Section A and B. Section A measured the demographic variables of the respondents; team B consist of a 12-item on the readiness level on a 4-point rating scale of Strongly Agree =4, Agree =3, Disagree = 2 and Strongly Disagree = 1." Experts from measurement and evaluation and human kinetics and health education did the instrument's face validity and substance. The final draught utilised in the study was the product of their modifications and suggestions. Twenty (20) additional adult education lecturers who were not involved in the research but shared the same characteristics as the target demographic were used to test the gadget. Using the Cronbach Alpha formula, a reliability coefficient of 0.79 was achieved, which is deemed suitable for this investigation. For the research topics, the data were analysed using mean and standard deviation, and the t-test at 0.05 significant level was used to assess the hypotheses. Finding the average of the 4-point scale led to the development of the decision rule for responding to the research questions, thus; $\frac{4+3+2+1}{4} = \frac{10}{4} = 2.50$, thus, "any item with a mean score of 2.50 or above was considered to be high level, while any item with a mean score of 2.49 or lower was considered to be low level. Reject null hypotheses for the hypotheses if the estimated t-value is higher than the crucial t-value." Otherwise, accept the null hypotheses.

Results and Analysis

Research Question 1: What is the difference in the mean rating of the responses on male and female human kinetics and health education lecturers' readiness level towards e-assessment in Bayelsa State?

Table 1: Mean and Standard Deviation of Male and Female Readiness Level

S/N	Items	Male (N = 47)			Female (N =50)		
		$\bar{x}$	St.D.	Decision	$\bar{x}$	St.D.	Decision
1.	I have the basic skills to use a computer	3.10	1.13	High	2.95	0.66	High
2.	In my opinion, online assessment has more advantages than manual assessment	2.22	1.02	Low	2.17	0.89	Low
3.	I know how to communicate using email, Skype and send text/audio/ video files using cloud computing	2.36	0.86	Low	2.24	0.64	Low
4.	In my opinion, online assessment has more disadvantages than manual	2.23	0.87	Low	2.21	1.25	Low
5.	I have the basic skills to search for information by browsing the internet and receiving data	2.47	0.88	Low	2.61	0.77	High
6.	Online assessment should possess personal characteristics similar to manual	2.56	0.84	High	2.12	0.87	Low
7.	I have access to a computer in the school	3.60	1.21	High	3.23	1.12	High
8.	I have access to relevant hardware and printers/scanners/overhead projectors	2.34	0.64	Low	2.45	0.66	Low
9.	Online assessment needs adequate knowledge and skills similar to manual	2.98	0.79	High	2.76	0.85	High
10.	My school has access to high-speed internet	2.36	0.82	Low	2.44	0.69	Low
11.	I am interested in upgrading my work performance through e-assessment	2.41	1.06	Low	2.47	0.71	Low
12.	The thought of using e-assessment technologies motivates me	2.38	0.63	Low	2.36	0.62	Low
Aggregate Values		**2.48**	**0.98**	**Low**	**2.37**	**1.04**	**Low**

Source: Fieldwork (2023)

Table 1 above shows the mean scores of male and female human kinetics and health education lecturers' readiness levels toward e-assessment in Bayelsa State. The aggregate of 2.48 and 2.37 show that both male and female human kinetics and health education lecturers had a low readiness for adopting e-assessment.

Research Question 2: What is the difference in the mean ratings of the responses of state and federal human kinetics and health education lecturers' readiness level towards e-assessment in Bayelsa State?

Table 2: Mean and Standard Deviation based on institution type

S/N	Items	Federal (N = 35)			State (N = 62)		
		$\bar{x}$	St.D.	Decision	$\bar{x}$	St.D.	Decision
1.	I have the basic skills to use a computer	2.65	0.76	High	2.67	0.87	High
2.	In my opinion, online assessment has more advantages than manual assessment	2.32	0.67	Low	2.26	0.63	Low
3.	I know how to communicate using email, Skype and send text/audio/video files using cloud computing	2.18	0.59	Low	2.21	0.73	Low
4.	In my opinion, online assessment has more disadvantages than manual	2.31	0.61	Low	2.46	0.81	Low
5.	I have the basic skills to search for information by browsing the internet and receiving data	2.22	0.65	Low	2.35	0.61	Low
6.	Online assessment should possess personal characteristics similar to manual	2.08	0.79	Low	2.01	0.63	Low
7.	I have access to a computer in the school	2.10	0.52	Low	2.38	0.68	Low
8.	I have access to relevant hardware and printers/scanners/overhead projectors	2.18	0.64	Low	2.29	0.66	Low
9.	Online assessment needs adequate knowledge and skills similar to manual	2.03	0.77	Low	2.05	0.61	Low
10.	My school has access to high-speed internet	2.17	0.87	Low	2.50	0.72	High
11.	I am interested in upgrading my work performance through e-assessment	2.51	1.12	High	2.63	0.94	High
12.	The thought of using e-assessment technologies motivates me	2.39	0.66	Low	2.47	0.71	Low
Aggregate Values		**2.41**	**1.04**	**Low**	**2.29**	**0.86**	**Low**

Table 2 above shows the mean response scores of lecturers' readiness level towards e-assessment based on institution type. The aggregate mean values of 2.31 and 2.39, respectively, show that the readiness level of federal and state human kinetics and health education lecturers' toward e-assessment was low.

Hypotheses

HO_1: "There is no significant difference in the mean ratings of the responses on male and female human kinetics and health education lecturers' readiness level towards e-assessment in Bayelsa State."

Table 3: t-test Statistics on Readiness to adopt e-assessment based on Gender

Categories	N	$\bar{x}$	St.D.	d_f	P	t_{cal}	t_{crit}	Decision
Male	47	2.48	0.98	95	0.05	1.07	1.96	Accept Ho_1
Female	50	2.37	1.04					

Source: Fieldwork (2023).

The result of Table 3 indicated that the t_{cal} value is 1.07, which is lower than the t_{crit} value, 1.960. This implies that the null hypothesis is not rejected. Therefore, there is no significant difference in the mean ratings of the responses on male and female human kinetics and health education lecturers' readiness level towards e-assessment in Bayelsa State.

HO_2: There is no significant difference in the mean ratings of the responses on the readiness level of lecturers in state and federal institutions towards e-assessment in Bayelsa State.

Table 4: t-test Statistics on Readiness to Adopt e-assessment based on institution type

Categories	N	$\bar{x}$	St.D.	d_f	P	t_{cal}	t_{crit}	Decision
Federal	35	2.41	1.04	95	0.05	1.36	1.96	Accept Ho_2
State	62	2.29	0.86					

Source: Fieldwork (2023).

The result of Table 4 indicated that the t_{cal} value is 1.36, which is lower than the t_{crit} value, 1.960. This implies that the null hypothesis is not rejected. Therefore, there is no significant difference in the mean ratings of the responses on the readiness level of human kinetics and health education lecturers in state and federal institutions towards e-assessment in Bayelsa State.

Discussion of Findings

The result of research question 1 revealed that male and female human kinetics and health education lecturers needed a higher readiness for adopting e-assessment. Also, the result in hypothesis 1 showed no significant difference in the mean ratings of the responses on male and female human kinetics and health education lecturers' readiness levels toward e-assessment in Bayelsa State. This finding is in line with that of Odual et al. (2020), who reported that male and female academic staff agree on their attitude to the use of e-learning. The findings also support Ikogi and Abadom (2021), who said that high school students valued the traditional mode of learning more than e-learning platform.

The result of research question 2 revealed that the readiness level of federal and state human kinetics and health education lecturers toward e-assessment is low. The result in hypothesis 2 showed "no significant difference in the mean ratings of the responses" on the readiness level of lecturers in state and federal institutions towards e-assessment in Bayelsa State. This supports Edo (2016), who reported that lecturers' readiness level does not depend on location, gender, and years of experience.

Conclusion

The rapid growth of emerging technologies has presented unprecedented opportunities to revolutionize various sectors, including education. Human Kinetics and Health Education (HKHE) is a critical discipline that promotes physical well-being and health consciousness among individuals and communities. Integrating emerging technologies into the HKHE curriculum can foster sustainable development by enhancing the quality of education and promoting healthier living habits. The study has established that the readiness level of human kinetics and health education lecturers toward e-assessment was low. Also, the study has affirmed that lecturers' gender and institution type do not significantly differ with their readiness for e-assessment for optimal performance and sustainability of human kinetics and health education programs in Bayelsa State.

Recommendations

1. There is a need for the management of tertiary institutions to organize orientation programs for Human Kinetics and Health Education lecturers to adopt e-assessment.
2. The management of tertiary institutions should encourage HKHE lecturers along genders lines to adopt e-assessment skills.

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