

DIGITAL IMMIGRANTS AND RESEARCH OUTPUT/PUBLICATION IN GOVERNMENT-OWNED UNIVERSITIES IN THE SOUTH-SOUTH REGION OF NIGERIA.

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Abstract

The study determined the relationship between digital immigration and research output/publication in government-owned universities in the South-South region of Nigeria. The explanatory cross sectional survey research design was adopted for the study. The population of the study consisted twenty-four thousand, seven hundred and ninety (24790) teaching staff across twenty-two (22) government-owned universities across the six (6) South-South States in Nigeria. After the application of Taro Yamene formula, the sample size of the study was three hundred and ninety-four (394) teaching staff across twenty-two (22) government-owned universities across the six (6) South-South States in Nigeria. After validation by the supervisors and two other experts in the Department of Office and Information Management, Cronbach alpha was used to test the reliability of the instrument. A total of three hundred and ninety-four (394) copies of the questionnaire was administered to the respondents by the researcher with the help of two research assistants and 352 copies were retrieved. The univariate analysis was carried out using mean and standard deviation, while the bivariate analysis was done using Pearson Product Moment Correlation in SPSS version 27.0. The Partial Correlation was used to run the multivariate analysis. Pearson Product Moment Correlation Coefficient was used in testing the hypotheses one to nine, while hypothesis ten was tested using Partial Correlations. The findings revealed that a significant positive relationship exists between dimensions of digital fluency, such as digital natives, digital immigrants, and digital outcasts and measures of teaching staff performance in government-owned universities in the South-South region of Nigeria, such as teaching effectiveness, research output/publications, and teaching commitment. The study concluded that sustained investment in digital infrastructure, continuous staff technological development, and inclusive digital transformation policies are essential for enhancing teaching staff performance and advancing the global competitiveness, innovation, and sustainability of government-owned universities in the South-South region of Nigeria. Hence, it was recommended amongst others that the management of universities in South-South, Nigeria should establish advanced digital innovation hubs within faculties to encourage digitally fluent lecturers to develop technology-driven teaching models, virtual research collaborations, and multimedia instructional resources that can further enhance teaching effectiveness and research productivity.

Keywords: Digital Immigration, Research Output, Teaching Effectiveness, Government-owned University, Digital Infrastructure

Introduction

In recent years, there has been growing concern about the declining quality of teaching staff performance in some government-owned universities in the South-South region of Nigeria. Many lecturers struggle to meet the expectations of effective teaching, robust research productivity, and strong teaching commitment. Teaching effectiveness is often undermined by outdated instructional practices, overreliance on traditional lecture methods, and limited adoption of innovative pedagogies, leading to poor student engagement, delayed grading, and late submission of results. Similarly, research output and publications remain low, as many lecturers produce few published works, rarely attend conferences, and engage minimally in collaborative research (Chigbata & Etudor-Eyo, 2025). This trend reduces institutional visibility and weakens global competitiveness. Furthermore, teaching commitment is often poor, reflected in irregular class attendance, incomplete course coverage, and weak supervision of student projects. According to Opara and Onyeri (2023),

these lapses harm educational quality and diminish student satisfaction. Despite managerial and governmental interventions, bureaucratic bottlenecks, poor motivation, and lack of technological integration continue to hinder substantial improvements in lecturers' performance.

It is obvious that there is an increasing scholarly attention on digital competencies and academic performance, but a notable gap remains in understanding how digital fluency relates with teaching staff performance in government-owned universities in Nigeria's South-South region. For instance, Bartholomew (2025) examined digital literacy and job performance in Nigerian tertiary institutions but did not distinguish between levels of digital fluency such as digital natives, immigrants, and outcasts. Fulgence (2020) explored digital fluency among teacher educators in Tanzania, emphasizing its role in instructional innovation but overlooking the dimensions of performance such as teaching effectiveness, research output, and commitment. Similarly, Mardiana (2024) assessed lecturers' digital literacy skills and found positive perceptions but did not link these skills to measurable performance outcomes. Edo and Egwurugwu (2023) investigated ICT use and lecturers' productivity in public universities but failed to examine how varying degrees of digital proficiency affect specific teaching performance indicators. Likewise, Chigbata and Etudor-Eyo (2025) focused solely on digital research skills and academic output, excluding other facets of performance. Therefore, while these studies affirm the relevance of digital competencies, none provide a comprehensive analysis of how digital fluency, across its categories of digital natives, immigrants, and outcasts, relates to teaching effectiveness, research output, and teaching commitment in the unique context of government-owned universities in the South-South region of Nigeria. This gap underscores the need for the present study.

Research Hypothesis

The hypothesis will be tested at 0.05 level of significance in the course of the study.

H₀₁: There is no significant relationship between digital immigrants and research output/publication in government-owned universities in the South-South region of Nigeria.

Digital Immigrants

Digital immigrants is a term first coined by Marc Prensky in 2001 to describe individuals who were not born into the digital age but have had to adapt to and learn to use digital technologies later in life. In contrast to digital natives, who have grown up in a world surrounded by technology, digital immigrants have had to learn how to use technology, often requiring effort and adaptation. In the context of government-owned universities in the South-South region of Nigeria, digital immigrants are typically faculty members, older students, and administrators who did not grow up with the internet, smartphones, and social media, but now use these tools in their professional and personal lives. Marc-Prensky's (2001) definition of digital immigrants focuses on the generational divide between those who were born before the widespread use of digital technology and those who have grown up with it. Prensky described digital immigrants as those who were born before the widespread use of digital technology and who have had to "learn" the new language of computers and the internet. According to Prensky, while digital immigrants are proficient in using technology, they do so with the mindset and habits they developed before the digital age, which often means they have to adjust to new technology more consciously than digital natives.

Bennett, et al. (2008) explain that digital immigrants are not only individuals who were born before the digital age but also those who have made a conscious effort to adapt to technology. However, they argue that digital immigrants are more likely to rely on traditional communication methods, such as face-to-face interaction, and may still be unfamiliar with the informal, instant communication that digital natives often use. This divide creates differences in how digital immigrants and digital natives engage with digital tools, especially in educational settings. Jones and Shao (2011) further emphasize that digital immigrants may have learned to use technology, but their approach to it tends to be more structured and methodical. Unlike digital natives, who tend to interact with technology in an intuitive and fluid manner, digital immigrants often approach new technologies

with caution and prefer to understand the functionality and purpose of digital tools before fully integrating them into their lives. This cautiousness can sometimes result in a slower adoption of new technologies in university environments, where digital natives expect seamless integration of digital tools. A more cognitive-oriented definition is provided by Tapscott (2009), who points out that digital immigrants face challenges not only in using digital tools but also in adjusting their cognitive processes to accommodate the fast-paced, multitasking world of the digital age. Digital immigrants are typically less skilled at juggling multiple streams of information and may struggle to work as efficiently with digital tools that demand rapid task-switching and constant attention. This difficulty in adapting to multitasking can affect the productivity and teaching methods of digital immigrant faculty members in Nigerian universities, where students are increasingly relying on digital platforms for learning.

Selwyn (2009) adds to the definition by describing digital immigrants as cautious technology users, often skeptical of the value of integrating digital tools into their professional or personal routines. This skepticism can be especially evident in higher education, where digital immigrants may not see the need to adopt new technologies or may prefer to stick to traditional teaching methods. This hesitation can create barriers to the integration of digital technologies into teaching practices in Nigerian universities, particularly when faculty are resistant to using learning management systems, online assessments, or digital classrooms. Bennett and Maton (2010) argue that digital immigrants maintain some of their "old-school" ways of thinking and communicating. This includes an attachment to face-to-face interaction, printed materials, and structured, linear ways of learning. While digital natives are accustomed to non-linear learning paths, such as exploring interconnected information on the web, digital immigrants are more likely to value more traditional, step-by-step approaches. In the classroom, this may manifest as a preference for lectures, note-taking, and paper-based assignments, rather than interactive, digital, or collaborative methods that digital natives are comfortable with. Oblinger and Oblinger (2005) describe digital immigrants as individuals who have a more fixed, traditional view of education, where teachers control the flow of information and students are expected to absorb knowledge in a passive manner. This traditional model, where the focus is on individual learning and one-way communication, contrasts with the collaborative and interactive model that digital natives often prefer, where they actively engage with content, peers, and instructors through digital platforms.

Research Output/Publications

Research output in government-owned universities serves as a fundamental marker of academic success and institutional advancement. Research output refers to the academic publications, contributions to knowledge, and scholarly works produced by faculty members, such as journal articles, conference papers, books, book chapters, and technical reports. According to Stokes (2015), research output is an essential indicator of intellectual activity in universities, reflecting the depth of engagement by faculty members in producing new knowledge and contributing to academic discourse. The importance of research output in Nigerian universities cannot be overemphasized as it affects the reputation of the institution, the quality of teaching and learning, and the ability of the institution to attract funding and collaborations. One of the core aspects of research output is its relevance to the academic community and society at large. Research output is not solely about producing a high quantity of publications but is measured by the quality, impact, and innovation of these works. According to Merton (1973), the value of academic research is primarily determined by its contribution to solving real-world problems and expanding knowledge within a particular field. For universities in the South-South region of Nigeria, the ability to produce research that addresses local, regional, and national challenges is crucial. For example, research on environmental sustainability, public health, and education reform is highly relevant in this region, where challenges such as oil spills, malaria, and inadequate infrastructure persist.

The quantity and quality of research output are significantly influenced by several factors, including access to resources, institutional support, and the socio-economic context of the region. One critical

factor is financial support for research activities. Research is inherently resource-intensive, requiring funds for acquiring books, materials, equipment, and access to academic databases. According to Ekpo (2019), inadequate funding for research in Nigerian universities has led to a decline in research output, as many lecturers are unable to access the tools and resources necessary for conducting high-quality research. Government-owned universities in the South-South region often face financial constraints, which hinder faculty members' ability to pursue large-scale or groundbreaking research projects. As Okebukola (2012) asserts, a lack of modern research facilities, such as laboratories, computing facilities, and access to international academic databases, impedes the ability of researchers to produce high-quality publications. In many universities in the South-South region, research infrastructure is outdated or insufficient, limiting faculty members' ability to conduct advanced research. The absence of well-equipped laboratories, research centers, and collaborative workspaces further inhibits faculty members' ability to pursue their research effectively, thereby reducing the volume and impact of their academic output.

Social Presence Theory (Short, Williams and Christie, 1976)

Social Presence Theory was propounded by Short, Williams, and Christie in 1976, who conceptualized social presence as the degree to which a communication medium enables users to perceive others as psychologically present and "real" in mediated interaction (Short et al., 1976). The theory argues that communication channels vary in their capacity to transmit verbal and non-verbal cues, thereby influencing intimacy, immediacy, and interpersonal involvement. In educational and organizational contexts, higher levels of perceived social presence are associated with greater engagement, satisfaction, and collaborative effectiveness in computer-mediated environments (Lowenthal, 2010). By emphasizing the relational and perceptual dimensions of mediated communication, Social Presence Theory remains foundational in understanding interaction quality in digital environments and continues to inform contemporary research on online learning and professional communication. The theory assumes that:

- i. A medium's social effects are principally caused by the degree of social presence which it affords to its users;
- ii. By social presence is meant a communicator's sense of awareness of the presence of an interaction partner is highly considered. This is important for the process by which man comes to know and think about other persons, their characteristics, qualities and inner states; and
- iii. Increased technological presence leads to a better person perception.

Implications of Social Presence Theory to the Present Study

The implication of Social Presence Theory for this study lies in explaining how differences in digital fluency, digital natives, digital immigrants, and digital outcasts, may influence mediated interaction and, consequently, teaching staff performance in government-owned universities in the South-South region of Nigeria. Short et al. (1976) argue that communication media vary in their capacity to convey immediacy and the sense of "realness" between participants. In digitally mediated academic settings such as virtual classrooms and learning management systems, higher digital fluency enables lecturers to project stronger social presence through prompt feedback, interactive delivery, and sustained online engagement, thereby enhancing teaching effectiveness and teaching commitment. Conversely, limited digital competence may weaken engagement and restrict collaborative research productivity. Empirical developments of the theory indicate that perceived social presence significantly predicts satisfaction and performance in online learning environments (Lowenthal, 2010). Accordingly, disparities in digital fluency among academic staff are likely to shape instructional quality, research collaboration, and overall professional performance within the universities studied.

Research Design

The explanatory cross sectional survey research design will be adopted for this study. The population of the study will consist of twenty-four thousand, seven hundred and ninety (24790) teaching staff across twenty-two (22) government-owned universities across the six (6) South-South States in Nigeria. A number of stages of sampling with varying sampling levels was conducted in tandem with the population distribution. The sample size for this study was first determined using the Taro Yamene Formula. Taro Yamene Formula was selected because of its ability to select a convenient sample from a huge population. The study will make use of primary data. The collection of primary data will be done using a questionnaire designed by the researcher.

A properly designed three hundred and ninety-four (394) copies of the questionnaire was administered to the targeted audience, assisted by two independent research assistants. With the help of these research assistants, the researcher was able to retrieve substantial copies enough for the analyses. The presentation and analysis of data/results was carried out using Statistical Package for Social Science (SPSS). The data analysis was done using descriptive analysis (univariate analysis), bivariate analysis, and multivariate analysis. The univariate analysis was carried out using mean and standard deviation, while the bivariate analysis will be done using Pearson Product Moment Correlation in SPSS version 27.0. The Partial Correlation was used to run the multivariate analysis.

Results

Digital Immigrants and research output/publication

H₀₁: There is no significant relationship between digital immigrants and research output/publications in government-owned universities in the South-South region of Nigeria.

Table 1: Correlations between Digital Immigrants and output/publication

		Digital Immigrants	Research Output/Publications			
Pearson	Digital Immigrants	Correlation Coefficient	1.000	0.654**	0.577**	0.707**
		Sig. (2-tailed)	.	.000	.000	.000
		N	352	352	352	352
		Correlation Coefficient	0.654**	1.000	0.707**	0.891**
	Research Output/Publications	Sig. (2-tailed)	.000	.	.000	.000
		N	352	352	352	352
		Correlation Coefficient	0.577**	.	1.000	0.646**
		Sig. (2-tailed)	.000	.000	.	.000
		N	352	352	352	352
		Correlation Coefficient	0.707**	0.891**	0.646**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	352	352	352	352

****.** Correlation is Significant at the 0.01 level (2-tailed).

Source: SPSS Output, 2026

Table 1 above shows r value of 0.577 at a significance level of 0.00 which is less than the chosen alpha level of 0.05 for the hypothesis relating digital immigrants and research output/publications. Since the significance value is less than the alpha level of 0.05, the null hypothesis (H_{01}) which states that there is no significant relationship between digital immigrants and research output/publications in government-owned universities in the South-South region of Nigeria, was rejected. This means that there is a relatively strong positive relationship between digital immigrants and research output/publications in government-owned universities in the South-South region of Nigeria.

CONCLUSION

The study showed that the availability of functional digital infrastructure serves as a critical enabling factor that determines the extent to which lecturers' digital capabilities can translate into meaningful academic outcomes. Indeed, in the knowledge-driven era of the twenty-first century, digital fluency has emerged not merely as a professional skill, but as the defining bridge between academic relevance and institutional excellence.

RECOMMENDATIONS

Based on the conclusion of this study, the following recommendations were made:

1. University administrations should organize structured and non-intimidating digital transition programmes that gradually expose lecturers to modern educational technologies through practical workshops, guided simulations, and hands-on academic technology training.
2. Institutions should develop hybrid teaching support systems that combine traditional pedagogical approaches with simplified digital platforms to help lecturers who are cautious about technology adoption adjust comfortably without compromising instructional quality.
3. Universities should provide personalized technical support units and digital coaching services to assist lecturers experiencing challenges with technological adaptation, thereby improving confidence, teaching commitment, and research efficiency.

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