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RESEARCH ARTICLE

Personal Characteristics and Academic Staff Teaching Adjustment to the New Normal: The Case of a Public University in Nigeria

Valentine J. Owan · John A. Ekpenyong · Udida J. Udida

ABSTRACT

Background/purpose – This study assessed personal characteristics and teaching adjustment to the new normal among academic staff at a public university in Cross River State, Nigeria. Two null hypotheses were formulated and tested in the study.

Materials/methods – The descriptive survey design research design was adopted for the study. Using the multistage sampling procedure, a sample of 313 respondents was obtained from 2,410 academic staff. The Personal characteristics and teaching adjustment questionnaire (PCTAQ) was used as the data collection instrument. However, primary data were collected from 297 academic staff who voluntarily participated. Independent *t*-test analysis was employed in testing the hypotheses at the .05 level of significance.

Results – Teachers' attitudes towards e-learning were found to have significantly influenced their teaching adjustment to the new normal. Teachers who maintained favorable attitudes towards e-learning reported higher COVID-19 teaching adjustment success rates than their counterparts with unfavorable attitudes. The level of ICT education significantly influenced their teaching adjustment to the new normal. Academic staff with a high level of ICT education adjusted their teaching strategies more to the new normal than those with a low level of ICT education.

Conclusion – It was concluded that teachers' characteristics can significantly influence teaching staff's adjustment to the new normal. The implication is that university academic staff need to develop positive attitudes toward e-learning and be ready to maximize all the potential benefits of utilizing digital technologies for instructional delivery.

Keywords: Adjustment, attitude, COVID-19, e-learning, ICT, new normal

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1. INTRODUCTION

At the peak of the COVID-19 pandemic, governments worldwide imposed travel restrictions, quarantines, workplace safety measures, and also mandated corporate and civic closures (Aslam et al., 2021; Bassey & Owan, 2020). Additionally, nations attempted to increase their health testing capacity and keep track of the connections of those exposed to the virus (Malcolm et al., 2020; Owan, Asuquo, Ekaette, et al., 2021; Zhu et al., 2021). The outbreak led to the most significant global economic downturn since the Great Depression of the 1930s (Behera et al., 2021; Johnson et al., 2020; Selgin, 2021), with panic buying, agricultural disruption and food shortages that contributed to widespread global supply problems. During the pandemic, the proliferation of false information through social media and traditional media exacerbated political unrest (Melki et al., 2021; Owan, Akah, et al., 2021; Serpell & Simatende, 2016). Due to the outbreak, racial and regional prejudice, health equity, and finding a middle ground between public health and individual rights came to the surface (Owan, 2020). A “new normal” in human behavior was established due to these various limitations, changes to everyday activities, and societal rules.

“New normal” refers to when a country’s economy, society, or other entity settles back down following a crisis or some sort, but to a state different to that which existed prior to the commencement of the crisis (Brouder et al., 2020; Davis et al., 2020). In addition to social and physical distancing, regular handwashing, the wearing of a face mask, safe food handling practices, and mindfulness are just some of the new-normal practices expected of today’s academic staff and other university personnel. Others areas that have been impacted include both domestic and international travel, self-assessment, isolation at home and testing (when needed), and maintaining close contact with the COVID-19 support infrastructure in case of emergency (Ingrassia et al., 2020; Owan, Asuquo, Ekaette, et al., 2021). Other new normal behaviors include regular handwashing, covering the mouth and nose when coughing, regularly cleaning surfaces, monitoring, and self-isolation for those people exposed or feeling unwell (Fineberg et al., 2021). As a result, it is reasonable to consider that people would alter their habits and routines in order to conform to the new standards.

Individuals’ and teachers’ perceptions of these rules may influence their acceptance and readiness to follow them, or to adjust their instructional strategies in order to suit the demands of the new normal. Teaching adjustment refers to the willingness among instructors to change or modify their teaching strategies so as to best suit the demands of the new normal. Such adjustment includes readiness to follow the prescribed health guidelines and precautionary measures whilst teaching. It also includes readiness among teachers to hold smaller classes with learners by utilizing digital technologies when the need arises (Rapanta et al., 2020; Seetal et al., 2021). In the new normal, teachers’ instructional readiness transcends their motive and willingness to teach in order to access quality and state-of-the-art resources to engage students within an online environment.

It has been shown that access to computers, mobile devices, and e-learning facilities in certain nations has become so widespread that every primary school student possesses a mobile device (Sung et al., 2016). However, by comparison, Nigeria seems to be in a different scenario. At all levels of education, schools and educational establishments in Nigeria seem to have inadequate electronic learning systems for group usage, and much less for personalized learning. The same scenario has also been reported in other developing nations (Adarkwah, 2021; Badiuzzaman et al., 2021). With academic activities and calendars gradually reshaping, it is essential to understand the level to which teachers have adjusted to the new normal. In

an attempt to demystify this change, the current study was designed with the aim to determine the contribution of two teachers' characteristics (attitude towards e-learning and level of ICT education) to the instructional delivery adjustment in the new-normal era occasioned by the COVID-19 pandemic.

2. LITERATURE REVIEW

Teachers' ideas, perceptions, and behaviors toward e-learning in education are manifestations of their attitudes toward e-learning. Teachers' attitudes towards e-learning are considered critical in this research because they may influence how eager teachers are to employ such tools for instructional delivery in either the traditional or online classroom. According to the literature, teachers encountered difficulty utilizing technology to instruct students during the epidemic (Ferri et al., 2020; Kim, 2020; Mishra et al., 2020; Williamson et al., 2020). Similarly, other studies have documented instructors' lack of access to adequate facilities to aid their teaching in the "new normal" (Aladsani, 2022; Ottenbreit-Leftwich et al., 2018; Owan, Asuquo, Makuku, & Etudor-Eyo, 2021; Owan et al., 2022; Ozudogru, 2022). As a consequence, some instructors can be forced to take on too much, resulting in some unequal behaviors among teachers due to their stress (Owan & Agunwa, 2019). Other studies have revealed that many instructors were not ready to deploy e-learning technologies prior to the COVID-19 pandemic (Adov & Mäeots, 2021; Dindar et al., 2021; König et al., 2020; Mulongo et al., 2019) due to their holding unfavorable perceptions (Khan, 2012; Peled, 2021; Woyo et al., 2020), among other factors, which may have contributed to the low level of their preparedness. It is essential, therefore, to determine whether or not teachers have adjusted their teaching methods to ICT-based teaching during and following the pandemic. This information should enable us to quantify the degree to which COVID-19 has negatively or positively shaped teachers' behavior, and for the purposes of developing appropriate remedial action.

The second aspect of the current study is to examine the levels of teachers' ICT education, which refers to how well teachers can utilize simple and sophisticated ICT devices and related electronic gadgets for the purposes of teaching. If teachers are not deemed competent at manipulating ICT tools for teaching purposes, then the mere procurement of such gadgets will be meaningless. This factor was considered when nations urgently switched to electronic learning (e-learning) as an emergency protocol early in the pandemic. Due to the importance of the subject, many have shown a keen interest in assessing the ICT literacy of academic staff (Hafifah & Sulisty, 2020; Li, 2021; Nugroho Yanuarta et al., 2021b, 2021a). However, the topic has received inadequate attention from developing nations such as Nigeria.

The current study aimed to address this gap by providing information on how teachers' ICT literacy contributes to their teaching adjustment in the new normal era. Therefore, the first objective of the study was to determine whether or not teachers' attitudes towards e-learning influences their teaching adjustment to the new normal. The second objective was to determine whether teachers' ICT literacy level influences their teaching adjustment to the new normal.

3. METHODOLOGY

The research employed a descriptive survey design as its approach. Studying how personal factors affected academic staff teaching adjustment at public universities during the COVID-19 period necessitated using information gathered through questionnaires. This approach was deemed suitable because the researchers studied a large population of 2,410 academic

employees from 16 different faculties of the University of Calabar for this research. The group ranged from assistant lecturers to university professors. When selecting the study's sample, a multistage sampling method was employed, with 31% selected from the University of Calabar's faculties in stage one (i.e., of the 16 faculties, five were randomly selected). In stage two, four departments were randomly selected from each faculty selected in stage one. Then, in stage three, only those academic employees who were present in their offices during the data collection period were included in the sample. In total, 313 were selected as the study's sample.

A data collection instrument was developed for the study by the researchers, named the Personal characteristics and teaching adjustment questionnaire (PCTAQ). The instrument was designed based on the related literature and structured in two sections. Section A was designed with an accompanying cover letter to obtain the respondents' demographic data, such as their gender, academic rank, and length of professional experience. Section B of the PCTAQ consisted of 18 items that aimed to assess two personal characteristics of teachers (attitude towards e-learning, and their level of ICT education), plus the dependent variable (teaching adjustment). These three variables were each assessed by six items, formed as a four-point, Likert-type scale with response options ranging from *strongly agree* to *strongly disagree*.

Two psychometric specialists from the Department of Educational Foundations at the University of Calabar validated the appearance and content of the instrument. These specialists each verified that the items consisted of precise contents and were arranged to prevent extraneous information from being collected, and that no items were considered to be unclear. Items that were deemed unnecessary were either changed or removed, and improvements were suggested to the researchers before the instrument's final draft was applied in the study's data collection. The instrument's reliability was ascertained using the Cronbach alpha approach after a trial test application was conducted with 30 academic staff of the University of Calabar who were not from the participating departments. A reliability index of .84 obtained from the analysis proved that the instrument was internally consistent overall, and at the variable level the alpha coefficients were found to be .79 for attitude towards e-learning, .85 for level of ICT education, and .90 for teaching adjustment.

Primary data were gathered by administering duplicate instruments to the study's participants. The researchers went door-to-door to meet with the participating academic staff based on certain dates pre-agreed with each department. The researchers were able to locate the academics' offices with the aid of non-academic staff from the departmental general offices. However, some academicians were unable to participate due to their unavailability or other commitments at the time; additionally, only those who volunteered to participate in the research were included. In order to minimize complications with data loss and retrieval, the researchers did not permit the participants to take away their copies of the data collection instrument. The academics who agreed to participate in the study were briefed on its significance and the need for them to provide open and honest answers. The participants were also assured that the information collected would be held in the strictest confidence. As the responders themselves were each academics/researchers, the application of the survey was considered straightforward. After a 2-week data collection period, a total of 297 academics had completed and returned the questionnaire for analysis. As a result, the final number of participants who supplied data from the study's sample was 94.9%, with a 5.1% rate of attrition. All of the completed copies of the instrument collected from the respondents were subsequently scored, categorized, and prepared for analysis. Independent

t-test statistical analysis was employed as the tool considered most appropriate for testing the study's two hypotheses at the .05 level of significance.

4. RESULTS

Hypothesis 1

The first hypothesis was that teachers' attitudes towards e-learning had no significant influence on their teaching adjustment to the new normal. The independent variable of this hypothesis, "teachers' attitude towards e-learning," was classified under two independent nominal levels –favorable and unfavorable attitudes–, while the continuous dependent variable was "teaching adjustment to the new normal." This made it suitable to adopt the independent *t*-test statistical technique as the most appropriate form of data analysis. Table 1 indicates that the teachers with favorable attitudes towards e-learning recorded a higher mean ($\bar{X} = 2.37$) for teaching adjustment during the COVID-19 pandemic when compared to their colleagues with unfavorable attitudes towards e-learning ($\bar{X} = 1.15$), with a mean difference of 1.22. The *p*-value in Table 1 was less than the alpha level of .05 at 295 degrees of freedom, leading to the rejection of the previously formulated null hypothesis. The teachers' attitudes toward e-learning on teaching adjustment to the new normal at the public university were found to have had a significant influence.

Table 1. *T*-test results: Influence of teachers' attitude towards e-learning on teaching adjustment

Variables	Teacher's attitude toward e-learning	<i>N</i>	\bar{X}	<i>SD</i>	<i>SE</i>	<i>t</i>	<i>p</i>
	Favorable	116	2.37	1.02	.09		
Teaching adjustment to the new normal						11.06	.00
	Unfavorable	181	1.15	0.92	.07		

*Significant at .05 alpha level; *df* = 295; Mean difference = 1.22

Hypothesis 2

The second hypothesis was that the participant teachers' ICT literacy level would not significantly influence their teaching adjustment to the new normal. This hypothesis was tested at the .05 level of significance after classifying the teachers' level of ICT education according to two independent categories, high and low. The dependent variable was measured continuously at the interval level. The results of the analysis, as presented in Table 2, indicate that teaching adjustment to the new normal was found to be higher for those teachers with a high level of ICT education ($\bar{X} = 2.28$) than those with a low level of ICT education ($\bar{X} = 1.15$), with a mean difference of 1.13. At 295 degrees of freedom, the .05 alpha level was calculated as being less than the *p*-value of .00, thereby indicating a significant influence. This led to the discarding of the null hypothesis and the upholding of the alternate hypothesis. Hence, the level of ICT Education was shown to have had a significant influence on teaching adjustment to the new normal at a public university.

Table 2. T-test results: Influence of teachers' ICT literacy level on teaching adjustment

Variables	ICT literacy level	N	\bar{X}	SD	SE	t	p
Teaching adjustment to the new normal	High	126	2.28	0.95	0.08	10.04*	.00
	Low	171	1.15	1.00	.08		

*Significant at the .05 alpha level; $df = 295$; Mean difference = 1.13

5. DISCUSSION

This study revealed that teachers' attitudes toward e-learning significantly influenced their teaching adjustment to the "new normal" following the COVID-19 pandemic. This finding is attributed to variations in the self-reporting of teaching adjustment to the new normal among teachers with favorable and unfavorable attitudes towards e-learning. Teachers who maintained favorable attitudes towards e-learning reported higher COVID-19 teaching adjustment success rates than their counterparts with unfavorable attitudes. This finding is not surprising in itself, since teachers with favorable attitudes towards e-learning are considered more likely to be interested in acquiring e-learning skills and applying them where appropriate. The COVID-19 pandemic ushered in a paradigm shift, moving away traditional face-to-face classroom teaching to a predominantly online-based approach. It is also no surprise that teachers with unfavorable attitudes towards e-learning found it harder to adjust to this technology-based form of remote teaching compared to their colleagues with more favorable attitudes. This finding aligns with the study by Toquero (2020) which revealed that many higher education institutions in the Philippines, both private and public, were largely unprepared to integrate e-learning technology into their teaching. Such a low level of preparedness may have been, among other reasons, due to the teachers' and administrators' unfavorable perceptions or poor prior use of ICTs. Consequently, the study of Roy et al. (xxxx, as cited in Strowd et al., 2021) proposed that during times such as the COVID-19 pandemic, people's mental health concerns should be raised and addressed.

In the current study, teachers' ICT literacy levels were found to significantly influence their teaching adjustment to the new normal. Academic staff with a high level of ICT education adjusted their teaching strategies more easily to the new normal than those with a low level of ICT education. This finding was as expected, because teachers with higher levels of ICT education are considered more likely to be competent in deploying and utilizing ICT tools for online instructional delivery when the need arises. For instance, during the 2020 peak of the COVID-19 pandemic, schools in many countries were closed and educational authorities switched almost immediately to online teaching and proctored online examinations. However, such Internet-based tools cannot be used by teaching staff who are not grounded in the sophisticated gadgetry of the modern era. This is suggested to help explain why teachers with higher levels of ICT education benefitted more from such knowledge during the pandemic over their colleagues with lower levels of prior ICT education. According to Almanthari et al. (2020), the teaching-learning process was maintained virtually using ICTs during the pandemic in Indonesia as a means to cope with the prolonged closure of

the country's schools and higher education institutions. The current study also corroborates the results of another research that e-learning was found to be challenging in schools with little to no prior experience and no pre-prepared e-learning materials, particularly when instructors had little or no working knowledge on how to utilize the required online programs (Allameh et al., 2011).

The current study, however, was limited to a small geographical area of Nigeria, which limits the extent to which any generalizations may be drawn and applied to other developing nations. It is, therefore, recommended that future studies on related areas broaden their scope to cover other regions. Second, the study's design did not allow for participants to offer any further insight through either focus group discussions or personal interviews. Thus, it is suggested that a mixed-method of research may be considered in future related studies.

6. CONCLUSION

This study quantitatively determined the extent to which the characteristics of teachers affected their adjustment to teaching in the "new normal" occasioned by the COVID-19 pandemic. Following the data collection and analysis, the study provided evidence that the characteristics of teachers helped to predict their teaching adjustment. The study concludes, therefore, that teachers' characteristics such as their attitudes toward e-learning and their level of ICT education significantly influenced their teaching adjustment to the new normal at the University of Calabar, Nigeria. This conclusion presents certain implications for the personal readiness of academic staff and universities to sustain teaching and learning during future epidemics or pandemics, such as Severe acute respiratory syndrome (SARS). This implies that teachers with favorable attitudes are more likely to be equipped to adjust readily to the new normal than those with unfavorable attitudes. Furthermore, ICT-skilled teachers are more likely to be able adjust their teaching methods to the new normal than those that lack the requisite ICT skills.

7. RECOMMENDATIONS

Based on the study's conclusion, the researchers recommend that university academic staff develop positive attitudes toward e-learning and maximize the benefits of using modern technologies for their instructional delivery. This may be achieved by changing scholars' mindsets that often consider e-learning or digital technology to be something exclusively for the younger generations. Departments should each organize regular practical ICT training for teaching staff who lack the requisite ICT skills. This will help increase the ICT literacy levels among teaching staff aimed at quality service delivery, and to help prepare them for health-based crises such as COVID-19 in the future. Academic staff should familiarize themselves with all the ongoing COVID-19 precautionary measures in order to mitigate the further spread of the virus, and to always adhere to them. This will also help to change their perceptions of quality instructional delivery in universities.

DECLARATIONS

Author Contributions: VJO: Conceptualization, methodology, data analysis, writing the original draft, data collection, and review. JAE: Literature review, data collection, software, and review. JUJ: Supervision, data collection, material resources, and review. All authors have read and approved the publication of the article's final version.

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Data Availability Statement: The data underlying this study is available upon reasonable request from the corresponding author.

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