

Jurnal Pra-bukti

Persepsi pustakawan tentang kesiapsiagaan bencana sebagai pendahulu untuk pelestarian yang efektif dan konservasi sumber daya perpustakaan di perpustakaan universitas Nigeria

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PII: S2212-4209 (18) 30852-5

DOI: <https://doi.org/10.1016/j.ijdr.2019.101381>

Referensi: IJDRR 101381

Untuk tampil di: ***Jurnal Internasional Pengurangan Risiko Bencana***

Tanggal Diterima: 19 Juli 2018 Tanggal

Revisi: 9 September 2019 Tanggal Diterima:

29 Oktober 2019

Silakan mengutip artikel ini sebagai: PI Ilo, C. Nkiko, R. Izuagbe, IM Furfuri, Persepsi Pustakawan tentang kesiapsiagaan bencana sebagai pendahulu untuk pelestarian yang efektif dan konservasi sumber daya perpustakaan di perpustakaan universitas Nigeria, *Jurnal Internasional Pengurangan Risiko Bencana* (2019), doi: <https://doi.org/10.1016/j.ijdr.2019.101381> .

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**Persepsi Pustakawan tentang Siaga Bencana aP s recursor untuk Efektif
Pelestarian dan Konservasi Sumber Daya Perpustakaan di Universitas Nigeria
Perpustakaan**

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ABSTRAK

Studi ini meneliti persepsi pustakawan tentang kesiapan diesras dan pengaruhnya terhadap pelestarian dan konservasi sumber daya perpustakaan yang efektif. osc, menggunakan di perpustakaan universitas di Zona geopolitik barat daya Nigeria. Desain survveesyearch diadopsi. Perpustakaan universitas yang menyediakan data dan kelembagaan untuk penelitian ini diacak menggunakan sistem pemungutan suara setelah itu total tecu pencacahan. diaiqwas dipekerjakan untuk melakukan sensus lengkap populasi. Populasinya terdiri dari 327 liibarnasr dan petugas perpustakaan yang tersebar di perpustakaan universitas federal dan negara bagian di wilayah tersebut. Metode pengumpulan data dan wawancara digunakan untuk pengumpulan data. Hasil ditegaskan, sebagai postudl, makan pelestarian dan konservasi itu sumber daya informasi akan lebih efektif jika langkah-langkah kesiapsiagaan pengguna dimasukkan ke dalam proses. Akibatnya, botphroaapch ditemukan saling melengkapi. Juga ditemukan bahwa trategi presieornvast digital inti tidak dipraktikkan di perpustakaan universitas di wilayah studi. Oleh karena itu, disarankan agar upaya yang ditujukan pada semua bentuk strategi pelestarian harus dilakukan yepdl untuk memastikan umur panjang dan keberlanjutan dari semua sumber informasi.

Kata kunci Pustakawan, Persepsi, Kesiapsiagaan Bencana, Tanggung jawab pemeliharaan, Sumber daya cetak, Pelestarian dan konservasi, Sumber daya perpustakaan

1. PENGANTAR

Peran perpustakaan sangat diperlukan instrumen untuk promosi melek huruf dan pendidikan berkualitas di semua tingkatan. Fakta ini menggarisbawahi didirikan perpustakaan di lembaga-lembaga akademik untuk memfasilitasi kelancaran realisasi amanat pendidikan badan induknya. Sementara perpustakaan akademis tidak hanya dibebani dengan tanggung jawab untuk membangun koleksi yang kuat untuk mendukung mandat ini secara memadai (yaitu, untuk melindungi dan penelitian), itu adalah hak prerogatif mereka untuk melihat keefektifan penggunaan dan perawatannya melalui aktivitas konservasi dan terkait konservasi untuk umur panjang dan keberlanjutan sumber daya. Tindakan melawan kerentanan penyampaian informasi Bahan pembusukan dan kerusakan memerlukan pelestarian dan upaya konservasi yang bertujuan untuk meminimalkan pengaruh faktor lingkungan, biologi, teknologi, serta manusia yang dapat menyebabkan ketidakmampuan untuk pulih. kerusakan sumber daya informasi.

Pelestarian sumber daya perpustakaan memerlukan organisasi sumber daya manusia yang esensial dan terencana dan kegiatan yang dikerahkan ke arah: kerusakan fisik dan kimia materi bahan pustaka (Hasenay & Kritalic, 2010). kegiatan pelestarian meliputi tindakan lingkungan, pembersihan preventif, enkapsulasi dan digital preservation (Perpustakaan Nasional RI Wales, 2018). Konservasi di sisi lain tindakan yang diambil untuk menyadarkan sumber daya yang memburuk (Popoola, 2003) atau tindakan yang dilakukan untuk memperpanjang kehidupan sumber daya informasi dengan memperlambat tiga kali kerusakan untuk memulihkan atau menjaganya dalam kondisi yang dapat digunakan. Beberapa kegiatan konservasi menurut Northeast Document Conservation Center (2015) antara lain: dokumentasi, tindakan, pemeriksaan, dan tindakan pencegahan lainnya.

Ketika kegiatan-kegiatan ini tidak pada tempatnya atau tidak beresiko, kerusakan bukan hanya tak terhindarkan tetapi juga akan terjadi - sebuah fenomena yang dapat mengakibatkan kerusakan serius pada bahan-bahan perpustakaan. Menyadari fakta ini, pustakawan harus bersiap-siap menghadapi ancaman atau bahaya yang dapat menyebabkan sumber daya yang rusak dan merusak; apakah berupa kerusakan yang disebabkan oleh suhu tinggi, lembab atau faktor biologis dll atau bencana di berupa kebakaran, banjir / hujan badai dll seperti kasus sebelumnya. Mengingat bahwa apapun bentuk kerusakan yang dapat dikaitkan dengan perpustakaan dan kolonialnya dapat disebut sebagai bencana (mengingat pentingnya mereka untuk beasiswa), studi ini berfokus pada pendekatan kesiapsiagaan master ini yang menangkap beberapa unsur pelestarian dan konservasi bahan-bahan informasi akan menjadi semua-inklusif. Oleh karena itu, penelitian ini mengusulkan bahwa ada realisasi antara kesiapsiagaan bencana dan pelestarian / konservasi sumber daya listrik karena menyangkut keselamatan.

Secara teknis, mungkin ada perbedaan yang jelas antara tindakan kesiapsiagaan bencana dan pelestarian dan kegiatan konservasi. hal ini berkaitan dengan pengurangan risiko perpustakaan sumber daya. Demikian pula, konsep-konsep ini seringkali terpisah dalam literatur dengan sedikit pengecualian (Shepard, 2018; Ishola, 2017; Robertson, 2015) yang menunjukkan kurangnya pembenaran empiris. Sedangkan beberapa studi (misalnya Ilo, Izuagbe, Mole & Ukeke, 2018; kami, 2018; Zaveri, 2015; Khalid & Dol, 2015; Hasenay & Kritalic, 2010; Matthe, WSmith & Knowles, 2009) telah memfokuskan pada kesiapsiagaan bencana sebagai cara untuk menjaga keberlanjutan dan isinya, lainnya (misalnya Adekunbi & Wahab, 2015; Sawant, 2014; Iyishu, Nkanu & Ogundimu, 2013; Njeze, 2012) telah bekerja pada tindakan pelestarian dan konservasi untuk semua orang pada kerusakan fisik / kimia sumber daya perpustakaan atau menyadarkan yang telah dilakukan agar tetap dalam kondisi yang dapat digunakan.

Studi yang mencoba meneliti presentasi tindakan konservasi sumber daya perpustakaan memasukkan langkah-langkah kesiapsiagaan bencana (dengan saran penelitian mencakup lebih banyak pendekatan holistik untuk menjaga keberlanjutan dan sumber daya yang terkandung di dalamnya) jarang ditemukan dalam literatur. Argumen dari penelitian ini menunjukkan bahwa terlepas dari

tindakan pengawetan dan konservasi dimasukkan ke dalam protokol keselamatan sumber daya perpustakaan afeguard tanpa batas jalan lain untuk keamanan rumah struktur bln akan lingkungannya dari bencana seperti kebakaran dan banjir, membahayakan semua upaya yang dilakukan. Sementara studi hipotesis menunjukkan bahwa ada hubungan antara dua istilah, hal ini telah ditunjukkan dalam literatur bahwa beberapa peralatan dan proses dirancang untuk bencana erdenpeace juga berlaku untuk pengawetan

dan kegiatan konservasi, seperti yang disajikan dalam snec2t.i4o.

Masalah kesiapsiagaan bencana dan preservasi o konservasi informasi materi adalah kunci untuk kelangsungan hidup akademis dan sumber daya yang mendukung pendidikan. Posisi ini terlepas, bagaimana libriaria ns melihat kegiatan ini dan yang diusulkan hubungan adalah fungsi persepsi yang sangat signifikan. Persepsi dioperasionalkan dalam penelitian ini sebagai interpretasi pustakawan terhadap informasi soern tentang kesiapsiagaan bencana karena berpengaruh pada pelestarian dan pelestarian materi informasi di perpustakaan akademik. Persepsi biasanya merupakan fungsi dari kesadaran — th igehehr yang terakhir, lebih baik yang pertama (Merikle, Smilek & Eastwood, 2001). Persepsi dan kesadaran bencana di antara pustakawan adalah komponen penting dari kesiapsiagaan atau kekurangan offtét.r dua bencana kebakaran di dua kampus perpustakaan Universitas Jos, di Northern N erigia pada 2013 dan 2016 masing-masing melaporkan bahwa tingkat kesadaran bencana para pemegang bank dan tingkat kesiapsiagaan darurat di kampus secara umum adalah po woorke(Nli, Panle & Samuel, 2017). Memiliki telah dilaporkan bahwa pustakawan di Nigeria menempatkan aktivitas kesiapsiagaan di bagian bawah daftar prioritas mereka (Abareh, 2014; Echezona, UgwuO & zioko, 2012).

Dengan latar belakang inilah studi menetapkan persepsi pustakawan ooutextamine tentang kesiapsiagaan bencana, dampaknya terhadap pelestarian. tiancoPengamatan sumber daya informasi di Perpustakaan akademik Nigeria. Timbul dari tujuan-ganda ini, pertanyaan-pertanyaan penelitian berikut ini diangkat untuk memandu penelitian:

- saya. Apa hubungan antara pustakawan petirokne umum tentang kesiapsiagaan bencana dan pelestarian yang efektif dan koantisi sumber daya perpustakaan? Bagaimana langkah-langkah kesiapsiagaan bencana
- ii. diterapkan lapcact tentang efektivitas pelestarian dan konservasi sumber daya perpustakaan

1. TINJAUAN LITERATUR

2.1 Praktek pelestarian dan konservasi sumber daya di perpustakaan universitas

Padahal kebutuhan setiap generasi untuk mendokumentasikan events khusus untuk itu mendukung pelestarian dan pelestarian praktik rekseosur informasi di perpustakaan, budaya pemeliharaan yang dibangun di sekitarnya (cetak atau digital) sangat penting untuk kegunaan dan masa pakainya. Cukup banyak penelitian telah dilakukan untuk mengkaji tahun, luasan, relevansi, metode dan tantangan yang dihadapi pelestarian dan nilai konservasi.

ras di perpustakaan dengan reaksi beragam muncul. Hal ini terungkap dari sebuah penelitian bahwa upaya pelestarian dan konservasi yang diterapkan pada bahan pustaka di PBB dapat ditentukan. perpustakaan rsivitey di Barat Daya Nigeria itu

membersihkan debu, membersihkan dan rak yang tepat untuk memungkinkan ffrle oov udara adalah pelestarian utama dan kegiatan konservasi (Osunride & Adetunla, 20.1A6) analisis komparatif dari praktik pelestarian dan konservasi dari spesialisasi yang dipilih iklperpustakaan demik di Nigeria Barat Daya juga menunjukkan hasil yang serupa. Selain keamanan yang memadai ures diberlakukan untuk mengekang vandalisme dan mutilasi yang menduduki peringkat tertinggi untuk libiersa akademis, r penelitian lebih lanjut mengungkapkan hal itu selanjutnya

pembersihan dan debu mengikat dan fotocopyhiniggh; diterangi sebagai kegiatan pelestarian dan konservasi yang paling sering dipraktikkan di perpustakaan disetdulibrary.

Kegiatan preventif kebanyakan dilakukan oleh libera sritowards menjaga sumber daya di agar tidak terpapar doeratetiroin meliputi digitasi, laminasi, fotokopi dan penjilidan (Ogbodo, 2011). SimilarNlyje, ze (2012) mensurvei tantangan pelestarian dan konservasi di enam perpustakaan universitas swasta di Nigeria Barat Daya. Studi ini menemukan bahwa teknik yang biasa digunakan untuk menyimpan dan menyimpan sumber daya perpustakaan termasuk menjilid, memfotokopi, membersihkan, membersihkan rak yang tepat seperti yang ditentukan oleh 85 persen responden yang merupakan mayoritas. Juga, 42 orang percaya bahwa mereka melestarikan dan melestarikan sumber daya mereka melalui laminasi dan penggunaan itnicsie

menunjukkan penggunaan mikro-filming dan de-aciditfioa dces. Hanya 3 persen yang tidak signifikan n ukuran. Penemuan Adekannbi dan Wahab (2015) memberikan kepercayaan lebih lanjut kepada outcown ini heere terungkap bahwa paling sedikit digunakan teknik pelestarian dan konservasi untuk librra Sumber adalah de-pengasaman.

Dari uraian di atas, rutinitas pemeliharaan rumah yang baik seperti pembersihan, debu, rak yang tepat, penjilidan dan fotokopi sumber daya libir dominan di antara langkah-langkah yang diambil untuk melestarikan dan mengkonservasi materi antar perpustakaan di wilayah tersebut. Sebaliknya, pemeliharaan kamar tera ideal mttingkat awal melalui penggunaan udara-Kondisioner, pencegahan sinar matahari langsung pada koleksi pra-bpaesed menggunakan tirai jendela, penghilangan kelembaban yang berlebihan dari tumpukan arseinagudehumidifier dan pengendalian agen hayati menggunakan insektisida antara lain langkah-langkah menghilangkan kebanggaan mereka dalam praktik pelestarian dan konservasi.

2.2 Praktik pelestarian digital di universitas lb

saya raries

Perkembangan matesriaci pembawa informasi semuanya untuk penyebaran teknologi yang mendesak untuk melindungi sumber daya elektronik. Ketidakjelasan dan ketidakstabilan sumber daya digital terus-menerus menekan perpustakaan untuk mengadopsi aktivitas unik yang biasa disebut sebagai 'pelestarian digital' untuk mempertahankan mig pelestarian ital memerlukan proses terlibat dalam pemeliharaan dan aksesibilitas og f itdemua objek dalam jangka panjang (Velmurugan, 2013). Definisi serupa bahwa aksesibilitas, keaslian dan integritas objek digital juga telah disediakan (Sadiku, dS arhea & Musa, 2017). Perawatan Aktivitas sumber daya digital berbeda secara signifikan dengan kegiatan cetak karena sifatnya yang damai. Karenanya, pelestarian digital merangkul vara iocutisvities yang membantu memastikan kelanjutan akses ke informasi yang ada dalam format digital. SEBUAH Stybli n Ska (2006) mencatat, perlunya melestarikan dan memiliki akses ke sumber daya digital saat ini dan dengan kecepatan eksponensial.

Cukup banyak teknik yang telah diusulkan r dthfeo pelestarian digital sumber daya — digital atau lahir digital. Ini termasuk migrasi, emulasi, penyegaran, enkapsulasi dan replikasi (Gaur & Tripathi, 22) 0,1 Sementara telah dilaporkan bahwa tidak ada 'pendekatan terbaik' yang disepakati untuk semua ruersco digital (Kim, 2018; Tristram, 2002) di antara strategi yang tersedia, bukti berlimpah bahwa emulasi mignrataiond adalah metode yang lebih baik (Rosenthal, 2015; Guttentbrunner & Rauber, 2012) w. eHvoer, telah diperdebatkan bahwa dari dua metode, migrasi adalah relatif lebih disukai daripada em

implikasi yang terakhir (Rosenthal, 2015) dan kemampuan untuk menyembunyikan konteks teknis (Rieger, Murray, Casad, Alexander, Dietrich, Kovari, Meri, cM leuller & Paolillo, 2015). Tampilan sebelumnya dibagikan oleh Granger (2000).

Sementara beberapa dari metode ini telah diimplementasikan, masih diterapkan untuk menjaga dan memperpanjang catatan digital di lingkungan perpustakaan akademis Niagnerai,

situasi mungkin tidak mempengaruhi orang lain. Gbaje (2011) menyampaikan Perpustakaan Nasional Nigeria (NLN), Arsip Nasional Nigeria (NAN) dan National Bureau of Statistics (NBS) menjadi memastikan sejauh mana struktur pengawetan digital dan struktur ditempatkan. Ditemukan bahwa migrasi data adalah strategi preservasi digital yang paling banyak diadopsi tanpa adanya struktur. Lima tahun ke depan, menyegarkan, migrasi a Pelestarian teknologi diamati sebagai pendekatan pelestarian digital yang paling banyak digunakan inesciapi dan perpustakaan akademik di Nigeria Barat Daya dengan tingkat implementasi yang rendah (Osunride & Adetunla, 2016). Posisi ini selaras dengan studi yang dilakukan di luar konteks akademis India (Sawant, 2014).

Sambo, Omeluzor dan Usman (2014) mengambil sampel 603 fiedc erltiibrarian di Nigeria menggunakan a conference to determine their awareness level of preservation strategies. Regrettably, 70 per cent indicated that they have not had any digital preservation training and as a result, they were not equipped with relevant skills to appreciate the exercise. Three years after, the situation has not changed significantly as Sambo, Urhfe and Ejita (2017) found that lack of training was second, behind hardware and software obsolescence, one of the challenges confronting digital preservation programmes in Nigeria. Similar change lesn have been observed in the Zimbabwean National Archives context (Sigauke & Nengomasha, 2012). As reported, relevant expertise is core to the implementation and management of digital preservation system (Rinehart, Prud'homme & Huot 2014). The situation tends to be different from the South African context as byoifit formal digital preservation programme cated. Furthermore, the study showed that spondent stated that preservation of digital Masenya and Ngulube (2019) revealed the availability as 68.2 per cent of the academic libraries surveyed and an overwhelming majority of 95.5 per cent of the resources has been undertaken in their various institutions.

2.3. Librarians' perception of disaster preparedness in Nigerian university libraries

Individual assessment and understanding of any event matter is perception-based. Whether or not the perception would be positive or negative; high or low is a function of other variables. For example, Nigeria is not predisposed to natural disasters. This could affect Nigerians' general perception on disaster—whether natural or man-made. This may not be unconnected to why it has been reported that so librarians pay little or no attention to disaster preparedness, due to the assumption that Nigeria and Africa are not prone to disasters and that library disasters are not widespread in the region (Echezona, Ugwu & Ozioko, 2012). Disaster preparedness embraces activities, programmes, policies as well as measures which are taken up before (to prevent or mitigate), during (to respond) and after (to recover) from the loss accompanying emergency. The importance of these activities has been long emphasized. For example, the International Federation of Red Cross and Red Crescent (1970) posited that the objectives of disaster preparedness are to increase the efficiency, effectiveness and impact of disaster mitigation, response and recovery mechanisms. Disaster preparedness comprises every action geared towards maintaining a satisfactory level of readiness for a corresponding rapid response to emergency situations. It not only embraces the measures put in place for enhancing life safety in the face of disasters, actions towards the protection of property as well as those meant for restoration and recovery (Seurtyon & Tierney, 2006).

Considering the value of any information system and the amount of preparedness activities engaged in to safeguard information resources found, the amount or total lost is sufficient. But it appears disaster preparedness awareness level among librarians in developing economies is the bane of the obvious neglect reported in literature (Igbeyan-Ose, Izuagbe, Ifijeh, Ilogho, Iwu-

James & Osinulu, 2018; Ilo et al., 2018; De Sil2 v0,04). A scenario was reported from the Ghanaian context where Management staff averretd stthaaff members of the library were adequately prepared to effectively prevent or rn esptw emergencies. In contrast, staff members' opinion from the responses provided indicated owth iseer (Ahenkorah-Marfo & Borteye, 2010). This paradox is an indication of low emergency p arepness both at the individual and organizational levels. In a recent study, librasri'an perception was identified as one of the challenges confronting effective disaster managetm inenNigeria (Ilo, Ngwuchukwu, Michael-Onuha & Segun-Adeniran, 2019).

2.4. Preservation activities, disaster preparednesasnd library resources

The ultimate goal of preservation is to slow dotw henwear and tear of library information stock thereby prolonging the life-span and ensulroinnng-term access to the resources. Whereas achieving this goal dependent on factors such aesquaadte funding (Olatokun, 2010; Ogunmodede & Ebijuwa, 2013), the availability oflferveant technology infrastructure and technical expertise are also essential to the ssusco c@ the entire process. As much as closed circuit cameras are key components of disasterapreredpness in libraries (Ilo et al., 2018; Donald, 2012) towards early detection of possible hazarnddsm aonitoning emergencies, they are being used to foster preservation activities in ordermtoonitor and deter mutilation, vandalism and outright theft of library resources (Segaetsho &jaMmna, 2012; Akussah & Bentil, 2010).

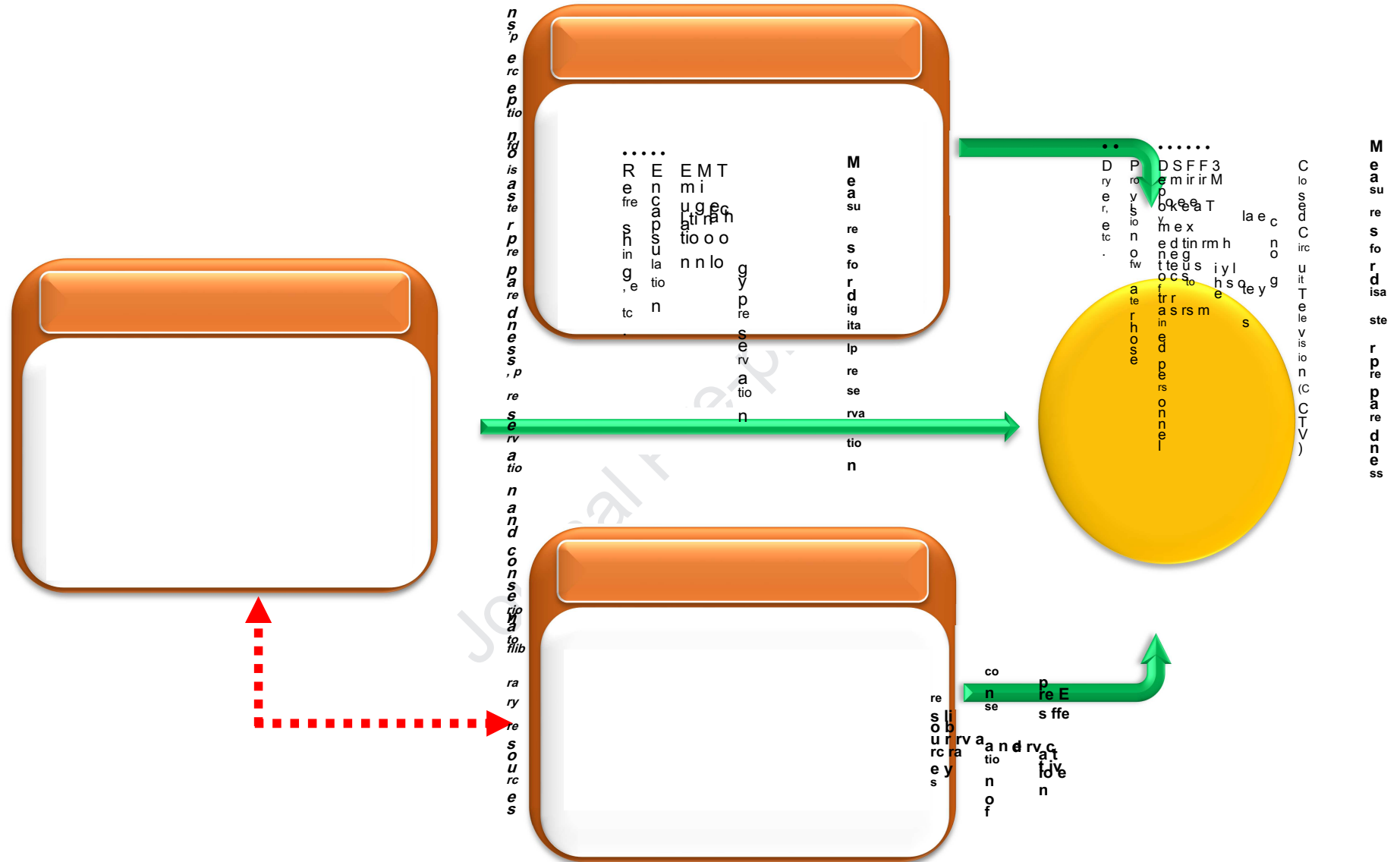
While Ilo, et al (2018) listed strong anti-virusoftware, dust extractors, insecticides/pesticides, plastic sheet cover, hdarirvde and other storage devices among disaster prevention measures, evidence of the use of thteesmes i in preservation and conservation activities abound in literature (Adekannbi & Waha2b0,15). Preservation activities (e.g. digital preservation) and some aspects of disaster manangt e(em.ge. digital disaster) are intertwined; as some equipment and processes designed to manaaagsetedr icsould also be helpful in preventing and mitigating the effect of the deteriorationio

bfral ry resources, vice versa.

Good housekeeping practices could be essential hbootpreservation of information resources and disaster management. It is a goosdekheoeuping principle to strategically position all relevant equipment for effective deployment w nhtne need arises. The proximity of these items (e.g. humidity control cassettes, dryers,t d exstractors/vacuum cleaners, fire extinguishers, insecticides/pesticides and mops) to the stacksaprelaay an important role in the speed and efficacy of response the library can offer in thveenet of emergency (Wong & Green, 2006). The degree of effectiveness of the response proceslsinwtlurn determines the resuscitation and restoration attention affected library materialsll w require.

Technically speaking from the digital preservaticoonntext, it has been observed that during migration, authenticity of a digital recocrd ould be compromised, functionality and data could be lost (Dressler, 2010s)i,ncethe process involves the relocation or copyingaotfadfrom outdated or endangered file formats by means ohfntoelcogy to one that is modern or prevailing (Venkadesan, 2010). This method portends signifitchaanzards to libraries and the collections with which they support scholarship. Therefore, teifchnological incompetence or nondeployment of relevant technology infrastructurecaoscion the loss of library data, disaster has occurred. It therefore follows that adequate preedpnaerss measures put in place to ensure digital preservation could go a long way to prevent digditiaslaster. On the other hand, poor disaster preparedness measures could facilitate the deisotrnuocft important computer hardware hosting the programmes for accessing digital resourcesa. rAessult, the study hypothesizes that:

H1: *There is no significant mean (X) difference between librarians' perception of preservation and conservation activities and their preparedness measures on information resource*



It has earlier been established in the study that damage to library resources is a disaster considering its effect on scholarship. As a result, employing disaster preparedness approach was theorized as a broader and more effective means of safeguarding library collections from all forms of hazards and emergencies. This implies that librarians' view of disaster preparedness is a factor of the effectiveness of preservation and conservation methods employed to safeguard library resources. Figure 1 illustrates the role of each activity to effective preservation and conservation of library resources.

These items listed as measures of the variables are based on extant literature which also guided the development of the measurement scale for data collection.

Besides the general disaster preparedness measures either preventing disaster occurrence or responding adequately or at least mitigating its impact and recovering with minimal consequences, the schema diagram further indicates that each library resource (print or electronic) requires unique measures for achieving effective preservation and conservation outcome. The diagram suggests that until a well-tailored all-inclusive disaster preparedness approach is employed, the overall maintenance and sustainability of print and digital resources remains a mirage.

1. METHODOLOGY

3.1 Procedure

The link between librarians' perception of disaster preparedness and effective preservation and conservation of library resources is what the study seeks to establish, using selected federal and state university libraries in Southwest geopolitical zone of Nigeria. Since the problem under study is correlational and descriptive in nature, the descriptive research design was adopted to situate the study. Samples (university librarians) were thereafter randomized using the balloting system after which total enumeration sampling procedure was employed to take complete count of the population. The study is designed to answer two research questions using criterion mean of 2.50 for decision and one hypothesis formulated and tested at 0.05 level of significance.

3.2 Population/participants

In a typical Nigerian federal or state university library, three categories of personnel exist namely: the Professional Librarians, some of whom are the management cadres who also double as academic staff. The Library Officers, otherwise known as quasi or para-professionals, belong to the middle level manpower in the library and non-professional library staff (Aboyade, 2013). The nature of data to be elicited requires professional competence hence; professional librarians and library officers were selected to provide the data for the research analysis. These library personnel are drawn from 14 universities (7 each of federal and state) across the 6 states in the southwest geopolitical region. A breakdown of the population is presented in Table 1.

Table 1: Distribution of respondents by libraries

			Library Personnel		
Institutions			Professional	Para-Professional	Total
SN	Responding Libraries	Location	N	N	N
1.	Adekunle Ajayi University	Akungba, Ondo State	6	6	12
2.	Ekiti State University	Ado-Ekiti, Ekiti State	16	9	25
3.	Federal University, Oye-Ekiti	Oye-Ekiti, Ekiti State	5	5	10
4.	Federal University of Agriculture	Abeokuta, Ogun State	23	8	31
5.	University of Technology	Akure, Ondo State	11	8	19
6.	Lagos State University	Ojo, Lagos State	17	6	23
7.	National Open University of Nigeria Obafemi	Lagos State	14	7	21
8.	Awolowo University	Ile-Ife, Osun State	8	14	32
9.	Olabisi Onabanjo University	Ago-Iwoye, Ogun State	11	14	25
10.	Ondo State University of Science and Technology	Okitipupa, Ondo State	3	4	7
11.	University	Osogbo, Osun State	7	4	11
12.	University of Ibadan,	Ibadan, Oyo State	22	43	65
13.	University of Lagos	Akoka, Lagos State	20	12	32
14.	Tai Solarin University of Education	Ijebu-Ode, Ogun State	9	5	14
Total			182	145	327

* Field survey 2018

3.3 Instrumentation

Questionnaire and interview methods were the instruments adopted for data collection. The questionnaire was grouped into 3 sections. Section A deals with the bio-data of the respondents and it contains 7 items. Section B contains information on librarians' perception of disaster preparedness. It has 7 items and section C focuses on preservation and conservation activities carried out in libraries towards safeguarding of library resources. It consists of 19 items. 76.1% of the 327 copies of the questionnaire distributed were duly completed and returned for analysis. The questionnaire was measured on a 4-point scoring scale of Strongly Agree = 4, Agree = 3, Disagree = 2 and Strongly Disagree = 1. The choice of this scoring pattern stems from the need to ascertain the extent to which respondents agree and or disagree with items measuring the variables. The study sets out to examine. In an attempt to validate the responses provided in the questionnaire, the University Librarians of all the responding libraries were interviewed. This was achieved with the aid of a structured interview schedule which comprised 10 open-ended questions. Areas covered librarians' perception of disaster preparedness in academic libraries, methods of digital preservation as well as preservation and conservation activities carried out in the libraries.

3.4 Constructs' reliability coefficient

To determine the internal consistency, the questionnaire was pre-tested on 17 librarians of Nnamdi Azikiwe Library, University of Nigeria Nsukka. The choice of the library stems from

the fact that it is not part of the academic libraries under study. The Cronbach Alpha method was used to determine the internal consistency of the instrument with the following: librarians' perception of disaster preparedness = 0.84; preservation and conservation activities = 0.83 with an overall consistency level of 0.97.

2. RESULTS

Research Question :1 What is the relationship between the general perception of librarians about disaster preparedness and effective preservation and conservation of library resources?

Table 2: Mean and standard deviation scores of librarians' perception of disaster preparedness and effective preservation and conservation of library resources

Items		Institution by ownership									
		Federal		State		Overall X					
SN		x	SD	X	SD	X	SD	r	d		
1	Disaster preparedness is a necessary requirement for effective preservation and conservation of library resources	3.63	.69	3.70	.58	3.65	.65		1 st A		
2	Disaster preparedness is too broad a task for university libraries alone to undertake	3.52	.73	3.69	.55	3.58	.68	2 nd	A		
3	Disaster preparedness is expensive and does not worth the stress	3.43	.79	3.54	.72	3.47	.77	3 rd	A		
4	Disaster rarely occurs in libraries	3.34	.91	3.46	.77	3.38	.86	4 th	A		
5	Due to pressure from other library activities, disaster preparedness is a less important task in library	2.78	.97	1.99	.88	2.05	.93	5 th	D		
6	Disaster preparedness is of secondary importance	1.72	.92	1.72	.92	1.57	.88	1.67	.90	6 th	D
7	Disaster can hardly destroy library resources even when it does occur	1.63	.79	1.63	.79	1.53	.76	1.60	.78	7 th	D
Weighted Mean		2.77									

** X = Mean; SD = Standard Deviation; r = Ranking; d= Decision, A = Agree, D = Disagree

Table 2 shows the mean and standard deviation scores of the respondents on librarians' perception of disaster preparedness for effective preservation and conservation of library resources in university libraries. Judging by the mean of 2.50, respondents are in agreement with items 1 — 4 and disagree with items 5 — 7 respectively as they concern

librarians' perception of disaster preparedness. It further reveals that, "Disaster preparedness is a necessary requirement for effective preservation and conservation of library resources" (X =

3.65) ranked highest among the items measuring librarians' perception in the distribution. This is followed by "Disaster preparedness is too broad a task for university libraries to take alone" (X = 3.58); Disaster preparedness is expensive and does not worth the stress (X = 3.47) and Disaster rarely occurs in libraries (X = 3.38). Ranked least in the distribution in terms of extent of disagreement is "Disaster can hardly destroy library resources even when it does occur" (X = 1.60). The low mean value of respondents' disagreement to this item suggested otherwise.

Research Question :2 How are disaster preparedness measures put in place to secure the library facility and the collections it contains, possible activities enough which this objective can be realized were grouped into clusters and analyzed. The choice of this arrangement stems from the need to present the weighted mean independently so as to form a clear picture (at a glance) of activities with highest response. Ranking of responses is presented in ascending order of magnitude according to mean values. Since analysis shows that all mean values exceeded the criterion mean of 2.50, participants' responses to each item tended towards agreement rather than disagreement. Table 3 seeks to unveil disaster preparedness activities geared towards effective preservation and conservation of library resources. For clarity, items are grouped into 3 sections and ranked correspondingly. Evidently, the Table has several interpretations relating to the determination of disaster

Table 3: Mean and standard deviation scores for disaster preparedness measures and preservation and conservation of library resources

Items		Institution by ownership								
		Feder al		Sta t e		Ove r all X				
		x	SD X		SD	X	SD	r	d	
Cluster A: Measures for preservation and conservation of print resources										
1	Good housekeeping practices	3.49	.51	3.67	.56	3.56	.54	1 st	A	
2	Binding and repair of torn library print resources	3.40	.66	3.59	.58	3.47	.64	2 nd	A	
3	Photocopying and digitization of library resources	3.38	.63	4		3.49	.90	3 rd	A	
	lights	3.42	.58	3.37	.95	3.40	.73	4 th	A	
5	Fumigation using insecticides and rodenticides	3.33	.69	6		3.53	.57	4 th	A	
	Dust extraction (vacuum) and control	3.31	.55	3.53	.68	3.39	.61	5 th	A	
7	Maintenance of conducive temperature	3.33	.65		3.42	.78	3.39	.70	5 th	A
Weighted Mean						3.43				
Cluster B: Disaster preparedness measures										
8	Provision of fire extinguishers	3.30	.60	3.47	.66	3.37	.63	6 th	A	
	Deployment of trained personnel	3.40	.68	3.29	.84	3.36	.74	7 th	A	
	Provision of water hose	3.31	.79	3.10	.89	3.24	.83	8 th	A	
11	Installation of fire alarm system	3.23	.74	3.21	.85	3.22	.78	9 th	A	
12	Installation of smoke detectors	3.18	.82	3.21	.88	3.19	.84	10 th	A	
	13 Deployment of CCTV	3.08	.85	3.22	.89	3.13	.86	11 th	A	
14	Use of 3M technology	3.08	.71	3.18	.84	3.12	.76	12 th	A	
Weighted Mean						3.23				
Cluster C: Digital preservation activities										
15	Uploading research outputs on institutional repository	3.13	.81	3.07	.93	3.11	.85	13 th	A	
16	Provision for data backup	3.16	.75	2.90	1.02	3.07	.86	14 th	A	
17	Building firewalls	3.07	.91	2.94	1.00	3.03	.94	15 th	A	
18	Migration	3.00	.84	2.74	1.00	2.91	.91	16 th	A	
19	Emulation	2.88	.83	2.75	.89	2.83	.85	17 th	A	
Weighted Mean						2.99				

** X = Mean; SD = Standard Deviation; r = Ranking; d = Decision, A = Agree

To ascertain the extent of safety preparedness in place to secure the library facility and the collections it contains, possible activities enough which this objective can be realized were grouped into clusters and analyzed. The choice of this arrangement stems from the need to present the weighted mean independently so as to form a clear picture (at a glance) of activities with highest response. Ranking of responses is presented in ascending order of magnitude according to mean values. Since analysis shows that all mean values exceeded the criterion mean of 2.50, participants' responses to each item tended towards agreement rather than disagreement. Table 3 seeks to unveil disaster preparedness activities geared towards effective preservation and conservation of library resources. For clarity, items are grouped into 3 sections and ranked correspondingly. Evidently, the Table has several interpretations relating to the determination of disaster

preparedness activities aimed at effective preservation and conservation of library resources. First, the analysis reveals that the libraries are more concerned with preservation and conservation activities of print resources than disaster preparedness and digital preservation activities as Cluster A suggests. Leading the pack in the cluster distribution is "Good housekeeping practices" (X = 3.56) while "Maintenance of conducive temperature" rated last (X = 3.39).

Cluster B shows evidence of practice of disaster preparedness activities in the studied libraries. Taking the pride of place in the cluster distribution is "Provision of fire extinguishers" (X = 3.37) while "Use of 3M technology" to checkleaking tendencies ranked last. Cluster C indicates that the activity that is the least emphasized in relation to effective preservation and conservation of library resources is digital preservation. "Uploading of research outputs on institutional repository" (X = 3.11) which is not a core digital preservation activity ranked highest while "Migration" (X = 2.91) and "Emulation" (X = 2.83) which are principal digital preservation strategies, ranked least in the cluster. Based on the criterion mean of 2.50 for taking decision, Table 3 shows that there is strong agreement among respondents on disaster preparedness activities for effective preservation and conservation of library resources in all the libraries studied. This conclusion is based on the weighted mean values of all items that exceeds the criterion mean.

4.1 Testing of hypothesis

H1: There is no significant mean (X) difference between librarians' perception of preservation and conservation activities and disaster preparedness measures on information resources.

Table 4: The t-test analysis of librarians' perception of preservation activities and disaster preparedness measures

SN	Institution	X	SD	N	DF	t- test P-Value	Sig.	Rmk
1.	Federal	2.86	.57	158				
2.	State	2.78	.76	91	247	1.519	.130	P>0.05 NS

* Significant at $p > 0.05$;

* NS = Not Significant

The t-test analysis presented in Table 4 showed a t-value of 1.519 at $p > 0.05$ level indicating insignificance relationship. Therefore, the null hypothesis which states that "There is no significant mean (X) difference between librarians' perception of preservation and conservation activities and disaster preparedness measures on information resources" is supported. This is an indication that there is no difference in librarians' perception between disaster preparedness measures and preservation and conservation activities relative to information resources safety. In other words, both methods have significant effect on the overall well-being of library collections.

3. DISCUSSION OF FINDINGS

With respect to research question one, the study found strong affirmative agreement among respondents on the impact of disaster preparedness measures on effective preservation and conservation of library resources. This shows that effective preservation and conservation of

information resources can be achieved if a library incorporate disaster preparedness measures towards ensuring the safety and well-being of the resources. The importance of disaster preparedness was further buttressed from another point in when respondents strongly disagreed that disaster preparedness is of secondary importance. This outcome lent support to the role of disaster preparedness measures in the efficacy of preservation and conservation of information resources. The study further revealed that there is a perception among librarians with strong consensus that disaster preparedness is not done alone due to financial, technical and other constraints.

A strong agreement level was also reached among librarians that disaster rarely occurs in libraries like in other organizations. From digital disaster perspective, Zaveri's (2015) noted that over 50 per cent librarians are less than 20 per cent aware that digital disaster is possible in libraries as against the 7.61 per cent librarians who are probabilistic about disaster occurrence in libraries. However, recent events in Africa are beginning to change the narrative as many libraries in the region have experienced the destruction of library structures and the resources they contain due to disaster (Abareh, 2014). This hypothesis partly lent credence to research question one, when it was shown that librarians (whether from federal or state university libraries) do not differ on the impact of disaster preparedness measures and those of preservation and conservation on the effective

use of information resources — both are essential. Librarians do believe that libraries need to be disaster-conscious in order to give preservation and conservation the right attention deserved in libraries. This position may be informed by the perception that disaster preparedness is an expensive undertaking to embark on. Drawing inference from Table 2, librarians' disposition towards disaster preparedness vis-à-vis preservation of information resources appear unfavorable. The responses elicited from one of the University Librarians (UL) interviewed indicated that "even if our level of disaster preparedness is low, we strongly believe in disaster preparedness". Another UL who appears more practical noted that "it is not enough to be disaster-conscious, actual preparedness begins with the procurement of relevant disaster equipment and adequate training of personnel."

Ishola (2017) reported that some of the problems of preservation and disaster management in academic libraries are due to lack of training on preservation, this, according to the study was responsible for the poor perception of librarians on preservation and conservation of library collections. Earlier, Abbar (2014) reported that poor perception of the importance of disaster preparedness among librarians is the bane of the various damage done to library buildings and resources during emergencies. The author blamed this phenomenon on the non-inclusion of disaster management in many library school curricula in Nigeria — a course meant to groom and prepare librarians with adequate knowledge on emergency management. Kolawole, Ogunbiyi, Oriogun and Ogbuiyi (2015) in their study submitted that lack of interest is the bane of librarians in disaster preparedness activities which in turn, negatively affect preservation of library resources in most university libraries in Nigeria.

On another hand, the result of this study corroborated that of Echezona, Ugwu and Ozioko (2012) who noted that it has been an age-long thinking of librarians that the chances of disaster occurrence in libraries are rare. If this is anything to go by, it can then be concluded that librarians in Nigeria are yet to learn any lessons from the two fire disasters that gutted the University of Jos two campus libraries' whole collection in 2013 and 2016 respectively (Nwokedi, Panle & Samuel, 2017). This position corroborated Matthews et al (2009) who reiterated in their study that libraries which have had previous experiences of disaster are more

likely to embrace disaster preparedness activities proactively than those that never experienced disaster. Irrespective of the effectiveness of preservation and conservation measures put in place to safeguard information resources, adequate prevention mechanisms against fire, flood, virus attack etc., preservation activities become a mirage when emergency occurs.

Findings emanating from research question 2 show that the prevailing preservation and conservation practices among university libraries in Southwest Nigeria are tilted more towards print resources than their electronic counterparts. In other words, university libraries in the region surveyed are more concerned with preserving print resources than they are for digital preservation and disaster preparedness. The strong evidence to this finding when they all responded that photocopying, binding, good housekeeping practices etc. are the preservation and conservation activities being practiced in their respective libraries. The plausible reason for this result is that preservation and conservation of print resources are far more economical to undertake than for digital resources.

As Zaveri (2015) reported, a common denominator between print and digital preservation of library resources. The author noted that water and fire are both destructive to print, digital as well as library hard/software infrastructure. Prior findings have shown that good and appropriate housekeeping practices like: dust cleaning and proper shelving to allow free flow of air (Osunride & Adetunla, 2016); binding, photocopying and a well-coordinated shelving approach (Adekunbi and Wahab, 2015; Njeze, 2012) help minimize chemical, biological and other environmental effect on library collections. Consistently, these are the most practiced preservation and conservation activities in university libraries in Nigeria as the current study affirmed.

It was also observed that the provision of fire extinguishers and deployment of trained personnel took the lead among the list of disaster preparedness activities in university libraries in Southwest Nigeria. This finding underscores the inadequate emphasis university libraries in Nigeria place on technological aspect of disaster preparedness. These results support that of Khalid and Dol (2015) who submitted that academic

libraries are more prepared for fire disaster than other forms of disasters. Similar claim was reported by Ahenkorah-Marfo and Borteye (2010) in Ghana. Strengthening this claim further, the interview responses by some of the ULs who affirmed that fire extinguishers are the common disaster preparedness tool in their libraries.

In terms of digital preservation measures, the most common approach common to all the university libraries studied is "uploading research outputs on Institutional Repository" and the "provision for data back-up". Sadly, the core digital preservation strategies such as migration (the relocation of data from outdated or endangered media to one that is modern) and emulation (the recreation of the environment in which the data is rendered in its original form), etc. are downplayed. Decman and Vintar (2013) noted that this result in part when they noted that uploading institutional/organizational research output into repositories is a short-term solution for the preservation of digital records. This finding contradicted that of Adekunbi and Wahab (2015) who found that migration was mostly the digital preservation strategy among academic libraries in Southwest Nigeria with a mean score of 1.50 which was the highest among the long-term digital preservation strategies employed but relatively low in comparison to the print strategies employed. Some of the ULs interviewed lent credibility to this claim when they answered that data backup, installation of power and virus and firewalls, migration of data etc. are the digital preservation techniques in use in their libraries.

The result of Zaveri (2015) also strengthened the result of this paper as the author observed that the measure commonly used to preserve digital contents among Indian libraries is manual backup. This conclusion was reached when 78 per cent of the responding libraries ranked the activity highest. Similar submission has also been made by Dimattia (2001). This outcome is partly in tandem with that of Sydney (2002) who reported that website backup was among the several technological innovations that the Sahasra Shiksha library after the September 11 disaster.

4. RESEARCH CONTRIBUTIONS

Disaster preparedness and preservation and conservation of information resources are two distinct concepts studied independently in library and archival studies. Where they are both mentioned, their composite effect to library collections and the facility housing them is empirically downplayed. Whereas the study showed that the effectiveness of preservation activities is largely dependent on the efficacy of disaster preparedness measures, both activities thus run complementarily. Accordingly, the study has extended the frontiers of preservation and conservation beyond the conventional limit of conservation of library resources to disaster management. A major research importance of this study (besides making significant addition to existing body of knowledge) is its ability to incorporate both concepts with a view to gaining broader perspective of the phenomenon. Since this study differs empirically from prior studies, its pioneering effect in ascertaining greater depth of the overall well-being of information resources and the facility housing them from a disaster preparedness standpoint is remarkable.

5. RECOMMENDATIONS

Arising from the findings of this study, the following recommendations are made:

- i. University libraries should embrace all-inclusive disaster preparedness approach towards the preservation and conservation of library resources. Limiting the concept to deterioration due to environmental, biological and other factors does not ensure a holistic approach for caring for library information resources and the facility housing them.
- ii. Librarians should have a change of perception to disaster preparedness. It is pointless to wait for an occurrence before taking proactive steps as this may lead to irrecoverable loss. Efforts should be made to liberate collections in good and usable conditions to sustain the continued promotion of scholarship and user satisfaction.
- iii. Print and digital resources are complementary, and hence, all approaches relevant to safeguarding them should be employed at all times. Because of the future of information resources rest more on digital resources than on print version, proactive effort should be made to ensure effective digital preservation practices in libraries.

- iv. Relevant disaster equipment such as fire extinguishers, smoke detectors, fire alarm systems, fire tractors, dryers, dehumidifiers, etc. could be procured and deployed to ensure effective prevention and response in the event of emergencies.

6. CONCLUSION

Two research questions and one hypothesis guided the study. The objective of this research was to examine the role of librarians' perception of disaster preparedness and its impact on effective preservation and conservation of library resources in university libraries in Southwest Nigeria. Having lent empirical justification for the independent contribution of preservation and disaster preparedness practices to the overall security and longevity of information resources, the composite effect of the application of both methods has been shown to guarantee the safety of the library facility as well as the comfort of patrons patronizing it. This suggests that adopting this broader approach to examine this phenomenon, in fact, implies that preservation activities and disaster preparedness measures are both interrelated complementary and when adequately and proactively harnessed, factors that facilitate the deterioration of library materials or portend significant danger to the library facility are minimized significantly.

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