

Preservation and Conservation of Library Resources as Correlates of Service Delivery Effectiveness in Universities in South-South, Nigeria

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Abstract

Good condition of information materials and equipment is crucial to quality service delivery in libraries. The study investigated the preservation and conservation of library resources as correlates of service delivery effectiveness in Universities in South-South, Nigeria. Five research questions and four hypotheses guided the study. Correlational research design was adopted for the study. Three hundred and two (302) professionals and para-professionals constituted the population of the study. The instrument used for data collection for the study was a rating scale titled "Preservation, Conservation and Service Delivery Effectiveness Rating Scale (PCSDERS)". Data were analysed, using Mean, standard deviation for research question five, Pearson Product Moment Correlation Coefficient was used to answer research question three and multiple regression was used to answer research questions one and two and the corresponding hypotheses at 0.05 level of significance. The findings of the study showed that when library resources are properly preserved, service delivery will be hinge-free, better conservation practices will lead to an increase in library service delivery effectiveness in the libraries studied. Lack of needed policies and training of library staff on proper preservation and conservation practices are some of the problems. Adequate training, standard preservation and conservation policies, funding and adoption of digital methods were recommended.

Keywords: *Library services, Preservation, Conservation, Service delivery, Library Resources.*

Introduction

Academic libraries are a vital part of every higher institution of learning as they provide information materials to support the teaching, learning and research endeavours of their parent institutions. Also, they offer services that meet the information needs of members of their parent institutions which in this case

include students at undergraduate and postgraduate levels, teaching and non-teaching staff, and members of the library community. Thus, the library is considered as a service-based institution. The services rendered by libraries vary from one library to another depending on the type and nature of the library. However, there are specific services common to most academic libraries which include reference services,

technical services, current awareness, selective dissemination of information, referral services, reprographic services and provision of information resources. All these services are crucial to realising the objectives of the library; therefore, the effectiveness of such service(s) delivery is of great importance to the body of knowledge in librarianship.

Service delivery effectiveness which for this paper, will be used interchangeable with quality service delivery; denotes a state of excellence by which activities (services) rendered to library users are delivered. Such state of excellence in delivering services must be of interest to libraries because it enables the library to develop a partnership with users to gain a competitive edge in competing with others in the field (Nitecki & Hernon, 2000). According to Thapisa & Gamini in Sahu (2016), quality is seen to relate to the fitness of a service or product to its intended purpose or use which is subject to the customer or user's assessment. Thus, quality is measured based on customer's or user's need. This corroborates the assertion of Parasuraman, Zeithaml & Berry (2009) that service quality is measured by how well the service level delivered matches customer expectations. This is the ideology behind expectation and confirmation theory, which underlies the principle of confirmation or disconfirmation of expectancy. Where the need of the user forms his expectation and the service delivered relates to the confirmation or disconfirmation level of the user. Effective service delivery in an academic library is said to have occurred when the delivered library services matches and exceeds the

expectation of the user, influenced by his information needs.

It is imperative to assert that the information need of library users is the focal point of service delivery and as such information materials in both print and non-print formats are instrumental to quality service delivery. Therefore, the condition or state of information materials is crucial to quality service delivery. In view of this, preservation and conservation, being measures for elongating the "life-span" and "wellness" of information materials is hypothesized to influence effective service delivery in academic libraries.

Preservation has been defined in the International Federation of Library Associations and Institutions (IFLA) principles for care and handling of library materials in Ogunmodede & Ebijuwa (2013) as "all the managerial and financial considerations including storage and accommodation provisions, staffing levels, policies, techniques, and methods involved in preserving library and archival materials". Preservation involves both the direct and indirect action on the safekeeping of the library materials. In preservation and conservation, consideration is given to every element that promotes the protection of the materials including the housing, storage system and security against such threats as theft, mutilation and poor handling (Onyam, Akpom & Enem, 2017). According to Prajapati (2015), Preservation services ensures the ongoing access to physical collections by undertaking assessments, treatments, housing, storage reviews, surveys and collection stabilization.

Preservation and conservation are often mistaken as same, however, there is a tiny difference between both concepts worth mentioning. This difference could be seen from the definitions of both concepts as given by Central Washington University (n.d) that Preservation is:

the set of procedures taken to prevent, stop or neutralize deterioration of library materials through the administration of storage techniques and housing of materials, environment; security/prevention of theft; handling practices; as well as through user and staff education. While Conservation is the actions taken to prevent, stop, or retard deterioration of individual items through treatment level intervention into the physical state of the item.

From the definitions above, it can be extrapolated that preservation is measures taken before damage is done to an information material, while conservation is a measure taken after damage has taken place. Furthermore, preservation prolongs the life of an information material by preventing it from damage of any sort whereas, conservation prolongs the life of an information material by restoring it to the initial state after damage has taken place (Oluwaniyi, 2015).

Objectives of the Study

The general purpose of the study is to investigate the preservation and conservation of library resources as

correlates of service delivery effectiveness in libraries in Federal Universities in South-south, Nigeria. To achieve this, the specific objectives of the study are to:

1. determine the relationship between library resources preservation and service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria.
2. ascertain the relationship between library resources conservation and service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria.
3. determine the relationship amongst preservation, conservation and service delivery effectiveness in academic libraries in South-South, Nigeria.
4. ascertain the challenges encountered in the preservation and conservation of library resources that may cause a slowdown in service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria.

Research Questions

1. What is the relationship between library resources preservation and service delivery effectiveness in academic libraries in federal universities in South-South Nigeria?
2. What is the relationship between library resources conservation and service delivery effectiveness in academic libraries in federal universities in South-South Nigeria?
3. What is the relationship between library resources preservation and

conservation in academic libraries in federal universities in South-South Nigeria?

4. What are the challenges encountered in the preservation and conservation of library resources in academic libraries in federal universities in South-South Nigeria?
6. How do library resources preservation and conservation jointly predict service delivery effectiveness in academic libraries in South-South, Nigeria?

Hypotheses

H₀₁: There is no significant relationship between library resources preservation and service delivery effectiveness in libraries in federal universities in South-South, Nigeria.

H₀₂: There is no significant relationship between library resources conservation and service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria.

H₀₃: There is no significant relationship between library resources preservation and conservation in libraries in federal universities in South-South, Nigeria.

H₀₄: There is no significant joint relationship between preservation, conservation and service delivery effectiveness in libraries in federal universities in South-South, Nigeria.

Methodology

The study adopted a correlational research design and census was used as the sampling

technique because the entire population of 302 professionals (librarians) and paraprofessionals was used. The professionals were 115 and paraprofessionals 187, from the federal universities in South-South, Nigeria. A rating scale of 57 items was used to elicit data. Three hundred and two (302) of the instrument were administered to the six federal universities-University of Port Harcourt Library (UNIPORTLIB.), University of Calabar (UnicalLib), University of Benin (UniBenLib), University of Uyo (UniUyo), Federal University of Petroleum Resources, Effurun (FUPRELlib) and Federal University Otuoke (FUOLib), out of 302 rating scale administered, 297 copies retrieved were used for data analysis. Mean and standard deviation were used for research question 5, Pearson product-moment correlation was used for research question three and multiple regression was used to answer research questions one and two and the corresponding hypotheses at 0.05 level of significance.

Results

Research Question1: Relationship between library resources preservation and service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria.

H₀₁: There is no significant relationship between library resources preservation and service delivery status in academic libraries in federal universities in South-South Nigeria.

TABLE I:

A: Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .346 ^a | .120 | .117 | .30123 | 1.517 |

a. Predictors: (Constant), Preservation

b. Dependent Variable: Library Service Delivery effectiveness

B: Coefficients

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|--------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.040 | .130 | | 15.650 | .000 |
| | Preservation | .293 | .046 | .346 | 6.344 | .000 |

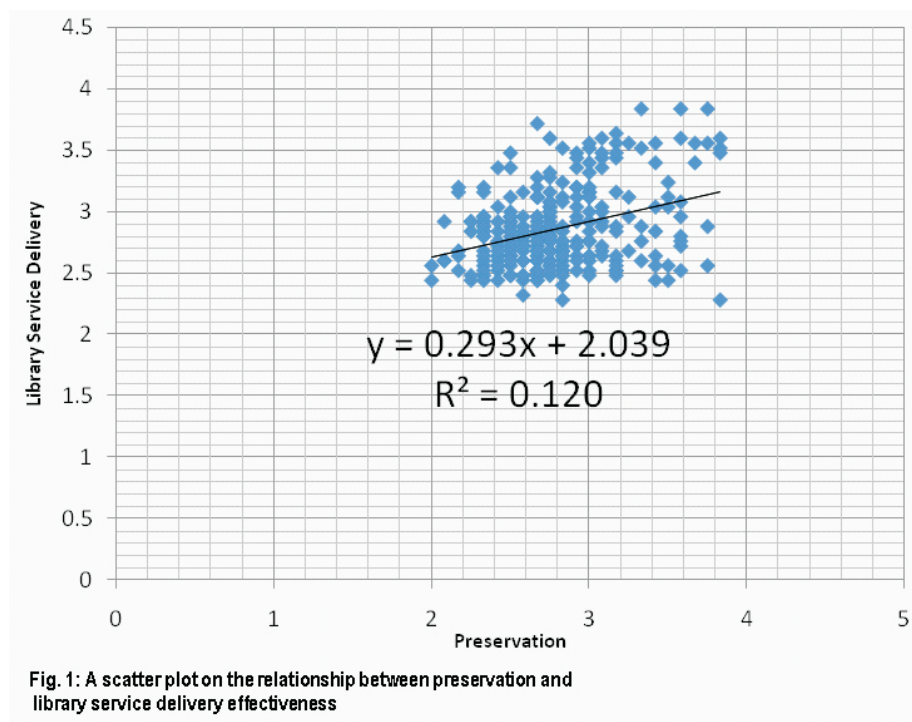
a. Dependent Variable: Library Service Delivery effectiveness, $y = 2.040 + .293x$

C: ANOVA

| Model | | Sum of Squares | Df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 3.652 | 1 | 3.652 | 40.248 | .000 ^b |
| | Residual | 26.768 | 295 | .091 | | |
| | Total | 30.420 | 296 | | | |

*a. Dependent Variable: Library Service Delivery effectiveness

b. Predictors: (Constant), Preservation



Part B of the Table I, shows that the regression analysis on the relationship between library resources preservation and service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria is described as strong and positive (Beta=.346). The R-squared value of .120 in part A showed roughly a 12% contribution of preservation to library service delivery effectiveness. The regression equation shows that $y=2.04+.293x$ shows that an increase in preservation will lead to an increase in library service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria. The result of the F-statistic shows that there is significant relationship between library resources preservation and library service delivery

effectiveness in academic libraries in federal universities in South-South, Nigeria ($F_{1, 295}=40.248, p<.05$). The null hypothesis (H_{01}) was rejected at the 0.05 alpha level.

Research Question 2:

What is the relationship between library resources conservation and service delivery effectiveness in academic libraries in federal universities in South-South Nigeria?

H_{02} : There is no significant relationship between library resources conservation and service delivery effectiveness in academic libraries in federal universities in South-South Nigeria.

TABLE II:

Relationship between library resources conservation and service delivery status in academic libraries in federal universities in South-South Nigeria

A: Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .241 ^a | .058 | .055 | .31168 | 1.575 |

a. Predictors: (Constant), Conservation

b. Dependent Variable: Library Service Delivery effectiveness

B: Coefficients

| Model | | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
|-------|--------------|-----------------------------|---------------------------|------|--------|
| | | B | Std. Error | Beta | |
| 1 | (Constant) | 2.288 | .135 | | 16.889 |
| | conservation | .198 | .047 | .241 | 4.259 |

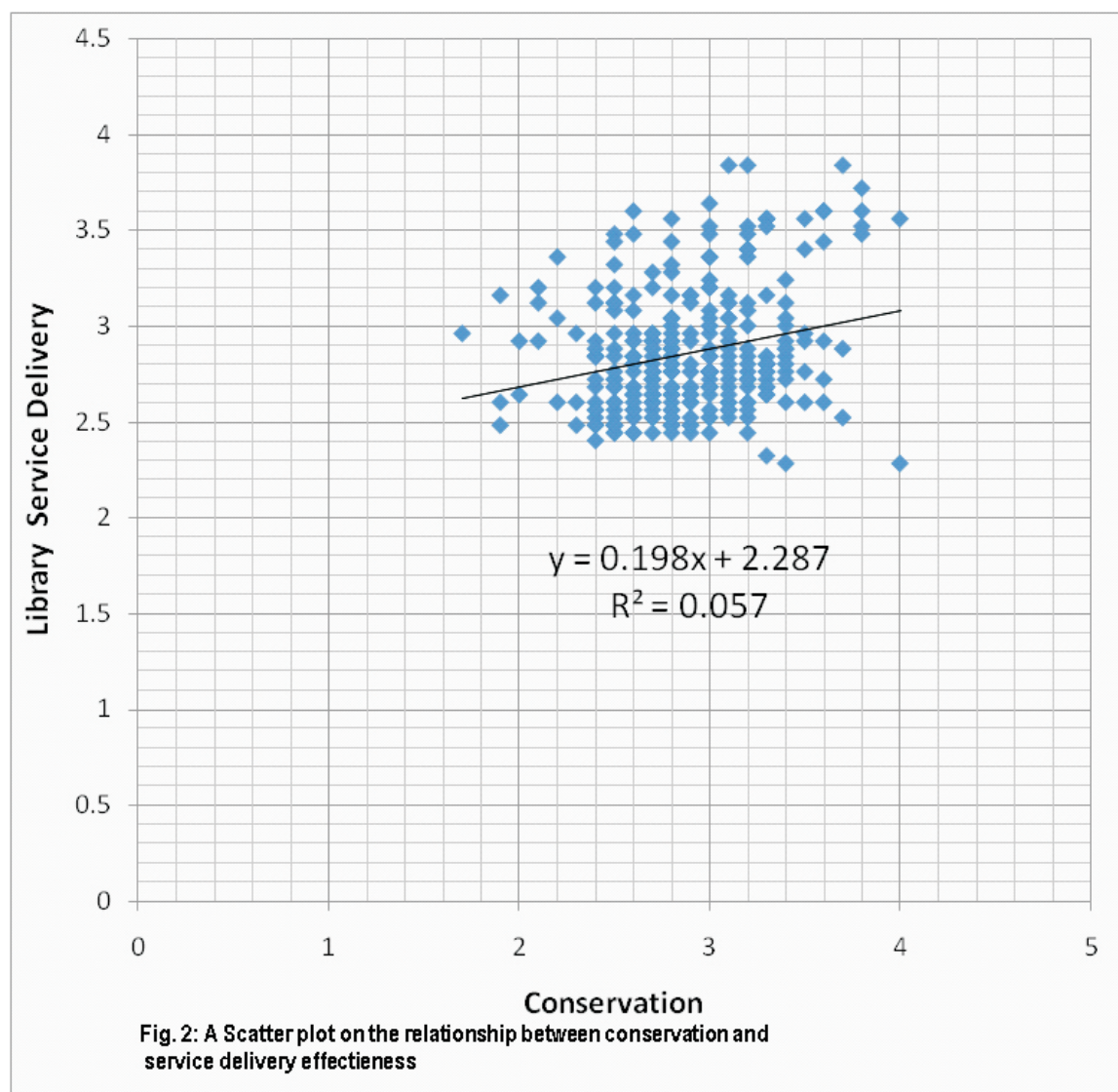
a. Dependent Variable: Library Service Delivery effectiveness, $y=2.288+.198x$

C: ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 1.762 | 1 | 1.762 | 18.139 | .000 ^b |
| | Residual | 28.657 | 295 | .097 | | |
| | Total | 30.420 | 296 | | | |

a. Dependent Variable: Library Service Delivery effectiveness

b. Predictors: (Constant), Conservation



Part B of Table II, shows that the regression analysis on the relationship between library resources conservation and service delivery status in academic libraries in federal universities in South-South, Nigeria is described as strong and positive (Beta=.241). The R-squared value of .058 in part A showed roughly a 5.8% contribution of conservation to library service delivery effectiveness. The

regression equation shows that $y=2.288+.198x$ shows that an increase in effective conservation will lead to an increase in library service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria. The result of the F-statistics shows that there is a significant relationship between library resources conservation and service delivery effectiveness in academic

libraries in federal universities in South-South, Nigeria ($F_{1, 295}=18.139$, $p<.05$). The null hypothesis (H_{02}) was rejected at 0.05 alpha level

Research question 3:

What is the relationship between library resources preservation and conservation in

academic libraries in federal universities in South-South Nigeria?

H_{03} : There is no significant relationship between library resources preservation and conservation in academic libraries in federal universities in South-South Nigeria

Table III:

Summary of Pearson Product Moment Correlation and Z-test analysis on the Relationship between library resources preservation and conservation in academic libraries in federal universities in South-South Nigeria

| Covariates | Y | N | X^2 | N | Y^2 | N | XY | N | r_{xy} -value |
|--|--------|-------|-------------|-----------|------------|-----|-------|---|-----------------|
| Preservation(x) versus Conservation(y) | 829.44 | 856.6 | 700559.2044 | 747079.74 | 715296.582 | 297 | 0.371 | | |

$z=6.37$, $z\text{-crit}=1.960$, $p\text{-value}=.000$,

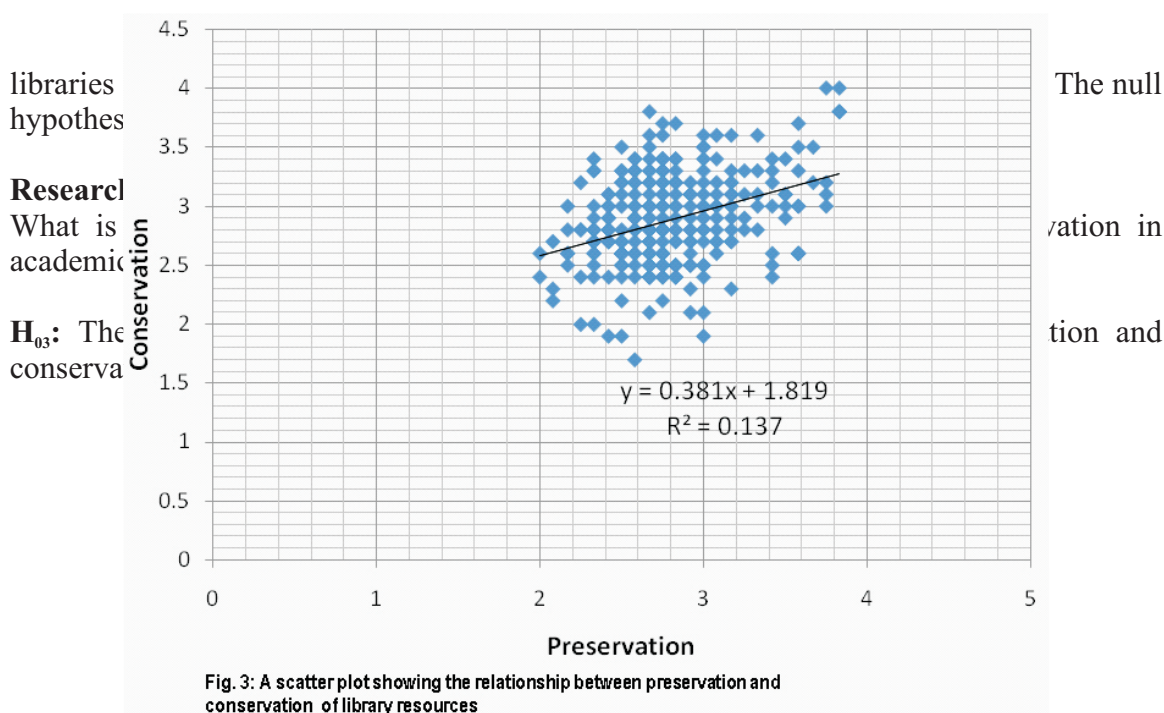


Table III shows the summary of Pearson Product Moment Correlation analysis on

the preservation and conservation of library resources in academic libraries in federal universities in South-South, Nigeria was 2.92, SD=0.35. The key challenges encountered in the preservation and conservation of library resources in academic libraries in federal universities in South-South, Nigeria, was lack of preservation and conservation policy (M=3.35, SD=0.98). This was followed by lack of training of library staff on proper measures of preservation and conservation

of library resources (M=3.06, SD=0.85) and inadequate equipment and materials for effecting preservation and conservation of library resources (M=3.04, SD=0.92). The least was poor library leadership style / administrative problems which prevent resources preservation and conservation actions (M=2.63, SD=1.01).

N=297

Research question 5:

How do S/N: Challenges Encountered in the preservation and conservation of library resources jointly predict library service effectiveness in academic libraries in federal universities in South-South, Nigeria?

H₀₄: There is no significant joint relationship between preservation, conservation and service delivery effectiveness in academic libraries in federal universities in South-South Nigeria.

Table V:

The joint contribution of the predictors of academic library service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria

| S/N | Challenges Encountered in the preservation and conservation of library resources | SA | CA | R | SD | Mean | SD |
|-------------------|--|-----|-----|----|----|-------------|-------------|
| 1 | Lack of preservation and conservation policy | 182 | 69 | 15 | 31 | 3.35 | 0.98 |
| 2 | Inadequate funds for preserving and conserving library resources | 182 | 69 | 15 | 31 | 2.92 | 0.35 |
| 3 | Lack of training of library staff on proper measures of preservation and conservation library resources | 100 | 129 | 53 | 15 | 3.06 | 0.85 |
| 4 | Inadequate technical manpower to handle preservation and conservation interventions | 60 | 161 | 16 | 28 | 2.91 | 0.81 |
| 5 | Lack of or inadequate equipment and materials for effecting preservation and conservation of library materials | 104 | 126 | 41 | 26 | 3.04 | 0.92 |
| 6 | Poor library leadership style / administrative problems prevent material preservation and conservation actions | 56 | 137 | 43 | 61 | 2.63 | 1.01 |
| 7 | Difficulty in controlling users of library resources which are exposed to the risk of damage | 115 | 101 | 50 | 31 | 3.01 | 0.99 |
| 8 | Tropical climate of excessive temperature, high relative humidity which degrade library materials | 86 | 96 | 74 | 41 | 2.76 | 1.02 |
| 9 | Poor maintenance culture in the library which also adversely affects library materials | 87 | 117 | 47 | 46 | 2.82 | 1.02 |
| 10 | Poor quality of materials used in the production of some library resources | 121 | 58 | 51 | 67 | 2.78 | 1.20 |
| Grand mean | | | | | | 2.92 | 0.35 |

Part A of Table V, shows that the regression analysis on library material resource preservation and conservation joint prediction of library service delivery effectiveness in academic libraries in federal universities in South-South Nigeria is described as strong and positive ($R=.3677$). The Adjusted R-squared value of .129 in part A showed roughly 13% joint contribution of preservation and conservation to library service delivery effectiveness in academic libraries in

federal universities in South-South Nigeria. The regression equation $y=1.845+.253x+.107z$ shows that any increase in the values of preservation and conservation of library resources will lead to an increase in library service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria. The result of F-statistic in Part C of Table VI shows that library resources preservation and conservation jointly predict service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria ($F_{2, 294}=22.868$, $p<.05$). The null hypothesis (H_{04}) was rejected at the 0.05 alpha level.

Discussion of Findings

The relationship between library resources preservation and service delivery effectiveness

A: Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .367 ^a | .135 | .129 | .29923 | 1.539 |

a. Predictors: (Constant), conservation, Preservation

b. Dependent Variable: Library Service Delivery effectiveness

B: Coefficients

| Model | | Unstandardized Coefficients | Standardized Coefficients | T | Sig. |
|-------|--------------|-----------------------------|---------------------------|------|--------|
| | | B | Std. Error | Beta | |
| 1 | (Constant) | 1.845 | .156 | | 11.808 |
| | Preservation | .253 | .049 | .298 | 5.105 |
| | conservation | .107 | .048 | .130 | 2.225 |

a. Dependent Variable: Library Service Delivery effectiveness, $y=1.845+.253x+.107z$

C: ANOVA^a

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|-------|------------|----------------|-----|-------------|--------|-------------------|
| 1 | Regression | 4.095 | 2 | 2.048 | 22.868 | .000 ^b |
| | Residual | 26.324 | 294 | .090 | | |
| | Total | 30.420 | 296 | | | |

a. Dependent Variable: Library Service Delivery effectiveness

b. Predictors: (Constant), conservation, Preservation

roughly a 5.8% contribution of conservation to library service delivery effectiveness. The regression equation shows that $y=2.288+.198x$ shows that an increase in effective conservation will lead to an increase in library service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria. When put to statistical test, the result of the F-statistic in Part C of Table II shows that there is significant relationship between library resources conservation and service delivery status in academic libraries in federal universities in South-South, Nigeria ($F_{1, 295}=18.139, p<.05$). This led to the rejection of the second hypothesis at 0.05 alpha level.

The relationship between library resources preservation and conservation in academic libraries

The result from Table III shows that the relationship between library resources preservation and conservation in academic libraries in federal universities in South-South Nigeria was positive and strong ($r_{xy\text{-value}}=0.371$). When put to statistical test, using z-test, the z-calculated was found to be greater than the table value, z-critical (1.960). In other words, the p-value was .000 showing that there is a significant relationship between library resources preservation and conservation in academic libraries in federal universities in South-South Nigeria ($r=.371, p<.05$). The null hypothesis three was rejected at .05 alpha level.

The challenges encountered in the preservation and conservation of library material resources

The result from Table IV shows that the key challenges encountered in the preservation and conservation of library resources in academic libraries in federal universities in South-South Nigeria were lack of preservation and conservation policies ($M=3.35, SD=0.98$). This was followed by lack of training of library staff on proper measures of preservation and conservation of library resources ($M=3.06, SD=0.85$) and lack of or inadequate equipment and materials for effecting preservation and conservation of library materials ($M=3.04, SD=0.92$). The least was poor library leadership style/administrative problems which prevent material preservation and conservation actions ($M=2.63, SD=1.01$). This has exposed the importance of preservation and conservation policy in the determination of the effectiveness of library services delivery in the selected institutions in south-south, Nigeria. The result further shows that the grand mean score and standard deviation on the challenges encountered in the preservation and conservation of library material resources in academic libraries in federal universities in South-South Nigeria was 2.92, $SD=0.35$, indicating that the identified factors were significant thus determine the challenges facing library service delivery effectiveness in Nigeria.

The joint contribution of the predictors of academic library service effectiveness

The result from Part A of Table V shows that the regression analysis on library resources preservation and conservation joint prediction of library service delivery effectiveness in academic libraries in

federal universities in South-South Nigeria was described as strong and positive ($R=.3677$). The Adjusted R-squared value of .129 in part A showed roughly 13% joint contribution of preservation and conservation to library service delivery effectiveness in academic libraries in federal universities in South-South Nigeria. The regression equation $y=1.845+.253x+.107z$ shows that any increase in the values of preservation and conservation of library material resources will lead to an increase in library service delivery effectiveness in academic libraries in federal universities in South-South, Nigeria. The result of F-statistic in Part C of Table V shows that library material resource preservation and conservation jointly predict service delivery status in academic libraries in federal universities in South-South Nigeria ($F_{2, 294}=22.868, p<.05$). This also led to the rejection of the null hypothesis (H_{04}) at 0.05 alpha level.

Conclusion and Recommendations

Preservation and conservation are important aspects of the jobs rendered in the libraries because the information materials acquired are better when kept in good condition for the users to make adequate use of them, thus aiding the smooth running of the services rendered by the professionals and the paraprofessionals. This study has established that when attention is given on the preservation and conservation of these resources the services rendered will also be affected positively thereby bringing an increase in the usage of these resources by the users. It also recognizes that the major challenges that militate against preservation and conservation of library resources were lack of preservation and

conservation policies, lack of training of library staff on proper measures of preservation and conservation of library resources and lack of or inadequate equipment and materials for carrying out the preservation and conservation of library materials.

Based on the findings of this study, the following recommendations are suggested for the preservation and conservation of library resources to ensure that services are delivered effectively:

There is a need for training of the professionals to conveniently and efficiently take care of the preservation and conservation of library materials in academic libraries.

The policies of preservation and conservation in academic libraries should be written down clearly by the heads of libraries to guide the activities of the professionals on safekeeping of the library materials and also be monitored for effective implementation and service delivery effectiveness.

The libraries need closed-circuit television (CCTV) for proper surveillance on the library materials sections to check mutilation, damages, theft and other criminal activities that may jeopardize the library holdings.

On all of these funding is key. Heads of libraries should seek for donors to support in getting sophisticated equipment for preservation and conservation of library resources in academic libraries.

REFERENCES

[Central Washington University](#) [n.d].

University libraries. Available at:
<http://www.lib.cwu.edu/Preservation-Materials-Policy>.

Nitecki, D.A.&Hernon, P. (2000). Measuring service quality at Yale University's Libraries. *Journal of Academic Librarianship*, 26(4), 259-273

Ogunmodede, T. A. & Ebijuwa, A. S. (2013). Problems of conservation and preservation of library resources in African Academic libraries: A review of literature. *Greener Journal of Social Sciences*, 3 (1), 050-057

Oluwaniyi, S.A. (2015). Preservation of information resources in selected school libraries in Ibadan North Local Government Area of Oyo State, Nigeria. *Library Philosophy and Practice* (e-journal)1220. Retrieved from: <http://digitalcommons.unl.edu/libphilprac/1220>

Onyam, I.D., Akpom, C.C. & Enem, F.N. (2017). Preservation and conservation practices and techniques in Polytechnic Libraries in South-East, Nigeria. *Review of Information Science and Technology* (RIST). 3, 39-47

Parasuraman, A., Zeithaml, V.A., & Leonard Berry, L.L. (2009). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 49(4):41-50

Prajapati, B.G. (2015). *Preservation of library Collections*. New Delhi: Discovery Publishing House.

Sahu, A.K. (2006). Measuring service quality in an academic library: an Indian case study. *Library Review*, 56(3), 234-243.

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