SURVEY OF LECTURERS' ATTITUDE, COMPETENCE AND UTILIZATION OF RESULT COMPILER SOFTWARE (RCS) IN KANO UNIVERSITY OF SCIENCE AND TECHNOLOGY WUDIL, KANO STATE, NIGERIA

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Abstract

This study investigated lecturers' attitude, competence and utilization of result compiler software (RCS) in Kano University of Science & Technology Wudil, Kano State, Nigeria. The study adopted a descriptive survey method. One hundred and eighty-seven lecturers were sampled in the university using stratified sampling procedure. The instrument used for the study was a questionnaire titled Lecturers Attitude toward Result Compiler Software (LARCS) and was subjected to reliability check. A Cronbach alpha was computed to ascertain the internal consistency of the instrument as .86, .79 and .76 were obtained on the three variables (attitude, competence and utilization) for the study. Based on the theoretical framework of the study, three research questions and a null hypothesis were generated, answered and tested using descriptive and inferential statistics. The findings of the study showed that lecturers have positive attitude toward result compiler software (RCS), lecturers are competent in the use of result compiler software (RCS) to some extent and have high level of utilization of result compiler software (RCS). Similarly, there is a statistically significant difference in the attitude of younger and older lecturers toward result compiler software (RCS) in favor of younger lecturers. Based on these findings, it was recommended among others that the university management should continue to motivate lecturers to sustained their attitude toward result compiler software and organize routine training in the area of result compilation.

Keywords: Lecturers, attitude, competence, utilization, result compilation software.

Introduction

The demand for higher education in Nigeria is growing exponentially, and this have increased Lecturer student's ratio in the universities, thus making students assessment, result compilation and report cumbersome especially for less technology savvy lecturers who do not possess the required skills to use any form of technology. The increasing demands had pushed university managements to introduce the use of result compiler software in order to reduce the complex nature of manual result compilation and timely preparation of result for consideration and approval (Ukem & Ofoegbu, 2012). To fulfil this pressing demand, lecturers are challenged to use result compiler software to prepare students result as a component of their role of teaching in the 21st century. Supporting the introduction of computer software to process students result.

Francis (2012) was of the view that the use of computer technologies and related software to electronically compile and compute students' results is an important milestone in the overall innovative practices in education, attempting to overcome some limitations that are experienced in the conventional manual result compilation. Recent advances in computer and relevant software have saved university lecturers time, energy and repetitive mistakes

emanating from traditional manual computation of students' results to electronic system in which student scores are uploaded electronically (Obayi, 2013). Ukem & Ofoegbu (2012) added that using computer result compiler software (RCS) has minimized the problems of missing results, unnecessary delays and deliberate manipulation of grades during computation. It is interesting to note that result compiler software works harmoniously with a computer system which was traditionally known to reads, stores, perform calculations and display data.

Surprisingly, the same machine can be programmed to compute students' results using internet based result compiler software (RCS). A compiler is a computer program that transforms source code written in a programming language (source language), into another computer language (target language) often having a binary form known as object code or machine code. Francis (2012) opined that result compilation encompasses the effective use of equipment and programs to upload, convert, organize, save, and present processed students results including a button for printing students' transcript. Transcript is an official copy of students' academic record, showing courses taken and grades obtained detailing students complete records at the university (Hsu, Wang & Chiu 2016). According to Obayi (2013) the use of result compiler software in the 21st century have become necessary to compute and keep students' records and also to enable administrative staff to process and retrieve students' academic transcript within few days of request. In addition, Muzenda (2013) remarked that result compiler software is embedded with data security which ensure that the database is protected from corruption and access by unauthorized persons. Thus, data security helps to ensure privacy and can be safeguarded through encryption, user authentication, and backup solutions. Student result stored in computer software can be positioned in a way that only authorized person(s) can access it.

Universities and other tertiary education institutions have long been using result compiler software to compute students result and store students' academic records for future use. Kano University of Science & Technology Wudil, being a Kano State government owned University established in 2001 to ensure equity and access to tertiary education in the country is in the forefront in the introduction and use of result compiler software since inception. Building on its peculiarities and earnest need of the community, the University of science and technology with six faculties and each faculty is made up of departments with interrelated scope and study disciplines. The faculties are Agriculture, Engineering, Earth and Environmental Sciences Math's and Computing, Science and Technology Education and Sciences (KUST, 2016). The university uses result compiler software, a web based software for uploading, computing and storing students' results. The software process students result accurately following the set operational guidelines by the programmers; Uploading students' courses for students' access during registration by the head of department, registration of courses by the students using students' interface, approval by the level adviser, head of department and the academic secretary. For lecturers to be assign duty as of teaching any course by the head of department, they should register with ICT unit using their staff identification number. Similarly, during result compilation, all course lecturers are required to download the list of registered students and enter the scores for Continue Assessment (C.A.) and examination and upload, compilation of results by the department examination officer follows (FlexiSAF, 2018).

Considering the period under which lecturers compiled student results in the university, the process had witnessed some noticeable challenges ranging from access to university portal, poor internet service, poor knowledge of the working environment, Hsu, Wang & Chiu (2016) added that low level of competency in the use of computer negative attitude toward the use of computer and related software and above all, electricity failure are part of the

challenge. With the aforementioned challenges, there is every possibility that the enthusiasm earlier developed for using the software may reduce and this had inspired the researchers to investigate the level of lecturers' attitude and competence in the utilization of result compiler software in Kano University of Science & Technology, Wudil. Attitude are ways that people think, feel and behave towards somebody or something. Attitude according to Francis (2012) is the belief of lecturers about computer which, positively or negatively influence their behavior towards its use. Hsu, Wang, & Chiu (2016) opined that attitudes are predispositions meant to respond in a particular way toward a specific class of objects. Thus, objects in this context may include those that are both functional and nonfunctional. Due to the fact that attitudes are predispositions, they are not directly observable and neither can they be measured by assigning numerical value. However, inferences can be drawn from the way an individual respond or react to stimuli in order to determine what the attitude of that person is to a given phenomenon.

To successfully implement the use of result compiler software in the university, Francis (2012) argued that lecturers' support to enhance positive attitudes is necessary. Supporting this view, Agbetuyi & Oluwatayo (2012) added that if lecturers perceived the use of any form of technology programs as neither fulfilling their needs nor their students' needs, it is likely that they will not integrate the technology into their teaching and learning. Conversely, if lecturers' attitudes are positive toward the use of that technology, they can easily provide useful insight toward its adoption and integration into teaching and learning processes. Francis (2012) remarked that positive attitude provides a platform for skill development and competency which are both necessary for result computation.

Muzenda (2013) described competence as the ability of a person to perform an acquired skill or use an inherent behavior to manipulate a machine, an object, for a particular purpose. Competence is synonymous to ability while ability to perform relies very much on the acquired skill of the competent individual as the case may be. Gay (2010) referred to competency as the mastery of a relevant body, scope and field of knowledge, coupled with high level skill in applying that knowledge to affect specified learning outcomes. Computer competence according to Muzenda (2013) is the ability of a lecturer to perform basic computer operations, use generic software and integration of computer to instruction, based on lecturers' self-efficacy. In view of this, the issue of use of computer and related software by lecturers depends solely on their level of competence in terms of the skill acquired. For a lecturer to achieve the level of competency in the use of computer and generic software, the knowledge and skills previously acquired should be put to use for effective result compilation. Similarly, Hsu, Wang & Chiu (2016) remarked that tertiary institution lecturers' frequency in the use of generic software is demonstrated by their attitude toward its usefulness. Thus, Davis (1986) proposed that attitudes are a function of beliefs, and those beliefs lead to behavioral intentions leading to acceptance or otherwise of a certain form of technology. If the intention is not changed, by some external factors, it will lead to specific behavior. Building on Technology Acceptance Model (TAM) which postulates that the use of information system is determined by the behavioral intention, but on the other hand, that behavioral intention is determined by the person's attitude toward the use of the system and also by his perception of its utility. According to Davis, the attitude of an individual is not the only factor that determines the use of a system, but is also based on the impact which it may have on the individual performance. Davis (1993) viewed computer usage as being extrinsically motivated by gains in performance and associated rewards and that individual who has a strong sense of capability in dealing with computers is more likely to accept new technology.

A comprehensive review of related literature in the domain of result compiler software and learning management system utilization revealed conflicting results. For example, a study by Leidner and Jarvenpaa (2013) showed that the variables that influenced the effectiveness of result compiler environment are technology, teaching and lecturers attitudes. Muzenda (2013) conducted a study on lecturer competency in the use computer software in examining and computing students result. The result revealed that lecturers are competent in the use of computer software for result computations. Volery and Lord, (2012) also stated that in the analysis of 47 students whose result were compiled based on e-learning software found that lecturers demonstrated expertise in three critical success factors (CSFs) in e-learning software environment; technology (easy to access, navigation, interface design and level of interaction), instructors (instructor attitudes towards the compiler software, instructors technology competencies and interaction during the classroom) and lecturers prior experience in the usage of technology.

Another study based on critical success factors of the use of e-learning by Hsu, Wang and Chiu (2016) concluded that factors influencing the use of e-learning software environment by lecturers involves human factors (motivation skills, time and effort), instructor technical competency, constructivist thinking by the instructors, high level collaboration and user friendly. Papastergiou (2010) investigated lecturer's competence and attitude towards Information and Communication Technology. Findings revealed that majority of lecturers have a positive attitude towards the use of ICT, and they are competent in the use of few basic tools. Overall, a significant difference was established between younger and older lecturers' attitude toward use of ICT. Hence, it is important to conduct research regarding lecturer's attitude, competence and level of utilization of result compiler software (RCS) among faculty members in Kano University of Science and Technology Wudil, Kano State, Nigeria.

Statement of the Research Problem

Despite the fact that result compilation is intellectually demanding, rigorous, complex work and time consuming, too often delays in uploading students' scores by course lecturers and compilation by examination officers abound which renders most results incomplete for consideration and approval by senate. Consequently, poorly uploaded scores by course lecturers caused additional workload on the side of examination officers for manually editing these scores for further compilation. These anomalies are attributed to lecturer's attitude toward result compiler usage, their competence and perceived usefulness. It is against this background that the researchers consider it appropriate to assess the variable that did not fit well among lecturers as regards their attitude, competence and utilization of result compiler software (RCS) in Kano University of Science & Technology, Wudil.

Purpose of the Study

The purpose of this study is to assess the lecturers' attitude, competence and utilization of result compiler software (RCS) in Kano University of Science and Technology, Wudil, Kano state, Nigeria. Specifically, the study was carried out to achieve the following objectives:

- 1. To determine whether lecturers have positive or negative attitude toward using result compiler software (RCS).
- 2. To assess lecturers' level of competency in the use of result compiler software (RCS).
- 3. To assess lecturers' level of utilization of result compiler software (RCS).
- 4. To find out the difference between younger and older lectures attitude toward result compiler software (RCS)?

Research Questions

The following research questions were answered in this study:

- 1. Do lecturers have positive or negative attitude toward using result compiler software (RCS)?
- 2. What is the level of lecturers' competency in using result compiler software (RCS)?
- 3. To what extent do lecturers use result compiler software (RCS)?
- 4. What is the difference between younger and older lectures attitude toward result compiler software (RCS)?

Research Hypotheses

A null hypothesis was formulated and tested at $p \le 0.05$

Ho₁: There is no significant difference between younger and older lecturers' attitude toward result compiler software (RCS) in Kano University of Science & Technology, Wudil, Kano State.

Methodology

The study adopted a descriptive survey research design. Descriptive survey was considered appropriate for this study as it seeks to ascertain the opinions of respondents on the Lecturers attitude, competence and utilization of RCS in Kano University of Science & Technology, Wudil. The population of this study comprised of all the 487 lecturers in Kano University of Science & Technology, Wudil. One hundred and eighty-seven lecturers were selected from six faculties (Agriculture, Engineering, Earth and Environmental Sciences Math's and Computing, Science and Technology Education and Sciences) in the university using stratified random sampling. The instrument titled Lecturers Attitude toward Result Compiler Software (LARCS) was developed by the researchers and used for data collection. The questionnaire elicited data from the respondents on the extent of lecturer's attitude, competence and utilization of Result Compiler Software (RCS). The questionnaire was patterned in to five-point Likert scale as 5Strongly Agree (SA), 4Agree (A), 3Neutral (N), 2Disagree (D), and 1Strongly Disagree (SD).

The instrument was validated by two computer scientists, three educational technology experts and one specialist in measurement and evaluation. The relevance, phrasing and suitability of the items of LARCS and how friendly the instrument is at the face level were all put together as the criteria used for the instrument validation. The instrument was administered to twenty lecturers in Yusuf Maitama Sule University Kano and the result was computed using Cronbach alpha to ascertain the internal consistency of the instrument as .86, .79 and .76 on the three variables (attitude, competence and utilization) of the study. The data of the study was analyzed using descriptive and inferential statistics. First, descriptive statistics was conducted using Shapiro Wilk test to test normality of the data for it to qualify for parametric tests. The test results for normality of the data before computing means and standard deviations does not result into significant levels (attitude = .074, competence = .576 and utilization = .270) thereby violating the normality assumptions and assumed distribution to be sufficiently normal to qualify the data for a parametric test, (Pallant, 2010). Research questions was answered using means with arithmetic mean for the values computed as 5+4+3+2+1=15/5=3.00. Therefore, any item with weighted mean of 3.00 was considered accepted and any item with weighted mean less than 3.00 was considered rejected as a decision rule. While t-test was used to test the null hypotheses at 0.05 level of significance using SPSS version 20.0.

Results and Demographics

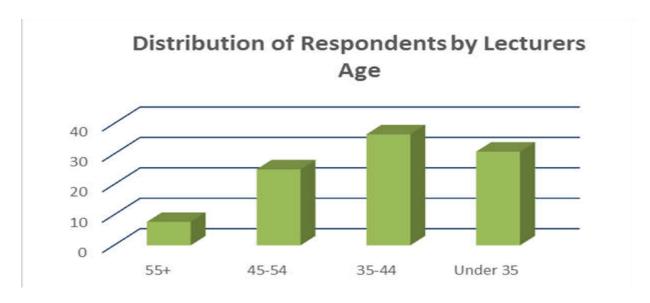


Figure 1:. Shows the graphical illustration of lecturers' age

Figure 1 shows the distribution of lecturers age in Kano University of Science & Technology, Wudil and the analysis indicates that majority of lecturers' age fall between (35-44) years with 36.5%, followed by under 35 years with 30.8% and (4554) years with 25.0% while those with 55+ years are 7.7%. This implies that majority of the workforce lies within the range of (35-44) years in the University and these age range are assumed to be technology savvy.

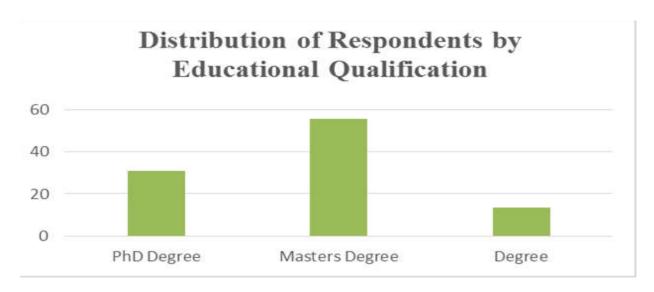


Figure 2: Shows the graphical illustration of lecturers by educational qualification

Figure 2 shows the distribution of lecturers by educational qualification in Kano University of Science & Technology, Wudil. The analysis showed that majority of lecturers obtained a master's degree qualification with 55.7%, followed by PhD. Degree with 30.8% while those lecturers with degree had the least with only 13.5%. This implies that majority of lecturers whose age range lies between (35-44) years obtained a master's degree qualification and have been anticipated to have been competent in the use of technology.

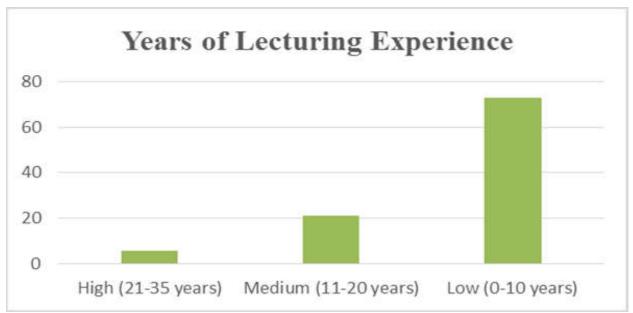


Figure 3: Shows the graphical illustration of lecturers by years of experience

Figure 3 shows the distribution of lecturers by years of experience in lecturing. The analysis shows that majority of lecturers are those that spend below 10 years in lecturing service with 73.0%, followed by 11-20 years with 21-2% while the least are those lecturers with 21-35 years in lecturing experience with least percent of 13.5%. This implies that majority of lecturers in Kano University of Science & Technology, Wudil spent 0-10years of experience in lecturing. The demographics appear to have been in agreement with its component's parts. For instance, lecturers whose age range lies between (35-44) years were found to have obtained a master's degree qualification with minimum of 10 years in lecturing service.

Research Question one: Do lecturers have positive or negative attitude toward using RCS in Kano University of Science & Technology, Wudil?

Table 1: Mean attitude response of lecturers toward using RCS in Kano University of Science and Technology Wudil, Kano State.

of Science and Technology Wadn, Rano State.						
S/N	ITEMS	Mean	SD	Decision		
1	I enjoy working with result compiler software	3.81	0.841	Positive		
	(RCS)					
2	I would work harder if I could use RCS more	3.73	1.140	Positive		
	often					
3	I think that it takes a long time to finish when I	2.46	1.038	Negative		
	use a RCS					
4	I feel comfortable working with a RCS	3.92	0.882	Positive		
5	I believe that as a lecturer it is very important for	4.56	0.574	Positive		
	me to learn how to use a RCS					
6	Working with a RCS and computers makes me	2.25	1.100	Negative		
	nervous					
7	Using a RCS is very frustrating especially if the	3.56	1.259	Positive		
	internet signals is weak					
8	I will do as little work with RCS as Possible	2.88	0.922	Negative		
9	I can do more from manual result compilation	2.63	1.329	Negative		
	than from a RCS					
10	I cannot think of any way that I will use	2.00	1.048	Positive		
	computers in my Career					

	Average Mean	3.51		
16	I use the web to send or receive email	4.29	0.936	Positive
	for study Purposes			
15	Internet I use the web to look up reference information	4.21	0.750	Positive
14	I use the web to download applications, audio, graphics, pictures and video files from the	3.73	0.069	Positive
13	I use a computer to manage and manipulate digital text	3.83	0.901	Positive
12	educational process easier and more enjoyable I think that using RCS will help arrive at accurate result computation	4.19	0.841	Positive
11	I believe using RCS in the faculties will make the	4.21	0.871	Positive

Decisions Mean= 3.00

Table 1 reveals the mean attitude responses of lecturers toward using result RCS in. A total of 187 lecturers responded to 16 items in the questionnaire and the result showed that the respondents agree with item 1, 2, 4, 5, 7, 11, 12, 13, 14, 15 and 16 but disagreed with items 3, 6, 8, 9 and 10 with an average mean of 3.51 to the 16 items. This indicates that lecturers have positive attitude toward using RCS in Kano University of Science and Technology, Wudil. S.D.I.

Research Question Two: What is the level of lecturers' competency in using RCS in Kano University of Science and Technology, Wudil?

Table 2: Mean responses of lecturers' level of competence in the use of RCS in Kano University of Science and Technology, Wudil, Kano State.

S/N	ITEMS	Mean	SD	Decision
1	I feel I am not capable of using result compiler software	1.88	1.003	Disagree
2	I need training to understand how to use result compiler Software	3.29	1.177	Agree
3	I believe that frequent use of result compiler software will increase my ability to record, upload compile and store and retrieve students result	4.35	0.623	Agree
4	I think it is not easy to access the wireless network to connect to the university portal	3.67	1.098	Agree
5	I believe that using result compiler software is a complicated process	2.40	1.071	Disagree
6	I think it would be easy for me to become skillful at using RCS	4.00	0.767	Agree
7	I think I can collaborate with other lecturers in my faculty to learn how to access and use the portal.	3.81	0.908	Agree
8	Knowing how to use computers and RCS is a worthwhile skill any Lecturer should lean	4.29	0.667	Agree
9	I think without RCS, lecturers and examination officers would not find it easy to make result available to students in good time	3.60	1.272	Agree
10		4.13	0.715	Agree

11	I think university management has to provide the skilled manpower to manage and trouble shoot the RCS	4.17	0.810	Agree
12	I think academic staff needs to collaborate with colleagues elsewhere to develop their competency in using internet based software.	4.37	0.658	Agree
	Average Mean	3.66		

Decisions Mean = 3.00

Table 2 reveals the mean rating responses of lecturers' level of competency in the use of RCS in Kano University of Science and Technology, Wudil. The result showed that respondents are in agreement with all the items except item 1 and 5. The average mean of all the items is 3.66, which is above 3.00 and the range of standard deviation is between .62 and 1.00 which implies that lecturers were non divergent in their responses. It further indicates that lecturers are competent in the use of result compiler software (RCS) in Kano University of Science and Technology Wudil, Kano State.

Research Question Three: To what extent do lecturers use result compiler software (RCS) in Kano University of Science and Technology, Wudil, Kano State.

Table 3: Mean responses of lecturers' level of utilization of Result Compiler Software (RCS) Kano University of Science and Technology Wudil, Kano State.

S/N	ITEMS	Mean	SD	Decision
1	The result compiler software (RCS) is user friendly	3.73	0.888	Agree
2	I like to use a RCS for uploading continue assessments and Examination scores	4.00	0.626	Agree
3	I wish I would not have to use a RCS as part of my lecturing Job	2.56	1.211	Agree
4	I think it might take me awhile to get comfortable with using RCS	2.63	0.971	Disagree
5	I would like to use the RCS as an alternative to manual result compilation	3.90	0.913	Agree
6	I would like to use the manual result compilation instead of RCS	2.31	1.094	Disagree
7	I would like to use email to ask questions regarding how and where to enter the scores	3.08	0.987	Agree
8	I would like to use the RCS for distance result upload and compilation from home	4.12	0.732	Agree
	Average Mean	3.29		

Decisions Mean= 3.00

Table 3 showes the mean responses of lecturers use of result compiler software (RCS) in Kano University of Science & Technology, Wudil. The result reveals that respondent agreed with item 1, 2, 5, 7 and 8 but disagreed with item 3, 4 and 6 with an average mean of 3.29 to the eight items. This indicates that lecturers are utilizing RCS to some extent in the University.

Hypothesis One: There is no significant difference between younger and older lecturers' attitude toward RCS in Kano University of Science & Technology, Wudil. To test this

hypothesis, a t-test analysis was conducted to compare the differences in the attitude of younger and older lecturers toward RCS in Kano University of Science & Technology, Wudil.

Table 4: Summary of t-test Result of the Mean Rating Responses of Younger and Older Lecturers Attitude toward Result Compiler Software (RCS) in Kano University of Science & Technology Wudil

Variable	N	df	Mean (x)	SD	t-value	p-value
Younger Lec.	112		55.04	8.772		
		185			15.157*	0.000
Older Lec.	75		31.91	12.094		

S: Significant at 0.05

The T-test result in table 4 indicated that there is a statistically significant difference in the attitude of younger and older lecturers toward result compiler software (RCS) in Kano University of Science & Technology, Wudil (t=15.157, df = 185, P. 0.000) in favor of younger lecturers. Further, Cohen's d value of (d= 2.18) indicated this was a large effect size difference between the younger and older lecturers. Therefore, the null hypothesis is rejected. This implies that younger lecturers manifest a more positive attitude toward result compiler software than the older lecturers in Kano University of Science & Technology, Wudil.

Discussion

This study assessed lecturers' attitude, competence and level of utilization of result compiler software (RCS) in Kano University of Science & Technology, Wudil. Figure 1 reported the demographic profile of the respondents which shows that majority of lecturers age lies between (35-44) years and Figure 2 indicated that this category of lecturers obtained a master's degree qualification while Figure 3 also indicated that majority of lecturers in the university are those that spend below 10years in lecturing service. These demographics have drawn a roadmap to the outcome of this study because of its consistency with components parts. For instance, lecturers whose age range lies between (35-44) years were found to have obtained a master's degree qualification and had a minimum of 10 years in lecturing service.

The finding of research question one revealed that lecturers in Kano University of Science & Technology, Wudil have positive attitude toward result compiler software (RCS). An important point emanating from this finding showed that even those lecturers (especially level advisers) who choose not to be technology compliant believed that the result compiler software has considerable potential to make their work less cumbersome. These findings are not surprising considering the result of the demography which revealed that majority of lecturers age lies within the range of (35-44) years which undoubtedly shaped their attitude toward accepting to use the technology. Thus, further confirming the proposition of technology acceptance model which states that the use of information system is determined by the behavioral intention, and that behavioral intention is determined by the person's attitude toward the use of the system. The finding is in agreement with the earlier finding of Leidner and Jarvenpaa (2013) whose result showed that the three main variables that influenced the effectiveness of result compiler environment are technology, teaching and lecturers attitudes.

The finding of research question two revealed that lecturers are competent in the use of result compiler software (RCS). It is worth noting that younger lecturers are more technology savvy and more comfortable in using technology than the older academics. The finding is consistent with Muzenda (2013) whose result revealed that lecturers are

competent in the use of computer software for result computations. The result is also in agreement with the finding of Valery, and Lord, (2012) whose result found that lecturers demonstrated expertise in three critical success factors (CSFs) in e-learning software environment; technology (easy to access, navigation, interface design and level of interaction), instructors (instructor attitudes towards the compiler software, instructors' technology competencies and interaction during the classroom) and lecturers prior experience in the usage of technology.

The finding of research question three revealed that lecturers utilize result compiler software (RCS) in the University. This finding is not astounding considering the lecturers age, academic qualification and the minimum years they have in active service. The finding agrees with the earlier finding of Hsu, Wang and Chiu (2016) who concluded that factors influencing the use of e-learning software environment by lecturers involves human factors (motivation skills, time and effort), instructor technical competency, constructivist thinking by the instructors and Obayi (2013) added high level collaboration and user friendly.

The finding on hypothesis 1 revealed that there is a statistically significant difference in the attitude of younger and older lecturers toward result compiler software (RCS) in Kano University of Science & Technology, Wudil in favour of younger lecturers with large effect size. The finding is supported by the earlier finding of Papastergiou (2010) whose result revealed that majority of lecturers have a positive attitude towards the use of ICT, and they are competent in the use of few basic tools. Overall, a significant difference was established between younger and older lecturers' attitude toward use of ICT.

Conclusion

Based on the findings of this study, it was concluded that:

- (i) Lecturers age range fall between 35-44years with highest number of them having master's degree and 0-10years of lecturing experience in the University.
- (ii) Lecturers in Kano University of Science & Technology Wudil have positive attitude toward result compiler software (RCS).
- (iii) Lecturers are competent in the use of result compiler software (RCS) in Kano University of Science & Technology Wudil .
- (iv) Lecturers utilize result compiler software (RCS) to some extent in Kano University of Science & Technology Wudil.
- (v) There is a statistically significant difference in the attitude of younger and older lecturers toward result compiler software (RCS) in Kano University of Science & Technology Wudil in favour of younger lecturers.

Recommendations

Based on these findings, the following recommendations were made:

- (i) The university management should use all avenues available to train young and older lectures in good time so as to increase the manpower strength in the university.
- (ii) The management of Kano University of Science & Technology, Wudil should continue to motivate lecturers to sustain their attitude toward result compiler software and help them to constantly update their knowledge about global issues especially in the area of information and communication technology, specifically in result compiler software (RCS).
- (iii) Competency in using result compiler software (RCS) is an issue that requires constant practice and access to necessary tools, therefore, the university management should mandate the deanery to constantly organize seminars and workshops both at department and faculty level especially in the area of information

- and communication technology. This is necessary to update their knowledge of computer usage for various tasks ahead.
- (iv) The management of Kano University of Science & Technology, Wudil should initiate a process for equipping lecturers with laptop computers, tablets and related hardware (even on soft loan basis) to increase access and ownership which is a precursor to technology and software utilization and expertise.

References

- Agbetuyi, P. A., & Oluwatayo, J. A. (2012). Information communication technology in Nigerian educational system. *Mediterranean Journal of Social Sciences*, 3(3), 2837.
- Davis, F. D. (1986). A technology acceptance model for empirically testing new end user information systems: Theory and results. Doctoral dissertation, Sloan School of Management, Massachusetts Institute of Technology.
- FlexiSAF, (2018). FlexiSAFEdusoft (Version 2.0) [FUK students result management software]. Retrieved from http://fuk.safrms.com
- Francis, O. (2012), Electronic Examination in Nigeria, Academic Staff Perspective—Case Study: National Open University of Nigeria (NOUN). *International Journal of Information and Education Technology*, 2(4), 1429.
- Gay, L. R. (2010). Educational research: *Competencies for analysis and applications, eighth edition.* Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Hsu, M. K., Wang, S. W., & Chiu, K. K. (2016). Computer attitude, statistics anxiety and self-efficacy on statistical software adoption behavior: An empirical analysis on elearning. *Journal of Computers in Human Behavior*, 2(3), 412-420.
- KUST, (2016). Kano University of Science & Technology Wudil Students Handbook.
- Leidner, D. E., & Jarvenpaa, S. L. (2013). The information age confronts education: case studies on electronic classroom. *Journal of Information Systems Research*, 4(1), 24–54.
- Muzenda, A. (2013). Lecturers' Competences and Students' Academic Performance. International *Journal of Humanities and Social Science Invention*, 3(1), 0613.
- Obayi, P. N. (2013), Utilization of computer as a tool for computing students' results in tertiary institutions in Enugu State, Unpublished Master Thesis.
- Pallant, J. (2010). SPSS survival manual (4th ed.). New York, NY: Open University Press.
- Papastergiou, M. (2010). Enhancing physical education and sport science students' self-efficacy and attitudes regarding information and communication technologies through a computer literacy course. *Journal of Computer & Education*, 5 (4), 298–308.
- Ukem, E. O., & Ofoegbu, F. A. (2012). A Software Application for University Students Results Processing. *Journal of Theoretical and Applied Information Technology*, 35(1), 2638.

Volery, T., & Lord, D. (2014). Critical success factors for online course resources and eLearning. *Journal of Computers & Education*, 3(2), 101–120.