

Open access publishing, predatory journal traps, and the career progression of academic staff in Federal Universities in South-South Nigeria

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Abstract

This study examined the combined effect of open access (OA) publishing awareness and predatory publishing exposure on the career advancement of academic staff in two federal universities in South-South Nigeria: the University of Benin and the University of Port Harcourt. A descriptive survey design was adopted. A sample of 300 lecturers was drawn from a population of 2,347 academics using the Taro Yamane formula. A structured questionnaire validated by experts (Cronbach's alpha = 0.83) was used for data collection. Frequency counts, percentages, and chi-square tests of independence were employed for analysis. Respondents showed high awareness of OA publishing; however, a large proportion had received predatory journal solicitations and some had published in outlets later suspected to be predatory, with quantifiable detrimental effects on promotion outcomes. Both hypotheses were supported at $p < .05$. The study recommends that universities institutionalize predatory journal screening policies, integrate publishing literacy into staff development, and align promotion criteria with internationally recognized quality indices such as Scopus, Web of Science, and DOAJ.

Keywords: Open Access Publishing, Predatory Journals, Career Progression, Academic Staff, South-South Nigeria, Scholarly Communication, Nigerian Universities

Introduction

Open Access (OA) publishing has emerged in the last two decades to change the face of scholarly communication in Nigeria and the rest of the world. The main principle of OA is free online access to peer-reviewed research and thus to remove subscription barriers that have traditionally limited access to information especially in low- and middle-income countries. This transition has been particularly significant for Nigerian scholars considering the absence of institutional access to subscription-based databases. In a complete bibliometric analysis, Piwowar et al. (2018) observed that OA articles are cited about 18 percent more often than articles that are subscription-based, with significant consequences in environments where publications are the primary currency for academic promotion.

But what few predicted was that the infrastructure that enabled legitimate OA publishing also enabled an industry of exploitation. The term “predatory publishing” was coined by American librarian Jeffrey Beall around 2008-2010, as the practice of charging Article Processing Charges (APCs) without providing real peer review, reputable editorial oversight, reputable database indexing or reliable archiving. Grudniewicz et al. (2019), later published a consensus definition in nature which was developed by multiple stakeholders. They defined predatory publishers as those that prioritise financial self-interest at the expense of scholarship, characterised by false or misleading information, and aggressive, indiscriminate solicitation. Cortegiani et al. (2019) looked at the journals from Beall-derived lists in anaesthesiology and found that most failed basic tests of credibility, did not have named editors and made unverifiable claims of being indexed.

The South-South geopolitical zone of Nigeria has many federal universities with active research mandate including Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers states, notable among them are the University of Benin (UNIBEN) and the University of Port Harcourt (UNIPORT).

However, there has been little research on the relationship between awareness of OA publishing, vulnerability to predatory publishing, and academic career outcomes in this particular context. Furthermore, Orji (2026) recently stated that poor Internet access, inadequate ICT infrastructure, and expensive APCs remain barriers to OA engagement in state-owned universities in the zone, mirroring wider African trends (Onaolapo et al., 2025; Nabyonga-Orem et al., 2020).

Nigerian federal universities have promotion guidelines set by the National Universities Commission (NUC) which require evidence of research productivity mainly through peer-reviewed publications. Academics who accidentally publish in predatory journals risk having those publications excluded at promotion review, potentially derailing years of work. This risk is exacerbated by weak institutional guidance, lack of research funding for legitimate APCs and a publishing literacy gap that leaves many academics ill-equipped to distinguish between legitimate and predatory outlets. Against this backdrop, the current study sought to assess the level of awareness of OA publishing, investigate the extent of exposure to predatory publishing and trace the implications for career progression of lecturers in UNIBEN and UNIPORT.

Statement of the Problem

Nigerian universities encounter growing pressures to publish or perish, with the quantity and perceived quality of scholarly publications playing a crucial role in determining promotion and career advancement. OA publishing has the potential for a global reach and citation impact that has not been possible for many Nigerian scholars. But the predatory side of the OA market has turned those same possibilities into traps for the unwary. The problem is more serious in the South-South zone where the federal universities are resource-limited and the institutional support for publishing is not available.

Again, Onaolapo et al. (2025) found that over 50% of the African researchers sampled had no dedicated research funding. This has a direct impact on their ability to pay legitimate APCs and drives some to cheaper and lower-quality publishing options. What is missing from the literature is detailed empirical evidence, specific to the South-South context, measuring the number of academics exposed to predatory solicitations, whether that exposure resulted in actual publications, and what the downstream implications for career progression have been. This study is primarily designed to fill this gap.

Research Questions

The following research questions guided the study:

1. What is the level of awareness of open access publishing among academic staff in the selected federal universities in South-South Nigeria?
2. To what extent have academic staff in selected universities been exposed to predatory publishing practices?
3. What is the relationship between OA publishing awareness and predatory publishing exposure among respondents?
4. What is the relationship between predatory publishing and the career progression of academic staff in the selected universities?

Hypotheses

H₀₁: There is no significant relationship between open access publishing awareness and predatory publishing exposure among academic staff in the selected federal universities in South-South Nigeria.

H₀₂: There is no significant relationship between predatory publishing and the career progression of academic staff in the selected federal universities in South-South Nigeria.

Literature Review

Open Access Publishing: Concepts and Dimensions

The established conceptual catalyst for the open access movement came with the 2002 Budapest Open Access Initiative, which called for free and unrestricted online access to peer-reviewed scholarly literature. Piwowar et al. (2018) performed one of the most extensive bibliometric studies to date, finding that by 2015, roughly 28 percent of scholarly literature was published in some form of open access and that OA articles received substantially more citations than subscription articles across disciplines and time periods. These citation advantages are especially relevant to researchers in sub-Saharan Africa. Nabyonga-Orem et al. (2020) highlighted the paradox of countries with the highest disease burden producing less than one percent of the world's research publications, and identified APC costs as a key structural barrier to African researchers' access to reputable OA channels.

Understanding the categories of OA publishing helps contextualise the choices academics make. Gold OA, where authors or their institutions pay article processing charges (APCs) to publish in fully open-access journals, is the most visible commercial model and, crucially, the most vulnerable to predatory exploitation. The use of Green OA (whereby manuscripts are deposited in institutional or disciplinary repositories without APCs) has not been widely exploited in Nigerian

universities due to poor repository infrastructure. The no-fee model for authors or readers known as Diamond OA is gaining international traction, but is poorly understood in many Nigerian academic circles. Bosah, Okeji & Baro (2017) found that there was relatively widespread awareness of the gold and green routes but librarians often based their advice regarding publishing on international reputation and indexing status. The costs of APCs were consistently cited as a deterrent. Orji (2026) surveyed 221 academic staff in universities in the South-South zone and found that overall awareness of OAs was rated as moderate with the most frequently cited barriers being inadequate ICT infrastructure, unreliable internet connectivity, high APCs and poorly developed institutional repositories.

Predatory Publishing: Nature, Scope, and Impact

Predatory publishing is one of the most debated aspects of modern scholarly communication. Grudniewicz et al. (2019), through a multistakeholder consensus process involving scholars and publishers from ten countries, produced the most widely accepted working definition: predatory publishers systematically place self-interest above scholarship through the provision of false or misleading information, deviation from best publication practices, and aggressive and indiscriminate solicitation. Shamseer et al. (2017) conducted a cross-sectional comparison of potential predatory, legitimate OA, and subscription-based biomedical journals, identifying observable markers such as the absence of named editors, unverifiable indexing claims, rapid acceptance, and poor web design.

Predatory publishing is well beyond the fringes of the academic world as confirmed by empirical research in Nigeria. Ajuwon & Ajuwon (2018) outlined the dilemma of the Nigerian academic who, faced with institutional pressure to publish internationally and perceived practical disadvantages of accessing credible journals, makes the rational but ultimately harmful choice of cheaper, faster outlets. Shen & Bjork (2015) found that the predatory market was growing fastest in countries like Nigeria, where institutional promotion checks were weakest. Cortegiani et al. (2019) found predatory journals in health sciences often falsely claim DOAJ indexing. In the Pan African Medical Journal, Tarkang & Bain (2019) argued that Africa's long-term scholarly

reputation rests on publishing quality research, and institutional and policy interventions are overdue.

Open Access, Predatory Publishing and Academic Career Development

The quality of scholarly publications and the progression of academic career are well-established and increasingly formalised in the Nigerian context. NUC guidelines and institutional promotion frameworks have stipulated minimum publication thresholds at all academic cadres with increasing emphasis on the use of journal credibility indicators such as Scopus, Web of Science or DOAJ indexing as proxies for publication quality. The potential for predatory publishing is highest in environments with the weakest institutional quality checks, which is exactly the environment that characterises many universities in the South-South zone (Shen & Bjork, 2015).

There is a strong case for credible OA publishing as a career strategy. OA articles are cited more, contributing to promotion-related metrics (Piwowar et al., 2018). The discourse on OA in Nigeria has moved from ethics of access to ethics of strategic investment in one's career and publishing in Scopus or Web of Science indexed journals is becoming a hallmark of quality research. Bosah et al. (2017) found that researchers who had a better understanding of journal indexing mechanisms were more capable of choosing credible publication venues. This implies that publishing literacy is a mediator between OA awareness and career-relevant publication outcomes. This result has direct implications for the design of university staff development programmes.

Methodology

The study adopted a descriptive survey research design, suitable for the systematic collection of quantifiable data from a defined population without experimental manipulation. The study population comprised academic staff of all lecturers' cadres from Lecturer I and II to Senior Lecturer, Associate Professor and Professor in UNIBEN and UNIPORT. Based on verified records from the Establishments Offices of the two institutions, the total population at the time of data collection was 2,347, 1,267 at UNIBEN and 1,080 at UNIPORT.

The minimum sample size was determined by using the formula of Taro Yamane, 1967 $n = \frac{N}{1 + Ne^2}$ where n = sample size, N = population, e = margin of error (0.05). The minimum sample size was about 342. We sent out three hundred and forty-two questionnaires and our estimated non-response rate was around 12 percent. The usable return of 300 questionnaires received gave a response rate of 87.7 percent. The sample quota was distributed between the two universities through proportionate stratified random sampling. UNIBEN had 160 respondents while UNIPORT had 140.

Data was collected by using structured questionnaire, Open Access and Predatory Publishing Questionnaire (OAPPQ). The OAPPQ was partly adapted and developed by the researcher. The instrument had five sections: Section A collected demographic data; Section B asked about awareness and engagement with OA publishing; Section C asked about exposure to predatory publishing; Section D asked about career progression metrics; and Section E asked about qualitative insights from open-ended questions. Sections B to D were rated on a four-point Likert-type scale, ranging from Strongly Agree, Agree, Disagree, to Strongly Disagree. A five point scale was deliberately avoided to avoid mid-point neutrality bias (Dawes, 2008).

Content validity was established through expert review by three senior faculty members in library and information science and educational research. Face validity was confirmed by a panel of five practising lecturers. Reliability testing was conducted with 30 academics from the University of Delta, who were not involved in the main study. The Cronbach's alpha coefficient was 0.83, indicating high internal consistency. Data analysis was performed using SPSS version 27. Descriptive statistics (frequency counts and percentages) addressed Research Questions 1 and 2. Both hypotheses were tested using chi-square tests of independence at the 0.05 level of significance.

Analysis and Findings

Demographic Profile of Respondents

Table 1: Demographic Profile of Respondents (N = 300)

Variable	Category	Frequency	Percentage (%)
Sex	Male	193	64.3
	Female	107	35.7

	Total	300	100.0
Rank	Lecturer I/II	128	42.7
	Senior Lecturer	91	30.3
	Associate Professor	51	17.0
	Professor	30	10.0
	Total	300	100.0
Years of Service	1 to 5 years	74	24.7
	6 to 10 years	103	34.3
	11 to 20 years	87	29.0
	Above 20 years	36	12.0
	Total	300	100.0
University	University of Benin	160	53.3
	University of Port Harcourt	140	46.7
	Total	300	100.0

Source: Field Survey (2026)

Table 1 shows that 64.3 percent of respondents were male and 35.7 percent female, broadly conforming to the staffing profile of Nigerian federal universities. The largest rank group was Lecturer I/II (42.7%), followed by Senior Lecturers (30.3%), Associate Professors (17.0%), and Professors (10.0%), reflecting the typical pyramidal structure of Nigerian university staffing. The 6 to 10 year service bracket accounted for the largest experience group (34.3%), indicating a mid-career workforce. UNIBEN respondents constituted 53.3 percent and UNIPORT 46.7 percent, roughly proportional to their respective staff populations.

Open Access Publishing Awareness and Engagement

Table 2: Respondents' Awareness and Engagement with Open Access Publishing

Statement	SA	A	D	SD
I know that open access publishing allows for research being available online for free.	168	87	29	16
I am aware of the distinction between gold and green open access roads.	89	110	62	39
I am the author of at least one paper published in an open access journal.	112	93	55	40
Open access publishing enhances citations of research outputs.	143	97	38	22
Open access publishing is encouraged by my institution.	78	102	76	44
I think APCs are restricting my involvement in OA publishing.	131	99	45	25

Source: Field Survey (2026). SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree

Table 2 indicates that 255 respondents (85.0%) agreed or strongly agreed that OA publishing makes research available free online, which implies a reasonable level of baseline awareness. But at the operational level complexity creeps in. Almost a third of respondents (33.7%) were unaware of the difference between gold and green OA routes, indicating that awareness is not specific enough for a substantial proportion of the sample. Only 60.0 percent agreed that their institutions support OA publishing, meaning four in ten respondents felt their institutions were not actively supportive, consistent with Orji's (2026) findings in state-owned universities in the same zone. In addition, 76.7 percent agreed that APCs affect their OA participation negatively. This finding supports Nabyonga-Orem et al. (2020) and Onaolapo et al. (2025), who argue that APC costs are a fundamental structural barrier for African researchers. The data show that while there is awareness of OA, the institutional support needed to translate that awareness into consistently sound publication decisions has not kept pace.

Predatory Publishing Exposure Among Respondents

Table 3: Respondents' Exposure to Predatory Publishing Practices

Statement	SA	A	D	SD
I have been receiving unsolicited e-mail invitations to write for journals I do not know.	198	71	21	10
I have published in a journal I later suspected was predatory.	62	88	91	59
Manuscripts are submitted after checking journal credentials.	95	108	65	32
There are some journals that my colleagues have warned me about because of predatory issues.	114	103	53	30
I know about Beall's List or other predatory journal lists.	71	84	88	57
There has been a negative impact of predatory publishing on the academic reputation in my department.	109	91	62	38

Source: Field Survey (2026). SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree

Table 3 presents remarkable findings on the exposure to predatory publishing. Almost all (89.7 percent) said they had received unsolicited marketing emails from unknown journals. More importantly, 50.0 percent reported having published in a journal that they later suspected was predatory. This does not imply passive exposure, but active decisions to publish with attendant professional consequences. There is a significant internal inconsistency within the data. Though 67.7 percent of respondents reported checking journal credentials before submitting, half of the sample indicated they harbour suspicions about predatory publications, implying that the

verification processes are less rigorous or systematic than respondents claim. Only 51.7 percent were aware of Beall's List or other predatory registries, meaning nearly half had no access to a widely used vetting tool, aligning with the findings of Shamseer et al. (2017) that predatory awareness tools are underutilised in environments where publishing literacy is not formally institutionalised. Furthermore, 66.7 percent of respondents reported that predatory publishing had damaged the reputation of their department, which corroborates the communiqué of the Nigerian Academy of Science (2022) on the damage predatory publishing has on institutional credibility.

Career Progression Implications

Table 4: Career Progression and Publishing Outcomes

Statement	SA	A	D	SD
Journal publications in reputable outlets have contributed to my promotion.	182	83	22	13
Publishing in open access journals has helped attract international collaborators.	97	116	56	31
Papers published in predatory journals were excluded from my promotion dossier.	118	94	56	32
My institution has clear guidelines distinguishing legitimate from predatory journals.	44	71	107	78
Open access publishing has positively affected my research visibility.	138	101	41	20

Source: Field Survey (2026). SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree

Table 4 points to the professional consequences of publishing. Most respondents, 88.3 percent, stated that being published in well-known journals had directly helped them in being promoted, highlighting the importance of academic publication in academic promotion. Most crucially, 70.7 percent indicated that predatory journals had led to their papers being demoted from their career portfolios, which means the loss of publication credit, and possible years of delayed career advancement, for those impacted. Most academics are making these decisions without support from institutions; the most significant governance finding is that only 38.3 per cent said that their institutions have clear and formalised policies to distinguish legitimate from predatory journals. A positive finding was that 79.7 per cent reported that OA publishing had raised their research visibility, thus giving empirical support to the bibliometric findings of Piwovar et al. (2018). The results of this study verifies the double-edged challenge of publication faced by African academics as identified by Tarkang & Bain (2019).

Hypothesis Testing

Hypothesis One

H₀₁: There is no significant relationship between open access publishing awareness and predatory publishing exposure among academic staff in the selected federal universities in South-South Nigeria.

Table 5: Chi-Square Test of Independence: OA Awareness and Predatory Exposure

Variable	Chi-Square (x ²)	Df	p-value
OA Awareness by Predatory Publishing Exposure	47.38	9	.000*
OA Engagement by Career Progression Score	39.14	9	.000*
Journal Verification Habit by Predatory Exposure	28.76	6	.000*

*Significant at $p < .05$. Source: Field Survey (2026); df = degrees of freedom

The results of the chi-square tests shown in Table 5 suggest that all variables pairs are significantly associated with one another with all p values being well less than 0.05. It was found that exposure to predatory publishing was the greatest association with the OA awareness measure ($x^2 = 47.38$, $df = 9$, $p = .000$), indicating that those who don't have a strong background of practical experience with OA routes or journal credential verification are at a much higher risk of predatory publication exposure. Thus, the null hypothesis is rejected. This finding suggests that a lack of publishing literacy (rather than just not knowing that predatory journals exist) is a critical structural factor in predatory vulnerability. This aligns with Orji (2026) who attributed this to the lack of institutional support for OA in South-South Nigerian universities and weak navigational capacity. The policy implication is obvious: Publishing Literacy campaigns are not enough; structured skills-based publishing literacy interventions are needed.

Hypothesis Two

H₀₂: There is no significant relationship between predatory publishing and the career progression of academic staff in the selected federal universities in South-South Nigeria.

Table 6: Chi-Square Test of Independence: Predatory Publishing and Career Progression

Variable	Chi-Square (x ²)	Df	p-value
Predatory Journal Publication by Promotion Outcome	53.91	9	.000*

Institutional Guideline Availability by Career Progression	31.47	9	.001*
Predatory Reputation Effect by Research Visibility	42.05	6	.000*

*Significant at $p < .05$. Source: Field Survey (2026); df = degrees of freedom

The results of the Chi Square analyses are displayed in table 6, indicating statistically significant relationships between predatory publishing behaviour and career progression outcomes. The finding with the strongest correlation was between predatory journal publication and promotion outcomes, $\chi^2 = 53.91$, $df = 9$, $p = .000$, which was the most career-relevant finding in the study. The relationship between institutional guideline availability and career progression ($\chi^2 = 31.47$, $df = 9$, $p = .001$) emphasizes that institutional policy is a factor that moderates institutional outcomes—where guidelines exist, academics have a better chance of making decisions that have a positive impact on their career paths rather than negative. The null hypothesis is turned down. This is consistent with the research of Piwowar et al. (2018) who found that credible OA publishing over time does indeed lead to citation and visibility benefits that translate to promotion-relevant metrics, and with Shen & Bjork (2015) who identified that predatory publishing effects are strongest in less-resourced environments with a weak institutional context. More stringent screening mechanisms in institutions are strongly recommended by the Nigerian Academy of Science (2022) which the present study supports.

Summary of Findings

The study explored the cross-section of OA publishing awareness, exposure to predatory publishing and academic career trajectory in two federal universities in South-South Nigeria. There were several related findings. While roughly 85% of respondents have general knowledge and understanding of OA publishing, there is a lack of operational knowledge and a significant number of respondents are unable to define the difference between OA routes or explain APC structures, meaning it's not a consistent guide to sound publishing decisions.

Second, predatory publishing was everywhere. Almost everyone indicated that they received unsolicited solicitations that they considered predatory. A disturbing half indicated that they published in journals they suspected were predatory. Most respondents said that they check journal credentials before submitting manuscripts. However, the differences between the reported checking practices of journals and the reported practices of predatory journals suggest that checking practices may not be as strict or thorough as respondents believe.

Third, the career damage was real and immediate.” The majority of respondents reported that predatory publications were not included in promotion dossiers (71 percent), pointing to the need for policy attention to be paid urgently. But less than 40% said their institutions had clear, formal guidance on distinguishing predatory from legitimate journals, suggesting a huge governance gap at the root of the problem.

Third, the Chi-square analyses demonstrated statistically significant relationships for both hypotheses: Lower OA publishing literacy was significantly associated with higher levels of exposure to predatory publishing. Higher levels of exposure to predatory publishing were significantly associated with negative career progression outcomes. Together, these results provide strong evidence for an institutional, rather than individual, knowledge gap as the predatory publishing problem.

Conclusion

The study provides empirical evidence that predatory publishing is a structural problem that threatens the careers of academic staff and the credibility of academic institutions in the country, as long as it has been expressed anecdotally in the academic community. UNIBEN and UNIPORT data provide clear examples of the prevalence of exposure to predatory journals, the quantifiable career implications of publication decisions, and the inadequacy of institutional structures to prevent exposure to predatory journals in the majority of cases. The study also confirms at the same time the real significance of credible OA publishing. Piwowar et al. (2018) provide bibliometric evidence of the positive effect of legitimate OA publications on research visibility and career progress. The challenge is not to discourage OA publishing, but to build the literacy and institutional infrastructure to help academics confidently navigate the OA landscape without falling into the predatory corners of it. This paper contributes to the growing body of empirical work on scholarly communication in sub-Saharan Africa by providing geographically-specific information from the South-South zone, a context in need of more scholarly research and study. The findings clearly indicate the need for coordinated action by university management, library profession, academic unions and regulatory bodies like NUC and TETFund. The university libraries have great potential to have an institutional leadership role in shaping the agenda of information literacy, since the institution already has a mandate of information literacy.

Recommendations

Based on the results of this study, the following recommendations are made:

There should be formal policies towards vetting of journals by academic staff in the Federal Universities of the South-South region documenting their evidence of indexing status in journals such as Scopus, Web of Science and listing in DOAJ. The implementation should be coordinated by the Establishments Offices and library management in order to both make it administratively and technically feasible.

It is recommended that the literacy workshop be designed as a part of the on-going staff in-service training in university libraries, especially in UNIBEN and UNIPORT. This will cover how to identify predatory journals, how to use the DOAJ and other verification resources, APC structures and effective navigation of the OA landscape. New academic staff should be made to attend sessions and refreshers should be provided to continuing staff.

The National Universities Commission (NUC) should explicitly incorporate the standard on publishing ethics and awareness of predatory journals in the minimum academic requirements framework and ensure that to be assessed during accreditation exercises, institutions should have a publishing literacy infrastructure. This would take the responsibility from the individual universities to the system level.

Funding agencies like TETFund should explore the possibility of subsidy schemes to enable academics publish in good gold Open Access journals without the prohibitive cost. However, one dominant structural factor is the financial hurdle of legitimate APC payment which has forced scientists to seek alternative, unreliable payment sources for access to journals (Nabyonga-Orem et al., 2020; Onaolapo et al., 2025).

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