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RESEARCH ARTICLE

RESEARCH BEHAVIOR IN HIGHER EDUCATION: A COMPARATIVE ANALYSIS OF UNIVERSITIES AND POLYTECHNICS STUDENTS IN THE SOUTH-EAST OF NIGERIA

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Abstract

Research in Nigeria's institutions of higher learning, including the universities and polytechnics, has consistently proved to be below expectation given the importance of research to the growth and development of the country. Although, the constraints impeding the realization of research goals in the higher education ecosystem have mainly been captured in the literature. However, there is a growing concern about the research behavior of scholars in higher education in Nigeria. Thus, the primary purpose of the current study is to compare research behavior between the university and polytechnic lecturers in southeast Nigeria. Ninety-six academic staff pooled from public tertiary institutions in the Enugu and Ebonyi States of Nigeria completed a self-report measure. The mean, standard deviation score, and t-test result revealed a statistically significant difference between the university and polytechnic scholars on research behavior. Thus, the result indicated that university lecturers have more positive research behavior than their polytechnic counterparts.

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Introduction:-

The contemporary education ecosystem is increasingly demanding for evidence-based learning and innovative paradigm. Integrating research-based knowledge with education is increasingly becoming a significant trend that requires much attention (Amaratunga & Senaratne, 2009). Research occupies a central position in the growth of higher education in recent times (Kachalova et al., 2019). Higher education institutions are experiencing an increasing shift to inquiry-based learning, encouraging more research models complementary to the age-long conventional teaching (Etzkowitz, 2003). Perhaps, robust systematic inquiry and logical research context are critical in national development (Ashrafi-Rizi et al., 2015). Hence, Bhagavathula et al. (2017) described evidence-based knowledge as a ubiquitous aspect of global education. Thus, research is an essential driver in advancing and improving every part of the global domain. Accordingly, Sabel'nikova-Begashvili and Khudoverdova (2020) underscored the relevance of imparting research knowledge to the learners. Krylova et al. (2019) emphasized teaching research competence to the students.

Research in higher education reflects the process of gathering and evaluating relevant data to increase knowledge and understanding of a topic or an issue (Creswell, 2012). Thus, it denotes careful processes that provide credible knowledge. Numerous literatures abound that associate positive research behavior and the willingness to engage in research activities (e.g., McLaughlin et al., 2018; Mina et al., 2016; Partido & Colón, 2019). Similarly, Vossen et al. (2018) emphasized the significance of research and evidence-based inquiries on the growing Science, Technology, Engineering & Mathematics education (STEM). In general, the higher education system in the contemporary academic

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environment encompasses research and teaching. Hence, the famous sayings 'publish or perish' (Uzochukwu et al., 2016). In particular, research in higher education is the pathway to institutional evaluation and comparisons.

Over the years, the quality of institutions of higher learning across the globe has been evaluated using the higher education ranking, which encompasses teaching and research appraisals (Boholano et al., 2014). Thus, the ranking of higher education is predominantly based on research productivity. This confirms the conception of research as a distinguishing feature of the higher institution (Marchant, 2009). Consequently, about seven HEIs in Nigeria are in the overall Times Higher Education World University Rankings, with the highest (University of Ibadan) ranked within the number 401–500 (Times Higher Education, 2021). Thus, signifying poor research productivity of HEIs in the country.

Accordingly, previous studies contend that effective research behavior in academia facilitates institutional integrity (Hajdarpasic et al., 2015), equip students with innovative information (Davis & Jones, 2017), increase scholarly inspiration (Falconer & Holcomb, 2008), and impact leading-edge knowledge and basic research procedures on the students (Brown et al., 2016). In particular, numerous literatures have underscored the importance of exposing learners to inquiry-based learning (e.g., Abu-helalah et al., 2015; Beanland et al., 2020; Borakati et al., 2017; Kozlov et al., 2017; Noguez & Neri, 2019; Razeghi, 2019; Roach, 2017; Swan et al., 2018; Weiner & Watkinson, 2014). Thus, research in higher education is fundamental in achieving the required developmental objective of contemporary societies.

The Nigeria higher education system consists of universities, polytechnic, and colleges of education. However, there has been age-long contention about the quality of education among the three principal higher learning systems. Regarding research productivity, the university system is mainly presumed to be more research-oriented given the importance of research productivity in academic qualifications. The polytechnics are typically concerned with functional or applied knowledge and practical learning, thus, are less competitive relative to academic qualifications. In particular, growing insinuation suggests that research activities are more salient in the university system than the polytechnics in the Nigerian context. The university sector, regarded as the pinnacle of the higher education system in Nigeria, seems to undertake more research than the other higher education learning centers. However, their research output tends to be more academic than applied research as supposed in polytechnics.

However, given the presumptions of a fragile research culture (Yusuf, 2012), especially in the Nigeria higher education sector, several factors have been identified as the impediments to research productivity among the scholars (Imhonopi & Urim, 2013; Okoduwa et al., 2018; Pascal Iloh et al., 2020). For example, Igiri et al. (2021) stated that motivation, gender, age, research knowledge and skills, academic rank, research orientation, and collaboration, including leadership, availability of resources, and institutional research policy are the principal barriers to research productivity in the Nigerian academia. Fortunately, the Tertiary Education Trust Fund (TETFUND) currently provides numerous grants designed to foster research and development across tertiary institutions in Nigeria. The fund has added to an unprecedented reform in the HEIs through the institute-based research grant and the national research fund. These grants have allowed scholars to partake in various inquiries and academic discourse. However, the growing trend of low research output from the university and polytechnic systems suggests explorations in academic research behavior.

Research behavior reflects the tendency to engage in research activities (Safi & Kumar, 2019). It describes the readiness to investigate phenomenon, comply with procedures and establish an assumed outcome. In particular, research disposition is integral in the academic profession and represents a pathway to professional development in the sector (Ulla, 2018). Conducting research allows academics to develop new skills, approaches, and strategies (Impedovo & Malik, 2016; Landicho, 2020), facilitates promotion in the system (Katz & Coleman, 2001), and determines success (Chin & Law, 2020). Therefore, research undertakings are considered vital and meaningful in the overall operations of the academic community. Academic activities such as sitting as a panel member in an oral defense, supervising and mentoring students' projects, publishing research findings, and presentations in national and international conferences are agents for enhancing research behavior in academia. Therefore, research behavior is a significant driver to research productivity in academia. In particular, negative research behavior may constitute constraints to research involvement among lecturers. Thus, it could contribute to the variance in research productivity among university and polytechnic scholars in Southeast Nigeria.

Hypothesis:

There would be a significant difference between scholars in the university and polytechnics on research behaviors.

Method:-

The study population comprised scholars from public tertiary institutions in southeast Nigeria. One hundred and twenty-one male and female lecturers from different academic disciplines were approached between August and November 2021. They were asked to participate in a study aimed to understand their research behaviors. The one hundred and eleven lecturers who consented to partake in the study were given the study instrument. In all, ninety-six (96) copies of the research instruments were filled correctly and utilized for the study, perhaps, the twelve (12) improperly filled copies and three (3) unreturned copies were discarded. A cross-sectional survey design was adopted in the study.

Measure:-

The participants completed a self-report measure designed to assess their research attitudes and motivation. The 10-item Linkert type scale is scored in a 5-point response format, with high scores indicating a high research behavior. The reliability of the scale was obtained following a pilot study. Observation of the Cronbach's alpha coefficients revealed acceptable levels of internal consistency reliabilities of the instrument, which exceeded the cutoff rules-of-the thumb of .86 as recommended for study purposes (Kaplan & Saccuzzo, 2001).

Result:-

The respondents' mean and standard deviation scores are presented in Table 1 below. It shows the mean and standard deviation of the score on the difference between the university and polytechnic participants on research behavior. The result revealed a higher mean and standard deviation score ($M = 2.46$, $SD = 0.71$) for the university respondents compared to the polytechnic respondents' mean and standard deviation score ($M = 1.54$, $SD = 0.50$). Thus, the result indicates that university scholars have higher research behavior than their polytechnic counterparts in southeast Nigeria. Furthermore, a t-test was conducted to test the difference between the university and polytechnic scholars' research behaviors. There was a significant difference between the university and polytechnic lecturers on research behavior $t(94) = 1.121$, $p = 0.05$, as shown in Table 2. Thus, the expectation that there would be a significant difference between the university and polytechnic scholars on research behaviors was supported.

Table 1:- The table shows the Mean and Standard Deviation of participants' scores on the difference between university and polytechnic scholars on research behavior.

Institution	N	Mean	SD
University	49	2.46	0.71
Polytechnic	47	1.46	0.50

Table 2:- Table showing the t-test result comparing the difference between university and polytechnic scholars on research behavior.

Institution	N	Mean	SD	t	df	Sig
University	49	2.46	0.71	1.147	94	.000
Polytechnic	47	1.46	0.50			

Discussion:-

The present study aimed to compare research behavior in higher education institutions. In particular, the study examines the difference between university and polytechnic scholars on research behavior. The study's findings showed the university scholars' mean and standard deviation score ($M = 2.46$, $SD = 0.71$) and polytechnic ($M = 1.46$, $SD = 0.50$), showing that the university lecturers perform higher on research behavior than the polytechnic lecturers. Also, the t-test result, $t(94) = 1.121$, $p = 0.05$, indicated significant difference between the university and polytechnic lecturers on research behavior. Thus, the hypothesis suggesting a difference between the university and polytechnic scholars on research behaviors was affirmed. The result presupposes that most lecturers in the university sectors are more motivated and willing to engage in research-directed behaviors. Probably, the "publish or perish" syndrome associated with the university system could be the primary driver of research activities in the university system in general. Also, the career-long survival race for promotions and positions within the university hierarchies propel many scholars to seek academic publications to their credit through research development desperately.

Conversely, the finding shows poor research behavior in the polytechnic sector. It indicates that the scholars in the polytechnic system are more likely to engage in research activities. This revelation collaborates previous studies that

reported the low substance of research output from the polytechnic system among its academic staff (Chiemeke et al., 2009), suggesting that the polytechnic system has low contributions to the educational research development. The poor research behavior observed among the polytechnic respondents indicates that the sector is lagging in research productivity that characterizes the higher education ecosystem of every society. Thus, it shows that more efforts need to be invested in enhancing the research behavior of the academic staff of the polytechnics.

Conclusion:-

The present study investigated the difference between university and polytechnic lecturers on research behaviors. Ninety-six scholars from diverse academic disciplines were recruited for the study. It was hypothesized that there would be a significant difference between the university and polytechnic respondents on research behavior. The analysis revealed a statistically significant difference between the respondents on research behavior, thus, affirming the study's assumption. It was concluded that lecturers in the university system have more positive research behavior than their polytechnic counterparts. This revelation is essential in academia because it provides insight into the role of research behavior in lecturers' research participation. However, the self-report measure of research behavior and the sample size constitute a considerable limitation to generalizing the result of the study. Future research should use multiple data collection methods and employ more sample size. Notably, a better understanding of the determinants of scholars' research behavior would be relevant in the higher education institutions in Nigeria to push the academic system towards research-based and improve the culture of scientific inquiries. It is implied that lecturers' research behavior in the polytechnics would increase by linking research productivity with academic positions and promotions in the early career of polytechnic lecturers.

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