REWARD SYSTEM AND RESEARCH PRODUCTIVITY OF LIBRARIANS IN PUBLIC UNIVERSITY LIBRARIES IN SOUTH-WEST, NIGERIA

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Abstract
This study examined the influence of reward systems on the research productivity of librarians in public university libraries across South-West Nigeria. Adopting a survey research design, primary data were collected from all 319 librarians using a structured questionnaire covering demographic information, research productivity, work environment, leadership style, and reward systems, with intrinsic and extrinsic rewards measured on a four-point Likert scale. Data were analyzed using descriptive and inferential statistics, including multiple regression, to determine the relationship between reward systems and research productivity. Findings revealed that research productivity was generally low across quantity, visibility, and quality, while librarians experienced moderate levels of both intrinsic and extrinsic rewards. Multiple regression analysis indicated that reward systems significantly influenced research productivity, with both intrinsic and extrinsic rewards contributing positively. The study concludes that enhancing research productivity requires deliberate attention to balanced reward structures, emphasizing both personal fulfilment and external incentives. Recommendations include improving recognition, compensation, professional development, and supportive environments to motivate librarians and enhance scholarly output.
Keywords: Reward systems, Research productivity, Librarians, Public university libraries, South-West Nigeria, Intrinsic rewards, Extrinsic rewards

Introduction
Research is the careful and systematic way of investigating issues to create new knowledge, ideas, or understanding. It involves planning, analyzing, and interpreting information to discover facts, confirm theories, or provide practical solutions to real problems (Hiebert et al., 2022). In Nigerian universities, research is very important because it helps improve knowledge, guides decision-making, and raises the reputation of institutions. But how well research is done depends not just on the skills of the researcher, but also on the support, resources, and motivation provided by the university.

Research productivity shows how effective a researcher is. It refers to the quantity and quality of research outputs produced by a person or group within a certain time (Adetayo, 2023). For academic librarians, this can include journal publications, conference presentations, grants, collaborative projects, and contributions to knowledge in library and information science. High research productivity improves the university's ranking, attracts funding, and increases recognition, while low productivity can limit career growth and reduce visibility in the academic community (Pal & Sakar, 2020; Elizabeth, 2020).

University librarians today are expected not just to manage books and information, but also to contribute to research. Academic librarians in public universities in Nigeria usually have advanced degrees and follow structured career paths such as Librarian II, Librarian I, Senior Librarian, Principal Librarian, and University Librarian. Promotion and career advancement often depend on how productive they are in research (Ifijeh et al., 2021; Adetayo et al., 2024). However, librarians face many challenges that affect their research. Studies show that poor institutional support, lack of funding, limited access to research resources, bureaucratic delays, and heavy workloads make it difficult for librarians to do research properly (Iwu-James et al., 2021). They also face low visibility for their work, limited mentorship, and inadequate training in research methods, which reduces the quality and impact of their outputs (Okeji, 2018).

One factor that can encourage research is a good reward system. Reward systems are ways universities recognize and motivate staff for their efforts and achievements. They can be intrinsic, such as personal satisfaction, professional growth, recognition by colleagues, and autonomy in research, or extrinsic, like salary increases, research allowances, awards, promotions, and access to better resources (Nzelum et al., 2019; Qing et al., 2020; Okolie & Egbon, 2024). For academic librarians, effective reward systems help maintain high research output. Intrinsic rewards give intellectual satisfaction and long-term motivation, while extrinsic rewards provide immediate incentives for performance (Amutuhaire, 2022; Alli, 2021). A well-planned reward system that is fair, clear, and achievable encourages librarians at different career levels to produce quality research (Qing et al., 2020). In public university libraries in South-West Nigeria, understanding how reward systems affect research productivity is very important. It can guide universities to put in place strategies that improve research output, support career development, and strengthen libraries as central hubs for knowledge creation and sharing.

Statement of the Problem

Academic librarians generally face low research productivity, which affects career growth and institutional reputation (Fasae & Ogbomo, 2024; Ani et al., 2017). Challenges such as poor institutional support, limited research resources, heavy workloads, and lack of mentorship hinder their ability to meet research expectations (Iwu-James et al., 2021; Okeji, 2019). A major factor is the absence of effective reward systems that recognize and motivate research efforts. Intrinsic rewards like professional recognition and extrinsic rewards such as promotions, allowances, and awards are often inadequate or poorly structured, reducing librarians' motivation to engage in research (Nzelum et al., 2019; Qing et al., 2020). This study, therefore, examines how reward systems influence the research productivity of librarians in public university libraries in South-West Nigeria, aiming to provide insights for improving scholarly output and professional development.

Objectives of the Study

i. To find out the level of research productivity librarians in the last three years in public university libraries in South-West, Nigeria;

ii. evaluate the reward systems available for librarians in university libraries in South-West Nigeria.

iii. To examine the relationship between reward system and research productivity of librarians in public university libraries in South-West, Nigeria;

Research Questions

i. What is the level of research productivity librarians in public university libraries in South-West, Nigeria in the last three years?

ii. What reward systems are available for librarians in university libraries in South-West Nigeria?

Research Hypothesis

Reward system have no significant influence on research productivity of librarians in public university libraries in South-West, Nigeria.

Literature Review

Conceptually, a reward system denotes the structured methods through which organizations recognize, motivate, and compensate employees for their efforts and contributions. It serves as a

key mechanism for influencing behavior, enhancing performance, and supporting professional growth (Qing et al., 2020). Reward systems can take different forms, broadly classified as intrinsic and extrinsic, but in practice they often complement each other to sustain employee motivation and engagement. Intrinsic rewards are the internal benefits employees derive from meaningful work, professional growth, and personal achievement. These include intellectual satisfaction, autonomy in decision-making, recognition from colleagues, and the fulfilment that comes from contributing to organizational or societal goals (Deci & Ryan, 2000; Manzoor et al., 2021). Employees who experience intrinsic rewards are more likely to maintain long-term motivation, engage creatively with their tasks, and demonstrate sustained commitment, as their work aligns with personal values and professional purpose. For academic librarians, intrinsic rewards may involve opportunities to conduct research, participate in decision-making, and advance knowledge in their field, fostering a sense of professional pride and achievement.

Extrinsic rewards, on the other hand, are external incentives provided by the organization to acknowledge performance and accomplishments. These include financial benefits such as salary increments, research allowances, bonuses, and promotions, as well as non-monetary recognition such as awards, public acknowledgment, or access to better resources (Sharma & Sadana, 2014; Lawler, 2000). Extrinsic rewards work by reinforcing goal-directed behavior, creating a clear link between effort and tangible outcomes, which can boost productivity, satisfaction, and staff retention. However, over-reliance on extrinsic rewards may sometimes reduce intrinsic motivation if employees focus only on financial gains rather than the work itself (Deci, 1971; Adams, 1963). The most effective reward systems, therefore, integrate both intrinsic and extrinsic elements, providing immediate incentives while also nurturing long-term satisfaction, professional growth, and engagement. In the context of public university libraries in South-West Nigeria, a well-designed reward system is essential to motivate librarians to engage in research and

enhance their scholarly productivity. By combining recognition, autonomy, professional development opportunities, and tangible rewards, institutions can create an environment where librarians are encouraged to produce quality research, contribute to knowledge creation, and advance both their careers and the reputation of their libraries.

Empirically, research has shown that reward systems significantly influence the research productivity of academic librarians, with both intrinsic and extrinsic rewards playing complementary roles. Udo-Anyanwu and Amadi (2022) investigated how different reward mechanisms affect job satisfaction among librarians in Imo State, Nigeria. They found that extrinsic rewards such as salaries, bonuses, and promotions positively influenced librarians' motivation, while intrinsic rewards including recognition, professional development opportunities, and job autonomy further enhanced engagement and research performance. Librarians who felt valued and supported through these reward systems demonstrated higher levels of productivity, suggesting that effective reward structures are closely linked to scholarly output. Lee (2021) also highlighted the importance of extrinsic support, showing that research funding, access to institutional resources, and administrative assistance significantly enhance research productivity among university staff in Korea. In parallel, intrinsic motivators such as autonomy, personal growth, and recognition were found to sustain long-term engagement with research activities. Stupnisky et al. (2025) emphasized that self-determined motivation, particularly the satisfaction of basic psychological needs for autonomy and competence, strongly predicted research publications and citations, indicating that intrinsic rewards are essential for sustained scholarly output.

Peng and Gao (2019) confirmed that intrinsic motivation positively affects publication in high-impact journals, while extrinsic motivation alone may not always produce the desired quality of research output. Fasae and Uwaifo (2024) observed that high levels of job motivation, encompassing both intrinsic satisfaction and extrinsic benefits, significantly

enhanced librarians' research productivity, despite generally low output over a five-year period. Shahzad et al. (2023) highlighted that rewards, recognition, and autonomy encouraged librarians to innovate and perform efficiently in their research roles. Similarly, Aro and Babalola (2024) found that motivated academic librarians in polytechnics maintained high research engagement and consistent publication records, illustrating the combined effect of intrinsic and extrinsic reward systems on productivity.

Methodology

The study adopted a survey research design using a structured questionnaire to collect primary data from all 319 librarians in public university libraries across South-West Nigeria. The questionnaire was considered appropriate because it allowed efficient data collection from a large population and captured all variables in the study, including work environment, leadership style, reward system, and research productivity. It was structured into five sections covering demographic information, research productivity, work environment, leadership style, and reward system, with the latter divided into intrinsic and extrinsic rewards measured on a four-point Likert type scale. The instrument was adapted from previous studies and self-

structured items to ensure clarity, relevance, and comprehensiveness. A total enumeration approach was used, including all librarians in the target population, eliminating sampling bias and ensuring complete representation. The questionnaire underwent content and construct validation through expert review and statistical assessments such as Kaiser-Meyer-Olkin measure, Bartlett's Test of Sphericity, exploratory factor analysis, and Average Variance Extracted, confirming that it accurately measured the intended constructs. Reliability analysis showed high internal consistency, with Cronbach's Alpha and composite reliability values for reward system and other constructs exceeding 0.7, indicating strong reliability. Data were collected manually over eight weeks, and respondents were assured of confidentiality and voluntary participation. The collected data were analysed using descriptive statistics such as frequencies, percentages, means, and standard deviations, as well as inferential statistics including correlation and multiple regression to examine the relationship between reward systems, work environment, leadership styles, and research productivity, with analyses performed using SPSS at a significance level of $p < 0.05$.

Data Analysis and Interpretation

Table 1 Librarians' Demographic Characteristics

Variable	Categories	Frequency (n)	Percentage (%)
Gender	Male	155	55.6
	Female	124	44.4
	Total	279	100
Academic Qualification	PhD	54	19.4
	M.Phil	15	5.4
	Masters	131	47.0
	BSc	37	13.3
	HND	42	15.1
	Total	279	100
Age	20 to 29	28	10.0
	30 to 39	40	14.3
	40 to 49	128	45.9
	50 to 59	70	25.1
	60 to 69	13	4.7
	Total	279	100
Marital Status	Married	199	71.3
	Divorced	34	12.2

	Single	10	3.6
	Widowed	32	11.5
	Separated	4	1.4
	Total	279	100
Work Experience	1 to 10 years	89	31.9
	11 to 20 years	112	40.1
	21 to 30 years	57	20.4
	31 to 40 years	21	7.5
	Total	279	100
Religion	Christianity	195	69.9
	Islam	84	30.1
	Total	279	100
Rank	University Librarian	29	10.4
	Deputy University Librarian	35	12.5
	Principal Librarian	106	38.0
	Senior Librarian	76	27.2
	Librarian 1	22	7.9
	Librarian 2	11	3.9
	Total	279	100

Source: Field Survey 2025

Table 1 shows that most of the librarians in the study were male, making up 55.6 percent, while females accounted for 44.4 percent. A large proportion held MSc degrees at 47 percent, followed by 19.4 percent with PhDs. Most respondents were between 40 and 49 years old at 45.9 percent, while 25.1 percent were aged 50 to 59, and only 4.7 percent were 60 years and above. The majority were married at 71.3 percent, while only 3.6 percent were single. In terms of work experience, 40.1 percent had worked for 11 to 20 years, followed by 31.9 percent with 1 to 10 years of service, and just 7.5 percent had 31 to 40 years of experience. Many were in senior positions, with 38 percent as principal librarians and 27.2 percent as senior librarians, while 10.4 percent were university librarians and 3.9 percent were librarian II.

Research Question One: What is the research productivity level of librarians in public university libraries in South-West, Nigeria in the last three years?

Table 2 Level of Research Productivity of Librarians in Public Universities in South-West, Nigeria

Research Productivity: Research publications in the last 3 years (2021-2024)	≥7 VH Freq. (%)	5-6 H Freq. (%)	3-4 L Freq. (%)	1-2 VL Freq. (%)	Mean $\bar{x}$	Standard Deviation (SD)
Quantity (Mean = 1.91, SD= 0.89)						
Total number of my peer review chapter in book you published in the last three years.	15 (5.4)	95 (34.1)	92 (33)	77 (27.6)	2.17	0.90
Total number of my peer review journal article you published in the last three years.	23 (8.2)	62 (22.2)	119 (42.7)	75 (26.9)	2.12	0.90
Total number of all types of peer reviewed publications (Conference papers, Book Chapters) you produced in the last three	31 (11.1)	45 (16.1)	89 (31.9)	114 (40.9)	1.97	1.01

research Productivity: Research publications in the last 3 years (2021-2024)	≥7 VH Freq. (%)	5-6 H Freq. (%)	3-4 L Freq. (%)	1-2 VL Freq. (%)	Mean $\bar{x}$	andard Deviation (SD)
years).						
otal number of peer reviewed textbooks you published in the last three years.	10 (3.6)	33 (11.8)	92 (33)	144 (51.6)	1.67	0.82
otal number of peer reviewed co-author textbooks you published in the last three years.	14 (5)	22 (7.9)	85 (30.5)	158 (56.6)	1.61	0.84
Visibility (Mean = 1.91, SD= 0.94)						
ow many of your journal articles published in the past three years is accessible on-line?	37 (13.3)	60 (21.5)	97 (34.8)	85 (30.5)	2.18	1.01
ow many of your publications in the last three years are on-line.	30 (10.8)	57 (20.4)	105 (37.6)	87 (31.2)	2.11	0.97
ow many of your co-authored textbook published in the past three years is accessible on-line?	13 (4.7)	51 (18.3)	89 (31.9)	126 (45.2)	1.82	0.89
ow many of your textbooks published in the past three years is accessible on-line?	26 (9.3)	32 (11.5)	70 (25.1)	151 (54.1)	1.76	0.99
ow many of your book chapters published in the past three years is accessible on-line?	8 (2.9)	40 (14.3)	87 (31.2)	144 (51.6)	1.68	0.82
Quality (Mean = 1.79, SD= 0.88)						
Google Scholar	17 (6.1)	44 (15.8)	114 (40.9)	104 (37.3)	1.91	0.88
SCOPUS	14 (5)	36 (12.9)	106 (38)	123 (44.1)	1.79	0.85
Web of Science (WoS). Thomson Reuters.	9 (3.2)	42 (15.1)	93 (33.3)	135 (48.4)	1.73	0.83
Others, NOT Listed	17 (6.1)	45 (16.1)	61 (21.9)	156 (55.9)	1.72	0.94
Average Overall Mean					1.87	0.90

Source: Field Survey 2025; Freq. = Frequency

KEY: VH (≥7) =Very High, H (5-6) = High, L (3-4) =Low, VL (1-2) =Very Low ***Decision Rule if mean is 1 to 1.74=Very Low; 1.75 to 2.49 = Low; 2.50 to 3.24 =High; 3.25 to 4= Very High.

The analysis in Table 2 shows that research productivity of librarians in public university libraries in South-West Nigeria (2021–2024) was generally low across quantity, visibility, and quality. The overall mean score was 1.87, indicating low research productivity. For quantity, the mean score was 1.91. Most librarians published few journal articles or book chapters, and contributions to textbooks were particularly low, with mean scores of 1.67 and 1.61. Visibility was also low (mean = 1.91). While journal articles had slightly better visibility (mean = 2.18), most works were not easily accessible online, especially book chapters and textbooks. Quality was the lowest (mean = 1.79), with limited presence in major indexing platforms. Google Scholar had the highest mean (1.91), while Web of Science and Others had the lowest (1.72 and 1.73).

Two: What reward systems are available for librarians in university libraries in South-West Nigeria?

Table 3 Reward Systems among Librarians in Public Universities in South-West, Nigeria

Reward Systems	SA Freq. (%)	A Freq. (%)	D Freq. (%)	SD Freq. (%)	Mean $\overline{x}$	andard Deviation (SD)
Intrinsic (Mean = 2.52, SD= 0.98)						
find my work as a librarian to be personally fulfilling.	68 (24.4)	108 (38.7)	60 (21.5)	43 (15.4)	2.72	1.00
enjoy the intellectual stimulation that comes with my job.	50 (17.9)	71 (25.4)	128 (45.9)	30 (10.8)	2.51	0.91
I find my work meaningful and impactful.	63 (22.6)	68 (24.4)	93 (33.3)	55 (19.7)	2.50	1.05
am proud of my contributions to the library community.	54 (19.4)	67 (24)	113 (40.5)	45 (16.1)	2.47	0.98
feel a sense of accomplishment when I successfully assist library patrons.	48 (17.2)	67 (24)	116 (41.6)	48 (17.2)	2.41	0.97
Extrinsic (Mean = 2.35, SD= 0.92)						
feel valued and appreciated by my colleagues and supervisors	42 (15.1)	92 (33)	79 (28.3)	66 (23.7)	2.39	1.01
he library provides opportunities for professional development.	33 (11.8)	99 (35.5)	89 (31.9)	58 (20.8)	2.38	0.94
am fairly compensated for my work as a librarian.	33 (11.8)	83 (29.7)	111 (39.8)	52 (18.6)	2.35	0.92
omotions in my library are based on merit and performance.	33 (11.8)	70 (25.1)	130 (46.6)	46 (16.5)	2.32	0.89
receive adequate recognition for my contributions to the library.	21 (7.5)	88 (31.5)	123 (44.1)	47 (16.8)	2.30	0.84
Average Overall Mean					2.44	0.95

Source: Field Survey 2025; Freq. = Frequency

KEY: SA=Strongly Agree, A= Agree, D=Disagree, SD=Strongly Disagree ***Decision Rule if mean is 1 to 1.74=Strongly Disagree; 1.75 to 2.49 = Disagree; 2.50 to 3.24 =Agree; 3.25 to 4= Strongly Agree

Table 3 presents the reward systems available for librarians in public universities in South-West Nigeria. The results show that intrinsic rewards, such as personal fulfillment, intellectual stimulation, meaningful work, pride in contributions, and a sense of accomplishment, were moderately experienced by librarians, with a mean of 2.52, indicating overall agreement. Extrinsic rewards, including appreciation by colleagues and supervisors, opportunities for professional development, fair compensation, merit-based promotions, and recognition, were slightly lower, with a mean of 2.35, suggesting that librarians generally disagreed or were less satisfied with these external forms of reward. The overall mean of 2.44 indicates that librarians experience reward systems at a moderate level, with intrinsic rewards being more prominent than extrinsic rewards.

Research Hypotheses

Reward systems do not significantly have influence on the research productivity of librarians in public university libraries in South-West, Nigeria.

Table 4.9: Multiple Linear Regression Analysis Showing the Influence of Reward Systems on the Research Productivity of Librarians in Public University Libraries in South-West Nigeria

Variables	B	Std. Error	Beta	T	Sig.	Adjusted R^2	F	ANOVA Sig
(Constant)	16.372	1.743		9.391	.000			
Extrinsic	.418	.167	.178	2.497	.013	0.134	22.531 (2,276)	0.001
Intrinsic	.504	.151	.237	3.338	.001			

The result on the influence of reward systems on the research productivity of librarians in public university libraries in South-West Nigeria is presented in Table 4.9. The result revealed that reward systems (Adjusted R^2 = .134, F (2,276) = 22.531, p < .05) had a significant joint influence on research productivity. This implied that reward systems accounted for about 13.4% of the variation in the research productivity of librarians. The result further showed that both extrinsic reward (β = .178, t (276) = 2.497, p < .05) and intrinsic reward (β = .237, t (276) = 3.338, p < .05) had significant individual influence on research productivity. This indicates that reward systems, through both extrinsic and intrinsic forms, significantly influenced the research productivity of librarians in public university libraries in South-West Nigeria. Therefore, the null hypothesis is rejected and restated thus: Reward systems significantly influence the research productivity of librarians in public university libraries in South-West Nigeria.

Discussions of Findings

This low productivity underscores the critical role of reward systems in influencing scholarly output. Empirical studies support this link, showing that both intrinsic and extrinsic rewards significantly affect research performance. Study findings align with that of Iwu-James et al. (2023), who reported that most professional published mostly within Nigeria than outside. Similarly, study findings correlate with that of Adegbaye et al. (2019) who reported that research productivity of professional were limited by substantial assignments and inadequate institutional support. Equally, findings showed that in terms of psychological, physical, and social conditions the professionals were not happy with condition of work environment. Likewise Udo-Anyanwu and Amadi (2022) found that extrinsic reward such as salaries, promotions, and bonuses, alongside intrinsic rewards like recognition, professional development, and job autonomy, positively influenced librarians' motivation and research engagement.

Similarly, Lee (2021) highlighted the importance of access to research funding and institutional support in enhancing productivity, while intrinsic motivators sustained long-term engagement. Stupnisky et al. (2025) and Peng and Gao (2019) emphasized that intrinsic rewards are essential for high-quality publications, even where extrinsic rewards are limited. Fasae and Uwaifo (2024), Shahzad et al. (2023), and Aro and Babalola (2024) further confirmed that combining intrinsic and extrinsic rewards enhances motivation, innovation, and consistent research output. These findings suggest that improving reward systems could be a key strategy for increasing the research productivity of librarians The findings show that librarians in South-West Nigerian public universities experience moderate intrinsic rewards, such as personal fulfillment and intellectual stimulation, which enhance job satisfaction and engagement, supporting Udo-Anyanwu and Amadi (2018) and Yusuf and Fehintola (2021). Extrinsic rewards, including fair compensation and merit-based promotions, were less strongly perceived, indicating gaps in external recognition. This aligns with Simisaye et al. (2024) and Iwu-James et al. (2021), who highlighted the importance of professional growth opportunities, financial support, and acknowledgment in boosting productivity. Overall, while intrinsic rewards are valued, strengthening extrinsic reward systems could

further enhance motivation, commitment, and research output among librarians.

Conclusion and Recommendations

The study concludes that enhancing research productivity among librarians in public university libraries in South-West Nigeria requires deliberate attention to both intrinsic and extrinsic reward systems. Intrinsic motivators such as personal fulfillment, intellectual stimulation, and a sense of accomplishment play a central role in engaging librarians and sustaining their professional commitment, while extrinsic factors including fair compensation, recognition, merit-based promotions, and professional development opportunities complement these internal drivers. The significant influence of reward systems on research productivity highlights the need for library management to adopt comprehensive strategies that balance both types of rewards, fostering an environment that motivates librarians, encourages scholarly output, and ultimately strengthens the quality, visibility, and quantity of research within the university system. The study thus recommended that:

i. Librarians should actively pursue professional development and leverage intrinsic motivators such as personal growth and job satisfaction to improve research productivity.

ii. Library management should establish fair and transparent reward systems, ensuring recognition, merit-based promotions, and adequate compensation.

iii. Stakeholders should provide both financial and non-financial incentives, including research funding, access to resources, and public acknowledgment of scholarly contributions.

iv. Librarians should participate in collaborative research and seek mentorship to enhance the quality and visibility of their publications.

v. Library management should regularly review and update reward policies to align with staff needs and institutional goals.

vi. Stakeholders should create supportive environments that encourage innovation, autonomy, and engagement in research activities.

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