

**5th International Conference on
Library and Information Management
(ICLIM - 2023)**

**“Re-engineering Library and Information Services
through Collaborative Strategies: A way forward.”**

29th - 30th November 2023

PROCEEDINGS

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Department of Library and Information Science,
Faculty of Social Sciences,
University of Kelaniya, Sri Lanka.
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5th International Conference on Library and Information Management
(ICLIM - 2023)

“Re-engineering Library and Information Services through Collaborative Strategies: A way forward.”

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Message from the Vice Chancellor

The University of Kelaniya is highly committed to nurturing an academic environment that promotes high-quality research. The ICLIM 2023 will provide an excellent platform to share knowledge and experience among researchers in the disciplines of Library and Information Science, and contribute towards collaboration in the provision of information services in an efficient and effective manner.

It is with great pleasure that I write this message of felicitation for the 5th International Conference on Library and Information Management (ICLIM 2023) organized by the Department of Library and Information Science under the very important theme **“Re-Engineering Library and Information Services through collaborative strategies: A way forward”**. This theme addresses many contemporary issues and challenges that our societies face today regardless of the level of development.

As the Vice-Chancellor of the host university, I extend a warm welcome to all the participants, especially our foreign delegates attending the conference, and wish that all of you will use this opportunity to share views and ideas on how to develop skills and competencies as well as build warm and amicable relationships, which are among the main objectives of this Conference.

I congratulate the Department of Library and Information Science for organizing this conference and wish ICLIM 2023 every success.

Senior Prof. Nilanthi De Silva

Cader Chair

Vice-Chancellor, University of Kelaniya, Sri Lanka.



Message from the Dean - Faculty of Social Sciences

I am pleased to issue a message at the 5th International Conference on Library and Information Management (ICLIM 2023), organized by the Department of Library and Information Science at the University of Kelaniya, Sri Lanka. It is truly an honour to witness such a historical event within the Faculty of Social Sciences, reflecting the commitment and dedication of the Department in fostering academic and professional excellence. The multidisciplinary nature of the Department, blending academic rigour with a professional approach, is commendable and speaks to the high standards upheld by the University of Kelaniya. I am delighted to acknowledge the efforts of the Department in organising this international forum for the fifth time. Such initiatives not only showcase the expertise within the Department but also provide a platform for erudite and well-experienced experts to convene, share knowledge, and contribute to the advancement of library and information sciences. Your appreciation for the Senior Librarians, library professionals from Sri Lanka, and human resources, particularly the LIS professionals, underscores their vital role in gathering and disseminating information and knowledge resources. The emphasis on providing information to underprivileged and socially excluded communities demonstrates a commitment to inclusivity and societal development. I commend the Department for spearheading this scholarly venture, which undoubtedly enhances professional, academic, and research collaboration. The connections forged among distinguished personalities, as well as the engagement of upcoming young professionals, will undoubtedly contribute to the growth and evolution of the field. I express my gratitude to the Conference Chair, Prof M.K. Weerasinghe and Prof W.A. Weerasooriya, Keynote speaker, Theme speakers, Chairpersons, Organizing Committee and all participants for their invaluable contributions to the success of the 5th ICLIM 2023. The entire conference organising team's dedication and hard work are recognised for special recognition. I wish you every success in this significant event, and I look forward to witnessing the positive impact it will undoubtedly have on the academic and professional landscape of library and information management.

Prof. M.M. Gunatilake

Dean, Faculty of Social Sciences, University of Kelaniya, Sri Lanka.



Message from the Chairman - Research Council, University of Kelaniya

It is indeed a great pleasure to send this message on the occasion of the 5th International Conference on Library and Information Management (ICLIM 2023) organized by the Department of Library and Information Science of the University of Kelaniya. This is the flagship research conference of the Department of Library and Information Science. Library and information science is a rapidly developing area which blends traditional and modern concepts of information management. The diversity and the developing new trends in this area have created a lot of research themes for curious researchers. The conference highlights the fact that the success of the future of libraries is strongly linked to the ability of the libraries to re-engineer their operations, embrace new technologies, and other innovative approaches. It emphasizes the need for libraries to evolve from traditional repositories of information to dynamic hubs of creating, disseminating, and engaging knowledge. The prime goals of the Research Council of the university are to enrich research culture in the university and promote multidisciplinary research. The Research Council provides incentives and necessary support to the researchers who publish in high quality journals. The research Council also expects that a considerable percentage of the studies presented in the form of abstracts in the conferences organized by the university to end up as full research articles in the near future. It is well understood that modern day research needs a multidisciplinary approach to produce high quality results. Library and information management is an area where many disciplines such as science, technology and social sciences can provide a positive impact. I congratulate the Department of Library and Information Science of the University of Kelaniya for organizing this conference annually for the fifth time and making it an excellent platform for researchers to present their novel findings.

I wish the ICLIM 2023 all success.

Senior Prof. Kapila Seneviratne
Chairman, Research Council
University of Kelaniya, Sri Lanka



Message from the Director - Research Centre for Social Sciences (RCSS)

I am pleased to extend my warmest greetings for the 5th International Conference in Library and Information Management (ICLIM 2023), organized by the Department of Library and Information Sciences, University of Kelaniya, Sri Lanka.

It seems that time has come to revisit the structure and functions of library system to line with pressing needs of the development process of societies and economies in and around the countries. The theme of this conference ‘Re-engineering Library and Information Services through Collaborative Strategies: A way forward’ is itself match with the requirement of the contemporary academic as well as social needs. Dissemination of knowledge in this regard is one of the key objectives of this conference. They would act as a platform for sharpening the internal aptitude and skills of academics, researchers, and scholars who present their academic work and share knowledge at the conference.

This conference may *be* immensely helpful in developing a research culture in the university system and widening collaboration among national and international universities. Hope each and everyone participated in his event will enjoy and learn a lot through this valued event.

On behalf of the Research Centre for Social Sciences (RCSS), University of Kelaniya, Sri Lanka, I wish and envisage that this event will be a stepping stone to move forward to a successful arena in the sphere of research and creation of new knowledge.

Prof. A.G. Amarasinghe

Director, Research Centre for Social Sciences (RCSS), Faculty of Social Sciences,
University of Kelaniya, Sri Lanka



Message from the Keynote Speaker

Greetings from Bharathidasan University, India

It is an honor to have been invited as a keynote speaker to this 5th International Conference on Library and Information Management (ICLIM 2023) at the University of Kelaniya. This conference is probably one of the first “high exposure” efforts of the only Department on Library and Information Science of Sri Lanka. More than 100 different presentations in 09 exclusive themes will be held. I can hardly imagine any topic left unaddressed in Information and Library Science, ranging from cultural, social interests such as reading habits or preservation of heritage to high-tech IT-related topics such as the use of the Cloud and the popular emerging mobile applications, Artificial Intelligence which are also relevant for libraries and Information Centre’s. With the multitude of themes covered. I am sure the Conference will bring a good view on what is going on in the Library and Information Science in Sri Lanka and neighboring and other countries. In our profession and scientific field, with such a broad scope of issues and topics, a steady and clear view on the basics and principles will remain necessary to act as a beacon for further orientation in many possible directions. My best wishes are for the Vice-Chancellor, Dean of the Faculty, Head of Department Prof M.K. Weerasinghe and Prof W.A. Weerasooriya and the teaching and non-teaching staff of the Department and the Faculty, the organizers and all committee members of the ICLIM 2023 for their untiring efforts like this. In closing, I would like to express my appreciation to the organizers, the participants, and everyone involved in making this conference a grand success. May this event mark the beginning of a new era in the evolution of library and information services. I am truly honored to have had the opportunity to serve as the keynote speaker at this remarkable conference, and I would like to extend my deepest gratitude to the organizers for this privilege. It is my distinct pleasure to be part of this gathering of brilliant minds, scholars, and professionals, all of whom share a profound commitment to advancing our field.

Prof. Srinivasa Ragavan

Department of Library and Information Science Bharathidasan University, India.



Message from the Head of the Department

As a Conference Chair and the Head, Dept. of Library and Information Science, University of Kelaniya, Sri Lanka, it is indeed a very pleasing and enthusiastic opportunity to convey a message for the 5th International Conference on Library and Information Management (ICLIM 2023) with the theme “Re- engineering Library and Information Services through collaborative strategies: A way forward”. It is also a great privilege for me particularly the fact that this landmark event takes place at the rightest time, the rightest manner, at the rightest place, the Department of Library and Information Science, University of Kelaniya where you all the distinguish and erudite personalities gathered here today.

Right from the start and to the present, the contribution made by this Department in human resource development, training, education, research, and consultancy work is so vivid and enormous. There have been quite a number of other projects and programs organized by the Department of Library and Information Science, University of Kelaniya in its remarkable annals and the ICLIM 2023 is the 5th International conference organized in this nature.

It is very obvious fact that the content of the most papers submitting today are original findings hence to make use of these for the development of the country is should be the vision of all who gathered here today. I take this opportunity to thank the Chairman UGC, Vice Chancellor, all Deans of Faculties, and the Heads of Departments, conference organizers, theme speakers, coordinators, chairpersons, rapporteurs, foreign delegates, and the faculty staff.

Senior Prof. M.K. Weerasinghe

Head, Department of Library and Information Science
University of Kelaniya, Si Lanka.



Message from the Conference Chairs

We are privileged and honor to issue a message on behalf of the Coordinating and the Organizing team of the 5th International Conference on Library and Information Management (ICLIM 2023) organized by the Department of Library and Information Science, Faculty of Social Sciences, University of Kelaniya. The principal purpose of the International Conference on Library and Information Management (ICLIM 2023) is to seek the theme of our conference, “Re- engineering Library and Information Services through collaborative strategies: A way forward” underscores the transformative journey that libraries and information services are currently navigating. Perspectives and to make ready for the future challenges through the best practices and the best opportunities available with us locally and internationally.

The world has witnessed remarkable revolutionary changes in the field of information including the libraries and library profession. In this milieu, the librarian’s role is challenged in providing access to information and in disseminating available information for the citizens of this knowledge society in the turbulent epoch. One dynamic solution for answering this issue is how the information professionals enshrine their information management work more effectively and productively in a more trustworthy and very collaborative approach. This International Conference expects to gather intellectuals, researchers, information professionals, students and other stakeholders in the LIS profession into one forum to create constructive dialogue to support sustainable development in our society. We firmly believe that this theme encapsulates the very essence of our field’s evolution. In a world of ever-increasing information and technological advancements, libraries must continually adapt and innovate, use collaborative strategies those are at the core of this transformation allowing us to pool our collective expertise, resources and creatively with other educational institutions/universities, research organizations and professional associations in the field of library, documentation and information science, to create collaborative scholarly platform for all, to create constructive dialogue in adopting and utilization of technologies and facing challenges forced in the digital environment are other finite objectives of ICLIM 2023. It is our humble duty to thank the distinguish scholars and professionals who specially arrived here

for the ICLIM 2023. The dedication provided by the Editors, Reviewers, Chairpersons, and the Presenters of the abstracts and others participating at this occasion is also valued.

We must thank specially members of the Sub Committees, Members of Symposium Secretariat. All Heads of Departments, teaching and non-teaching staff of the Faculty of Social Sciences also deserve thanks. We lend everyone a happy and rewarding experience at the the 5th International Conference on Library and Information Management (ICLIM 2023), University of Kelaniya, Sri Lanka.

Senior Prof. M.K. Weerasinghe
Conference Chair
Head, Department of Library and
Information Science
University of Kelaniya, Sri Lanka.

Senior Prof. W.A Weerasooriya
Conference Chair
Department of Library and Information
Science,
University of Kelaniya, Sri Lanka.

List of Abbreviation

ADEPLIS	Advanced Distance Education Programme
ALA	American Library Association
BOAI	Budapest Open Access Initiative
CAL	Computer Assisted Learning
CAS	Current Awareness Service
CBL	Computer Based Learning
CC	Creative Commons
CMS	Content Management System
COLA	Course on Library Automation
CPD	Continuous Professional Development
CSCL	Computer Supported Collaborative Learning
DIPLIS	Diploma in Library and Information Science
DLIS	Department of Library and Information Science
DOAJ	Directory of Open Access Journals
DRTC	Documentation Research and Training Centre
FGS	Faculty of Graduate Studies
FLA	Fellowship of the Library Association
GPL	General Public License
ICT	Information and Communication Technology
IFLA	International Federation of Library Associations
ILS	Integrated Library System

IR	Institutional Repository
KDU	General Sir John Kotelawela Defense University
LIS	Library & Information Science
LMS	Library Management Systems
MARC	Machine Readable Catalogue
NCL	Networked Collaborative Learning
NLDSB	National Library and Documentation Services Board
NSF	National Science Foundation
OPAC	Online Public Access Catalogue
ORBL	Online Resource Based Learning
RCI	Research Citation Indexes
RRMS	Researcher prefer Reference Management Software
SLLA	Sri Lanka Library Association
SMA	Social Media Analytics
UGC	University Grants Commission
UPLSB	Uva Provincial Library Service Board
VLE	Virtual Learning Environment
WBT	Web-Based Training
WIF	Web Impact Factor
WWW	World Wide Web

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Section I

Preliminary analysis on Diploma Students' Satisfaction in Online Learning during the COVID- 19 pandemic: Sri Lanka Library Association

Alahakoon, Champa N. K.

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Abstract

This study aims to measure the satisfaction, successfulness and challenges faced by the Diploma students of Sri Lanka Library Association during the pandemic period. The survey was conducted using Google forms. Approximately 225 questionnaires were sent to the students via WhatsApp, and 194 (88.5%) responses were received. SPSS software use for the data analysis. The results showed that more than 50% of the students agreed to online education during the lockdown. Students indicated that online mode is secure their health (98%) during this lockdown than having face-to-face classes. The study indicated that 97(49.9%) students were highly satisfied with online teaching, and 36.5% were neutral. The majority of students (78.9%) used smart phones however, the usage of desktops, laptops, and tablets was not highly utilized (19%) for e-learning. Alternatpively, 41.8% tried to find notes through the web page and whatsApp groups, while 23.7% of students sought help from friends to recover the lessons. The challenges reported included not being able to clearly hear the lecture 88 (45.4%), expensive equipment 85(43.8%), poor internet connection 84(43.3%), difficulty in timely logging on 84(43.3%), and feeling of isolation while attending class 82(42.3%). It is recommended to enhance the practical effectiveness of the online course.

Keywords: *Online education, Diploma students, Students satisfaction, Sri Lanka Library Association, E-learning*

Introduction

The COVID-19 pandemic has had a profound impact across the globe, affecting individuals and communities everywhere. Consequently, online teaching has emerged as the sole viable solution for educational institutions to continue their education programs in the pandemic situation. This approach is also known by alternative terms such as e-learning, blended learning, online education, web-based education, and web-based instruction (Bao, 2020; Urme & Barua, 2023). The transformation from conventional to online learning and teaching is a significant challenge for both students and lecturers of Sri Lanka Library Association (SLLA) requiring adaptation to novel educational and teaching models during the exceptional time of the pandemic. The substantial effort has been made to create the effective online teaching with affordability and which to make satisfactory for the SLLA students to grasp the lessons. As mentioned Haththotuwa & Rupasinghe, (2021), Zoom has become a popular teaching platform for delivering online lectures in Sri Lankan educational institutes and universities. However, the SLLA education program was streamlined to suit the online environment by subscribed the ZOOM and the awareness programs were conducted with students and lecturers. Although, the SLLA has conducted face-to-face and distance education programs the e-learning has become the only solution for this global pandemic, even with the challenges posed to both educators and students.

Problem Statement

Most of the higher education institutes and universities have conducted surveys to measure the perceptions on the effectiveness of teaching and learning in the online platform. However, despite the Sri Lanka Library

Association's transition to online education from conventional teaching learning methods, no research has thus far been undertaken to assess the success of online learning. Therefore, this study was carried out to measure the success, satisfaction and challenges of students faced by students enrolled in the Diploma course at SLLA during the academic year of 2021/2022.

Objectives

In this environment the following objectives has been set for the study.

- To investigate the students' success with various mode of teaching methods
- To measure the level of satisfaction of having online education
- To identify the difficulties encountered by students during online education.

Materials and Methods

The target population of this study comprised active students who enrolled to pursue the Diploma (1 Year) courses at the SLLA. They constituted the inaugural batch to experience the complete lecturer series via zoom. Data were collected through a Google Form survey questionnaire and prepared it to match the local research setting and distributed through whatsapp groups. The questionnaire consists of demographic questions in the first part and students' perceptions on Zoom in the second part. The third part is consisted satisfaction of online classes and through the final section it was gathered the challenges faced by the students in having online education by using five-point Likert Salce. Out of a total of 219 fresh students, 194 students were responded,

resulting in a response rate of 88.5%. Data were analysed by using SPSS software.

Significant of the Study

The results of the study contribute to enrich the blended approach in the Diploma programme. Furthermore, it aids to identifying the challenges related to online teaching and learning within course, and the practical difficulties, if any to mitigate such problems for future teaching and learning of the courses at SLLA. During coronavirus-19, as no research was published on SLLA context, this study holds additional value in terms of originality.

Results and Discussion

Majority of the survey participants were females 171(88.3%); and the male was around 23 (11.7%). Nearly 30% comprised 26 - 30 age range. Most of the students were from Arts stream 145 (74.7%) followed by commerce stream 34 (17.5%) were applied for the Diploma course. Out of the study sample, only 112(57.7%) students were employed in various places. Regarding the successfulness of the course, more than 50% of the students were agreed to have online education during this lockdown. In addition, students ensured that the online mode is securing their health (98%) during this pandemic lockdown rather than having face-to-face classes. Moreover, the study indicated that 97(49.9%) students were highly satisfied with online teaching and 36.5 were neutral. Nafreez et al., (2020) indicated that the study carried out at Southeastern University revealed that more than 50% of the students were happy with online education during the lockdown. The majority of students (78.9%) have used smart phones however, the other accessories

like desktops, laptops, and tabs are not much utilized (19%) for online learning. As an alternative method, 41.8% tried their best to find notes through the web page and WhatsApp group, 23.7% of students are seeking the help from friends to recover the lesion. The challenges were reported as not clearly hear the lecture 88 (45.4%), more expensive equipment 85 (43.8%), poor internet connection 84(43.3%), cannot timely log on 84 (43.3%), and isolation or the loneliness 82(42.3%) were the problem faced by students.

Conclusion and Recommendations

It is recommended that more interaction need to be maintained considering the levels of students' dissatisfaction on online learning. As the findings showed that there have been many barriers towards online learning, redesigning online courses with the application of constructive alignment would be recommended to enhance the practical effectiveness of the same.

References

- Bao, W. (2020). "COVID-19 and online teaching in higher education: A case study of Peking University", *Hum Behav & Emerg Tech*,2, pp. 113–115. <https://doi.org/10.1002/hbe2.191>
- Haththotuwa, P. and Rupasinghe, R. (2021), "Adapting to online learning in higher education system during the covid-19 pandemic: a case study of Universities in Sri Lanka", *Sri Lanka Journal of Social Sciences and Humanities*, 1(2), pp. 147-152.
- Urme, U. N. and Barua, B. (2023). "Assessing the online teaching readiness of faculty member", *Journal of Research in Innovative Teaching & Learning*, vol. pp. 2397-7604.

Disaster Mitigation in Libraries: A study based on the National Museum Library of Sri Lanka

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Abstract

Libraries must play a vital role in society. As a developing country Sri Lanka is facing the challenges of the protection of Library collection, life of readers and staff as well as property. Because disaster management has become an essential part of the library. The main objective of this study is to identify the physical resources and human resources which are vulnerable for disasters of the museum Library of Sri Lanka and disaster management activities and to present a suitable disaster management action for the library. Other objectives are to investigate why the management of the institute was not interested in developing a disaster management plan, investigate why the management of the institute was not interested in developing a disaster management plan, to identify the mitigation problems of frequently-use collections in museum library of Sri Lanka and Highlight the importance of disaster management plan. The museum Library of Sri Lanka is used as the sample. Relevant data was collected from the respondents using several methods which included observation, face to face interviews and document reviews. The collected data was analyzed, interpreted, and presented using qualitative methods. The findings revealed that as the largest library collection in Sri Lanka, had taken several simple actions to protect their collection. But we can't be satisfied about that. Because they are facing some problems. Such as there is no written policy on disaster mitigation in the library, lack of adequate facilities, inadequate fund allocation to libraries and lack of interest on the part of some disaster management issues. It was recommended that disaster mitigation facilities and funds to avert disaster should be provided for the government,

to have mitigation and disaster management policy and ensure they are adhering to and provide guidelines to the use and management of libraries.

Keywords: *Disaster Management, Disaster Mitigation, Library Management, Museum Library*

Introduction

Libraries are gateways of knowledge. Libraries must play a vital role in society. Libraries of the word have faced a lot of disasters in the last few years. Disaster means sudden and terrible accident. It can strike at any time at any place. Disasters in the library context can be either natural or man-made. Natural disasters are generally induced by such events as floods, cyclones, Tsunami, and earthquakes. Man-made disasters include wars, rioting, malicious damage to materials, negligence, armed conflict, terrorism etc. No one knows when and how disasters come. In this situation libraries need to have a properly developed disaster management plan including disaster mitigation.

A disaster is "A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses that exceed the ability of the affected community or society to cope using its own resources." -WHO, 1998-

Disaster management encompasses all management issues necessary to deal with incidents that threaten library buildings, collections, services, and human lives. Since libraries of today are technology-driven, many nascent disasters are evolving. For instance, changes in energy systems and lack of electricity supply endanger traditional library materials, just as digital materials are useless without energy supply. No libraries are immune to these disasters; depicting that any of them could befall any library any moment since it is totally inescapable without appropriate control measures.

In a disaster that has been underway for some time and may continue for an extended period. The cumulative damage may not be known for years, and the public may not be aware or concerned until the damage reaches crisis proportions-building cracks, rodents, termites, and insect activities. Disaster mitigation makes libraries more useful because access to information is maintained so they can provide access to information for future generations. Olatokun, (2008) opined that among the essential missions of libraries, two are complementary: preservation and access preserving for the sake of preserving is useless and giving access lavishly to all documents without taking into account preservation measures will, sooner or later, lead towards making the documentary heritage inaccessible for future generations.

The IFLA activity on Preservation and Conservation (PAC) through numerous conferences and publications provides support, information, and training for disaster management (IFLA, 2010). In a similar manner, the steps for the development of a disaster management plan for libraries, according to the work of Halsted et al. (2005), include the Setting up a disaster response team, Assessing the risks, Establishing a disaster communication network, Ensuring access to financial resources, Reinforcing building security, Creating lists and collecting supplies for cases of emergency, Defining weak points, Creating an evacuation plan, Drawing up a disaster management plan, Conducting disaster exercises (preparedness exercises), Reviewing and updating the disaster management plan.

Foundation grants for preservation in libraries, archives, and museums (2010) stated that the conservation division of the Library of Congress in the United States ensures that the library's universal collection of

knowledge and creativity will still exist for future generations through adequate funding of conservation and preservation of conservation division activities.

Wong and Green (2008) write on crucial aspects of formulating a disaster management plan. The study identifies six important components in the disaster risk reduction plan that can be designed for both public and academic libraries and lists them as planning, prevention, response, recovery, preparedness, and training. The study states that so many institutions and libraries face many difficulties when it comes to disaster as they believe that disasters and unpredictable crises will not happen to them, and that this idea needs to be changed especially within the communities that access and work regarding these institutes and libraries.

Azigba and Edet (2008) said that disaster management is a dynamic process that requires good cooperation among different types of professionals. Kostagiolas et.al., (2011) stated that academic libraries in Greece have adopted a rather passive approach towards disaster preparedness, limited to a few elementary protection measures without following creative and modern methodologies to formulate an integrated disaster management plan.

Problem Statement

Mitigation seems to be a somewhat neglected area in the library and disaster management activity. In recent times many libraries within and outside Sri Lanka have been affected either by man-made or natural disasters. The museum library of Sri Lanka has not written disaster management plans and mitigation actions which we can be satisfied with. But as the largest library collection in Sri Lanka, it is one of the

national problems in Sri Lanka. Mitigation actions help to prevent, alleviate, suffering or diminish the potential effects of libraries in a disaster situation. Actions within this phase are aimed to lessen the effects of disaster on a library. The action of mitigation includes implementation of codes of building, system to protect emergency power supplies and vital communications, follow rules and regulation of land and development of libraries from disaster prone areas etc.

Objectives

The main objective

Which are vulnerable for disasters of the museum Library of Sri Lanka and disaster management activities and to present a suitable disaster management action for the library.

Other Objectives

- To investigate why the management of the institute was not interested in developing a disaster management plan.
- To identify the mitigation problems of frequently used collections in the museum library of Sri Lanka.
- Highlight the importance of disaster management plans.

Materials and Methods

The research was carried out with the use of a case study method. The main instruments for collecting data for this study were observation and face to face interview with the library staff. The study can clearly identify the disaster Mitigation actions related to the library building, staff, and collection.

Results and Discussion

The study reveals that there is no written policy on mitigation and disaster management in the Museum Library of Sri Lanka, hence it is impossible to cultivate the culture of mitigation in whole libraries in Sri Lanka, which place information materials, especially frequently used materials at a high risk for extinction. There is a likely hood of fire as the collections are mostly organic in nature. Once a fire starts, it is difficult to save those materials which get burned. Items not directly engulfed in flames can be charred by soot and smoke. Heat emitted from fire causes buildings to shrink and wrap and plastic base materials to melt. Water used for fighting fire can cause enormous damage. Besides fire, floods, high winds, cyclones, earthquakes are also agents of deterioration for the library collections. These will lead documents to absorb water, swell, warp and become extremely vulnerable to physical damage. Dyes and ink may bleed, and book pages stick together. Leather bindings seriously wrap and change shape. Effects of disasters on library collections are too obvious to comprehend.

The results of observation and interview were summarized. According to them, the museum library in Sri Lanka still does not have a formal disaster management plan. The collection is destroying day by day. But they are not stored electronically, and it appears there are not enough disaster management practices. Not only that, but there is also not enough subject knowledge of disaster management, not a good support of the mother institute, negligence of the staff, financial constraints and less resources are reasons for that. There was nonexistence of the library without a disaster management plan.

Based on the findings of the study, the formal disaster management plan

of a library is made up of a compilation of smaller plans that must be crafted with the support of library staff. It should contain clear, short, and precise instructions and be readily available to all employees, especially the disaster management team. A good policy on short term to long term mitigation should be formulated, librarians should ensure adequate sensitization of all staff on disaster preparedness at all times, should create disaster consciousness among library staff will make all the difference during disaster situations, start the electronically material stored programs and the roof of the library buildings should be checked before and during the rainy season in order to repair leaking spots so that water seepage will be stopped or reduced to protect materials.

Conclusion and **Recommendations**

Disaster mitigation prevents response to damage caused by fire, water and other emergencies. Staff of the museum library of Sri Lanka was not hypersensitive at all on disaster mitigation. The activities of insects, termites and rodents constitute major threats to the safety of library resources. The study showed that the library did not have a written disaster management plan, disaster response team, staff training programs and library had no insurance policy for their resources. There is no substitute for good preparedness when it comes to disaster response. But the library needs a disaster management plan and should always ensure adequate hypersensitive of all staff on disaster preparedness.

References

Angela, F. & Verzosa, M. (2009). Disaster management in libraries: Response and recovery operations for water-related damages. Manila/National library of the philippines. (Accessed 25 January 2021).

Ayoung, A.D., Boabil, C.S. & Banbil, S. (2015). How secure are library collections? an evaluation of polytechnic libraries in Ghana. (Accessed 25 January 2021).

Disaster Management Group. (2004), "M25 disaster control plan", M25 Disaster Management Group, available at: www.m25lib.ac.uk/m25dcp/(accessed 15 February 2021).

Federal Emergency Management Agency. (2010). FEMA Recovery policy RP 9523.3. http://www.fema.gov/pdf/government/grant/pa/9253_3.pdf (Accessed 15 February 2021).

Hasenay, D. & Krtalic, M. (2010). "Disaster and after" What have Croatian libraries learned about preservation and disaster management after the war experience?76th IFLA General conference and Assembly.3.Aug 2010,Gothenburg,Sweden,Retrieved September 12,2021 from: www.ifla.org/pastwlic/2010/88hasennay=en-pdg (Accessed 15 February 2021).

Juriyah, S., Khalid, M. & Doi, N. (2015). Disaster preparedness for academic libraries in Malaysia: An exploratory study. International journal of social, Behavioral, Educational and management Engineering. 9(10).Retrieved August 16 from : <http://waset.org/publications/0002555> 29(accessed 16 February 2021).

A Scientometric Analysis of Millet's Research Output in India

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Abstracts

This study analyses the research output on millets Publications during 1989-2022 retrieved from Web of science database. The objective of the study was to perform a scientometric analysis of Millet's Research publication in India there were 11585 research literatures scattered over the world, Data for a study is a total of 3373 have been downloaded and analyzed according to objectives. Findings of the study reveal that the journal publications of the Indian millet's research literature are 3047 and the most preferred journal was Journal of food science and technology, Mysore and secured first position under source of publication. This paper also quantifies and evaluates various aspects of millet research, including citation patterns, research collaboration and Prolific authors and contributions etc. This scientometric analysis on millet's research may play a crucial role in advancing knowledge, addressing challenges, and promoting sustainable development in the agricultural sector.

Keywords: Millet's, Scientometric, Scientific Assessments, Authorship Pattern

Introduction

The present study analyzes a scientific approach to study Indian millet research publications and its characteristics, publication patterns, citations, collaborations, and impact. The scientometric analysis provides insights into the scientific landscape, research trends, collaboration networks, and the impact of millet's research on the scientific community and society. By employing scientometric analysis of this study in millet's research, researchers, policymakers, and

stakeholders can gain a deeper understanding of the scientific landscape, identify research gaps, foster collaborations, inform policy decisions and promote the utilization of millets for food security, nutrition, and sustainable agriculture.

Aravind (2023) the researcher conducted a scientometric analysis of global research literature on El Nino and La Nina. This research was carried out between 2000 -2022. Maikely Luana Feliceti et.al (2023) studied the Genetic improvement of black oats: a scientometric review analysed the scientometric analysis of research on black oats' genetic improvement. Utilising information from the Web of Science from 1945 to 2020, a review of the literature was conducted. Initial study of 859 articles resulted in a reduction to 404 articles, which were then subjected to additional analysis. Xiaoyan Pane et.al (2022) examines the research focus on rice under drought, water logging, or both conditions has changed over the past three decades. Bin Liu (2019) carried out a bibliometric examination of rice research's development and history from 1985 to 2014. Krishnan (2019) evaluates the advancements in Indian pulse research developments in Indian research on pulses. Data on research productivity were taken from Web of Science for the years 2000 to 2017. Tripathi and Garg (2016) studied the scientometrics of cereal crop science research in India from 1965 to 2010 with five-year intervals as evidenced by Scopus international database coverage.

Objectives

- To study the Year wise growth analysis with annual Millet's research publications in International perspective
- To Examine open access publications in Indian context

- To Analyse the Citation pattern of Indian Millet’s Research Publications
- To identify the major subject areas of research
- To identify the various collaborative institutions and funding organizations
- To study Authorship pattern and Most prolific author with H index
- To prepare most productive journals and Geographical distribution publications

Materials and Methods

The Web of Science database was used to get the study's data. Using Web of Science's general search capabilities, 11585 publications data regarding the Millet’s research paper output from the period of 1989 to 2022 is acquired and with the address field of the general search option used the phrase India for the for Indian millet research literature. There were 3373 Indian millet’s research publications identified as the main object of the study. The retrieved information was saved in text files and loaded into Microsoft Excel for analysis. The data was then scientometrically examined with Histcite software.

Results and Discussion

The distribution of Indian millet’s research articles listed in the Web of Science database from 1989 to 2022, as well as their average growth and citation trends, are shown year by year. The analysis reveals that a total of 3373 publications were extracted from the Web of science database. It is observed that the maximum number of publications have been

recorded in 2022 (8. 36%). Looking at the data regarding The annual ratio of growth observed that there is moderately fluctuation throughout the study period where in 2007 AROG recorded with (1.5). The changes in the annual growth of publications may be caused by a researcher's lack of interest, funding organisations' unwillingness to cooperate, or a lack of infrastructure facilities in the institution. Whereas, the data reflects a steadily growing citation pattern throughout the year with 51446 citations and an average citation rate of 1513.2.

Table 1 Document wise distribution of Millet Research Literature

Sl No.	Document Types	Record Count	% of 3,373
1	Article	<u>2544</u>	75.42
2	Article; Proceedings Paper	<u>701</u>	20.78
3	Note	<u>57</u>	1.69
4	Meeting Abstract	20	0.59
5	Article; Early Access	<u>16</u>	0.47
6	Editorial Material	<u>16</u>	0.47
7	Correction	<u>6</u>	0.18
8	Review; Book Chapter	<u>6</u>	0.18
9	Review; Early Access	<u>4</u>	0.12
10	Letter	<u>2</u>	0.06
11	Article; Book Chapter	<u>1</u>	0.03
TOTAL		3373	100.00

It is evident from table 1, the highest type of documents published in articles with 2544 records (75.42%) and Review of Article (701) 20.78% and Note (88) 2.061%.

Table 2: Open Accesses publication of Indian Millets Research

Sl No	Open Access	Record Count	% of 2,691
1	All Open Access	1,065	39.58%
2	Gold	427	15.87%
3	Gold-Hybrid	90	3.34%
4	Free to Read	112	4.16%
5	Green Published	477	17.73%

6	Green Accepted	405	15.05%
7	Green Submitted	115	4.27%

The Web of Science database has 2691 open access papers out of the 3373 Indian Millets research outputs. Total records in all open database publications are 1065. In the area of Indian Millets Research, there are 427 open papers that are Gold Open Access (it denotes that the final published version of your research is freely and indefinitely accessible online for readers worldwide). Gold Hybrid, (makes it quickly and entirely accessible for everyone; nevertheless, an article publication charge must be paid by the author, institution, or funder.) which has 90 records, Green (With open access, authors can choose to archive their own work on a website that they, their sponsor, or a third-party repository manages.) Open access is completely responsible for 997 records.

Table 3: Top 10 Research Areas on Indian Millet's literature

Sl No	Field	Record Count	% of 3,373
1	Agriculture	1,196	35.46%
2	Plant Sciences	828	24.55%
3	Food Science Technology	689	20.43%
4	Chemistry	258	7.65%
5	Science Technology Other Topics	246	7.29%
6	Biotechnology Applied Microbiology	228	6.76%
7	Biochemistry Molecular Biology	210	6.23%
8	Genetics Heredity	200	5.93%
9	Nutrition Dietetics	173	5.13%
10	Environmental Sciences Ecology	166	4.92%

It is evident from table 3, Indian Millets research output is divided into 79 broad subjects. The table 5 indicates the top 10 Subject fields of Millet's research. Agriculture subject field contributed 1196 research publications plant science area contributed 828 publications and 689

publications from Food and science technology.

Table 4: Top 10 Funding Sponsor of Indian Millet's Research

Sl No.	Funding Agencies	Record Count	% of 3,373
1	University Grants Commission India	165	4.89%
2	Department Of Biotechnology Dbt India	163	4.83%
3	Indian Council Of Agricultural Research Icar	148	4.39%
4	Department Of Science Technology India	125	3.71%
5	Council Of Scientific Industrial Research Csir India	96	2.85%
6	Consultative Group for International Agricultural Research	84	2.49%
7	Uk Research Innovation Ukri	38	1.13%
8	Indian Council Of Medical Research Icmr	28	0.83%
9	Biotechnology And Biological Sciences Research Council	25	0.74%
10	Bill Melinda Gates Foundation	24	0.71%

Table 4 indicates the top 10 Funding sponsors of Indian millets research. This table observed that University Grant Commission (UGC,) have provided more funding for the Indian millets research. Department of Biotechnology (163), ICAR (Indian Council of agricultural research (148) has come second and third positions.

Table 5: Top 10 Affiliated Institutions for the Indian Millet's Research

Sl No.	Affiliations	Record Count	% of 3,373
1	Indian Council of Agricultural Research ICAR	864	25.62%
2	Consultative Group for International Agricultural Research CGIAR	530	15.71%
3	International Crops Research Institute for The Semi Arid Tropics	511	15.15%
4	Council Of Scientific Industrial Research CSIR India	238	7.06%
5	ICAR Indian Agricultural Research Institute	213	6.32%
6	CCS Haryana Agricultural University	196	5.81%

7	CSIR Central Food Technological Research Institute CFTRI	180	5.34%
8	Tamil Nadu Agricultural University	155	4.60%
9	University Of Mysore	143	4.24%
10	Govind Ballabh Pant University of Agriculture Technology	126	3.74%

Table 5 reveals that the Indian Council of Agricultural Research (ICAR), at 864 research activities contributed in India. Consultative Group for International Agricultural Research (CGIAR) is the second-highest research contributor research activities, (530, followed by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), contributed with 511.

Table 6: Authorship Pattern of Contribution

Sl No.	Authors Ptttern	No. of Records	Total No. of Authors	Percentage
1	Single authors	110	110	0.7%
2	Two Authors	803	1606	10.5%
3	Three Authors	594	1782	11.6%
4	Four Authors	484	1936	12.6%
5	Five Authors	424	2120	13.8%
6	Six Authors	292	1752	11.4%
7	Seven Authors	193	1351	8.8%
8	Eight Authors	127	1016	6.6%
9	ninth Authors	76	684	4.5%
10	Ten Authors	51	510	3.3%
11	More than 10 Authors	219	2492	16.2%
Total		3373	15359	100.0

Table 6 shows the pattern of authorship distribution. A total of 15359 authors contributed to 3373 publications under various authorship arrangements. The majority of authors favour team publications of their work over solo ones. 110 (0.7%) of the publications in the Indian Millets

research have just one author, while 68.3% (2305) of the articles have two, three, four, or five authors. This indicates that rather than writing their papers as a single author, the majority of authors prefer to collaborate in groups of two to five.

Table 7: Top 10 Prolific Authors

Sl No	Author Name	Record Count	% of 3,373	H Index
1	Kumar A	118	3.50%	25
2	Shetty HS	84	2.49%	24
3	Hash CT	70	2.08%	30
4	Rai KN	67	1.99%	17
5	Prasad M	66	1.96%	33
6	Kumar S	57	1.69%	16
7	Singh S	57	1.69%	19
8	Upadhyaya HD	57	1.69%	19
9	Sharma R	52	1.54%	15
10	Yadav OP	49	1.45%	15

The analysis of most prolific authors in table 7 reveals that Author Kumar, A., is the most prolific author in Indian Millets research in India who published 118 papers followed by Shetty, H.S, published 84 papers and Hash, C.T. published 70 papers.

Table 8: Most productive Journal (Top 10 only)

Sl No.	Publication Titles	Record Count	% of 3,373
1	Journal of food science and technology mysore	184	5.46%
2	Indian journal of agronomy	68	2.02%
3	Annals of arid zone	60	1.78%
4	Current science	59	1.75%
5	Frontiers in plant science	59	1.75%
6	Crop science	56	1.66%
7	Food chemistry	55	1.63%
8	Indian journal of genetics and plant breeding	53	1.57%

9	Field crops research	44	1.30%
10	Euphytica	43	1.28%

The research articles on Indian millets are dispersed throughout 648 journals. Table 8 demonstrates the 184 records that the Journal of Food Science and Technology Mysore contributed. The Annals of Arid Zone magazine published 60 articles, and the Indian magazine of Agronomy provided 68 records.

Table 9: Country wise distribution of Indian Millet's research publication (Top 10 only)

Sl No.	Countries/Regions	Record Count	% of 3,373
1	INDIA	3,373	100.00%
2	USA	206	6.11%
3	ENGLAND	73	2.16%
4	AUSTRALIA	67	1.99%
5	GERMANY	59	1.75%
6	WALES	57	1.69%
7	JAPAN	41	1.22%
8	NIGER	38	1.13%
9	CANADA	29	0.86%
10	PEOPLES R CHINA	29	0.86%

In the Web of Science database's analysis of the country-by-country distribution of Indian millet research output spanning the years 1989 to 2022, 3373 research publications on the subject came from 97 different nations. It is clear from Table 9 that the United States has the top spot for Indian millet's research publications in the Web of Science database with 206 records. 73 papers came from researchers in Australia, and 73 from researchers in England.

Conclusion and Recommendations

- The distribution of document types in Indian millet's research shows that the highest contribution was made by articles (2,544),

followed by review articles (701) and notes (57). Out of the 3,373 Indian millet's research outputs, 2,691 are open access papers. Within the open access publications, 427 papers are Gold Open Access, 90 are Gold Hybrid, and 997 are Green Open Access.

- Indian millet's research output is divided into 79 broad subjects. The agriculture subject field contributed the most research publications (1,196), followed by plant science (828) and food science and technology (689).
- A total of 15,359 authors have contributed to the 3,373 articles on Indian millet's research. Collaborative publishing is preferred over single-author publications.
- There are 648 scholarly publications that have published research articles on Indian millets.
- A total of 97 different countries have contributed to the 3,373 Indian millet's research publications. The United States has contributed the most articles, followed by Australia and England, with 73 papers each.

The major objective of this study is to identify the dimension of Indian Millet's research outputs from the web of science database (WoS) during the period of 1989-2022. This scientometric analysis can offer insightful information about the research in terms of publishing output, citation pattern, and average ratio of growth with relative growth and doubling time. With the use of open access document distributions, funding sources, the most productive journals, and the identification of major subjects or themes within the field, researchers and research institutions

can benchmark their performance.

Reference

Aravind S and Anandraj K.C (2023) The researcher conducted a scientometric analysis global research literature on El Nino and La Nina.In proceedings of the National conference on Exploring the past, present and future of Library and information science May university of Mysore, Krnataka

Bin Liu, Lu Zhang and Xianwen Wang (2019) Scientometric Profile of Global Rice Research during 1985-2014, Current science, 112(5)

H. K. Tripathi and K. C. Garg (2016) Scientometrics of Cereal Crop Science Research in India as seen through SCOPUS database during 1965-2010 Annals of Library and Information Studies, 63(3)

Maikely Luana Feliceti et.al (2023) Genetic improvement of black oats: scientometric Review Acta Scientiarum., Agronomy. 45

P. Krishnan (2019) A Scientometric Analysis of Research on Pulses in India During 2000–2017, Agricultural Research 11(3)

Xiaoyan Pane el (2022) Scientometric Analysis on Rice Research under Drought, Waterlogging or Abrupt Drought-Flood Alternation Stress, Agriculture, 12(9)

Importance of Staff Capabilities to Provide a Quality Service in University Libraries: Users' Perspective in Sri Lankan Context

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Abstarct

The research methodology employed a sample survey, encompassing 2131 participants, consisting of 1638 undergraduates and 493 academic staff members. These individuals were selected at random from seven state universities across different provinces of Sri Lanka. A structured Likert-type scale, ranging from 1 to 9, was utilized to gauge the users' perceptions of service quality based on nine key staff capability attributes. These attributes encompassed qualities such as dedication to instilling confidence in users, personalized user care, the ability to address user queries, user empathy, competency in responding to user queries, dependability, courtesy and politeness, willingness to serve, and the ability to understand user needs. The analysis of the collected data employed descriptive analysis and importance-performance analysis. These analytical approaches allowed for an examination of the gap between users' expectations and their perceived experiences in the library regarding the nine staff capability attributes. The findings of this research demonstrate that, out of the nine staff capability attributes, seven were perceived by users as highly important and highly performed. This suggests that library staff excel in these areas and meet or exceed user expectations. However, two attributes, namely, employees' caring for users and their proficiency in addressing user queries, were deemed both low in importance and performance. Notably, attributes related to instilling confidence in users and providing crucial component of university libraries, even in the age of digitalization and automation. It highlights the need for libraries to focus on

developing and enhancing various aspects of staff capabilities, particularly in the context of the evolving digital networked environment. By addressing the identified gaps in staff capabilities, libraries can continue to serve as vital hubs of knowledge and support in the academic journey of students and researchers, enriching the overall library experience.

Keywords: *Human support, Service quality, Staff capabilities, University libraries, User perception*

Introduction

In the ever-advancing landscape of modern libraries, marked by the seamless integration of technology and a plethora of digital resources, one might be tempted to believe that the traditional role of library staff has waned (Seal, 2015). While many sophisticated tools for searching, retrieving, and exchanging information quickly and easily are available in the current technology-associated environment, human support is essential. This is because, without the proper knowledge of how to verify the authenticity of information on the web, students often resort to questionable, non-authoritative online resources in their academic assignments and projects (Owolabi et. al, 2022; Harisanty, et al. 2022).

However, this research underscores a fundamental truth: the role of library staff remains irreplaceable and indispensable. In the context of university libraries, human support continues to be a cornerstone of the user experience. The human factor, as perceived by library patrons, plays a pivotal role in elevating the overall library experience from merely accessing information to a holistic journey of knowledge acquisition and academic success (Lenstra, 2015).

Librarians, with their wealth of expertise, provide more than just information retrieval; they serve as vital guides and facilitators in the pursuit of knowledge (Halder, 2009). Their personalized assistance,

tailored to the unique needs of each user, adds immeasurable value to the academic journey. It is the librarian's human touch—understanding, empathy, and dedication—that transforms libraries into vibrant hubs of not just information but comprehensive support (Caspe, & Lopez, 2018; Shahzadet al. 2023).

Objectives

This study represents a systematic exploration into the multifaceted dimensions of library staff capabilities and their impact on the perceived quality of university libraries. It aims to unravel the intricate web of attributes and skills that contribute to patrons' assessments of library services.

Materials and Methods

To achieve this, a sample survey was conducted, encompassing a diverse group of 2131 participants, including 1638 undergraduates and 493 academic staff members. These participants were thoughtfully selected from seven distinct state universities, spanning various provinces. The research employed a carefully structured Likert-type scale, spanning from 1 to 9, to meticulously gauge users' perceptions of service quality. This measurement was based on nine key attributes of staff capabilities. These attributes encompass a spectrum of qualities, from instilling confidence in users and providing personalized care to addressing queries, demonstrating empathy, exhibiting competency in answering questions, ensuring dependability, upholding courtesy and politeness, displaying willingness to serve, and understanding users' unique needs. Together, these attributes symbolize the diverse skills and qualities that library staff bring to the table to enhance the library experience.

Results and Discussion

Data analysis in this study entailed both descriptive examination and importance-performance analysis. These analytical tools provided a comprehensive view of the dispersion among these nine service quality attributes concerning users' expectations versus their perceived experiences (Wong, et al. 2011).

Findings

Perception Differences

Table 1- Difference between expected level and perceived level of staff capabilities

Capability Attribute	Perceived level	Expected level	Difference
Expertise and dedication of the library employees to instill constant confidence in users	31411	62805	-31394
Ability of the library staff to provide personalized and attentive care for users	30175	60333	-30158
Ability of the library staff to continuously and promptly address user questions	33321	66625	-33304
Ability of the library employees to engage with users in an attentive and empathetic manner to creating a welcoming environment	33965	67912	-33947
Knowledge and competency of the library personnel to proficiently answer user inquiries	33719	67422	-33703
Dependability of the library staff in resolving service-related issues	33453	66889	-33436
Ability of the library staff to consistently uphold the standard of courtesy and politeness in interactions with users	32971	65926	-32955
Willingness of the library staff to assist users to fulfill their diversity of information needs	33659	67301	-33642

Ability of the library employees comprehend and address the unique requirements of each user,	33431	66845	-33414
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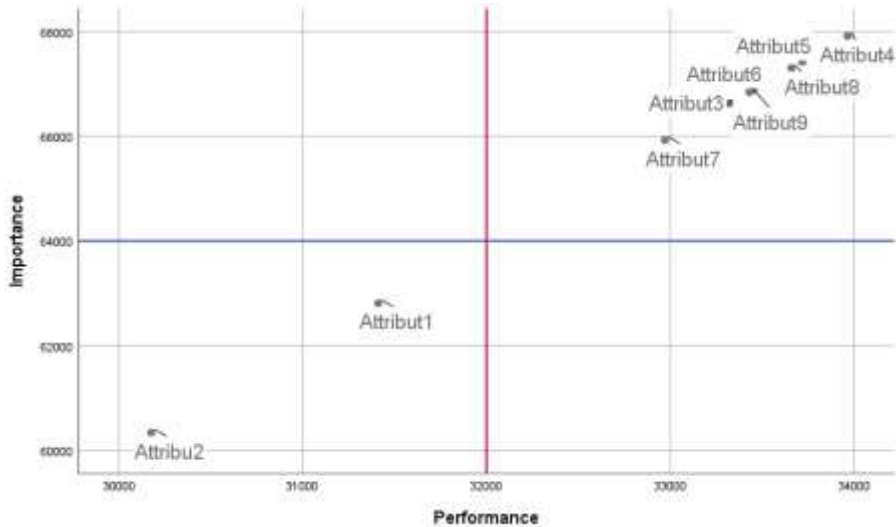


Figure 1 Importance-Performance analysis

Conclusion and Recommendations

In conclusion, this research reaffirms the enduring importance of human support in university libraries, even in an era characterized by digitalization and automation. It underscores the necessity for libraries to continually evolve and nurture various facets of staff capabilities, especially in response to the ever-changing digital landscape. Addressing the identified gaps in staff capabilities ensures that libraries continue to stand as indispensable hubs of knowledge and unwavering support throughout the academic journey of students and researchers, thereby enriching the overall library experience.

References

- Caspe, M., & Lopez, M. E. (2018). Preparing the next generation of librarians for family and community engagement. *Journal of Education for Library and Information Science*, 59(4), 157-178.
- Halder, S. N. (2009). Multimodal roles of library and information science professionals in present era. *International journal of library and information science*, 1(6), 092-099.
- Lenstra, N. (2018). The experiences of public library staff developing programs with physical activities: An exploratory study in North Carolina. *The Library Quarterly*, 88(2), 142-159.
- Owolabi, K. A., Okorie, N. C., Yemi-Peters, O. E., Oyetola, S. O., Bello, T. O., & Oladokun, B. D. (2022). Readiness of academic librarians towards the use of robotic technologies in Nigerian university libraries. *Library management*, 43(3/4), 296-305.
- Owolabi, K. A., Okorie, N. C., Yemi-Peters, O. E., Oyetola, S. O., Bello, T. O., & Oladokun, B. D. (2022). Readiness of academic librarians towards the use of robotic technologies in Nigerian university libraries. *Library management*, 43(3/4), 296-305.
- Seal, R. A. (2015). Library spaces in the 21st century: Meeting the challenges of user needs for information, technology, and expertise. *Library Management*, 36(8/9), 558-569.
- Shahzad, K., Khan, S. A., Latif, M., & Iqbal, A. (2023). Relationship between personal traits and sustainable competence development among librarians in relation to value-added library services in a networked world: A systematic literature review from 2002 to 2022. *Sustainability*, 15(3), 2359.
- Wong, M. S., Hideki, N., & George, P. (2011). The use of importance-performance analysis (IPA) in evaluating Japan's e-government services. *Journal of theoretical and applied electronic commerce research*, 6(2), 17-30.

Bibliometric Analysis of ‘Bibliotherapy’ in the Digital Environment: Based on JSTOR Scholarly Publications

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Abstract

Bibliometric analysis makes a significant contribution to directing researchers to more effective studies even before they start reading. It also allows them to quickly discover research gaps in the field, inspire new ideas for research, reveal research trends and map the research field for conceptual, social, or cognitive purposes. Accordingly, the main objective of this article is to provide an analysis of publications on bibliotherapy in JSTOR from 2010 to 2020. The bibliometric analysis method was used as the research method for this study. Data were collected using a standardized search approach through JSTOR using the keyword "bibliotherapy". A total of 906 books, book chapters and journal articles on bibliotherapy have been published across the world during the relevant period. The retrieved data set was analyzed with the text-mining facility of JSTOR. The findings of the study will be important for researchers to conduct more effective studies of bibliotherapy and library professionals to support their clients.

Keywords: *Bibliometrics, Bibliometric studies, Bibliotherapy, Scholarly publications, JSTOR*

Introduction

The growth of technology provides increased opportunities for students and educators to ascertain their learning materials through the digital environment. The main components of a digital environment typically consist of websites, databases, social media platforms, cloud servers, search engines, mobile apps, audio and video, and other web-based resources. In this digital environment, a scholar looking for information

on a particular topic such as bibliotherapy has the ability to access a large amount of information he or she needs in an instant.

Bibliotherapy as an expressive therapy that involves reading certain texts for healing purposes. Utilizing the relationship of individuals with the contents of books, poetry, and other written words as therapy (Agustina, 2020). Reading materials such as academic journals, books, conference proceedings, Thesis and primary sources on bibliotherapy are abundant in the digital environment. It is useful to examine the current trend of literature in the digital environment for systematic evaluation of bibliotherapy.

Bibliometric is the use of statistical methods to analyze books, articles and other publications. The bibliometric studies are considered as an integral part of research evaluation methodology. Different techniques are used by researchers to obtain data for bibliometric studies. JSTOR is a digital library available in digital space for the intellectually curious. This research allows to evaluate the research publications in JSTOR with regard to ‘Bibliotherapy’. JSTOR provides access to more than 12 million academic journal articles, books and primary sources in 75 disciplines (<https://about.jstor.org>). Accordingly, this study examines the growth of scholarly literature on ‘Bibliotherapy’ employing JSTOR digital library.

Objectives

The aim of this study is to perform an overall analysis of all literature collected in the JSTOR from 2010 to 2020 with following parameters.

- To analyze the coverage of publications related to ‘bibliotherapy’ from 2010-2020

- To identify the most visualized community group on ‘bibliotherapy’ studies
- To explore the most studied mental condition in bibliotherapy
- To examine disciplinary based approaches of ‘bibliotherapy’

Materials and Methods

The bibliometric analytical method was used as the research method for this study. Data was collected using a standardized search approach through JSTOR and using the term ‘bibliotherapy’ from the articles books and book chapters published during the ten years, 2010-2020. The retrieved records (906) were analyzed with the text-mining support from JSTOR.

Result and Discussion

Coverage of Publications related to ‘Bibliotherapy’

A descriptive statistical analysis was used to find out the trends of the number of publications by years. Figure 1 illustrates the overall trends in the number of publications related to 'bibliotherapy' over the years from 2010-2020. Only English language literature was retrieved. Nine hundred six (906) items were published in total in those years. Out of these 906 publications, the highest number of scholarly publications was published in the year 2014 with 113 publications. The lowest number of publications appeared in the year 2019 and 2020. It can be speculated that the reason for this situation is that literature has not been uploaded yet or because of the backlash in the world due to the Corona epidemic situation.

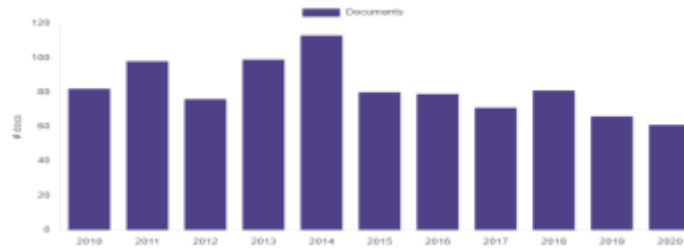


Figure 2 The Total Number of Publications by Years

The Visualized Community Group on ‘Bibliotherapy’ Studies

The published literature indicates that bibliotherapy has been employed with every community group such as children, young and adults. Community groups visible in the studies were considered with the help of the data set obtained in this study. Accordingly, the results found that the most visualized community group on ‘Bibliotherapy’ studies is young people. The below figure indicates the result.

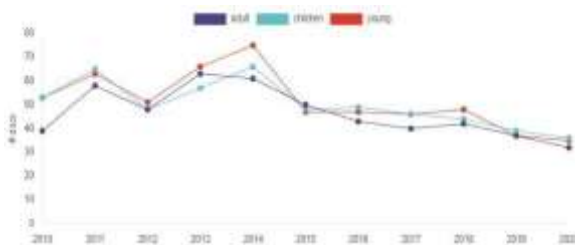


Figure 3 ARABIC 2 Results of Visualized Community Group

Most Studied Mental Condition in Bibliotherapy

Bibliotherapy has been widely utilized for various types of problems such as depression, anxiety, obsessive compulsive disorder, stress, personal growth, grief, bullying, alcoholism etc. Meanwhile, the most common one that has drawn much attention from the researchers is depression, says Davis (2020). According to the conceptual mapping and performance analysis, this study indicates that 'Depression' is the most studied mental condition in bibliotherapy research.

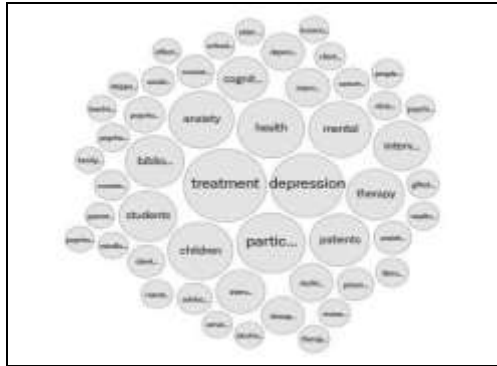


Figure 4 ARABIC 3 Most studied Mental Condition

Disciplinary based Approaches of ‘Bibliotherapy’

Bibliotherapy is pertinent to a wide range of disciplines including medicine, health science, psychology, psychotherapy, library and information science, religion, education etc. and is utilized in many helping professions. As per the result of the current study, literature related to health sciences covers the majority followed by education (134), psychology (135), information science (32) and literature (117).

Conclusion and Recommendations

The current study performed an overall analysis of all ‘bibliotherapy’ scholarly literature published globally such as books, book chapters and journal articles, stored in the JSTOR from 2010 – 2020. The results of this study revealed that a total number of 906 scholarly publications were collected in the JSTOR. According to the result, there were some fluctuations of the publications from 2010 – 2020. But the most declined year was 2020. But it does not indicate the real trend. It can be speculated that the reason for this situation is that they have not been uploaded yet or because of the backlash in the world due to the Corona epidemic situation.

The findings of the study will be important for researchers and library professionals to identify the ‘Explanation of ‘Bibliotherapy in the Digital Environment’ to some extent. More future studies need to be conducted based on other scholarly databases.

References

Agustina, S. (2020). Content Analysis of ,Serial Anak-anak Mamak’ Novel for Bibliotherapy., (p. 13). Retrieved May 21, 2021, from <https://www.researchgate.net/publication/346487036>

Dede, Ercan and Ozdemir, Ercan (2022). Mapping and performance evaluation of mathematics education research in Turkey: A bibliometric analysis from 2005 to 2021. *Journal of Pedagogical Research* Vol. 6 (4) <https://doi.org/10.33902/JPR.202216829>

Davis, C. H. (2020). "Bibliotherapy for Depression: Evaluating Cognitive Behavioral Therapy and Acceptance and Commitment Therapy Approaches and Examining the Role of Client Choice. thesis, Utah State University. Retrieved from <https://digitalcommons.usu.edu/etd/8088/>

JSTOR (<https://about.jstor.org>).

Assessing the Perceived Quality of Government Training Institutions' Libraries from User Perspectives

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Abstract

Service quality measures how well a product or service meets a customer's expectations. A study was conducted on the quality of services maintained by a library of a certain government service training institution in Sri Lanka. Providing a high-quality service is critical to attracting and retaining library users, as this will improve library productivity and enhance the library's reputation.

Keywords: *Quality assessment, Service quality, user-friendly library service, Users' perspective,*

Introduction

Properly understanding customers' perceptions along service quality dimensions is essential for LIS professionals to recognize customer expectations. Service quality assesses the performance of products and services from customers' perspective. A library has both tangible information sources and intangible services. Assessing Service Quality as a management technique is of recent origin and new to Library and Information Science (LIS) professionals.

A study was conducted on the quality of services maintained by a library of a certain government service training institution in Sri Lanka. The background of this study was to identify the evaluation done by the course participants in relation to the library in evaluating the assets and services of the institution.

Objectives

The main aim of this paper was to find out the service quality and user satisfaction of Government training institutes in Sri Lanka. The objectives of this were to evaluate the condition of the services currently being maintained, to identify the user needs and accordingly to develop the quality of the existing services and facilities and to provide new services and facilities.

Materials and Methods

The quality of library service depends on three factors: library resources, the library as a place and Library staff. In this study, all three aspects were covered. At the end of each module of the course, an evaluation of the module and resource person, as well as the institution's resources and services, will be obtained from the participants. A sample was selected from among those who attended the course in one year. The sample consisted of 870 students and 189 students used the library during their course. However, many participants did not use the library. There, the relevant data was collected for this study based on the evaluation forms filled by participants regarding the library of that institution.

Conclusion and Recommendations

The library is not merely a storehouse of materials; it is a dynamic agency to assist scholars and researchers in carrying on their pursuits in the advancement of knowledge by making use of information. The library has a direct connection with the curriculum of the courses of the institute. The library's services and facilities are categorized into five groups: customer care, lending service, reference service, internet facilities and photocopy service. They expressed their opinions

regarding the development of the services and facilities and their quality.

Not enough time to use the library is the reason for this problem. Appreciation of help desk and customer care in their Comment. The suggestions are to convert manual services to online, introduce digital membership cards, extend library opening hours, make library facilities available to readers on weekends and network with the universities that allow access to the library to the public officers. Also, regarding the services that keep the library open, they thought there was insufficient time to use it. Therefore, they raised the issue of extending the opening hours of the library and providing library facilities to the readers on weekends.

Librarians and staff of special libraries have close connections with their users, and they regard them as their clients. Asked about the library staff, it was stated that the staff are very friendly. Also, he mentioned that it took a lot of time to get the proper information that he needed as there is a limited and untrained workforce since the training course is coming in the middle of the training period. However, as a result of the studies, the library is maintained as a more user-friendly library by increasing the quality of services maintained, adding new services and facilities

References

Nawarathne, I.M (2013), Service Quality and User Satisfaction in Sri Lankan Academic Libraries: A Comparative Study in *Journal of Knowledge & Communication Management* 3(2):149

Wanigasooriya, Piyanwada (2016) Evaluation of service quality in libraries in *Sri Lanka Library Review* vol. 30, pp. 38 – 46

Explore and Usage of Artificial Intelligence Tools for the research scholars: A Special Reference at Bharathidasan University

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Abstract

In the contemporary academic landscape, the integration of Artificial Intelligence (AI) tools has become increasingly prevalent, revolutionizing the research methodologies employed by scholars across diverse disciplines. This paper delves into the exploration and utilization of AI tools specifically tailored for research scholars at Bharathidasan University. The study begins by providing an overview of the current state of AI in academic research, highlighting its transformative potential and the paradigm shift it brings to traditional research approaches. Bharathidasan University, known for its commitment to academic excellence, serves as a specific reference point for investigating the incorporation of AI tools into scholarly pursuits. The paper then proceeds to examine various AI tools applicable to research endeavors, including natural language processing, machine learning algorithms, and data analytics. Special emphasis is placed on tools designed to enhance literature reviews, automate data analysis, and streamline the research process. Case studies from Bharathidasan University illustrate practical applications, showcasing how these tools can be effectively employed in diverse research domains. Furthermore, the challenges and ethical considerations associated with the use of AI in research are critically examined. Addressing concerns such as bias in algorithms, data privacy, and the need for interdisciplinary collaboration, the paper proposes guidelines for responsible AI integration within the academic context. The impact of AI on fostering interdisciplinary

collaboration and knowledge exchange among scholars at Bharathidasan University is also discussed. The potential for AI to facilitate cross-disciplinary research and create synergies among various academic departments is explored, contributing to a more holistic and integrated research environment. The conclusion emphasizes the transformative potential of AI tools for research scholars at Bharathidasan University and suggests avenues for future exploration. As AI continues to evolve, the integration of cutting-edge technologies into the research process is crucial for staying at the forefront of academic innovation.

Keywords: *Artificial Intelligence, Research Scholars, Bharathidasan University, Machine Learning, Data Analytics, Interdisciplinary Collaboration, Ethical Considerations.*

Introduction

In the ever-evolving landscape of academia, the infusion of Artificial Intelligence (AI) tools has emerged as a transformative force, reshaping the methodologies employed by researchers across diverse disciplines. This research paper embarks on a comprehensive exploration of AI tools customized for the scholarly community at Bharathidasan University. Recognized for its unwavering commitment to academic excellence, the university serves as an ideal locus for investigating the integration of AI into scholarly pursuits. The paper initiates with a panoramic view of the current state of AI in academic research, accentuating its revolutionary potential and the consequent paradigm shift from conventional research approaches. Focusing specifically on Bharathidasan University, the study delves into a nuanced examination of AI tools applicable to various research endeavors. These tools, encompassing natural language processing, machine learning algorithms, and data analytics, are scrutinized for their capacity to enhance literature reviews, automate data analysis, and streamline the overall research process. Real-world

case studies from the university serve as practical illustrations, elucidating how these AI tools can be effectively harnessed across diverse research domains. Moreover, the paper critically addresses the challenges and ethical considerations inherent in the integration of AI into research practices. Thorough scrutiny is given to concerns such as algorithmic bias, data privacy, and the imperative for interdisciplinary collaboration. The research offers a set of guidelines aimed at fostering responsible AI integration within the academic context. A significant facet of the study revolves around the impact of AI on fostering interdisciplinary collaboration and knowledge exchange among scholars at Bharathidasan University. The exploration of AI's potential to facilitate cross-disciplinary research and create synergies among different academic departments contributes to the envisagement of a more holistic and integrated research environment. In this paper underscores the transformative potential of AI tools for research scholars at Bharathidasan University and posits directions for future exploration. As AI continues its evolutionary trajectory, the integration of cutting-edge technologies into the research process emerges as an indispensable strategy for staying at the forefront of academic innovation.

To construct and validate an artificial intelligence (AI) contouring tool to automate primary gross tumor volume (GTV) contouring in patients with NPC. Materials and Methods MRI data sets covering the nasopharynx from 1021 patients (median age, 47 years; 751 males, 270 female) with NPC between September 2016 and September 2017 were collected and divided into training, validation, and testing cohorts of 715, 103, and 203 patients, respectively (Lin et. al., 2019). A qualitative study using a grounded theory approach to semistructured interview

analysis was conducted in general dermatology clinics at the Brigham and Women's Hospital and melanoma clinics at the Dana-Farber Cancer Institute (Nelson et. al., 2020). Twenty-four patients were interviewed about a direct-to-patient AI tool and 24 patients were interviewed about a clinician decision-support AI tool (Ma et. al., 2020). study developing and verifying automatic detection of active pulmonary tuberculosis from multi-slice spiral images based on deep learning. An AI tool for automatic detection of ATB in chest CT is successfully developed. The AI tool can accurately detect ATB patients, and distinguish between ATB and non- ATB cases, which simplifies the diagnosis process and lays a solid foundation for the next step of AI in CT diagnosis of ATB in clinical application. The AI-driven tool combined two deep convolutional neural networks with expert refinement (Leite et. al., 2020). study artificial intelligence-driven novel tool for tooth detection and segmentation on panoramic radiographs. The method showed a clinically significant reduction of 67% of the time consumed for the manual. To evaluate the benefits of an artificial intelligence (AI)-based tool for two-dimensional mammography in the breast cancer detection process. 14 radiologists assessed a dataset of 240 digital mammography images, acquired between 2013 and 2016, using a counterbalance design in which half of the dataset was read without AI and the other half with the help of AI during a first session and vice versa during a second session, which was separated from the first by a washout period (**Pacilè et. al., 2020**). As technology is evolving, more and more AIbased options emerge that promise to detect human emotions and support decision making (Aysolmaz et. al., 2021). focus on the full delegation of detecting emotions to AI to contribute to the understanding how such AI is perceived and why it is accepted. These professionals invested in

AI interrogation practices—practices enacted by human experts to relate their own knowledge claims to AI knowledge claims.

Materials and Methods

- Provide an overview of the increasing importance of Artificial Intelligence (AI) tools in academic research.
- Highlight the relevance of AI tools for research scholars at Bharathidasan University
- Review existing literature on the use of AI tools in academic research
- Identify gaps and areas where AI tools have not been extensively explored in the context of Bharathidasan University
- Discuss the impact of AI on research methodologies and outcomes

AI Applications in Research

Artificial Intelligence (AI) applications have become integral to academic research, ushering in a transformative era that redefines traditional methodologies and introduces novel avenues for exploration across diverse disciplines. The incorporation of AI tools not only amplifies efficiency but also unleashes unprecedented possibilities for data analysis, pattern recognition, and knowledge generation. This comprehensive overview delves into key AI applications in research, emphasizing their revolutionary impact. Natural Language Processing (NLP) facilitates enhanced literature reviews, empowering researchers to navigate extensive literature efficiently. Machine learning algorithms enable swift data analysis and prediction, unveiling intricate patterns

that may elude human observation. AI-driven data analytics automate the labor-intensive aspects of data collection and processing, allowing researchers to focus on interpretation. The automation of repetitive tasks increases overall efficiency, especially in experimental design and data collection. In fields like biology and medicine, AI excels at image and pattern recognition, enhancing analysis accuracy. Virtual research assistants, powered by AI, manage administrative tasks, freeing up researchers for intellectual work. Ethical considerations, including algorithmic bias and data privacy, demand careful attention to ensure the responsible and unbiased use of AI tools. As AI technology advances, its expanding applications in research promise innovative tools for data-driven decision-making, pushing the boundaries of knowledge and fostering a new era of discovery and innovation in academia.

Case Studies from Bharathidasan University

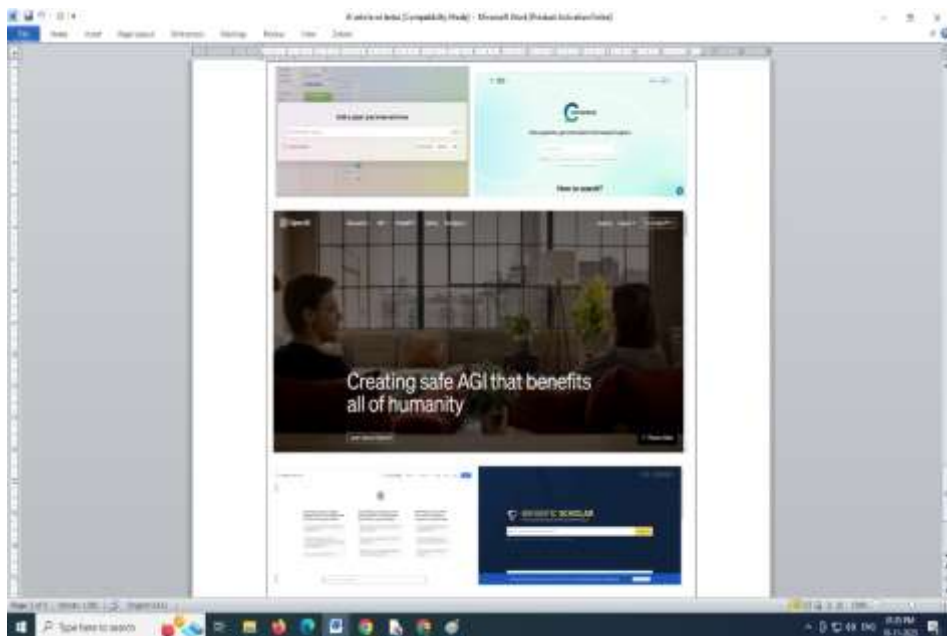


Table 1: frequently using these Artificial Intelligence Tools

Network/Consortia	Frequently	%	Occasionally	%	Rarely	%	Total	%
PLAITO	11	0.59	4	0.26	6	0.81	21	0.51
BARD AI	562	30.25	446	28.61	179	24.16	1187	28.55
QUILLBOT	214	11.52	609	39.06	161	21.73	984	23.67
Queirum	21	1.13	13	0.83	11	1.48	45	1.08
DreamBox	37	1.99	66	4.23	21	2.83	124	2.98
CHATGPT	694	37.35	263	16.87	168	22.67	1125	27.06
COGNII	169	9.10	124	7.95	130	17.54	423	10.17
Gradescope	150	8.07	34	2.18	65	8.77	249	5.99

Table-1 shows about the frequently using Artificial Intelligence tools. Among the 4158 multiple answers majority of 30.25% use the BARD AI frequently, 28.61% of them use occasionally, and 24.16% use rarely; 37.35% of them use the CHATGPT frequently, 16.87% use occasionally, and 22.67% of them use rarely; 11.52% of them use the QUILLBOT frequently, 39.06% use occasionally, 21.73% of them use rarely; 9.10% of them use COGNII frequently, 7.95% of the respondents use occasionally and 17.54% of them using rarely.

Table 2: Problems faced while accessing electronic resources

Problems	Most Frequently	Frequently	Occasionally	Not at all
Copy right protection	361 (29.83%)	449 (37.11%)	297 (24.55%)	103 (8.51%)
Difficult to access on particular websites	136 (11.24%)	224 (18.51%)	42 (3.47%)	808 (66.78%)
Download restriction	159 (13.14%)	126 (10.41%)	152 (12.56%)	773 (63.88%)

File preservation	164 (13.55%)	134 (11.07%)	141 (11.65%)	771 (63.72%)
Frequent hanging systems	139 (11.49%)	197 (16.28%)	201 (16.61%)	673 (55.62%)
Inconvenient usage electronic formats	164 (13.55%)	719 (59.42%)	142 (11.74%)	185 (15.29%)
Lack of awareness about way of access	176 (14.55%)	181 (14.96%)	135 (11.16%)	718 (59.34%)
Lack of IT skills	114 (9.42%)	36 (2.98%)	34 (2.81%)	1026 (84.79%)
Language barrier	82 (6.78%)	42 (3.47%)	89 (7.36%)	997 (82.40%)
Limited terminals	171 (14.13%)	134 (11.07%)	152 (12.56%)	753 (62.23%)
Password Restriction	163 (13.47%)	130 (10.74%)	129 (10.66%)	788 (65.12%)
Disturbance of Power supply	171 (14.13%)	156 (12.89%)	141 (11.65%)	742 (61.32%)
Slow accessing speed of Internet	167 (13.80%)	142 (11.74%)	173 (14.30%)	728 (60.17%)
Storage facilities	197 (16.28%)	173 (14.30%)	137 (11.32%)	703 (58.10%)
Time consuming	192 (15.87%)	188 (15.54%)	181 (14.96%)	649 (53.64%)
Virus attack	145 (11.98%)	139 (11.49%)	178 (14.71%)	748 (61.82%)
Others	22 (1.82%)	27 (2.23%)	52 (4.30%)	1109 (91.65%)

Majority 91.65% of the respondents never access the Artificial Intelligence tools because of other difficulties, 4.30% of them accessing occasionally, 2.23% of them accessing frequently and 1.82% of them accessing most frequently. Totally, 84.79% of the respondents not at all access the Artificial Intelligence tools due to Lack of IT skills, 2.81% of them access occasionally, 2.98% of them access frequently and 9.42% of them access most frequently. Totally, 82.40% of the respondents not

at all access because of Language barrier, 7.36% of them access occasionally, 3.47% of them access frequently and 6.78% of them access most frequently. Totally, 66.78% of the respondents not at all access because of Difficulty inaccessing particular websites, 3.47% of them access occasionally, 18.51% of them access frequently and 11.24% of them access most frequently. Totally, 65.12% of the respondents not at all access because of Password Restriction, 10.66% of them access occasionally, 10.74% of them access frequently and 13.47% of them access most frequently. Totally, 63.88% of the respondents not at all access because of Download restriction, 12.56% of them access occasionally, 10.41% of them access frequently and 13.14% of them access most frequently. Totally, 63.72% of the respondents not at all access because of File preservation, 11.65% of them access occasionally, 11.07% of them access frequently and 13.55% of them access most frequently. 62.23% of the respondents not at all access because of Limited terminals; 12.56% of them access occasionally, 11.07% of them access frequently and 14.13% of them access most frequently. Totally, 61.82% of the respondents not at all access because of Virus attack, 14.71% of them access occasionally, 11.49% of them access frequently and 11.98% of them access most frequently. Totally, 61.32% of the respondents not at all access because of disturbance of power supply, 11.65% of them access occasionally, 12.89% of them access frequently and 14.13% of them access most frequently. 60.17% of the respondents not at all access because of slow accessing speed of the Internet. Totally, 14.30% of them access occasionally, 11.74% of them access frequently and 13.80% of them access most frequently. 59.34% of the respondents not at all access because of Lack of awareness about the way of access. Totally, 11.16%

of them access occasionally, 14.96% of them access frequently and 14.55% of them access most frequently. Totally, 58.10% of the respondents not at all access because of Storage facilities, 11.32% of them access occasionally, 14.30% of them access frequently and 16.28% of them access most frequently. Totally, 55.62% of the respondents not at all access because of frequent hanging systems, 16.61% of them access occasionally, 16.28% of them access frequently and 11.49% of them access most frequently. A total of 53.64% of the respondents were not at all access because of Time consuming, 14.96% of them accessing occasionally, 15.54% of them access frequently and 15.87% of them access most frequently. 15.29% of the respondents not at all access because of inconvenient usage electronic formats, 11.74% of them access occasionally, 59.42% of them access frequently and 13.55% of them access most frequently. Totally, 8.51% of the respondents not at all access because of Copyright protection, 24.55% of them access occasionally, 37.11% of them access frequently and 29.83% of them access most frequently.

Table 5: Extent do they use electronic resources and printed materials

Parameter	Regularly	Sometimes	Not at all
Career development	257(21.24%)	941(77.77%)	12(0.99%)
Electronic resources only	359(29.67%)	845(69.83%)	6(0.50%)
For finding quick information	369(30.50%)	840(69.42%)	1(0.08%)
For study and research	564(46.61%)	645(53.31%)	1(0.08%)
Use electronic resources and printed material equally	522(43.14%)	684(56.53%)	4(0.33%)
Use electronic resources most of the time	634(52.40%)	574(47.44%)	2(0.17%)
Use printed material most of the time	321(26.53%)	887(73.31%)	2(0.17%)

The data in table-3 indicate majority 77.77% of the respondents, sometimes, as using Artificial Intelligence tools for career development,

21.24% of them use regularly, 73.31% of them use to get printed material most of them time, 26.53% use regularly, 69.83% of them use, sometimes, the electronic resources only and 29.67% of them use regularly, 69.42% of them use for finding quick information and 30.50% of them use regularly, 56.53 of them use for use electronic resources and printed material equally, and 43.14% of them use regularly, 53.31% use for study and research and 46.61% use regularly. Very few of them are not at all using the electronic resources and printed materials.

Benefits and Challenges

Ethical considerations in the integration of Artificial Intelligence (AI) into research methodologies are paramount, with challenges emerging in various dimensions. Algorithmic bias, a persistent concern, raises ethical dilemmas, particularly in studies involving sensitive topics or populations, necessitating researchers to grapple with issues of fairness, transparency, and responsible AI use. Data privacy becomes a critical focal point, as AI's reliance on large datasets raises apprehensions about safeguarding sensitive information, mandating robust measures and adherence to ethical standards. The complexity of AI tools introduces expertise requirements, posing challenges for researchers unfamiliar with AI technologies and underscoring the need for knowledge bridging. The resource intensiveness of implementing AI in research, both in infrastructure and costs, poses challenges for smaller institutions or projects. Interdisciplinary collaboration barriers, stemming from differences in language and methodologies, highlight the importance of effective communication and mutual understanding. Moreover, the potential overreliance on AI raises concerns about the loss of human oversight, emphasizing the necessity of maintaining a balance to avoid

overlooking critical contextual nuances or unforeseen factors that AI may not capture. Careful navigation of these ethical considerations is essential to ensure the responsible and equitable deployment of AI in research endeavors.

Results and Discussion

The future of interdisciplinary collaboration in the realm of Artificial Intelligence (AI) holds promising prospects, driven by the continuous evolution of AI technologies. The seamless integration of insights from arts, science, and social science domains using sophisticated AI tools could lead to groundbreaking discoveries at the intersections of traditionally distinct fields. Another potential avenue lies in tailoring AI applications to offer personalized research support for scholars, with virtual research assistants evolving to understand individual research styles and preferences. The future will likely prioritize an ethics-centric approach to AI development, emphasizing tools that not only adhere to ethical guidelines but actively contribute to minimizing biases, ensuring data privacy, and promoting transparency in research processes. Additionally, the integration of AI with Augmented Reality (AR) and Virtual Reality (VR) technologies could redefine how scholars interact with data, providing immersive experiences for deeper understanding. Refinement of human-AI collaboration models, where AI serves as collaborative partners rather than replacements, is anticipated. Recommendations for institutions include prioritizing continuous skill development for researchers, establishing and enforcing clear ethical guidelines, allocating resources for AI integration, promoting interdisciplinary collaboration, engaging the community in AI discussions, and investing in emerging technologies like AR and VR to

ensure scholars have access to cutting-edge tools for enhanced research experiences. These strategies aim to foster a research environment that maximizes the potential of evolving AI technologies while maintaining ethical standards and promoting collaboration across disciplines.

Conclusion & Recommendations

Based on the findings of this study, the researcher concluded that the use of Artificial Intelligence tools had a significant impact on the academic performance of students and faculty members at Bharathidasan University; however, they needed to improve their abilities in the use of Artificial Intelligence tools. The goal of this research was to help the library improve its offering of Artificial Intelligence tools to fulfill the academic needs of the university's students. This paper is designed to help libraries improve library services, particularly in supporting students with their academic work. This study will be made accessible for execution by the university library management.

Reference

- Lin, L., Dou, Q., Jin, Y. M., Zhou, G. Q., Tang, Y. Q., Chen, W. L., ... & Sun, Y. (2019). Deep learning for automated contouring of primary tumor volumes by MRI for nasopharyngeal carcinoma. *Radiology*, *291*(3), 677-686.
- Nelson, C. A., Pérez-Chada, L. M., Creadore, A., Li, S. J., Lo, K., Manjaly, P., ... & Mostaghimi, A. (2020). Patient perspectives on the use of artificial intelligence for skin cancer screening: a qualitative study. *JAMA dermatology*, *156*(5), 501-512.
- Ma, L., Wang, Y., Guo, L., Zhang, Y., Wang, P., Pei, X., ... & Lure, F. Y. (2020). Developing and verifying automatic detection of active pulmonary tuberculosis from multi-slice spiral CT images based on deep learning. *Journal of X-ray Science and Technology*, *28*(5), 939-951.
- Leite, A. F., Gerven, A. V., Willems, H., Beznik, T., Lahoud, P., Gaêta-Araujo, H., ... & Jacobs, R. (2021). Artificial intelligence-driven novel tool for tooth

detection and segmentation on panoramic radiographs. *Clinical oral investigations*, 25, 2257-2267.

Pacilè, S., Lopez, J., Chone, P., Bertinotti, T., Grouin, J. M., & Fillard, P. (2020). Improving breast cancer detection accuracy of mammography with the concurrent use of an artificial intelligence tool. *Radiology: Artificial Intelligence*, 2(6), e190208.

Aysolmaz, B., Leyer, M., & Iren, D. (2021). Acceptance of AI for delegating emotional intelligence: Results from an experiment.

Disaster Preparedness: the use of social media for academic information during the COVID-19 pandemic by new entrants of the Faculty of Dental Sciences at the University of Peradeniya, Sri Lanka.

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Abstract

The shift to online education due to the COVID-19 pandemic had a profound impact on educational institutions worldwide, including those in developing countries. In response, many educators and institutions turned to social media sites and other digital tools to continue delivering education and sustaining the learning process. The present study attempts to examine the way of using social media by the new entrants to the Faculty of Dental Sciences of the University of Peradeniya, specifically for the information requirements relating to their academic programs during the COVID-19 Pandemic. The study was undertaken at the Library of the Faculty of Dental Sciences during the orientation program conducted for the new entrants. Even though 117 students registered in the academic year 2022/2023, only 112 students participated in the survey. An online questionnaire was used as the main data-gathering tool. Findings indicated that WhatsApp, Facebook, and Research Gate were the widely used social media platforms by Dental Science undergraduates during the COVID-19 Pandemic specifically for academic purposes. Sixty-five percent of them (65%) used social media for searching Scientific and academic information related to their subject matters. The major positive impact perceived by the students was that social media helps them to maintain better relationships with their friends; however, at the same time, they believe social media behavior is quite a time-consuming matter. While social media has the potential for educational purposes, the findings indicate that a significant number of students (35%) are not aware of its importance and potential for educational activities. The majority of responded seem to

pripritize the use of social media for entertainment rather than for accessing seem to prioritize the use of social media for entertainment rather than for accessing educational content or features available on these platforms. Based on these findings, it may be beneficial for educational institutions and policymakers in Sri Lanka to explore ways to promote the educational potential of social media platforms among students.

Keywords: *Social Media, COVID 19, Undergraduates, Dental Sciences, Sri Lanka, University.*

Introduction

Social media or social networking sites have been performing a pivotal role in making changes in every aspect of human life in the modern information world. According to Boyd and Ellison (2008), social network sites are profile-based websites that allow users to maintain social relationships by viewing, visiting, and sharing their lists of social connections with other members. As Hamade (2013) explored these sites can be used for work-related issues, personal issues, romantic relationships, and shared interests such as music, arts, sports, politics, etc. As of today, social media has become a part of many people's everyday lives. It is fair to say that this situation became more acute during the COVID-19 epidemic. The COVID-19 pandemic indeed had a profound impact on the higher education system worldwide. As a result of the pandemic, many countries and institutions had to rapidly transition to online and remote learning to ensure the safety of students and educators. Due to the sudden and unprecedented emergence of COVID-19, libraries are also forced to choose better alternatives to continue their services similar to other service-oriented organizations (Dharmarathne,2022). Therefore, the main purpose of this study is to examine the way of using Social Networking Sites for academic information during the COVID-19 Pandemic by new entrants in the

faculty of Dental Sciences, University of Peradeniya. The specific objectives are to find out the extent of use of different social networking sites by new entrants in the faculty of Dental Science specifically for academic information during the COVID-19 pandemic, to examine ways of communication that they had with peers using social media platforms to share academic information, to identify the positive and negative impacts of social media as perceived by Dental undergraduates. Though this is an emerging and sudden phenomenon in the modern information world, limited studies have been undertaken in the Sri Lankan context to examine the use of social media during the COVID-19 Pandemic by undergraduates of the university system in Sri Lanka.

Materials and Methods

All new entrants registered in the academic year 2022/2023 of Faculty of Dental Sciences, University of Peradeniya were selected for the study. In order to obtain forthright, independent, and anonymous answers, a three-page structured questionnaire created using Google Forms was administered among the sample during their library orientation program conducted in February 2022. Even though there were 84 female and 33 male students registered in the Dental Science library, only 112 new entrants participated in the library orientation program. Therefore, the final study sample comprised 112 respondents. The Statistical Package for the Social Sciences (SPSS) version 23 was used to get frequencies, percentages, tabulations, and other statistical measures.

Results and Discussion

Demographic Information and Response Rate

Since all administered online questionnaires could be collected at the end of the program, the response rate was 100%. Of the one hundred and twelve respondents (112), eighty (71.42%) were female and thirty-two (28.57%) were male. The majority of the students (90.7%) were in the 21-24 age group and rest of them (9.3%) were in the 17-20 age group.

Availability of User Accounts on Social Media Platforms

Respondents were asked whether they have user accounts on social networking sites. Results show that WhatsApp was the vast majority used social media platform (90%) whereas Facebook (80%) rated as the second most favorite site by Dental Science undergraduates. Research Gate (45%), LinkedIn (37.3%), Twitter (18.7%) and Instagram (16%) were in the third level of favorite sites. Availability of user accounts on Twitter (2.6%) and Myspace (1.3%) was very low. Apart from the above, all students were instructed by the faculty to maintain a Zoom user account. All undergraduates had to engage in online education via this social media platform during the CORONA outbreak. None of the respondents had an account on Flickr. Accordingly, WhatsApp and Facebook were the most popular social media platforms among the Dental Science new entrants in the academic year 2022/23. In terms of privacy and security of their accounts, 80% of respondents maintained controlled accounts. Only authorized friends and relatives can view these accounts. However, 20% of respondents expressed that they are not concerned about the privacy and security of their accounts, which means anybody can view and post on their accounts without prior

permission and restrictions. The majority (62.3%) of the sample expressed that they have not included their parents in the fans list but 37.7% mentioned that they have retained their parents.

Frequency of Opening and Posting on Social Media Accounts

Sixty percent (60%) of respondents open their accounts daily while 22.7% frequently visit their accounts within a day. Twelve percent (12%) open their accounts once a week and 5.3% open accounts in once every other day. With regard to posting on social media accounts, 58.7% of respondents said that they do post on their accounts rarely. Twenty-four percent (24%) of respondents post once a week. Ten point seven percent (10.7%) of respondents post on their accounts once a day while only 1.3% of the respondents post many times a day. However, 2.7% expressed that they don't like to post on their accounts.

Purpose of Using Social Media

Majority of new entrants in the faculty of Dental Sciences used social media for entertaining purposes (81%). Sixty-five percent of them (65%) used social media for searching the Scientific and academic information related to their subject matters. Another 24% of members like to view sports related information on social media. Twenty percent (20%) of the respondents used social media for accessing the local and foreign news, current affairs etc. while another 5% of respondents liked to access political and business information through social media.

Using Social Media for Information / Academic Purposes

It was expected to examine the way of using social network sites for information activities specifically for the academic purpose by the new

entrants in Faculty of Dental sciences during the CORONA Outbreak. For this, 65% members expressed that they had been extensively used social media for searching information relating to their academic programs. However 35% of respondents said that they had not an idea about using social media for academic information. Some of the respondents had used social media for certain educational activities during their A/L examination period. Of the respondents who used Social Media for academic information, 44% had used the YouTube for viewing video clips related to their subject matters. Thirty-two percent (32%) of students had used online chat consoles eg; Messenger on Facebook, WhatsApp for discussing the educational and subject matters with peers. Twenty-one percent (21%) of them used social media to exchange the handouts, study notes and assignments etc. with their friends. Four percent (4%) of respondents used social media for making video calls for academic purposes and 4% used it as a platform to exchange ideas with their teachers and tutors eg; Messenger on Facebook and WhatsApp.

Positive and Negative Impacts of Social Media

The survey provides insights into how respondents perceive the positive and negative impacts of social media. Among the key findings; A significant majority, 88%, of respondents believe that social media helps them maintain better relationships with their friends. 43% of respondents view social media as a good platform for maintaining better relationships with family and close relatives. A notable 32% of respondents positively use social media to get involved in social activities. This could include joining groups or participating in events related to shared interests or causes. About 16% of respondents engage

in cultural activities through their social media accounts. A smaller percentage, 6%, of respondents believes that they can be involved in political activities through social media. The most significant negative impact identified by respondents is that 66% of them believe that maintaining social media accounts is time-consuming. Approximately 28% of respondents believe that social media behavior adversely affects their ability to focus on their studies. This implies that social media can be a distraction from academic responsibilities for a substantial portion of respondents. A smaller 4% of respondents indicated that social media is one of the reasons for the breakdown of their social relationships.

Conclusion and Recommendations

Most new entrants in the faculty of Dental Science of University of Peradeniya have a good understanding and adequate awareness of how to use social media. They are familiar with the platforms and their functionalities. Similar to many other countries, certain social media platforms are popular among young adults in Sri Lanka. This was further confirmed by the findings of this study. While social media has the potential for educational purposes, the findings indicate that a relatively significant number of students (35%) are not aware of its importance and potential for educational activities. According to findings, many students primarily use social media for entertainment and recreation. Even during the COVID-19 pandemic, when alternative information sources were needed, it appears that social media was not widely recognized or utilized for educational purposes by students. The majority of respondents seem to prioritize the use of social media for entertainment rather than for accessing educational content or features available on these platforms. Based on these findings, it may be

beneficial for educational institutions and policy makers in Sri Lanka to explore ways to promote the educational potential of social media platforms among students. This could involve initiatives to raise awareness of available educational resources and encourage their use for learning purposes. Additionally, understanding which specific social media platforms are popular among students can inform targeted educational strategies and interventions.

References:

Boyd, D.M. and Ellison, N.B. (2008). Social network sites: definition, history, and scholarship, *Journal of Computer-mediated Communications*, Vol. 13 No. 1, pp. 210-230.

Dharmarathne, A. (Sept-Dec.2021). Social media as a tool of library marketing's brief review on experiences of selected countries in Asia. *University of Peradeniya Library Newsletter*,01(03), pp.14-16. Available at : <http://www.lib.pdn.ac.lk/library-newsletters/vol-1-issue-3.pdf>

Hamade, S.N. (2013). Perception and use of social networking sites among university students, *Library Review*, Vol. 62, No 6/7, pp. 388 – 397.

Review of Google Scholar-based studies on the use of social media for public relations in libraries from 2013 to 2022.

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Abstract

A library is a collection of informational resources and related materials that are available to a specific community for borrowing or reference. Public relations (PR) is a collection of tactics and methods for managing how information about a person or company is disseminated to the general public, particularly the media. Social media platforms facilitate the dissemination of information, ideas, messages, and other types of content. Using social media platforms offers libraries of all types a promising opportunity to strengthen their public relations efforts. The study's objectives are as follows: To examine the annual growth of scholarly papers on the use of social media for public relations in library settings, to explore the many forms of publications that were used to convey data, to learn about the various types of libraries featured in social media for public relations publications, and to investigate the distribution of publications based on authorship. The study uses bibliometric analysis as its methodology to evaluate a large volume of scientific data. From 2012 until 2022, the study period lasted eleven years. Only scholarly articles written in English were considered for study. A total of 546 research publications were obtained, with 492 articles chosen. The survey found that most of publications 59 (12%) were published in 2021, and that a considerable majority of the publications were written by a single person 241 (49%). This study suggests that future research investigate the methods and behaviors used to develop public relations (PR) utilizing social media.

Furthermore, it is critical to identify which specific social media sites libraries mostly use for public relations.

Keywords: *Google Scholar, Bibliometric analysis, Public relations, Social media, Publish or perish*

Introduction

A library is a collection of informational resources and related materials that are available for borrowing or reference to a specific community. The word derives from the Latin *liber*, “book,” whereas a Latinized Greek word, *bibliotheca*, is the origin of the word for library in German, Russian, and the Romance languages” (Britannica, 2023). As technology has changed and allowed ever-new ways of creating, storing, organizing, and providing information, public expectation of the role of libraries has increased. As libraries have changed, so, too, has the role of the librarian.

Public Relations is the distinctive management function that helps establish and maintain mutual lines of communication, understanding, acceptance, and cooperation between an organization and its public; involves the management of problems or issues; helps management to keep informed on and responsive to public opinion; defines and emphasizes the responsibility of management to serve the public interest (Rex F. Harlow, 1976). Hence, the advent of new information and communication technologies (ICT) has become a crucial aspect for libraries, particularly in their efforts to engage with library users. This is especially significant due to the significant impact of the rise of social media on user behavior. Social media platforms facilitate the dissemination of information, ideas, messages, and various forms of material. Utilizing social media platforms presents a favorable prospect for libraries of all kinds to enhance their public relations process.

Problem statement

According to data from wordsrated.com, the annual publication of academic publications has exceeded 5.14 million as of 2022, encompassing a variety of formats such as short surveys, reviews, and conference proceedings. Given the substantial volume of information being generated, it becomes challenging for academics or institutions to comprehensively cover and categorize every type of information. The utilization of social media platforms for public relations purposes in libraries is similarly challenging to conceal. Researchers and libraries greatly benefit from acquiring knowledge about new trends, tactics, challenges, impediments, and solutions related to the utilization of social media for public relations in libraries through these types of evaluations. No papers utilizing the publish or perish program on Google Scholar were found that employ the aforementioned review methodology. These kind of reviews are highly valuable for professionals in the field of library and information science (LIS), including librarians, credentialed teachers, and subject matter specialists.

Objectives

- To analyze the yearly expansion of scholarly publications pertaining to the utilization of social media for public relations inside library settings.
- To examine distribution of publications according to authorship
- To investigate the various forms of publications that were utilized to present data
- To find out about the various types of libraries featured in social media for public relations publications.

Materials and Methods

The study uses bibliometric analysis as its methodology to assess a substantial volume of scientific data. The keywords were employed to apply data filtering techniques in the context of public relations on social media platforms inside library settings. The data was sourced from Google Scholar using the Publish or Perish tool. The study period encompassed a duration of eleven years, specifically from 2012 to 2022. Only scholarly articles written in the English language were included for analysis. A total of 546 research publications were acquired and selected 492 articles. The quantitative data was subsequently filtered in alignment with the study's aims. The data retrieved from Google Scholar was analyzed and visualized using the Excel packages.

Significant of the study

This study is significant since it encompasses various aspects, including tracing the historical trajectory of the topic and making predictions about its future. It aids field specialists and professionals in formulating systems for determining their next steps and staying informed about current developments. Additionally, provide a list of prominent subjects pertaining to the utilization of social media for public relations within library contexts. The establishment of a systematic framework for authors to effectively produce high-quality papers or publications in the realm of literature holds significant importance. Researchers in the subject might engage in comparative analysis of their own work and that of others as a result of this type of study.

Results and discussion

The results were presented through the utilization of tables, graphs, and figures, which were based on the study of a total of 492 study papers. Based on the findings of this review, the total number of citations observed was 5102, with an average of 463 citations each year and 10.3 citations per paper. The paper that obtained the highest number of citations was titled "Social networking tools for academic libraries," authored by SKW Chu and HS Du from Hong Kong. This publication acquired a total of 376 citations, resulting in an average of 37.6 citations each year. The majority of publications, specifically 175 out of 492 articles, were published by the United States of America, accounting for around 36% of the total.

Table 1 presents an overview by year of the research output pertaining to the utilization of social media for public relations in libraries. The data exhibits a pattern of diametrically opposing increases and decreases on a yearly basis. The findings are presented as follows,

Table 1: Overview by year of the research output pertaining to the utilization of social media for public relations in libraries

Year	No.of Publication	Percentage
2012	27	5%
2013	32	6%
2014	37	8%
2015	48	10%
2016	39	8%
2017	54	11%
2018	41	8%
2019	53	11%
2020	52	11%
2021	59	12%
2022	49	10%

Table 2 presents the distribution of publications according to authorship, revealing that a significant majority of the publications were authored by a single individual, as indicated by the analysis. The observed percentage is 241 (49%), with the second largest percentage being 127 (26%) for articles authored by two individuals. Articles authored by more than four individuals accounted for 17 (3%) of the total.

Table 2: Distribution of publications according to authorship

Author count	Number	percentage
1	241	49%
2	127	26%
3	88	18%
4	19	4%
More than 4	17	3%

Based on the facts presented in Table 3, it is evident that the predominant form of documentation utilized by individuals worldwide to disseminate their research findings is journal articles. The second highest category of publications was theses, while the third highest category consisted of conference papers.

Table 3: Various forms of publications that were utilized to present data

Journal	Count	Percentage
Book	40	8
Conference	43	9
Journal	352	72
Poster	1	0.00
Report	10	2
Theses	46	9

Based on the results shown in Table 4, it is evident that a significant majority of articles, specifically 291 publications (59%), center on the utilization of social media for public relations inside academic libraries.

The public library ranked second highest with a total of 98 (20%). Following closely behind was general discussion pertaining to all types of libraries, which garnered 68(14%).

Table 4: Types of libraries

Type of Library	Count	Percentage
Academic Library	291	59%
All Type	68	14%
National Library	2	0%
Public Library	98	20%
Special Library	33	7%

Conclusion and Recommendations

The concept of public relations has mostly expanded in the United States, and subsequently reached Europe and Asia. It is crucial for libraries of all types to effectively implement public relations strategies in order to engage with users. Without active user participation, libraries risk becoming stagnant and devoid of activity. In contemporary society, the management of public relations among users has proven to be highly efficacious, particularly through the utilization of digital media. Consequently, social media platforms have emerged as a particularly effective instrument in this regard. This analysis highlights the utilization of social media platforms for public relations purposes, as evidenced by a total of 492 articles examined in the study. This particular study facilitates the enhancement of knowledge and awareness among researchers, undergraduate and graduate students, educators, and professionals on the subject of public relations (PR) and its significance in relation to the use of social media. This study recommends that future research focus on exploring tactics and actions employed to establish public relations (PR) using social

media. Additionally, it is important to investigate which specific social media platforms are predominantly utilized by libraries for PR purposes.

References

- Britanica. (2023). Library. In Library. Britanica.
<https://www.britannica.com/topic/library/The-history-of-libraries> Rex F. Harlow. (1976). Building a public relations definition. 1976, 2(II).
- Zhang, F., Wang, H., Bai, Y., & Zhang, H. (2022). A Bibliometric Analysis of the Landscape of Problem-Based Learning Research (1981–2021). *Frontiers in Psychology*, 13, 828390. <https://doi.org/10.3389/fpsyg.2022.828390>

Addressing Educational Disparities: Analysis of Library Resources and Services in Urban, Semi-Urban, and Rural Schools in the Kandy District

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Abstract

This study investigates the disparities in library resources and services among urban, semi-urban, and rural school libraries in the Kandy district. The findings reveal significant gender disparities among school librarians and diverse roles within the profession. Analysis of available information resources indicates variations across locations, with notable discrepancies in the availability of audio-visual materials. Similarly, disparities in library services and facilities are identified, impacting study spaces, reading materials, and technology access. The study emphasizes the need for targeted efforts to address these discrepancies and ensure equal educational opportunities. Recommendations include promoting awareness of diverse library services and resources and implementing improvements for enhanced effectiveness. The study contributes valuable insights to inform decision-making processes aimed at fostering equity in the educational system, regardless of school location.

Keywords: *Library use, Resources, Rural schools, School librarians, Urban schools*

Introduction

School libraries are invaluable facilities that significantly contribute to positive learning outcomes (CILIP, 2004) in the country. The school library serves as a vital source of information for both teachers and learners, playing a crucial role in achieving learning outcomes. In today's rapidly evolving educational environment, the significance of school libraries and the role of school librarians have become increasingly important. School librarians facilitate access to library

resources and services for the user community, making effective utilization of school libraries essential in promoting student learning and academic success.

Educational disparities, especially concerning library resources and services, are critical issues affecting the learning opportunities of students in various settings. These disparities are particularly noticeable among urban, semi-urban, and rural schools (Sullivan et al., 2018). Adequate access to library resources, including audio-visual materials, study spaces, reading materials, and technology, significantly influences the quality of education students receive. Addressing these discrepancies is pivotal to ensuring equal educational opportunities and fostering a more conducive learning environment for all.

The main objective of this study is to examine library resources and services available in school libraries, identifying gaps and discrepancies in the availability of information resources and library services & facilities among different settings: urban, semi-urban, and rural. By addressing these objectives, the study aims to provide valuable insights and recommendations to inform decision-making processes, leading to a more equitable educational system for all students, regardless of their school's location.

Materials and Methods

This study utilized a survey method to collect data from the librarians regarding library resources and services available in school libraries. The research was conducted in the Kandy district, focusing on schools that have dedicated school libraries. To gather the necessary data, a questionnaire was developed as the primary data collection tool. The questionnaire was administered to all 267 schools in the Kandy district

that were reported to have formal school libraries, as obtained from the Zonal office of the Education Department of Kandy. The survey was conducted in January 2023, and the questionnaires were distributed to all identified schools. Following the data collection phase, a total of 186 completed responses were received from the participating schools by a 64.8% response rate. For data analysis, the SPSS (17.0) was utilized.

Results and Discussion

Background information of the respondents

Firstly, background information about the librarians who responded to the survey such as gender, designation, work experience and location of school where they work are presented in Table 1. Regarding the demographics of the respondents, the majority were female, comprising 92.5% of the sample while males accounted only for 7.5%. The study indicates a significant gender disparity within the school librarian profession. With regards the current positions, the most common position among respondents was "Teacher librarian," representing 50% of the sample. Other positions included "Library in charge" (10.8%), "Teacher" (18.3%), "Librarian" (11.8%), and "Library assistant" (9.1%). These diverse roles highlight the range of responsibilities within the school library profession.

Table 1: Descriptive Statistics for Biographical Characteristics

1	Gender	Frequency	Percentage
1)	Male	14	7.5
2)	Female	172	92.5
2	Current position at school		
1)	Librarian	22	11.8
2)	Teacher librarian	93	50.0

3)	Library in charge	20	10.8
4)	Teacher	34	18.3
5)	Library assistant	17	9.1
3	Work experience		
1)	less than 1 year	21	11.3
2)	1-5	47	25.3
3)	6-10	28	15.1
4)	More than 10	90	48.4
4	Location of school		
1)	Central city	65	34.9
2)	Suburb	80	43.0
3)	Rural	39	21.0
4)	No response	02	1.1
	Total	186	100.0

When considering the number of years in the profession, respondents' service periods varied with the largest group (48.4%) having served for more than 10 years. A significant portion (25.3%) had a service period of 1-5 years, while 15.1% had served for 6-10 years. The smallest group (11.3%) had less than 1 year of service. With regards to the school location, most of the respondents, 80 (43%) indicated that their schools were situated in a suburb area followed by nearly 35% in urban areas and 21% in a rural area. The schools where the respondents' works were located were thus fairly representative of town areas as well as rural areas.

Services Offered by School Libraries

Information Resources

School libraries should offer a variety of services in order to cater to the diverse needs of their users. The study examined available information

resources for users and then it was investigated whether such resources varied depending on school location i.e. urban, suburbs and rural.

Table 2: Available Information Resources for Library Users

	Resources	Urban No. (%)	Semi-Urban No. (%)	Rural No. (%)	Total
1	Books	65 (100%)	80(100%)	39(100%)	186
2	Periodicals	60(92.3%)	77(96.3%)	35(89.8%)	175
3	Newspaper	62(95.4%)	74(92.5%)	33(84.6%)	175
4	Maps	57(87.7%)	64(80%)	21(53.8%)	142
5	Audio Visual Media	11(16.9%)	26(32.5%)	04(10.3%)	41
Note: Urban=65: Suburbs=80: Rural=39: No response=02 ; Total=186					

Table 2 presents information about the availability of different resources in school libraries across urban, semi-urban, and rural areas. For instance, it shows that books, periodicals, and newspapers are the most widely available resources in all areas of libraries, with higher percentages in semi-urban areas. Maps, on the other hand, have a higher percentage of availability in urban areas compared to semi-urban and rural areas. Interestingly, audio-visual materials are not much available while 32.5% of suburban schools were having access but only 17% and 10% having access in urban and rural schools respectively. Interesting finding was that only 32.5% of suburban schools have audio visual materials but 83% of urban schools and 90% of rural schools are not available. The results allow researchers and policymakers to understand the distribution of library resources across different types of locations

and identify potential gaps or areas for improvement in library services.

Library Services and Facilities

The library services and facilities provided by the school library were examined and, then it was investigated whether the services and facilities being provided varied depending on school location. The Table 3 shows that all schools irrespective of the location provide lending services while 95% of all schools provide reference services.

Table 3: Library Services and Facilities for Library Users according School Location

	Services	Urban No. (%)	Semi- Urban No. (%)	Rural No. (%)
1	Lending service	60(100%)	80(100%)	39(100%)
2	Provision of reference services/ access to reference books (eg. dictionaries, encyclopedias etc...)	62(95.4%)	77(96.3%)	37(94.9%)
3	Facilitating studies in the library	59(90.8%)	65(81.2%)	32(82%)
4	Facilitating reading of newspapers and magazines	57(87.7%)	76(95%)	35(89.7%)
5	Maintaining a library catalog to facilitate book searching	34(52.3%)	42(52.5%)	27(69.2%)
6	Informing readers about library resources and facilities through educational programs (Library orientation)	15(23.0%)	27(33.8%)	04(10.2%)
7	Provision of photocopying services	24(36.9%)	45(56.3%)	12(30.8%)
8	Provision of internet facilities	02(3%)	03(3.9%)	00(00)
Note: Urban=65: Suburbs=80: Rural=39: No response=02 ; Total=186				

It can be seen that most of urban schools (90%) while 82% of rural and 81% of suburbs schools provide facilities for studying in the library. Majority of suburban schools (95%) facilitate reading of magazines and newspapers while 90% rural and 88% of urban schools provide such

facilities for the library users.

Interestingly, higher percentages of rural schools (69%) have library catalogs and lesser percentage of urban and semi-urban schools (52%) maintain catalogs for searching books in the library. Although 34% of suburban schools conduct user education programs to educate users about available library resources and facilities, only 23% and 10% urban and rural schools respectively provide that facility. More than 56% of semi-urban schools provide photocopying services while nearly 37% of urban and 31% of rural schools provide such facilities for the users.

A remarkable finding is that only 3% and 4% of urban and suburban schools respectively provide internet searching facilities from the library but none of rural schools provide the facility. The disparities in library services among different school locations, particularly in rural areas, create unequal access to resources, hinder information literacy development and have long-term impacts on academic performance. Addressing these issues is essential to ensure equal educational opportunities for all students in the country.

Conclusion and Recommendations

In conclusion, the study highlights disparities in the availability of library resources, especially in audio-visual materials, across urban, semi-urban, and rural school libraries, underscoring the need for targeted efforts to enhance resource access and equity in educational settings. The study further reveals disparities in library services and facilities across urban, semi-urban, and rural schools, highlighting varying levels of access to resources such as study spaces, reading materials, and technology, emphasizing the need for targeted improvements and equal opportunities in educational settings. Based on

these findings, the study recommends that school administrators and librarians promote the diverse services and resources available in the library to enhance its effectiveness.

References:

Chartered Institute of Library and Information Professionals (CILIP). (2004). Information literacy: definition. Retrieved form: <https://www.cilip.org.uk/news/421972/What-is-information-literacy.htm>

Sullivan, K., McConney, A., & Perry, L. B. (2018). A Comparison of Rural Educational Disadvantage in Australia, Canada, and New Zealand Using OECD's PISA. *SAGE Open*, 8(4).
<https://doi.org/10.1177/2158244018805791>

Factors affecting for customer satisfaction in using motor insurance policies in sri lanka with special reference to the western province

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Abstract

This study mainly investigates the Factors affecting Customer Satisfaction using motor insurance policies in Sri Lanka, what is the relationship between customer satisfaction and service quality, customer loyalty, customer knowledge, technical quality and customer interaction and identifies the highest contributing factor towards customer satisfaction in motor insurance. The whole research population was 385 motor insurance policyholders in the Western province of Sri Lanka. This study used a self-structured questionnaire to collect data. The questionnaire was developed to collect primary data with a five-point Likert scale. Collected primary data were analysed using SPSS and to extend the objectives of the research, data were analysed using descriptive statistical techniques, correlation coefficients analysis, and regression analysis. According to the reliability and validity test, the results were at the accepted level According to Pearson's Correlation test, the null hypothesis of the research was rejected and the alternatives were accepted which proved that there was a significant positive impact of all the selected independent variables on customer satisfaction in motor insurance policies. The final result highlights that the overall model is statistically significant, and the researcher suggests that hence the results are not representative of the whole country, other studies should be conducted considering other provinces of Sri Lanka.

Keywords: *Customer Satisfaction, Customer Loyalty, Customer Knowledge, Customer Intention, Service Quality*

Introduction

Background of The Study

Motor Insurance history started around the late 19th century when the first motor policy was sold in 1948. Motor insurance is one of the leading products sold in Sri Lanka and it plays a significant role in providing cover mainly to road vehicles. However, because of the intense competition, increasing loss ratio, and demand from digital-savvy customers, the insurance industry facing several challenges these days (Ernst and Young, 2011, 2012; IIF 2016). Conventional motor insurance products had created the attitude that, spending money on motor insurance was wasting. It influences customers to just buy a third-party Insurance cover to drive a vehicle on the road (Jayasuriya, 2017).

There is tremendous competition among insurance companies to attract and retain market shares and increase profitability (Perera and Gamage, 2019). To remain in the industry with the competition and further grow up, insurance service providers have to focus on service quality and customer satisfaction. It is very important to know how to measure the constructs from the customers' perspective to give them better service. Customer service is one of the most important aspects that everyone needs to prioritize, and it is a significant concept in motor insurance (Gamage,2017). Perera and Gamage, (2019) proved that there is a direct relationship between service quality, customer knowledge, customer loyalty, technical quality and customer interaction and customer satisfaction. According to more recent research, customer satisfaction is seen as a post-purchase experience, an outcome or result of the process of consuming a service. This point of view has its origins in theories of motivation, which contend that individuals act in ways that will advance

important goals or that are motivated by a need to be met. This is how satisfaction is viewed as a target to be attained and is characterised as a consumer fulfilment reaction.

Due to the characteristics of intangibility (the process of service delivery aims to satisfy the need rather than the production of a physical good), heterogeneity (there are no exact standards services, nor are they always identical to themselves, because they depend from company to company, depending on personal contact, so the quality specifications are set within a range of acceptable quality), and intangibility, the issue of customer satisfaction in service industries is difficult to define. The interaction between employees and customers is improved by this aspect. This is referred described as the "moment of truth," when the consumer genuinely judges the calibre of the service (Parasuraman et al., 1991). And to make the customer's participation in the service delivery insurance process as fruitful as possible, it is required to increase the training and recruiting of contact. Political loyalty, also known as "client retention" and "retention exploitation," hasn't received much attention in recent years because of this. It is now obvious that there has been a genuine revolution in the insurance industry, which has changed the market, corporate strategies, the offerings of products and services, and the methods of distribution of insurance products.

Problem Statement

Among twenty-eight insurance companies, thirteen insurance companies are operating general insurance businesses in Sri Lanka. Insurance companies follow different strategies to satisfy customers through various forms to enhance their customer network and profitability in the motor insurance business. Despite the efforts made

by the insurance companies to retain the customers with them, they experience switching the motor policyholders to competitors at the renewal. Accordingly, the long-term retention of motor policyholders by insurers is a significant issue in the motor insurance industry in Sri Lanka (Perera and Gamage, 2019)

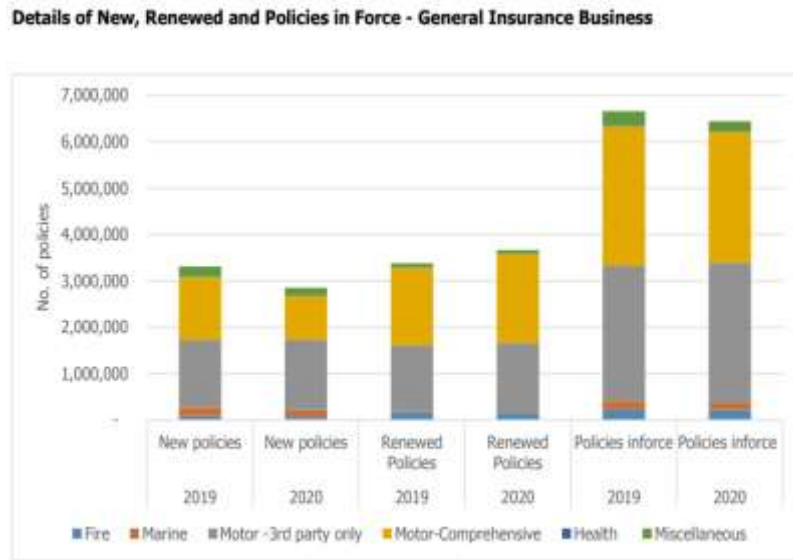


Figure 1: Details of new renewed and publication in Force General Insurance business

Objectives

The main research question would be the “What factors affect customer satisfaction with motor insurance policies in Sri Lanka?” Further two specific objectives are formulated as: To find the factors that affect customer satisfaction in motor insurance policies in Sri Lanka and To find the most significant factors that affect customer satisfaction in motor insurance policies in Sri Lanka.

Significant of the Study

During the years 2015 to 2019, there were few types of research focused on customer satisfaction in the motor insurance industry in Sri Lanka (Perera and Gamage, 2019; Gamage,2017) and some other countries. Accordingly, the findings of this study will provide empirical data regarding the context based on after the year 2020 figures based on western provinces. The study will provide valuable information which will allow stakeholders like investors, shareholders, employees, the Consumer associations, among others to provide useful suggestions to improve the service delivery of their respective insurance companies.

Materials and Methods

According to the framework Service Quality, Customer Loyalty, Customer Knowledge, Technical Quality and Customer Interaction known as Independent Variable and where as Customer Satisfaction in motor insurance policies considered as Dependant variable. According to Krejcie & Morgan (1970) simple random sampling method, the sample size is 384 for a large population exceeding or equal to 10,000. As per the bellow formula by Cochran (1963) sample size is calculated as 384 with a confidence level of 95%, and a margin error of 5%. The questionnaire comprised 27 structured questions relating to the dependent and independent variables, in which the respondents were allowed to make choices among a set of alternatives.

Results and Discussion

With the output result of the reliability test, it shows a Cronbach's Alpha value of 0.889 (SQ), 0.869 (CL), 0.853 (CK), 0.801 (TQ), 0.857 (CI) and 0.875 for the dependent variable of customer satisfaction with a significant of $P < 0.005$

Table: 8 indicates that the R square value was 76.7%. According to the relationship between independent variables and customer satisfaction accounts for 76.7% of the variance. There was an unexplained variation of 23.3%. Because explained variation was considerably more significant than unexplained variance, it appeared as though the model had been fitted to the data. According to Table: 8 of Model Summary, Durbin Watson's value was 2.051. According to the rule of thumb that test statistic values in the range of 1.5 to 2.5 are relatively normal. Values outside of this range could be cause for concern. Field, (2009) suggests that values under 1 or more than 3 are a definite cause for concern.

Analysis of variance (ANOVA) was presented in the following Table: 9 and it included the degree of freedom, the sum of the square, the F value and the P value. A p-value of 0.000 suggested that the test was highly significant and overwhelming evidence to say that there is a relationship between customer satisfaction and independent variables. The Independent factors ((B value (Regression Coefficient) – 0.139, 0.150, 0.189, 0.405, 0.212). Sig. / P Value of all independent variables (SQ- 0.002, CL-0.001, CK-0.000, TQ- 0.000, CI- 0.000 < 0.005) have a significant impact on customer satisfaction in motor insurance policies at a 05.00% level of significance.

$$Y (\text{Customer Satisfaction}) = 0.066 + 0.139SQ + 0.150CL + 189CK + 0.405TQ + 0.212CI$$

Independent variable	Pearson Correlation – Customer Satisfaction	Sig. Value (2-tailed)	Hypotheses	Conclusion
SQ	0.773	0.000	There is a significant positive affect of service quality on customer satisfaction in motor insurance policies in Sri Lanka	H1 Accept
CL	0.776	0.000	There is a significant positive affect of customer loyalty on customer satisfaction in motor insurance policies in Sri Lanka	H2 Accept
CK	0.743	0.000	There is a significant positive affect of customer knowledge on customer satisfaction in motor insurance policies in Sri Lanka	H3 Accept
TQ	0.819	0.000	There is a significant positive affect of technical quality on customer satisfaction in motor insurance policies in Sri Lanka	H4 Accept
CI	0.774	0.000	There is a significant positive affect of customer interaction on customer satisfaction in motor insurance policies in Sri Lanka.	H5 Accept

Conclusion and Recommendations

The primary goal of this study was to evaluate and analyse the Factors affecting Customer Satisfaction using Motor insurance policies in Sri Lanka. When it comes to the final data analysis using 385 data, according to the SPSS Survival Manual (Pallant, 2013), for the reliability test of final data analysis, it shows Cronbach’s Alpha values

were greater than 0.7 with a significant value of $P < 0.005$. It can be identified as all the collected data was reliable. When it comes to the Validity testing, it shows KMO and Bartlett's Test results were greater than 0.5, which can be identified as valid data. According to Hair et al. (2010); Bryne (2010), the analysed data was considered normal since the Skewness and Kurtosis values were in the range of acceptable according to the SPSS Output data. When it comes to the coefficient analysis, all the coefficient variances were positive and it indicates a strong positive relationship between the independent variables and the dependent variable of Customer satisfaction. According to hypothesis testing, the correlation analysis between a dependent variable and the independent variables indicates a strong positive effect. Further when considering P – values was 0.000 in every independent variable implied that the test was highly significant and evidence to say that there is a positive affect between customer satisfaction and the independent variables.

References

- Berry, L. L. and Parasuraman, A. (1991). Marketing Services: Competing through Quality. *Journal of Marketing*, Vol.56, NO.2, pp. 132-134. <https://doi.org/10.2307/1252050>
- Byrne, B. M. (2010). *Structural Equation Modeling with Amos: Basic Concepts, Applications, and Programming* (2nd ed.). New York: Taylor and Francis Group.
- Gamage, S.K. (2017). An Investigation of the Customer Relationship Management Applications on Customer Satisfaction in Motor Insurance Industry of Sri Lanka. *International Journal of Innovative Research and Knowledge* Volume-2 Issue-11. <https://www.researchgate.net/publication/336412445>

Gamage, S.K., Perera, S.L., (2019). Determinants of the Customer Satisfaction in Motor Insurance. *Saudi Journal of Business and Management Studies*, Volume 04(9): p754-764. DOI:10.36348/SJBMS. 2019.v04i09.009

Hair, J. F., Black, W. C., Babin, B. J. et al. (2010). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Krejcie, R.V., & Morgan, D.W., (1970). *Determining Sample Size for Research Activities*. Educational and Psychological Measurement.

Jayasooriya, J.K.S.P. (2011). *Consumer Buying Behavior in Motor Insurance Industry: Case Study Based on Western Province in Sri Lanka*. Digital Library. University of Moratuwa, Sri Lanka.

The Scientometrics analysis on the research landscape of Epigenetics in Diabetes research

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Abstract:

In recent years, there has been a surge of interest in the field of epigenetics and its potential implications for understanding and treating diseases, including diabetes. Epigenetics is the study of how people's behaviours and environment can impact the way their genes function. It plays an important role in the development and progression of diabetes. This study aims to find the year-wise distribution of papers published on epigenetics in diabetes and to find the most productive authors, top funding agencies, countries, and journals contributing to the research relating to epigenetics in diabetes. The study found that a lot of research was published in the form of articles and that the number of papers being published on Epigenetics in Diabetes has been increasing year after year. The highest number of records published was in the year 2021 with 365 records. The study also found that the USA was a highly productive country and India stands at 10th position in terms of research publication outcome.

Keywords: *Epigenetics, Diabetes, Scientometrics, Bibliometrics, Medical science*

Introduction

In recent years, there has been a surge of interest in the field of epigenetics and its potential implications for understanding and treating diseases, including diabetes. Epigenetics refers to changes in gene expression that occur without altering the underlying DNA sequence. By studying these epigenetic modifications, researchers hope to gain insights into the molecular mechanisms that contribute to the

development and progression of diseases like diabetes. In this article, we will explore the research landscape of epigenetics in diabetes research and uncover the latest advancements in this fascinating field. A scientometric analysis of epigenetics in diabetes research has the ability to provide valuable insights into the intricate relationship between gene expression and disease pathogenesis. By mapping the scientific landscape and identifying hotspots and knowledge gaps, scientists can focus their efforts on groundbreaking research avenues. As epigenetics continues to unravel the complexities of diabetes, we stand poised to unlock new diagnostic tools, therapeutic strategies, and ultimately, the prevention and cure of this global health burden.

Objectives

The main objectives of this study are:

- To show the year-wise distribution of research growth between the years (1993 – 2023).
- To investigate the distribution of research findings in the chosen field by journals.
- To discover the most productive authors.
- To determine the distribution of publications by institutional grouping.
- To discover the top countries and funding agencies that contributed to the chosen topic.

Materials and Methods

The researcher has explored the premier indexing database Web of Science as a source for data accumulation of the research indexed on epigenetics, with special emphasis on diabetes. The researcher used the keyword “Epigenetic in diabetes” as a phrase search and the records found from the year 1993 have been retrieved and organized into Histcite. VOSViewer is the analytical tool used for mapping the research outcome. The study aimed at analysing the citation and impact of the research outcome, the funding pattern, the source publication, the growth pattern and collaborative pattern.

Analysis and Interpretation

Table 1: Year wise Distribution

S.N o	Publicati on Year	Rec s	TLC S	TGC S	S.N o	Publicati on Year	Rec s	TLC S	TGC S
1	1993	1	2	264	16	2009	53	522	5805
2	1994	1	15	227	17	2010	77	938	12458
3	1996	1	0	242	18	2011	98	991	8894
4	1997	2	3	155	19	2012	136	1029	9661
5	1998	1	0	94	20	2013	177	951	20701
6	1999	4	0	242	21	2014	183	1077	11924
7	2000	2	1	14	22	2015	239	1221	17397
8	2001	4	18	129	23	2016	214	772	11407
9	2002	6	34	378	24	2017	287	724	16409
10	2003	2	9	194	25	2018	268	722	10047
11	2004	8	16	832	26	2019	322	559	12242

12	2005	22	113	3503	27	2020	319	240	9646
13	2006	24	83	2642	28	2021	365	128	5069
14	2007	45	302	3395	29	2022	347	53	1551
15	2008	50	737	6931	30	2023	225	0	188

The above table shows the year-wise distribution of papers published on Epigenetics in Diabetes from the year 1993 to 2023. The highest number of records published was in the year 2021 with 365 records which have 128 TLCS and 5069 TGCS, followed by the year 2022 with 347 records which have 52 TLCS and 1551 TGCS, the year 2019 with 322 records having 559 TLCS and 12242 TGCS, the year 2020 with 319 records published which have 240 TLCS and 9646 TGCS, and so on. The years 1993, 1994, 1996, and 1998 had the least number of publications having 1 publication each respectively. From the table, it can be inferred that the number of papers being published on Epigenetics in Diabetes has been increasing year after year.

The various document types in which the research related to Epigenetics in Diabetes. A lot of research is published in the form of 1863 articles followed by 1392 reviews, 70 meeting abstracts, 61 proceeding papers, 36 editorial materials, and so on.

Table 2: Prolific Journal wise Distribution

S.No	Journal	Recs	TLCS	TGCS
1	International Journal Of Molecular Sciences	103	22	2924
2	Frontiers In Endocrinology	84	0	1519
3	Clinical Epigenetics	78	0	2520
4	Diabetes	76	1448	5589
5	Diabetologia	61	802	3545
6	PLOS One	57	0	2186
7	Nutrients	45	45	2346
8	Scientific Reports	45	0	1232

9	Epigenetics	39	355	1720
10	Epigenomics	39	Social factors of suicides in Sri Lanka	796

The above table shows the top 10 prolific journal-wise distribution of articles. The International Journal of Molecular Sciences has the highest number of publications with 103 articles published, followed by Frontiers in Endocrinology with 84 articles, Clinical Epigenetics with 78 articles, Diabetes with 76 articles, and so on.

Table 3: Prolific Author wise Distribution

S.No	Author	Recs	TLC S	TGC S	S.No	Author	Recs	TLC S	TGC S
1	Ling C	61	1283	5943	11	Beguinet F	20	52	324
2	Natarajan R	41	962	3152	12	Saffery R	20	54	823
3	Kowluru RA	35	496	2057	13	Chakrabarti S	19	103	938
4	El-Osta A	27	459	2466	14	Hivert MF	19	280	971
5	Vaag A	27	480	1964	15	Perfilyev A	19	300	1071
6	Ronn T	26	715	3291	16	Volkov P	19	337	2265
7	Groop L	24	552	2624	17	Paneni F	18	136	1193
8	Ozanne SE	24	155	1917	18	Simmons RA	18	374	1428
9	Nilsson E	21	472	2517	19	Cosentino F	17	128	1286
10	Zhang Y	21	75	487	20	Costantino S	17	116	498

The table shows the top 20 list of prolific authors who have contributed articles on Epigenetics in Diabetes. Author Ling C is on the top of the list with 61 articles with a total of 1283 TLCS and 5943 TGCS followed by Natarajan R with 41 articles with a total of 962 TLCS and 3152 TGCS,

Kowluru RA with 35 articles with a total of 496 TLCS and 2057 TGCS, El-Osta A with 27 articles with a total of 459 TLCS and 2466 TGCS, Vaag A with 27 articles with a total of 480 TLCS and 1964 TGCS and so on.

Table 4: Country wise Distribution

S.No	Country	Recs	TLCS	TGCS
1	USA	1138	5411	68592
2	Peoples R China	527	980	14532
3	UK	339	1486	35290
4	Italy	279	940	15021
5	Germany	208	493	16942
6	Australia	203	1035	16421
7	Sweden	184	1791	12083
8	Canada	172	946	9793
9	Spain	160	349	17722
10	India	153	245	5026

The above table shows the list of the top 10 countries that contributed to Epigenetics in Diabetes. USA is on top of the list with 1138 articles published with a total of 5411 TLCS and 68592 TGCS. The USA is followed by the People's Republic of China in the 2nd place with 527 articles with a total of 980 TLCS and 14532 TGCS followed by the UK, Italy, and Germany in the 3rd, 4th, and 5th positions respectively. India is in 10th position on the list with 153 articles published with a total of 245 TLCS and 5026 TGCS.

Table 5: Institution wise Distribution

S.No	Institution	Recs	TLCS	TGCS
1	Lund University	86	1202	6629
2	University of Copenhagen	67	493	4504
3	University of Penn	65	730	5130
4	University of Melbourne	61	297	2387
5	Karolinska Institute	54	398	3572
6	Harvard Med School	53	112	3007
7	University of Cambridge	52	427	5561
8	Monash University	49	246	1745
9	University Michigan	47	120	2251
10	University Southampton	45	397	5647

The above table shows the top 10 list of institutions that contributed to Epigenetics in Diabetes. Among the top 10 institutions, Lund University is at the top of the list with 86 articles with a total of 1202 TLCS and 6629 TGCS followed by the University of Copenhagen with 67 articles with a total of 493 TLCS and 4504 TGCS, the University of Pennsylvania with 65 articles with a total of 730 TLCS and 5130 TGCS, University of Melbourne with 61 articles with a total of 297 TLCS and 2387 TGCS and so on.

Table 6: Keyword analysis

S.No	Word	Recs	TLCs	TGCs	S.No	Word	Recs	TLCs	TGCs
1	Diabetes	978	4283	42317	11	Obesity	234	794	12748
2	Epigenetic	823	4353	33675	12	Human	229	1177	14459
3	Type	499	2879	25721	13	Mellitus	222	728	9882
4	Methylation	434	2706	18478	14	Associated	219	1122	8496

5	Dna	368	2187	15038	15	Regulation	208	773	8631
6	Diabetic	366	2222	18466	16	Maternal	199	780	8594
7	Disease	341	710	20014	17	Expression	193	1146	9501
8	Metabolic	292	1427	16028	18	Gene	193	1228	9665
9	Role	251	736	9892	19	Cell	185	454	6191
10	Cells	235	557	6268	20	Epigenetics	182	981	9722

The above table lists the top 20 words that have been frequently used. The word diabetes has been used 978 times followed by the word epigenetic 823 times, the word type 499 times, Methylation 434 times, DNA 368 times, and so on.

Table 7: Funding Agencies (3797)

S.no	Funding Agencies	Record Count	%
1	United States Department of Health Human Services	672	19.43
2	National Institutes of Health NIH USA	670	19.37
3	National Natural Science Foundation of China NSFC	321	9.28
4	European Union EU	132	3.82
5	NIH National Institute of Diabetes Digestive Kidney Diseases Niddk	131	3.79
6	Uk Research Innovation UKRI	128	3.70
7	Medical Research Council UK MRC	115	3.33
8	Novo Nordisk Foundation	107	3.09
9	Juvenile Diabetes Research Foundation	100	2.89
10	Spanish Government	93	2.69

The above table shows the top 10 list of funding agencies that funded the research on Epigenetics in Diabetes. Out of the top 10 funding agencies, the United States Department of Health and Human Services

funded a total of 672 articles placing it in 1st place followed by the National Institutes Of Health, USA funded 670 articles, the National Natural Science Foundation Of China Nsfsc funded 321 articles, European Union Eu 132 articles, Nih National Institute Of Diabetes Digestive Kidney Diseases Niddk with 131 articles and so on.

Results and Discussion

A lot of research is published in the form of an article with 1863 articles followed by 1392 reviews, 70 meeting abstracts, 61 proceeding papers, 36 editorial materials, and so on. It can be inferred that the number of papers being published on Epigenetics in Diabetes has been increasing year after year. The highest number of records published was in the year 2021 with 365 records which have 128 TLCS and 5069 TGCS, followed by the year 2022 with 347 records which have 52 TLCS and 1551 TGCS. It was found that the present research outcome on epigenetics does not adhere to Bradford's law of proliferation of research in journals as the top 20 journals could contribute less research outcome during the study period. The USA is a highly productive country and India stands at 10th position in terms of research publication outcome.

References

- Shen, J. M., Chen, J., Feng, L., & Feng, C. (2023). A scientometrics analysis and visualisation of diabetic foot research from 1955 to 2022. *International Wound Journal*, 20(4), 1072-1087.
- Masic, I. (2013). Medical publication and scientometrics. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*, 18(6), 516.

Unraveling Library Over dues: Exploring Overdue Patterns through Analyzing Koha Reports from Rajarata University of Sri Lanka

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Abstract

This study addresses the pervasive issue of Library Over dues (LO) by investigating their present situation and overdue patterns in the RUSL Library System. To understand these dynamics, the study employs quantitative analysis, utilizing a dataset retrieved from the Koha Library Management System. Extracting overdue report files, borrower records, and circulation logs, the research aims to discern patterns in frequency, type, and duration of over-dues, distributions faculty wise considering factors like user types and material categories. The study identified both the students and teacher's overdue books as a nominal activity. When analyzing the clarifications for over dues noted that such as forgetfulness and extended borrowing mainly caused the lengthy over dues. The study intends to propose tailored strategies to eliminate the issue. Recommendations may involve user education, policy revisions, or technological interventions to enhance library services and mitigate over dues, adding more copies of outstanding books thereby contributing to a more efficient library system.

Keywords: *Library Over dues, User Behavior, Koha Library Management System, Library Services, Policy Interventions, RUSL*

Introduction

Library Over dues (LO) pose global challenges, disrupting library operations and hindering resource access for users (Alao, 2002). Basak and Yesmin's (2021) study at BRAC University library identified forgetfulness and incomplete tasks as primary causes for late book returns. Despite fines, students continued library use, suggesting policy effectiveness. The research advocated for increased hard-copy and e-book collections to enhance services. Addressing long-term thefts, interviews at an undisclosed library revealed a lack of orientation among students, emphasizing the need for proactive feedback (Jayasundara, 2021). Alao (2002) observed delays in book returns due to unfinished readings and forgetfulness among medical students. Proposed solutions included renewals, more copies, and extended loan periods. This research delves into the magnitude and causes of library over dues, utilizing data from Koha reports at Rajarata University of Sri Lanka (RUSL) to devise effective strategies for overdue materials.

Rajarata University of Sri Lanka using Koha: Open Source Library Integrated System to automate its Collections, Library users and their check in and checkout transactions since 2009 including its Main Library which mainly serves to the faculties of Management Studies and Social Sciences & Humanities, faculty libraries which mainly serve to the faculties of Applied Sciences, Agriculture, Medical and Allied Sciences and Technology. Under this project, nearly 250000 library materials and 6000 users' have been integrated and provide online Public Access Catalogue Service (Web OPAC) via www.opac.rjt.ac.lk throughout the centralized main server under the Linux platform. Since the said system running over 13 years it has not analyzed its overdue

behavior by the users and this study will be significant for overlooking the users' overdue behavior within the systemic level. Based on the achieving of the above significant following objectives was set up.

Objectives

The study mainly aims to analyze the major distributions and identify the patterns of Library Over dues (LOs) within the RUSL Library System using the Koha reports of its Library Integrating System including identifying the root causes, understanding the impact on library services, and proposing improvement strategies as its specific objectives.

Materials and Methods

The research objective involves a quantitative analysis of library over dues utilizing data from the Koha Library Management System up to 30.03.2023 and clarifications given by the users when they attempted such a situation. These methodologies involve extracting relevant data, including overdue report files, borrower records, and circulation logs, to analyze the frequency, type, and duration of over dues along with user demographics. The data will be cleaned and organized, followed by statistical analysis and visualization, examining factors such as user types, material types, and loan periods to identify trends and causes. The analysis will focus on understanding user behavior, library policies, and resource availability, pinpointing reasons for over dues analyzing the borrowers' clarifications which are collected by the check in & checkout counters. Based on these methods, findings will be figured out and recommendations will be proposed, which might involve targeted user education, policy revisions, or technological interventions to enhance

library services and reduce over dues.

Results and Discussion

Major Distribution of Total Library Checkouts

The study exhaustively examined the users' checkouts from the library over a duration of three years, specifically from January 1, 2020, to March 31, 2023. It revealed the following comprehensive distribution of checkouts among its users (Figure 1):

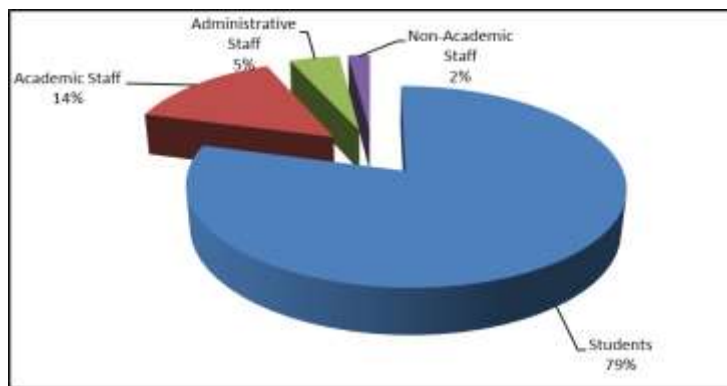


Figure 1: Major Distribution of Total Library Checkouts

Source: Koha Time Series Data, 2023

Figure 1 shows, library checkouts history by its users reveals a robust engagement: 79.30% by students, emphasizing their focus on academic resources, 14.20% by academic staff, reflecting continuous learning, 4.53% by administrative staff and 1.94% by non-academic staff. These figures depict a diverse and active library community, fostering knowledge exchange and learning across the university.

Major Distribution of Over Dues

The study meticulously analyzed the Active Library Over dues profile and outlined the following comprehensive distribution of dues among its users (Figure 2):

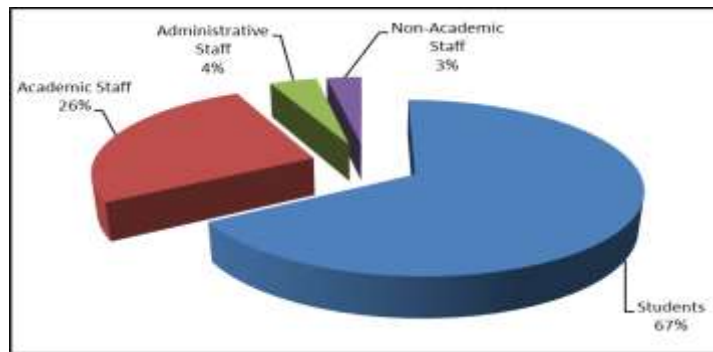


Figure 2: Major Distribution of Total Library Overdues

Source: Koha Time Series Data, 2023

The figure 2 indicates the majority at 67% over dues by student and academic staff members follow at around 26%,

Major Reasons for over dues

The study then analyzed the major causes behind over dues based on the clarifications given by the users.

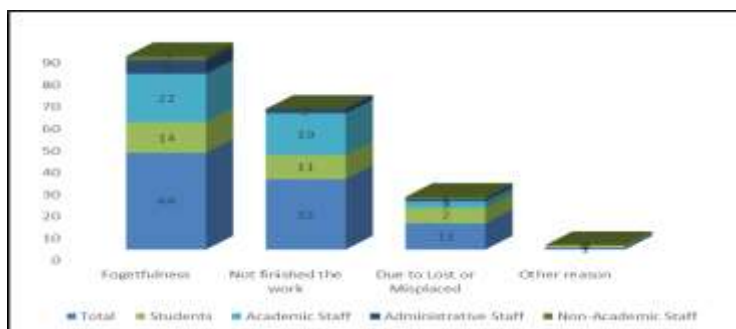


Figure 3: Major reasons for over dues vs user categories

Source: Koha Time Series Data, 2023

As shown in figure 3, the primary factors identified include forgetfulness (49%), due to their unfinished academic works (36%), loss or misplacement of materials (14%), and various other reasons such as being abroad or having illnesses, etc. The provided data reveals several noteworthy patterns within an academic or institutional context.

Forgetfulness emerges as a prevalent issue, affecting both students (31.82%) and academic staff (50%), with academic staff experiencing a notably high percentage of cases. Incomplete work is a significant challenge faced by both students (34.38%) and academic staff (59.38%), indicating potential difficulties in managing workload or time constraints. Lost or misplaced items primarily affect students (58.33%), highlighting possible organizational challenges. Interestingly, there is only one reported case under "Other Reason" (100%), suggesting that miscellaneous factors contributing to incomplete tasks are relatively rare.

Conclusion and Recommendations

The analysis of Rajarata University's library data spanning three years reveals significant trends. Students dominate checkouts at 79.30%, emphasizing their focus on academic resources, while academic staff contributes 14.20%, indicating continuous learning. The predominant overdue patterns, with 67% attributed to students, underscore the need for enhanced time management skills and awareness programs. Over dues, primarily from forgetfulness (49%) and unfinished academic work (36%), highlight areas for targeted interventions. To mitigate over dues, the university can implement timely reminders and academic support strategies, fostering a responsible borrowing culture. By addressing these patterns, the university can create a more efficient and responsible library environment, promoting timely returns and fostering a culture of accountability among its users.

References

Alao, I. A. (2002). “Students and overdue books in a medical library”. *Journal of the Medical Library Association*, 90(3), 294.

Basak, S., & Yesmin, S. (2021). “Students’ attitudes towards library overdue fines in an academic library: A study in a private university setting in Bangladesh.” *IFLA journal*, 47(1), 91-100.

Jayasundara, C. C. (2021). “How a fine regime of an unacceptable user behavior policy affects library use: nudging or shoving?” *Journal of Access Services*, 18(2), 111-146.

Design and Development of Digital Repository of Biodiversity for Bharathidasan University

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Abstract

Organizing the information resources into different studies in physical form as well as in a digital form in a library is very much necessary to bring posterity of the knowledge which is available in the public domain. It is very relevant to carry out the collection and organization of specific resources which belong to a particular region and also exhibit the same to make aware of the importance of the resources pertinent to the particular region. It may be of social, it may be of cultural, it may be of historical, or it may be of lingual. In that context, heritage documentation is very relevant. The processes used to make sure that digital materials remain accessible are referred to as "digital preservation." All the procedures designed to maintain the availability of digital biodiversity resources for as long as they are required can be grouped under the umbrella term of digital preservation.

Keywords: *Cultural Heritage, Biodiversity, Digital Preservation*

Introduction

Preserving digital sources of biodiversity ensures accessibility, with international organizations like UNESCO, EU, and African Nations launching mission projects to document cultural, geographical, historical, religious, and social aspects of heritage, while initiatives are also being launched in India. In this context, the research intention at documenting the biological resources of flora and fauna collective documentation of biodiversity species existing in the both the campuses of Bharathidasan University.

Problem Statement

In the evolution of 21st Century, where some of the unique and rare biodiversity species are extinct in nature. In accordance with the sustainable development goals, there is an emergency of preserving those species of flora and fauna at any cost. The research on biodiversity conservation will address the preservation of flora and fauna species prevailing in the natural surrounding of an education institution and thereby making an emphasize on documenting them digitally to create global awareness on the significance of existing species habitat.

Objectives

- Identifying and documenting the exclusive plants and animal species existing in both the campuses of Bharathidasan University: Palkalaiperur Campus and Khajamalai Campus
- To design and develop a digital repository that would serve as a comprehensive and user-friendly resource for researchers, students, and enthusiasts interested in the Biodiversity of Bharathidasan University.
- To encourage this documentary of digital preservation system and thus creating a global awareness of cultural habitat existing in all Higher Education Institutions with an emphasis on sustainable environment.

Materials and Methods

The research aimed at digital documentation and preservation of native biodiversity species by developing a digital repository of collection representation the existing species prevailing in the study region surveyed. First and foremost, plants and animal species which are unique and rare existing in Palakalaiperur and Khajamalai Campuses were identified, traced and documented citing relevant taxonomic information of species. Photography in its natural environment is captured for evidence. A digital repository is built and designed using DSpace 6.3 version and the information collected is uploaded in the repository citing relevant taxonomic information.

Significant of the Study

Bharathidasan University, is renowned for its rich biodiversity, serves as a vibrant ecosystem and a diverse range of flora and fauna. The university's commitment in preserving and promoting biodiversity has led to planting of herbal, ornamental and aquatic plants which would attract various animal habitats. Accordingly, a vast array of biodiversity species through a collection of 146 plant species from 58 different families and a diverse range of animal habitation is included in the researcher's detailed photographic documentation captured in Bharathidasan University's natural surroundings.

Results and Discussions

- Log onto Bharathidasan University DSpace Repository with Login ID and Password
- Creating a Top-Level Community and Sub-Community

- Collection Building within sub-level community
- Submission of Information such as File Description, File Upload, Verification of Submission, Distribution of License etc.
- Search and Retrieval of Information in Bharathidasan University Institutional Repository.

The researcher has explored the potential of leveraging digital technologies to create a centralized platform using DSpace for preserving, accessing, and disseminating valuable information about the rich biodiversity within the university's premises. By gathering and organizing a vast array of biodiversity data, including species records, photographs and taxonomic information, the researcher has successfully created a centralized repository that captures the essence of the university's natural heritage.

Table 4.1 displays the sample list of some of plant species and its relevant taxonomic information is tabulated as in the institutional repository.

S. N	Common name	Binomial name	Tamil Name	Family	Category
1.	Indian Almond	<i>Terminalia catappa</i> L.	நோட்டு உதும்பை	Combretaceae	Edible, Medicinal
2.	Texas Sage	<i>Leucophyllum frutescens</i> (Berland.) I.M. Johnst.	செக்ஸோஸ்டி லர்லீப்	Scrophulariaceae	Ornamental
3.	Ashoka Tree	<i>Monoon longifolium</i> (Sonn.) B. Xue & R.M.K. Saunders	சுநட்டிலிங்கம்	Annonaceae	Ornamental

4.	Cluster fig	<i>Ficus racemosa</i> L	அத்தி	Moraceae	Medicinal
5.	New Zealand Rock Lily	<i>Arthropodium cirratum</i> (G.Forst.) R.Br.	நியூசீலாந்து போமை அல்லி	Asparagaceae	Edible, Ornamental
6.	Song of India	<i>Dracaena reflexa</i> Lam.		Asparagaceae	Ornamental
7.	Golden Bamboos	<i>Phyllostachys aurea</i> Rivière & C.Rivière	சுபோன்முங்கில்	Poaceae	Ornamental
8.	Sago Palm	<i>Cycas revoluta</i> Thunb.	ஜவ்வோரி ரைம்	Cycadaceae	Ornamental
9.	Mauritius hemp	<i>Furcraea foetida</i> (L.) Haw.	பச்செமக் கத்தோமை	Asparagaceae	Ornamental
10.	Caterpillar tree	<i>Plumeria alba</i> L.	ஈரத்தலேரி	Apocynaceae	Ornamental

The Fig 1 to Fig 4 depicts the pictorial demonstration of Bharathidasan University's Institutional Repository as the outcome of this project.



Figure: 1 Institutional Repository Bharathidasan University Biodiversity



Figure: 2 Searching By Name



Fig. 3 Search Results



Fig. 4 Final Search Result

Conclusion and Recommendation:

To conclude, the researcher summarizes the main contributions of the research, highlight the significance of the findings, and discuss the implications for future research and practical applications. As addressed in the problem, the research also recommends the global Higher Education Institutions to digitally document and preserve these kind of native biodiversity resources existing in its institution's premises as it would serve as a comprehensive and user-friendly resource for future researchers, students and biodiversity enthusiasts.

References:

- Anil, M. N. V., Kumari, K., &Wate, S. R. (2014). Loss of biodiversity and conservation strategies: an outlook of Indian scenario. *Asian Journal of Conservation Biology*, 3(2), 105-114.
- Bicknese, D. (2003). Institutional Repositories and the Institution's Repository: What Is the Role of University Archives with an Institution's On-line Digital Repository? *Archival Issues*, 81-93.
- Buehler, M. A., &Trauernicht, M. S. (2007). From digital library to institutional repository: a brief look at one library's path. *OCLC Systems & Services: International digital library perspectives*, 23(4), 382-394.
- Byrne, A. (2007). Conclusion: From people's university to information for all. In S. Ferguson (Ed.), *Libraries in the Twenty-First Century* (pp. 337–344). Chandos Publishing. <https://doi.org/10.1016/B978-1-876938-43-7.50024-7>

The awareness of disaster management among the library staff of university libraries: A case study based on the staff of the University of Sri Jayewardenepura Library in Sri Lanka

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Abstract

A disaster is an unpredicted incident that puts every resource in any institution, including libraries, at risk. At present the library is fully automated and provides printed resources, e-resources, etc. to fulfill the information needs of users. The objective of the study is to explore the awareness of disaster management among the library staff. The study used the descriptive survey research method. The sample size was 62, and the population was the University of Sri Jayewardenepura library staff. Sixty-two copies of the questionnaire were disseminated, and 56 (90.32%) of the completed copies were received. The study analyzed all 56 responses. The interviews were semi-structured and conducted using the purposive sample technique. Out of the 56 respondents, only 6 were selected for the interview based on the purposive sampling method. The study concludes that the library staff members are very aware of the disasters 49 (87.50%) and damage 40 (71.43%) that occurred due to the disasters in the library. The library staff members lack awareness of disaster management in the library 38 (67.86%). It is further revealed that the library staff members do not know how to use library disaster management equipment in disaster situations. The study recommended that the library organize awareness programs on disaster management for the library staff. The study also suggested that the library staff should be trained on how to use library disaster management equipment and emergency response through the appropriate disaster management courses.

Keywords: *Disaster Awareness, Disaster Management, Emergency Management, Library Disasters, Sri Lanka, University Libraries*

Introduction

There are various factors that increase the occurrence of disasters around the world. Academic libraries are one of the potential learning environments that function at the tertiary education level (Kaur, 2009). The library has to face disasters caused by natural, man-made, or hybrid disasters (a combination of natural and man-made disasters) situations (Akussah & Fosu, 2001). Eden and Matthew (1996) defined disaster in society as any incident that threatens human safety and damages a library's building, collections, equipment, systems, activities, and services.

Natural disasters include weather phenomena such as floods, fires, earthquakes, storms, cyclones and hurricanes (Morgan & Smith, 2014), tornadoes, rainstorms, volcanoes, mudslides, etc. (Rasaki, 2019). Human-made disasters are fires, wars, civil disorders (Johnson, 1994), theft (Hussain, 2019), bombings, malicious vandalism, negligence, power surges, failures, and mutilation (Akussah & Fosu 2001). However, disasters, whether natural or man-made, always have negative impacts on the economic, social, health, environmental, and delivery of services across both organizations and the wider society.

The negative impacts are managed through a proper disaster management plan and activities (Eden & Matthews, 1996). Disaster management concepts such as preparing solutions for a wide range of disasters, disaster control, disaster preparedness, disaster response, and recovery are developed around the world (Himayatullah et al., 2008). Library disaster management and preparedness are the most important steps that libraries should follow to minimize library disasters (Eden & Matthews, 1996). Librarians and library staff are aware of the need to

practice disaster planning, training, communicating, and collaborating to minimize disasters. The library staff should be aware of how to minimize disasters before they occur and manage library activities in disaster situations (Fortson, 1992; Harvey, 1993).

One of Sri Lanka's state universities is the University of Sri Jayewardenepura (USJ), which has eleven faculties. The 11 faculties include humanities and social sciences, management studies and commerce, applied sciences, graduate studies, medical sciences, allied health sciences, dental sciences, and computing. The USJ library serves as the university's knowledge hub, disseminating all users with information resources and library facilities to fulfill their information needs, including academic, non-academic, and researchers. There are 47 non-academic staff members, 12 academic personnel, 1 academic support staff member, and 1 executive in the library. Nearly 15,000 users use the library, which has three branches devoted to medical, engineering, and technology.

On December 28, 2017, a water leakage occurred at the main library of USJ. The water leakage that happened during the night caused damage to many sections of the library. A year later, on November 30, 2018, a cyclone took off the roof of the Technology Library, causing rainwater to ruin a part of the collection. Over time, library staff discovered several mould-infected books on the library's shelves due to mold growth. Furthermore, it was found that the newly added volumes were also at risk of mold infections if they were kept with the affected books (Wijayasundara, 2020). In addition, the COVID-19 pandemic is a severe disaster that libraries still face. Unfortunately, no expert disaster management staff members at the library know the proper procedures

for recovering damaged resources or how to use equipment to minimize disasters. Therefore, short-term and master plan solutions are needed by the library for awareness of library disaster management.

According to the observation, library staff did not know what to do with the wet electrical wiring, computer equipment, and wet floor carpet other than apply ad hoc arrangements. The library staff did not know how to use equipment to minimize disasters and continue library services during a disastrous situation due to a contagious disease. Again ad hoc arrangements were applied.

Therefore, this study explores the awareness of disaster management among the library staff at USJ, Sri Lanka.

Objective

- To explore the awareness of disaster management among the library staff.

The objective describes library staff awareness of the disasters and damages that occurred in the library, library staff awareness of the disaster management process, activities and the staff awareness of how to use disaster management equipment and how to manage human resources during a disaster situation.

Significant of the Study

This study is a very cooperative effort to identify the staff risk of library disaster management activities in the library. The library is able to pay attention to the awareness of disaster management among the library staff at the library. The library develops awareness of disaster management strategies to minimize disasters that occur in the library.

The library develops library management activities to determine what to do or not do in disaster situations.

Materials and Methods

The descriptive survey research method was applied in the study. Researchers used qualitative and quantitative data. The population consisted of the entire library staff at the University of Sri Jayewardenepura and the sample size was 62. The study used the purposive sample technique for semi-structured interviews. Questionnaires, semi-structured interviews, observation and pilot study were the data collection instruments. Sixty-two copies of the questionnaire were distributed, and 56 (90.32%) of the total were received after filling it out. Six respondents (09.68%) were not received. All 56 responses were used for data analysis. According to the purposive sampling method, only 6 participants out of the 56 who responded were selected to be interviewed. The interview session was arranged by the telephone. Primary and secondary data were gathered for the investigation. The data collected through questionnaires was analysed with descriptive statistics such as percentage distribution and frequency counts using the Excel package. The data was presented in tables and visualized using bar charts and pie charts. The study's semi-structured interview data was transcribed and organized into themes and sub-themes. This research is a case study, only the Library staff members of the USJ were selected as respondents.

Results and Discussion

Table. 1: Staff awareness of disaster management

Awareness	Yes	No
	Frequency (%)	Frequency (%)
Are you aware of disasters that occurred in our library?	49 (87.50)	7 (12.50)
Are you aware of damages that occurred due to those disasters?	40 (71.43)	16 (28.57)
Are you aware of activities needed for pre-disaster management?	28 (50.00)	28 (50.00)
Are you aware of the disaster management process?	18 (32.14)	38 (67.86)
Are you aware of how to use library disaster management equipment during a disastrous situation?	16 (28.57)	40 (71.43)
Are you aware of how to manage human resources during a disaster?	23 (41.07)	33 (58.93)
Are you aware of disaster reporting after a disaster?	26 (46.43)	30 (53.57)

Source: field survey data, 2021

According to Table 1, about 49 out of 56 (87.50%) library staff said they were aware of the disasters that occurred in the library. This fact was discussed in the interviews. They mentioned that they remember the library's water leakage, rainwater damage at the Technology Library, damage caused by insects to the books, especially the silverfish, and more recently, the service breaking down due to the COVID-19 pandemic as disasters at the USJ library. One interviewee stated that

"Due to the leakage of water from the upper floor, the floor carpet of the computer room was damaged, and the carpet gave off a bad smell for a few days. Some areas of the carpet became slippery and changed the color of the carpet. There was physical damage to the carpet".

This statement clearly shows that they remember not only the disasters, but they also know of the damages that occurred due to disasters, and

there were 40 (71.43%) of them recalled past incidents. Nearly half of the respondents 28 (50.00%) know about the activities they should take before the disaster, or pre-disaster activities. The number of respondents who are aware of managing human resources during a disaster is even lower 23 (41.07%) than those who know the process of reporting a disaster after its occurrence, 26 (46.43%). However, only 18 (32.14%) of the responded library staff members are aware of disaster management processes, and 16 (28.57%) know how to use the related equipment during a disaster. The response of library staff members who lack awareness of disaster management processes is 38 (67.86%), and those who say "No" how to use the related equipment during a disaster are 40 (71.43%). "No" was selected by 33 (58.93%) to manage human resources during a disaster. Those who said "No" to the process of reporting a disaster after an occurrence were 30 (53.57%). The researcher also used interviews to get opinions from respondents about their awareness of disaster management. Following are some of the responses to measure their level of awareness:

"I do not know how to use fire equipment. I think that all library staff do not know how to use fire extinguishers. At least they do not know how to open those and do not know where to switch off the electricity supply of the entire library".

"Disaster management plan is a need that all institutes should use".

Conclusion and Recommendation

The study concludes that the staff members of the library were very aware of the disasters that occurred in the library, representing 49 (87.50%) of respondents. 40 (71.43%) respondents among the library staff members were very aware of the damage that occurred due to the disasters in the library. However, the staff members of the library lack awareness of disaster management 38 (67.86%). Those who dealt directly with disaster management had a poor understanding. 40 (71.43%) respondents among the library staff members do not know how to use library disaster management equipment during a disastrous situation.

The library staff members 33 (58.93%) do not know how to manage human resources during a disaster. The library staff members do not know how to report after a disaster, representing 30 (53.57%). At present, the awareness of disaster management among the library staff is not at a satisfactory level. The interview result revealed that the library staff members lack awareness of library disaster management activities. The library staff members do not know the disaster management process and how to use library disaster management equipment in disaster situations.

The study recommended that Awareness programs on disaster management should be organized for the library staff. The library staff should be trained on how to use library disaster management equipment and emergency response. Experts should be invited to train staff on how to use library disaster management equipment in disaster situations and emergency response. The library collaborates with university libraries to organize awareness programs on disaster management. The library

organizes guest lectures, workshops or seminars and exhibits of movies and photographs on managing various disasters. The library staff study appropriate disaster management degree courses or disaster management programs.

References

- Akussah, H., and Fosu, V. (2001). Disaster management in academic libraries in Ghana. *African Journal of Library, Archives and Information Science* 11(1), 1–16. <https://www.ajol.info/index.php/ajlais/article/view/26106>
- Eden, P. and Matthews, G. (1996). Disaster Management in libraries. *Library Management*, 17(3), 5–12. <https://doi.org/10.1108/01435129610112743>
- Fortson, J. (1992). *Disaster planning and recovery: a how-to-do-it manual for librarians and archivists*. New York: Neal-Schuman.
- Harvey, R. (1993). *Preservation in libraries: principles, strategies and practices for librarians*. London: Bowker Saur.
- Himayatullah K., Giurca, V., and Asmaatullah, K. (2008). Disaster Management Cycle-A Theoretical Approach, *Management and Marketing journal* 6, no 1, 43-50. <https://www.mnmk.ro/documents/2008/2008-6.pdf>
- Hussain, A. (2019). *Disaster preparedness in libraries of Kashmir*. New Delhi: Library Philosophy and Practice.
- Johnson, H. (1994). Strategic Planning for Modern Libraries. *Library Management*, 15(1), 7–18. <https://doi.org/10.1108/01435129410049007>
- Kaur, T. (2016). Disaster management in university libraries of India and Pakistan. *Pakistan Journal of Information Management and Libraries*, 17(5), 155–161.
- Morgan, G., and Smith, J. G. (2014). Disaster management in libraries: the role of a disaster plan. *South African Journal of Libraries and Information Science*, 65(1), 62–71. <https://doi.org/10.7553/65-1-1502>
- Rasaki, O. E. (2019). Disaster management practices in selected university libraries in Nigeria. *Journal of the Institute of Conservation*, 42(2), 151–167. <https://doi.org/10.1080/19455224.2019.1604395>

Library user behavior in the face of the COVID-19 pandemic situation in Training and Research Institutes in Sri Lanka.

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Abstract

The global crisis of the COVID-19 pandemic in 2020, libraries in Sri Lanka faced unprecedented challenges, compelling them to transcend traditional roles. This study, conducted in Colombo, focuses on special libraries' transformation in the Western Province. Combining quantitative and qualitative methods, it examines patrons' needs, emphasizing the importance of online resources, digital collections, and social media networks. The findings underscore the demand for 24-hour access and remote facilities. Librarians, particularly in research and academic settings, are seen as pivotal in guiding information searches. Recommendations highlight the need for continual verification of online resources to ensure reliability in a rapidly evolving information landscape.

Keywords: *COVID-19 pandemic, Information Technology, Librarian role, Special libraries, User behavior*

Introduction

The COVID-19 pandemic situation that occurred at the beginning of 2020 was a global crisis. Sri Lanka was also affected by this plaque. Within that situation the Government requested Administrators to the General public to react appropriately. When the social economy in the country and also in the world collapsed, researchers and scholars had to find strategies and solutions to overcome the situation. Here they needed very accurate, timely and easily accessible information. So, library professionals were forced to go beyond their traditional professional

framework to provide services for their clients. By using new technological tools, communication systems and the internet efforts were made to provide more services within the 24 hours of the day.

The new information technology was aware of user services provided in modern libraries of the world, and was not widely implemented in Sri Lanka. But in the face of COVID-19, Librarians had to completely maintain their services using modern technologies especially in Special Libraries. So developing and transforming the available library resources and databases with the least amount of staff and technology they faced the challenge to provide the service continually to succeed in the economic and social crisis.

Objectives

Main objective of this study is to find whether the services provided by libraries are user-friendly and the behavior of patrons. Also, what extent are the services provided in this way reader friendly? Is the status co-sufficient? Need for further development? In what way? How should prepare for future patrons' needs? Were the main problems and find the solutions for them.

Materials and Methods

This was conducted in association with special libraries established in Colombo district in the Western Province of Sri Lanka. A special library is a library that collects information resources covering the relevant scope by prioritizing a particular subject, and has a unique user community for those information resources.

One research institute and one public service officers training institute libraries were selected for this study as per study convenience. Two

groups of users from service categories of Researcher and Academic staff were selected from total registered readers of the libraries respectively. One institution consists of 77 registered scientists in the Library and in other institutions all library users are considered library users. So, as sample data we selected only 17 scientists and 25 users from each institution. Total sample included 42. Google form was distributed among all of them and received only 38 replies. Face to face conversation and telephone conversation data gathered from 15 people of the same sample.

Followed both quantitative and qualitative analysis methods. “Qualitative methods offer the opportunity for participants to describe the subject of study in their own words and to do so largely on their own conditions” (Boeije, 2010: 32) Questionnaire (using google form) and telephone and face to face interviews, Data analysis was done under statistical methods using SPSS and NVivo. Collected patrons’ current requirements and the Libraries current services by using these methods.

Results and Discussion

According to the sample data of 42, 34 patrons’ showed library online catalogues, digital collections, web pages and other social media networks are very important to fulfill their information needs. And also 38 patron’s opinion was that the use of Facebook, Blogs, WhatsApp and also Artificial Intelligence based software (ex: ChatGPT) was very important.

“Acquisition of needed information resources leads to availability of required current information and will help students to conduct effective research and sound comprehensive work” (Gunasekera, Chamani

2016). More recent studies also have found the changing role of Libraries. As per the statement “Changing environment of the information world from a library-centered to information-centered entity” Gobalasuthanthiran, (K et.al. 2016). we found that fulfill such requirement of the library patrons may be most important to make their research most successful with information-centered change.

Conclusion and Recommendations

Patrons require 24 hour facilities, remote access and download facilities for accurate information resources quickly and easily. Digitization and correct use of information technology and social networks to overcome the challenges in Research Institute and academic institute libraries are possible.

Especially the users of the relevant sample were Researchers and consultants. They expected the role of a teacher from the Librarian in searching for information. Librarians should be aware of the research and teaching activities carried out by institutions regularly. It is the responsibility and role of the librarian to identify appropriate information resources and provide them timely.

Librarians should study, verify the current special software and databases that receive online. That is because sometimes information has been published incorrectly. For example, even today's popular Chat GPT software provides wrong information sometimes. This occurs because of the different language differences; subject differences affect the provision of data. There it should be confirmed thoroughly and provide the most reliable information to them, as we are forced to drive to developed countries without backing after such a pandemic situation in the world.

References

- Boeije, Hennie (2010), *Analysis in qualitative research*, Los Angeles, SAGE
- Goblasuthanthiran, K and et. Al (2016), *Influence of socio-economic education status of school children on their information seeking behaviour and school library usage: a study among G.C.E advance level students of the Jaffna /educational zone*. Sri Lanka Library Review Vol. 30, 01-08 pp.
- Gunasekera, Chamini, (2016) *Use of library services and information seeking methods of postgraduate students in the University of Peradeniya: A case study*, Sri Lanka Library Review Vol. 30, 70-84 pp.
- Qualitative Reserch: issues of theory. Methods and practice, 3rd edition ed. By David Siverman, New Delhi: SAGE.

Mapping the Literature on the Application of Image Processing in the Medical Field: A Scientometric Analysis

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Abstract

The application of image processing in the Medical field has witnessed remarkable growth and innovation. This scientometric analysis delves into the vast body of literature that explores this intersection, aiming to map the landscape of research and development in this crucial domain.

Our research uses scientometric approaches to analyze and synthesize a large corpus of scientific publications, including journal articles, conference papers, and patents. We investigate major trends, notable study topics, influential authors, and the growth of knowledge networks. The study was designed using a scientometric approach, with data extracted from a renowned database, Web of Sciences, from 2004 to 2023. A total of 1723 journals and conference proceedings from Web of Science database were analyzed. Trends within the field are identified, as are the dominant sub-fields and their interconnections, as well as citation patterns, key publications, key research institutions, key researchers, and key journals, along with the extent to which these interact with each other in research networks. The stages are as follows: (1) identification, keyword selection, and formation of the search strategy with the permission of a panel of computer scientists and librarians; and (2) design and construction of a flawless algorithm to validate these selected keywords in Web of Science title-abstract-keywords. (3) Processing data in certain cutting-edge bibliometric visualization tools, Biblioshiny R and VOSviewer (4) analyzing the findings for practical consequences.

This study's findings shed light on the critical significance of image processing in Medical research and clinical practice. Our study contributes to a greater understanding of the contributions and difficulties within this dynamic junction of technology and healthcare by recognizing emerging subfields, significant research, and the interplay between many disciplines. This scientometric investigation provides insights that can help researchers, policymakers, and industry experts navigate the changing landscape of Medical image processing, ultimately leading to breakthroughs that benefit both healthcare practitioners and patients.

Keywords: *image processing, scientometric, Medical research, clinical practice, Covid-19*

Introduction

Image processing has made a significant contribution to Medical diagnostics and the development of new drugs. Image processing, according to experts, will have a significant influence by giving radiologists with tools for making faster and more accurate diagnosis and prognoses, which will lead to more successful therapy. Because computers will be able to process massive volumes of patient data, big data and image processing will revolutionise the way radiologists work, allowing them to become specialists on extremely particular jobs. Artificial intelligence has already been successful in solving problems such as chronic diseases and skin cancer. Scientists currently expect artificial intelligence to play an important role in the hunt for a cure for the new corona virus, and thus in reducing the panic that has gripped the world.

Due to the Medical epidemic, the health-care system has recently faced significant hurdles in terms of supporting an ever-increasing number of patients and accompanying expenses [5][6]. As a result, the recent

impact of MEDICAL necessitates a mental shift in the health-care sector. As a result, utilising modern technology such as artificial intelligence in order to build and develop intelligent and autonomous health-care solutions has become critical. When compared to other viruses, Medical is notable for its rapid transmission, which allowed it to become a worldwide pandemic in record time. The Medical and health-care systems are still researching and analysing it in order to gather more trustworthy information and gain a better understanding of this critical problem of rapid spread. As a result, accurately simulating the Medical transmission remains a top priority in the fight against this virus [7]. The detection of viral RNA from sputum or a nasopharyngeal swab using real-time reverse transcription–polymerase chain reaction (RT-PCR) is currently the most widely utilised diagnosing approach. These tests, on the other hand, require human interaction, have a low positive rate at early stages of infection, and can take up to 6 hours to produce findings. Thus, fast and early diagnosis tools are needed to speed up the control of this pandemic, especially in the long run, when lockdowns are entirely lifted, testing should be conducted on a broad scale to avoid the pandemic from resuming.

Due to a lack of resources and technology in some nations, testing has been confined to patients who have symptoms, and in many cases, several symptoms. The enormous burden that the situation has placed on national health-care systems and personnel, even in the most developed countries, exacerbates the difficulty of recognising and tracking potential cases [8].

Through this research work, the detailed analysis of the papers published on the Detection of Medical using Image Processing techniques, which

country contributing more on this content, co-occurrences of the keywords, citation, co-authorship, co-citation network analysis done on the detection of Medical using Image Processing techniques.

Several studies have been conducted to detect the Coronavirus (Covid-19) using Chest X-Ray, CT scan by various image processing and deep learning techniques. Narin, Ali, Ceren Kaya, and Ziyet Pamuk [9] For the detection of coronavirus pneumonia-infected patients using chest X-ray radiographs, five pre-trained Convolutional Neural Network-based (CNN) models (ResNet50, ResNet101, ResNet152, InceptionV3 and Inception-ResNetV2) have been proposed. Karthik, R., R. Menaka, and M. Hariharan [10] For diagnosing infections, a unique CNN architecture may mine data patterns that catch small differences between infected and normal X-rays. Covid-19. Hasoon, Jamal N., et al [11] developed an image processing approach for MEDICAL classification and early detection utilising X-ray images. Ahuja, Sakshi, et al [12] Transfer learning from CT scan pictures reduced to three levels using stationary wavelet was used to detect the Covid-19. Ismael, Aras M., and Abdulkadir Şengür [13] Chest X-Ray images were utilised to evaluate several multiresolution methods in the detection of Covid-19. Gozes, Ophir, et al [14] built a poorly supervised deep learning framework for detecting, localising, and quantifying MEDICAL disease severity from chest CT scans. Horry, Michael J., et al [15] demonstrated how images from three of the most regularly used Medical imaging types, X-Ray, Ultrasound, and CT scan, can be used to conduct MEDICAL detection utilising transfer learning from deep learning models. Gupta, Anunay, Shreyansh Gupta, and Rahul Katarya [16] suggested a model for detecting MEDICAL and pneumonia in infected people's chest X-ray pictures by identifying anomalies induced by these

diseases. Rahimzadeh, Mohammad, Abolfazl Attar, and Seyed Mohammad Sakhaei [17] suggested a fully automated method for detecting MEDICAL from a patient's chest CT scan images that is high-speed and accurate. Goel, Tripti, et al [18] The goal was to use chest X-ray images to classify COVID-19, normal, and pneumonia patients. As a result, an Optimized Convolutional Neural Network (OptCoNet) for the automatic diagnosis of MEDICAL is proposed in this paper. Das, N. Narayan, et al [19] Using the extreme version of the Inception (Xception) model, researchers created an automated deep transfer learning-based technique for detecting MEDICAL infection in chest X-rays. Kassania, Sara Hosseinzadeh, et al [20] For automatic MEDICAL classification, we analysed various deep learning-based feature extraction frameworks. Karar, Mohamed Esmail, Ezz El-Din Hemdan, and Marwa A. Shouman [21] To improve the performance of these Computer Aided Diagnosis (CAD) systems for strongly suspected MEDICAL and pneumonia disorders in X-ray pictures, researchers suggested a new framework of cascaded deep learning classifiers.

Materials and Methods

The data collected from Web of Science Core collection. The keywords image processing AND Medical AND Coronavirus AND chest CT scans AND X-Ray AND lung images AND deep learning AND feature extraction AND machine learning AND artificial intelligence AND classification are used to extract the data. The methods like Citation analysis on countries, Co-Citation on cited sources, co-occurrences of keywords and co-authorship analysis on countries are analyzed in this research work.

Result and Discussion

Citation Analysis based on Countries

In this study, 79 countries involved for contributing articles towards the detection of Medical using Image processing techniques. From the 79 countries, only 34 countries are selected with the threshold like minimum number of documents of country is set as 5. Table 1 depicts the Citation Analysis based on the Countries only top 20 countries have given. Figure 1 gives the graphical representation of the Citation Network visualization on Medical detection using image processing techniques. From the table 1 and figure 1, it is shown that only 3 countries like USA (108 articles), India (77 articles) and Peoples R China (100 Articles) have published more than 50 articles and USA scored more citation count of 500 than India and Peoples R China. India has more Total link strength of 188, than USA and Peoples R China.

Table 1: Citation Analysis based on Countries

Country	Documents	Citations	Total link Strength
India	77	268	188
Saudi Arabia	50	175	98
Turkey	37	137	92
USA	108	500	85
Egypt	26	101	79
South Korea	34	171	60
Italy	23	143	57
Peoples R China	100	219	54
Canada	33	116	46
England	36	163	39
Australia	25	185	37
Germany	25	118	35
Iran	23	142	35
Brazil	15	90	34

Vietnam	5	34	33
Portugal	5	41	30
Switzerland	11	74	27
Pakistan	19	66	21
Spain	26	128	21
Denmark	6	39	17

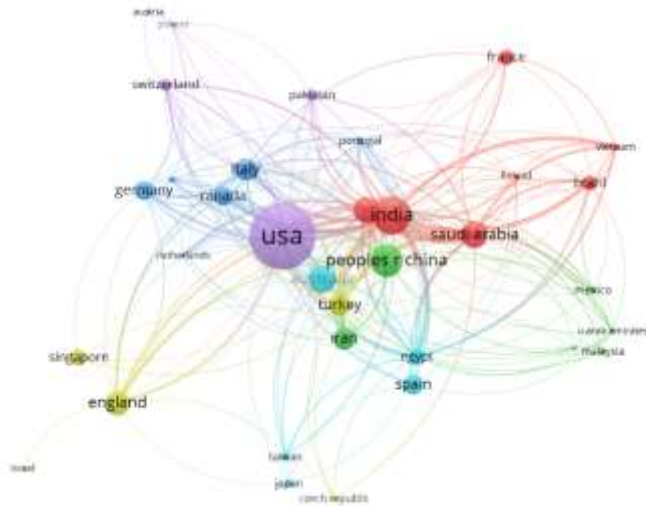


Figure 1: Citation Network Visualization based on Countries

Co-Citation Analysis based on Cited Sources

In this study, Co-Citation based on Cited sources are considered. Table 3 gives the minimum of number of citations of a source, total number of sources and number of sources selected. In this paper, the minimum number of citations of a source is set as 20, and 182 sources are considered for the analysis.

Table 3: Setting a threshold for selecting the number of sources based on minimum number of citations of a source

Total Number of Sources	Minimum of Citations of a source	Number of Sources selected
7745	5	832
	10	390
	15	240

	20	182
	25	137
	30	105
	40	73

Table 4 represents the top 20 sources selected based on total link strength. Figure 2 gives the Co-Citation Network Visualization based on Cited Sources. From the table 4 and figure 2, Arxiv preprint arxiv source has link strength of 16511, where the citation count is 427, but radiology has highest citation of 542, but less link strength than Arxiv preprint arxiv. Only 2 sources link strength are above 15000, whereas IEEE access has citation of 334 and link strength of 11908.

Table 4: Representation of the top 20 sources based on Total link strength

Source	Citation	Total Link Strength
Arxiv preprint arxiv	427	16511
Radiology	542	16503
Ieee Access	334	11908
Proc cvpriece	407	9932
Chaos soliton fract	134	9293
Ieee t med imaging	242	8896
Compute biol med	232	8371
Sci rep-uk	229	7602
New engl j med	237	7388
Eur radiol	194	6910
Plos one	185	6523
Lancet	215	6506
Nature	177	6027
Comput meth prog bio	123	5304
Appl intel	132	5019
Jama j-am med assoc	138	4829
Science	127	4763
Cell	111	4667
Lec notes computsc	187	4562

Nat communication	81	3562
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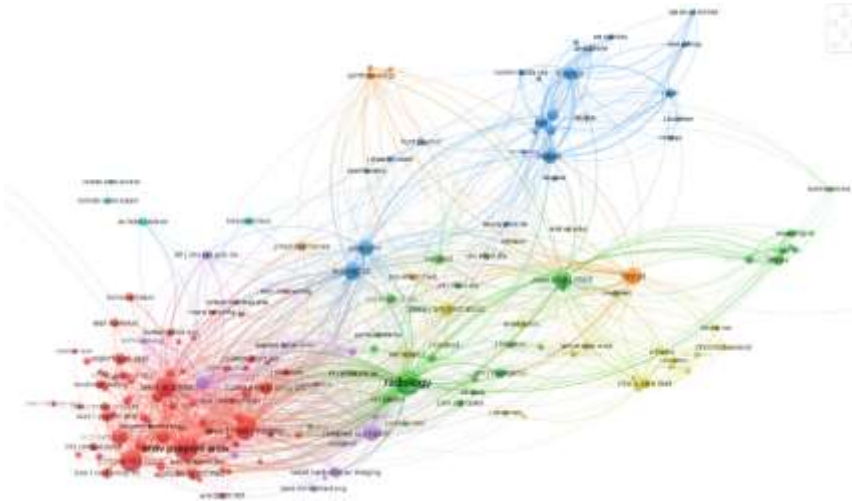


Figure 2: Co-Citation Network Visualization based on Cited Sources

Co-Occurrences of Keywords

In this study, Co-occurrences of keywords on all keywords used in the publication are considered. Table 5 depicts the total number of keywords, minimum number of occurrences of a keyword, and number of keywords obtained with the minimum of number of occurrences. From the table 5, 84 keywords are selected by setting the threshold as minimum number of occurrences of a keyword as 5.

Table 5: Threshold table for selecting the number of keywords based on minimum number of occurrences of a keyword

Total Number of Keywords	Minimum number of occurrences of a Keyword	Number of Keywords selected
2156	5	83
	6	60
	7	50
	8	40
	9	34
	10	29
	11	27

	12	24
	13	23
	14	21
	15	20

Table 6 gives the Co-Occurrences of a top 20 keyword and total link strengths is represented. Figure 3 depicts the co-occurrence of keyword network visualization. From the table 6 and figure 3, Medicalkeyword has 248 occurrences with total link strength of 673, Deep Learning has 105 occurrences with total link strength of 364. Other keywords are occurred below 100 only. Only those keywords are co-occurred many times in the publication.

Table 6: Co-Occurrence of a Keyword

Keyword	Occurrences	Total Link Strength
Covid-19	248	673
Deep learning	105	364
Classification	57	224
Coronavirus	47	162
Machine learning	34	161
Pneumonia	36	157
Sars-cov-2	52	147
Artificial intelligence	30	132
Diagnosis	26	117
Feature extraction	22	111
Transfer learning	24	96
Convolutional neural network	24	89
Computed tomography	18	88
Segmentation	24	81
Ct	19	79
X-ray	17	77
Cnn	20	70
Image processing	22	70
Chest x-ray	12	66

Model	16	57
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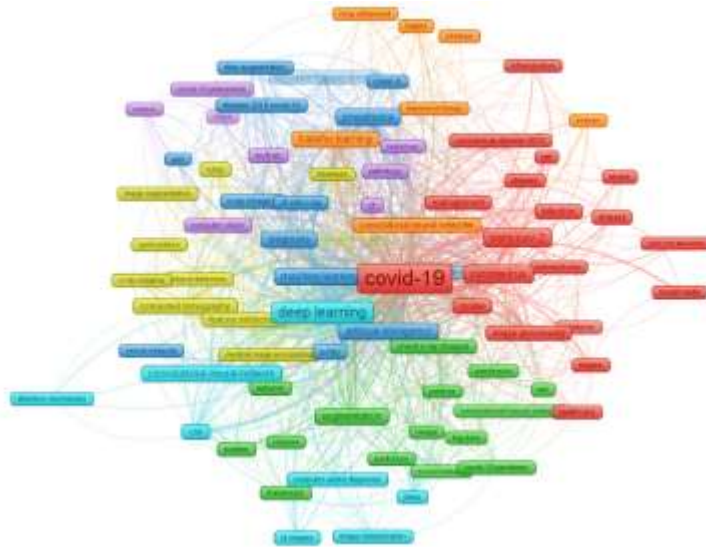


Figure 3: Co-Occurrences of a Keyword Network Visualization

Co-Authorship Network Analysis based on Countries

In this study, Co-authorship based on countries is considered. Table 7 depicts the threshold table for getting the number of countries to be selected based on the minimum number of documents of a country and minimum number of citations of a country on the total number of countries. From the table 7, when the minimum number of documents of a country and minimum number of citations of a country is 5, the number of countries met the threshold is 34 out of 79 countries.

Table 7: Threshold table to select number of countries for co-authorship analysis based on countries

Total Number of Countries	Threshold Parameters		Number of Countries met the Threshold
	Minimum number of documents of a country	Minimum number of citations of a country	
79	5	0	34
	5	5	34
	6	5	30

	6	6	30
	7	6	25
	7	7	25
	8	7	23
	8	8	22
	9	8	21
	9	9	21
	10	9	20
	10	10	20

Table 8 gives the Co-Authorship based on countries which contains number of documents by the countries, citations and total link strength. Figure 4 depicts the co-authorship network visualization based on countries. From the table 8 and figure 4, the authors/researchers from countries like USA, People R China and India are jointly authored for many publications on Medical detection using image processing, deep learning techniques since those countries have more than 100 total link strength. USA have co-authorship total link strength of 158, Peoples R china have co-authorship link strength of 107, where as India has link strength of 104. Other countries like Saudi Arabia, Canada, Germany, Australia, England, South Korea, Italy have co-authorship link strength are from above 50 to 100.

Table 8: Co-Authorship of Top 20 countries

Country	Documents	Citations	Total link Strength
USA	108	500	158
Peoples R China	100	219	107
India	77	268	104
Saudi Arabia	50	175	93
Canada	33	116	80
Germany	25	118	71
Australia	25	185	70

England	36	163	70
South Korea	34	171	65
Italy	23	143	61
Pakistan	19	66	50
Switzerland	11	74	46
Egypt	26	101	45
France	13	95	45
Spain	26	128	42
Brazil	15	90	40
Japan	10	42	38
Singapore	9	100	38
Denmark	6	39	35
Iran	23	142	34

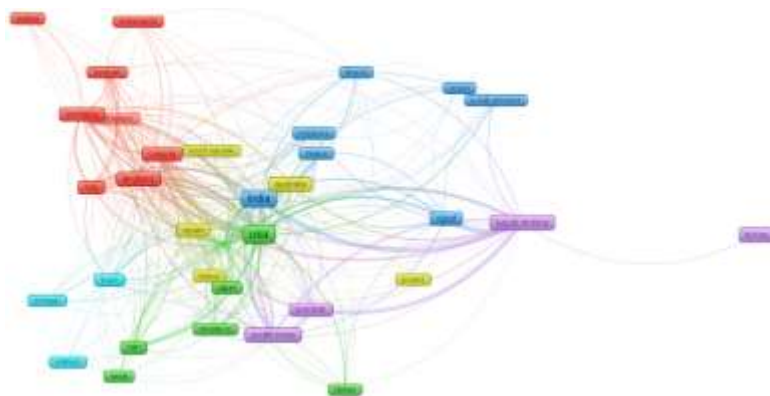


Figure 4: Co-Authorship Network Visualization based on Countries

Conclusion & Recommendations

Through this article we have made an attempt to limit the impact of the MEDICAL epidemic since it began. Around the world, the search for effective therapies, vaccinations, and societal management methods has escalated. Image Processing technologies have surely played a significant impact, providing academics with fresh insights and techniques.

The United States, China, and India, as mentioned in this article, have

the highest output in this regard. It's worth noting that practically all of the top ten countries with the highest scientific output on the topic of COVID-19/image processing have a lot of fund, demonstrating the importance of funding and economic support for research. On the other hand, we have demonstrated that, in an increasingly globalised society, there is a high level of cross-national collaboration. There was a lot of cooperation between surrounding and geographically close countries, in addition to collaborations between the US and China. This suggests that the ease of physical transportation and cultural similarities between countries on the same continent may lead to increased collaboration. The MEDICAL pandemic has expanded the use of teleworking, but it's unclear whether distant cooperation will change this view in the next years. The use of Web of Science, help us in comparing the results. Despite the fact that the samples were of varying sizes, equivalent classifications were identified. This suggests that the WoS sample, despite being smaller, is still representative of MEDICAL research in image processing technologies. This report outlined the research that was carried out over the course of several years. In respect to the use of image processing systems, a period of around a year and a half MEDICALpandemic data was analysed. We plan to do so in the future in order to expand our understanding of this fascinating issue, we will continue our research using bibliographic analysis a better understanding of researcher interactions, the progression of scientific knowledge manufacturing, as well as current research trends.

References

Gupta, B. M., Mamdapur, G. M., & Dayal, D. (2021). Black Fungus (Mucormycosis) Research in India during 1998-2021: A Scopus-based Scientometric Analysis. *International Journal of Medicine and Public Health*, 11(3).

Stoitsis, John, et al. "Computer aided diagnosis based on Medical image processing and artificial intelligence methods." *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* 569.2 (2006): 591-595.

Lehmann, Thomas Martin, Claudia Gonner, and Klaus Spitzer. "Survey: Interpolation methods in Medical image processing." *IEEE transactions on Medical imaging* 18.11 (1999): 1049-1075.

Wechsler, Harry. Automatic detection of rib contours in chest radiographs: an application of image processing techniques in Medical diagnosis. Birkhäuser, 1977.

Jana, S., Gupta, A., & Nath, A. (2020). Assessment of Global Performance on MEDICALResearch during 1990-2019. *Qualitative and Quantitative Methods in Libraries*, 21-39.

Jana, S., Gupta, A., & Nath, A. (2020). Assessment of Global Performance on MEDICALResearch during 1990-2019. *Qualitative and Quantitative Methods in Libraries*, 21-39.

Gupta, B. M., Pal, R., Rohilla, L., & Dayal, D. (2021). Bibliometric analysis of diabetes research in relation to the MEDICALpandemic. *Journal of Diabetology*, 12(3), 350.

Fan, Wenjuan, et al. "Investigating the impacting factors for the healthcare professionals to adopt artificial intelligence-based Medical diagnosis support system (AIMDSS)." *Annals of Operations Research* 294.1 (2020): 567-592.

Narin, Ali, Ceren Kaya, and Ziyne Pamuk. "Automatic detection of coronavirus disease (covid-19) using x-ray images and deep convolutional neural networks." *Pattern Analysis and Applications* (2021): 1-14.

Karthik, R., R. Menaka, and M. Hariharan. "Learning distinctive filters for MEDICALdetection from chest X-ray using shuffled residual CNN." *Applied Soft Computing* 99 (2021): 106744.

Hasoon, J. N., Fadel, A. H., Hameed, R. S., Mostafa, S. A., Khalaf, B. A., Mohammed, M. A., & Nedoma, J. "MEDICALAnomaly Detection and

Classification Method based on Supervised Machine Learning of Chest X-ray Images." *Results in Physics* (2021): 105045.

Ahuja, Sakshi, et al. "Deep transfer learning-based automated detection of MEDICAL from lung CT scan slices." *Applied Intelligence* 51.1 (2021): 571-585.

Ismael, Aras M., and Abdulkadir Şengür. "The investigation of multiresolution approaches for chest X-ray image based MEDICAL detection." *Health Information Science and Systems* 8.1 (2020): 1-11.

Gozes, Ophir, et al. "A weakly supervised deep learning framework for Medical ct detection and analysis." *International Workshop on Thoracic Image Analysis*. Springer, Cham, 2020.

Horry, Michael J., et al. "MEDICAL detection through transfer learning using multimodal imaging data." *IEEE Access* 8 (2020): 149808-149824.

Gupta, Anunay, Shreyansh Gupta, and Rahul Katarya. "InstaCovNet-19: A deep learning classification model for the detection of MEDICAL patients using Chest X-ray." *Applied Soft Computing* 99 (2021): 106859.

Rahimzadeh, Mohammad, Abolfazl Attar, and Seyed Mohammad Sakhaei. "A fully automated deep learning-based network for detecting Medical from a new and large lung ct scan dataset." *BioMedical Signal Processing and Control* 68 (2021): 102588.

Goel, Tripti, et al. "OptCoNet: an optimized convolutional neural network for an automatic diagnosis of COVID-19." *Applied Intelligence* 51.3 (2021): 1351-1366.

Das, N. Narayan, et al. "Automated deep transfer learning-based approach for detection of MEDICAL infection in chest X-rays." *Irbm* (2020).

Kassania, Sara Hosseinzadeh, et al. "Automatic detection of coronavirus disease (COVID-19) in X-ray and CT images: a machine learning based approach." *Biocybernetics and BioMedical Engineering* 41.3 (2021): 867-879.

Karar, Mohamed Esmail, Ezz El-Din Hemdan, and Marwa A. Shouman. "Cascaded deep learning classifiers for computer-aided diagnosis of MEDICAL and pneumonia diseases in X-ray scans." *Complex & Intelligent Systems* 7.1 (2021): 235-247.

Development of the libraries in the British period of Sri Lanka: a historical study

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Abstract

This research delves into the historical development of libraries in British Colonial Sri Lanka (1796-1948), emphasizing qualitative analysis of secondary data from sources such as Ferguson's Directory, Ceylon Almanac, and Ceylon Blue Book. The study identifies reasons behind the systematic library system's emergence, explores their locations, delves into oriental libraries, and examines prominent British-era libraries. Initially catering to British civil servants, libraries expanded to encompass diverse communities, including planters and missionaries. Notable libraries, such as Colombo Museum Library and Jaffna Public Library, emerged, laying foundations for the present Sri Lankan library system. The research concludes that the British period spurred the transformation from traditional pirivenas to a systematic library network, fostering educational and cultural evolution. Presently, these libraries continue to thrive, offering automated services, diverse collections, and widespread accessibility, showcasing the lasting impact of British-era developments on Sri Lanka's library system.

Keywords: *British period, Library development, Library history, Sri Lanka, Subscription libraries*

Introduction

The main objective of this research was to study the historical development of libraries in the British period in Sri Lanka. The other aims were to explore the usage of libraries, explore the distribution of libraries, and study the historical sources in the British period.

This is qualitative research. This research was based on secondary data, and data was collected through historical sources namely, Ferguson's

Directory, Ceylon Almanac and Ceylon Blue Book. The British period in Sri Lanka was a selected period (1796-1948). The qualitative data was analyzed accordingly. The findings of the study are as follows.

Objectives

- To identify the reasons for the development of systematic library system in the British period of Sri Lanka.
- To explore the places that libraries were developed in the British period.
- To identify the oriental libraries which were developed in the British period.
- To study about popular libraries which were developed in the British period.

In 1796 British came to Sri Lanka. After British captured Kandy kingdom, Sri Lanka became a British colony. In the British period libraries were built to fulfill needs of the British civil servants. These libraries were called subscription libraries

In 1850 libraries were distributed in Galle, Trincomale, Kandy, Negombo, Chilaw, Kalutara, Rathnapura, Hambanthota, Mannar and Jaffna. After the development of the planting sector libraries were built for planting communities use. Thus libraries were built in Nuwaraeliya, Hatton, Gampola, Kegall, Tangalle and Matara. Accordingly, libraries were built with the establishment of missionary organizations. For example, Colombo Catholic library, Batticaloa Catholic library can be considered.

Native peoples reading habits were also improved in the 19th century. Even native peoples started to built oriental libraries like Kandy oriental library. The change of the Sinhala literature style and the development of printing presses also affected.

In 20th century libraries were built with higher education institutes such as law libraries, medical libraries, research institute libraries and government department libraries.

Colombo museum library, Royal Asiatic society library, Colombo public library, Jaffna public library, Kandy public library, Jayawardhanapura University library can be considered as the leading libraries which were built in the British period.

The foundation of the present library system of Sri Lanka started as subscription libraries in the British period. British civil servants and army officers used these libraries. To get library services users had to pay a little amount of money. Accordingly, only Europeans could access to the libraries. The library built by Loughton Michael, a businessman in Colombo can be considered as the first library which is built in the British period. (T.G. Piyadasa, 1985)

In the first half century of British period libraries were limited to main cities such as Colombo, Galle and Trincomale. Afterwards libraries were built whole around the island.

In early 19th century most of the libraries were started in Colombo area. There were three significant libraries in Colombo, United Service Library (1812), Colombo Pettah Library (1829), and Colombo Library (1842). Information about these three libraries can be found in Fergusons Directory, Ceylon Calendar and Ceylon blue book. According to 1832 Ceylon Calendar the governor Horton and major

general J. Wilson were the patrons of the United Service Library. Colombo Pettah library was formed by a well-educated Burgher group. The British government has given 500 Rupees of fund annually for this library. (Ferguson, 1866-1926) In 1874 July 1st United Service Library was merged to Colombo Library. The new building was situated in no25, Queens Street, Pettah. (De Silva, 1987)

Galle Pettah Library was established in Dutch Period. Therefore, this library can be considered as the first systematic library in Sri Lanka. In 1845 the governor William Gregory named this library as Galle Pettah Library.

Royal Asiatic Society library was formed in 1845 with the establishment of the Ceylon branch of Royal Asiatic Society. The patron of the library was the governor. The first librarian of this library was J. Clapper. (T.G. Piyadasa, 1985)

British established subscription libraries as well as oriental libraries. Many of the British were interested in learning Sinhala, Pali and Sanskrit language. They collected many palm leaves about religion, literature, medicine, etc. It proves that British government also interested in establishing oriental libraries by forming government oriental library in 1869, and forming Kandy oriental library in 1895.

The pirevenas that formed at the end of the 19th century can be considered as the climax of Buddhist education. As a result, in 1873 Hikkaduwe Sumangala thero lead to form Vidyodaya pirivena. The information about Vidyodaya pirevena library can be found in 1880-1881, 1927, 1929 and 1947 Ferguson's Directory.

In 1877 Colombo Museum library was established. The first librarian of this library was Richard Van Culenburgh. He built the library collection

to 2200 books. (T.G. Piyadasa, 1985) The governor sir William Gregory patronized Colombo Museum Library.

At the end of the 19th century public library system of Sri Lanka started. In 1920 Kandy Municipal assumed Kandy Central Town Library. This library can be considered as first public library in Sri Lanka. According to 1927 Ferguson's Directory this library was named as Kandy Municipal free library.

The Colombo Public Library was established in 1925 by merging Colombo Library and Colombo Pettah Library. According to Sir James Fernando Chandrasekaras testamentary a building named 'Siri Nivesa' in Edinburgh Crescent was chosen to form the Colombo Public Library.

In 1934 K. M. Chellappa, a social worker in Jaffna formed a library in his home. In 1934 a committee gathered to discuss about forming a library in Jaffna. As a result, Jaffna public Library was established with a collection of 844 books and 30 magazines and newspapers. K. M. Chellappa was named as the secretary of this library.

Today in Sri Lankan libraries which were built in the British period can be considered as significant libraries among other libraries. These libraries have developed their collections, services and user crowd.

Galle library which was built in 1837 is now a tourist attraction point in Galle/ Also it is greatly funded by Netherlands SOS Velsen foundation.

Royal Asiatic Society library have a collection of 11000 volumes at present. Also 117 periodical titles and rare palm leaves of 17, 18 centuries included to the collection. which referes to Sri Lankan history, religion, language and literature too.

After 1959 Vidyodaya pirevena (1873) is named as Sri Lanka

Vidyodaya University. Today it is Sri Jayawardhanapura University. This University library have more than 200 000 collections. University collection includes online databases, online books and online periodicals. Also library have OPAC, laptop lending, user education, photocopying, inter library loan and many more services.

Colombo museum library claims Sri Lanka's largest library collection. Museum library have a 12 million collection including palm leaves collection, text books, periodicals, government publications, manuscripts, maps, stamps, arts, photographs and rare books.

Sri Lanka's first public library, Kandy municipal library is now known as Kandy D. S. Senanayaka memorial library. The library collection is near to 300 000. More than 1500 users access the library for a day. There are main 7 sections in the D. S. Senanayaka memorial library. Additionally, it has a India corner and a American corner.

Colombo public library is the prominent public library in Sri Lanka. Now it has 40 000 – 50 000 members. This library annually accepts new books around 5000 – 6000. There are 13 branches in Colombo public library.

Jaffna public library is the largest library for Sri Lankan Tamil community. In 1981 the library had 95000 collections, when it was on fire. After reconstruction library have six sections and five branch libraries.

Conclusion and Recommendations

In the British Period Sri Lanka's education, literature and culture has been modified. Therefore, the library system in Sri Lanka also changed. Instead of pivenas a systematic library system was developed. At

present these libraries are automated including Sri Lankan valuable rare collections. Most of these libraries have branch libraries and provide many services. Also many users access the library daily.

Hence Sri Lankan library system is systematically developed in the British period.

References

De Silva, M. U. (1987) 'The growth of the libraries in Sri Lanka during the nineteenth century', *Vidyodaya, Journal of Social Sciences*, 1(2), P.43-72.

Korea, Ishwari (1969) *Lanka pusthakalawala ithihasaya: Lankawe adyapanaya: siyawasa prakashanaya*, Colombo: Sri Lanka education and cultural department.

Kularathna, Thilak (1975). *Sri Lankawe pusthakala ithihasaya, pusthakala ha janathawa: kolaba mahajana pusthakalaya 1925-1975 samaru sangrahaya*, Colombo: Colombo public library

Piyadasa, T. G. (1985), *Libraries in Sri Lanka: their origin, history and ancient times to the present time*, Sri satguru publications, Delhi.

Ranasingha Piyadasa and Ranaweera, R. A. A. S. (2012) *Public libraries in Sri Lanka during the British period*. *Sri Lanka library review*, vol.26, 16-21

The Ceylon blue book 1866 Government press, Colombo

The Ferguson's Ceylon directory (1866-196), Government press, Colombo

Weerasingha, M. K. (2017). *Pothpath hasara*. Kelaniya: karthru prakashana

Research Output of Nanorobot with Special Reference to Scopus Database: Scientometric Analysis

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Abstract

The analysis reveals interesting patterns in research productivity and citation activity over time. The year 2020 stands out as the period with the highest research output, while the early years had limited publication and citation activity. The findings also highlight influential authors in the field, such as Sitti M and Li Y, who have made significant contributions and achieved high H-indices and citation counts. The study further examines the publication types and sources that contribute to nanorobot research, emphasizing the predominance of articles and the impact of journals such as IEEE Robotics and Automation Letters. The analysis also sheds light on global collaboration, with China and the United States leading in terms of research output, followed by countries like India, Japan, and Iran. Moreover, the study identifies highly cited papers that have played a pivotal role in shaping the field of nanorobotics. These findings provide valuable insights into the research landscape of nanorobotics, including trends in research output, influential authors and sources, and global collaborations. The analysis contributes to the understanding of the field's development, impact, and knowledge diffusion, offering a comprehensive overview of the research output in nanorobotics. Researchers, scholars, and practitioners interested in nanorobotics will benefit from the identified influential papers and the understanding of key contributors and research trends. This scientometric analysis serves as a valuable resource for further exploration, advancement, and interdisciplinary collaborations in the field of nanorobotics.

Keywords: Nanorobot, Research Output, Scopus Database, Robotics, Scientometrics

Introduction

Nanorobots, a groundbreaking field at the intersection of nanotechnology and robotics, have garnered significant attention due to their potential applications in various domains, particularly in medicine. The ability of these miniature robots to perform precise and targeted tasks at the nanoscale holds immense promise for revolutionizing medical techniques and treatments. In recent years, a growing body of research has focused on the development and application of nanorobots, leading to numerous advancements in the field. This scientometric analysis aims to explore the landscape of nano robot research, with a specific emphasis on publications indexed in the Scopus database. By examining the scientific literature, this study seeks to provide insights into the current trends, key contributors, and major research themes driving the field of nanorobotics. The present study explores the Indian contribution to Nano Robot Research with special reference to Scopus database for the period of 1991- 2023.

Onososen, Adetayo Olugbenga, and Innocent Musonda (2022) studied the research focus for construction robotics and human-robot teams towards resilience in construction through a scientometric review published in the Journal of Engineering, Design, and Technology. The authors' meticulous approach and thorough analysis contribute to the understanding of the research landscape in this field, making this paper a valuable resource for researchers and practitioners interested in construction robotics and human-robot teams.

Coccia (2018) conducted a scientometric study published in Scientometrics, focusing on the general properties of the evolution of research fields, namely the human microbiome, evolutionary robotics,

and astrobiology. Coccia's study contributes to the understanding of the evolving landscape of these fields and offers a foundation for further exploration and advancement in human microbiome, evolutionary robotics, and astrobiology research.

Feng et al. (2021) conducted a scientometric study published in the Asian Journal of Surgery, aiming to analyze the top 100 most-cited publications based on Web of Science in the field of robotic versus laparoscopic surgery. Feng et al.'s study provides a valuable overview of the most influential publications in this domain, offering researchers and clinicians valuable insights into the current state and future directions of robotic and laparoscopic surgical techniques.

Objectives

The present study aims to analyze the growth pattern of Global nano robot Research in terms of publication output as reflected in Scopus database during the period 1991-2023.

The following objectives were formulated

- To analyze the growth pattern of global Nanorobot Research.
- To explore the most prolific author of Nanorobot Research
- To measure the Country wise publications
- To explore the source and institutional metrics of research output
- To measure the most global cited documents
- To find out the emerging areas in the field of Nanorobot Research

Materials and Methods

Scopus citation database is used as a source of data and retrieved 1046 records for the period of 1991-2023 on Nano robot research. A search query performed for “nano robots” with the restriction to All Open Access Publication in global level. The present study attempts to find out the publication pattern of Global research in the field of Nano ronto. The extracted data were analyzed using the Biblioshiny and VoS viewer and SPSS.

Results and Discussion

Growth Pattern of Nano robot Research

Data indicates the growth of Nano robot research output during 1991-2023. The highest research output during the 20-year period was in the year 2020 (285) and the lowest (1) in 2001, 2003, 2004. Further the year wise distribution during the years 2013(50), 2014 (71), 2015 (81) indicates that these years were relatively more productive in relation to total number of publications in Nano robot research.

The annual trends in total citations per year for a specific set of years. The data provides valuable insights into the citation impact and longevity of the publications within this timeframe. Several notable observations can be made. Firstly, in the early years, such as 1991, 1992, and 1993, there were either no publications or minimal citation activity. This suggests that the research output during that period may have had limited visibility or impact. However, starting from 1994, there is an increase in the number of publications, with some years showing higher citation counts. For instance, the year 2003 stands out with a significant number of publications (20) and the highest mean total citation per year

(3.59), indicating a strong impact and recognition of the research in that particular year. Moreover, the data reveals that the mean total citation per article and mean total citation per year vary across the years, indicating fluctuations in the citation impact of the publications. Additionally, the "CitableYears" column highlights the number of years for which articles remain citable, ranging from 12 to 31 years. This suggests that some publications have a longer-lasting impact and continue to be relevant for an extended period. Table 1 provides a comprehensive overview of the citation patterns and longevity of publications within the given timeframe, shedding light on the trends and impact of research in different years.

Most prolific authors

The top 10 prolific authors based on their H-index, G-index, total citations (TC), number of publications (NP), and the year of their first publication (PY_start). The data provides valuable insights into the research impact and productivity of these authors. Several notable observations can be made. Firstly, the authors Sitti M and Li Y stand out with the highest H-indices of 15 and 14, respectively, indicating their significant impact in the field. Moreover, Li Y has the highest G-index of 20, suggesting a high number of highly cited publications. The m-index, which measures the ratio of the H-index to the number of years since the first publication, ranges from 0.318 to 1.25, indicating varying levels of impact relative to the authors' career duration. Additionally, the total citation counts (TC) vary widely, with the highest being 1567 for Sitti M and the lowest being 115 for Lutz P. The number of publications (NP) ranges from 9 to 25, reflecting the authors' research output. Furthermore, the year of the first publication (PY_start) spans from 2001

to 2015, showcasing the longevity and experience of these authors in the field.

Predominant source of publication

The predominant source of publications by the researchers of nanorobot engineering research in India. 442 articles were published in 20 most refereed journals out of 1987 articles in total publications. Out of which 100 (22.62%) papers were published in “IEEE Robotics and Automation Letters” followed by “IEEE International Conference on intelligent on Robot 58, (13.12%) and so on. The most impactful sources based on their H-index, G-index, m-index, total citations (TC), number of publications (NP), and the year of the first publication (PY_START). The data provides insights into the influential sources in the field. Notably, the IEEE Robotics and Automation Letters stand out as the most impactful source with an H-index of 17, indicating its significant influence and high citation count. The Proceedings - IEEE International Conference on Robotics and Automation also demonstrates strong impact with a high G-index of 28, suggesting a high number of highly cited publications. Furthermore, the International Journal of Robotics Research and the IEEE Transactions on Robotics exhibit notable impact with an H-index of 12 and 14, respectively. The m-index, which measures the ratio of the H-index to the number of years since the first publication, ranges from 0.22 to 2.43, indicating varying levels of impact relative to the source's age. Additionally, the total citation counts (TC) range from 69 to 1112, reflecting the sources' overall influence and recognition within the research community. The number of publications (NP) varies from 5 to 84, representing the breadth and depth of research output by these sources. The year of the first publication (PY_START)

spans from 1996 to 2020, showcasing the longevity and contribution of these sources to the field. Table 3 provides valuable insights into the most impactful sources in the field, shedding light on their influence, visibility, and scholarly contributions.

Institutionwise distribution

The predominant institutions in Nanorobot research. The highest output was observed from the Chinese Academy of Sciences (62), Nagoya University (45), Femto-St - Sciences et Technologies (43), and ETH Zürich (42). Additionally, both the Ministry of Education China and City University of Hong Kong have 37 publications each. CNRS Centre National de la Recherche Scientifique follows closely with 35 publications, among others. This data indicates that the University of Chinese Academy of Sciences has the highest number of publications in Nano Robot research.

Collaboration with countries

The country-wise collaboration in Nano Robot research. The data indicates that China has the highest number of publications with 483, accounting for 24.31% of the total. The United States follows closely behind with 400 publications, representing 20.13% of the total. India and Japan also have significant contributions with 195 (9.81%) and 182 (9.16%) publications, respectively. Other countries such as Germany, France, South Korea, Iran, and the United Kingdom also demonstrate notable involvement in the field. This table highlights the global nature of Nano Robot research, with contributions from various countries across different continents.

Most relevant countries

The most relevant countries in Nano Robot research based on various metrics. China emerges as the leading country with 351 articles, accounting for 0.24 frequency and having a substantial share in terms of SCP (262) and MCP (89), with an MCP ratio of 0.25. The United States follows closely behind with 220 articles, a frequency of 0.15, and notable SCP (179) and MCP (41) values, resulting in an MCP ratio of 0.19. India, Japan, and Iran also demonstrate significant relevance in Nano Robot research, showcasing their contributions in terms of article count, frequency, SCP, and MCP metrics. Other countries such as France, Germany, South Korea, and Switzerland also exhibit noteworthy involvement in the field. This table highlights the diverse and global nature of Nano Robot research, with multiple countries actively contributing to the body of knowledge in this domain.

Most global cited documents

The most globally cited documents in Nano Robot research. These papers have made significant contributions and garnered high citation counts within the field. The paper titled "COLOMINA I, 2014, ISPRS J PHOTOGRAMM REMOTE SENS" stands out with a total citation count of 1752, averaging 194.6667 citations per year and a normalized TC value of 36.4145. Other notable papers include "LI J, 2017, SCI ROBOTICS" with 630 total citations, "WANG C, 2016, ADV MATER" with 610 total citations, and "GISSIBL T, 2016, NAT PHOTON" with 523 total citations. These highly cited papers have made significant impacts and have been influential in shaping the field of Nano Robot research. Researchers and scholars in this area can refer to these papers for valuable insights and knowledge.

Conclusion and Recommendations

- The highest research output in Nano Robot research was observed in the year 2020 (285 publications), while the lowest output was recorded in 2001, 2003, and 2004 (1 publication each).
- The data analysis reveals that early years had limited research output and citation activity, while from 1994 onwards, there was an increase in publications and varying citation counts. The year 2003 stood out with a significant number of publications and the highest mean total citation per year, indicating strong impact and recognition.
- Sitti M and Li Y demonstrate high H-indices, indicating their influential contributions. Li Y also stands out with a high G-index, denoting numerous highly cited publications. The m-index varies, suggesting different levels of impact relative to career duration.
- The findings indicate that the majority of contributions in nano robot research are articles (46.00%), followed by conference papers (42.43%). Review papers (7.80%) and book chapters (2.62%) also contribute to the research output. Notably, there are relatively fewer publications in categories such as books, editorials, letters, and short surveys.
- The findings reveal that among the total publications in nanorobot engineering research in India, the predominant source is the "IEEE Robotics and Automation Letters" with 100 articles (22.62%), followed by the "IEEE International Conference on

Intelligent Robot" with 58 papers (13.12%), and so on, in the top 20 most refereed journals.

- The findings reveal influential sources in the field of robotics and automation, with the IEEE Robotics and Automation Letters standing out as the most impactful source (H-index: 17).
- The findings reveal that the Chinese Academy of Sciences, Nagoya University, Femto-St - Sciences et Technologies, are among the top contributors in Nano Robot research, with the University of Chinese Academy of Sciences leading in terms of the highest number of publications.
- The findings highlight that English is the primary language used for publications in Nano Robot research, with Chinese, Japanese, and other languages also making notable contributions.
- The findings reveal a global collaboration in Nano Robot research, with China leading in terms of the highest number of publications, followed closely by the United States. India, Japan, and several other countries also contribute significantly to the field, emphasizing its global nature and widespread participation.
- The findings reveal that China leads in terms of the most relevant country in Nano Robot research, followed closely by the United States, India, Japan, and Iran. These countries demonstrate significant contributions in terms of article count, frequency, SCP, and MCP metrics, emphasizing the global and diverse nature of research in the field. Other countries such as France,

Germany, South Korea, and Switzerland also exhibit notable involvement in Nano Robot research.

- The findings highlight the most globally cited documents in Nano Robot research, with the paper titled "COLOMINA I, 2014, ISPRS J PHOTOGRAMM REMOTE SENS" leading the pack with a total citation count of 1752. These highly cited papers serve as valuable references for researchers and scholars seeking insights and knowledge in Nano Robot research.

Conclusion

The findings from the provided details indicate several key insights in the field of Nano Robot research. Firstly, there has been a significant increase in research output and citation activity from 1994 onwards, with notable productivity in 2013, 2014, and 2015. The top authors Sitti M and Li Y demonstrate influential contributions, with high H-indices and significant citation counts. Articles and conference papers are the predominant publication types, while influential sources such as IEEE Robotics and Automation Letters and IEEE International Conference on Robotics and Automation shape the field. China emerges as a leading country in terms of research output, collaboration, and relevance in Nano Robot research, followed by the United States, India, and Japan. Additionally, there are globally cited papers that have made significant impacts and serve as valuable references for researchers in the field. Overall, these findings highlight the dynamic and impactful nature of Nano Robot research across countries and sources.

References

Chen, Y., Chen, D., Liang, S., Dai, Y., Bai, X., Song, B., ... & Feng, L. (2022). Recent Advances in Field-Controlled Micro–Nano Manipulations and Micro–Nano Robots. *Advanced Intelligent Systems*, 4(3), 2100116.

Mazumder, S., Biswas, G. R., & Majee, S. B. (2020). Applications of nanorobots in medical techniques. *IJPSR*, 11, 3150.

Onososen, A. O., & Musonda, I. (2022). Research focus for construction robotics and human-robot teams towards resilience in construction: Scientometric review. *Journal of engineering, design and technology*, 21(2), 502-526.

Xu, K., Xu, S., & Wei, F. (2021). Recent progress in magnetic applications for micro-and nanorobots. *Beilstein Journal of Nanotechnology*, 12(1), 744-755.

Zhang, N., Yan, P., Feng, L., Chu, X., Li, J., Li, J., ... & Yang, K. (2022). Top 100 most-cited original articles, systematic reviews/meta-analyses in robotic surgery: A scientometric study. *Asian Journal of Surgery*, 45(1), 8-14.

Obstacles Encountered by Authors during the Publication Process of Books: An Investigative Study of University of Peradeniya Sri Lanka

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Abstract

Publishing books is an attractive mode of dissemination and sharing knowledge; however, it is a significantly challenging task for authors in Sri Lanka, particularly in the current critical situation in the country. The primary objective of this study was to identify and comprehend the challenges faced by authors in their book publication. The study population consisted of 32 authors who had published books in the years 2021 and 2022. Data for this research was collected via a survey that sought insights into the challenges they faced and the perspectives of these authors regarding the book publishing field. 72% (23) response rate obtained from authors predominantly associated with the Faculty of Arts at the University of Peradeniya. The survey sought to gain a more comprehensive insight into the obstacles faced by authors throughout the publication process and to discern their perspectives on the assistance and resources required for achieving success in book publishing. This research explores various facets of these challenges, encompassing aspects such as finding a professional publisher, marketing books, book demand limitations, limited copies acquired from the libraries, limited funds and lack of proper guidance or mechanisms to support the authors. Furthermore, the research findings elaborate on the suggestions made by the authors when seeking publishers, promoting their books, establishing an online presence, distributing their works effectively, and preparing guidelines for professional publications.

Keywords: Author Challenges, Authorship, Publishing Challenges, publishing of books, Writing books

Introduction

Books have been a key medium for sharing knowledge for centuries. Authors write books on a wide range of topics, from fiction to nonfiction, to educate and inform readers. The primary channel for disseminating knowledge is through the publication of research and creative writings by creative writers. It is conventionally assumed that book publishing is a process through which writing is related to readers: publishing is conceived as publication. At most, publishing is acknowledged as a process which writing passes through, with effects that are partially acknowledged for mass-market genre fiction and almost universally denied for literary fiction (Malik, 2008). In this context, the authors encounter various challenges when publishing their books, making it a multifaceted endeavor fraught with numerous obstacles. “Writing and publishing a first book can be an exciting and rewarding journey. However, it also comes with its fair share of challenges. For aspiring authors, bringing their words to life and sharing their stories with the world can be a daunting task” (Hassan, 2023). The overarching objective of this research is to identify the primary challenges faced by authors when bringing their books to the public and to provide insights into the evolving dynamics of the industry. The study population comprised 32 authors who had published books in the years 2021 and 2022. A survey was conducted, and responses from 23 out of 32 authors primarily associated with the Faculty of Arts at the University of Peradeniya. The research findings pinpointed several key challenges faced by authors, including difficulty in finding a recognized publisher, financial constraints in publishing, challenges of marketing, lack of publisher interest in certain subject areas, protracted editing and proofreading processes, issues surrounding publisher agreements,

publishing additional copies without author notification, and attempts by some publishers to alter or remove crucial content that authors wish to retain. Furthermore, the authors proposed important measures to address these challenges. These suggestions included allocating special funds from the university to sponsor authors, promoting book publication among university academics through incentives and encouragement, establishing mechanisms to support and facilitate authors, expanding university library collections with works authored by faculty, and encouraging the adoption of authors' books as textbooks within the university or department curriculum. The authors also emphasized the need for an effective marketing strategy involving university support to create a thriving market for their publications. Additionally, establishing a functioning university press was deemed essential to facilitate more publications while acknowledging the institute's contribution. Providing clear guidelines, offering consultancy services, and implementing guidebooks were identified as crucial remedial actions to address the challenges encountered by authors in the publishing process.

Problem Statement

Creative writing and the publishing of books are essential for promoting reading and acquiring knowledge. In the present scenario, book publishing is challenging for the authors, especially in the university sector. These challenges may impact the success and dissemination of their publications. When considering knowledge dissemination, it's important to highlight that university authors significantly contribute to productivity in this regard. Therefore, this survey aims to explore the challenges faced by university authors during the process of publishing

their books. The study gains a comprehensive understanding of these challenges and provides valuable suggestions, strategies, and support mechanisms to overcome these challenges.

Objectives

- To identify the challenges that authors at the University of Peradeniya encounter in the publishing of their books.
- To identify the alternative solutions proposed by the authors themselves to address these challenges.

Materials and Methods

This study was based on the publishing of books by the authors at the University of Peradeniya. According to the books acquired from the Main Library, University of Peradeniya, in 2021 and 2022, most of the authors identified at the Faculty of Arts. Hence, the selection of the population was the authors from the Faculty of Arts at the University of Peradeniya. To identify the list of authors, I mainly checked the collection of the Main Library of the University of Peradeniya, as well as the official website of the Faculty of Arts. Through this process, researchers identified 32 authors and data collection was carried out from this list. For the study, a survey research method was employed utilizing a questionnaire as the primary tool. The questionnaire was specifically designed to gather information related to the challenges faced by authors during the book publishing. The survey questionnaire included open-ended and closed-ended questions and was distributed through Google Forms. Descriptive analysis was performed using MS Excel and, based on the results obtained through the analysis, derived the conclusions.

Significant of the Study

This research is important as it explores the various obstacles and difficulties authors encounter while publishing books. Significantly, understanding the challenges authors face provides valuable insights into the publishing industry. These identifications will assist in overcoming the issues related to the publishing of books and authors. Publishing is not only a creative endeavor but also an economical process. Understanding the challenges authors face can have significant effects on promoting the economic implications for the book publishing industry. Finally, the findings of this study will help the university administrators to discuss and assist the authors in publishing books.

Results and Discussion

The Results of this study revealed valuable insights into the challenges and strategies of authors in the context of book publishing in the university sector. When analyzing the demographic profile of the respondent's majority secured by the male authors (78%). The survey found that most of the respondents belonged to the age category of 46-55 (39%) followed by 56-65 (30%), while the remaining authors were below 45 years old. Regarding the subjects primarily written about in books, a significant proportion of authors (91%) focused on academic and subject-specialist topics, with smaller percentages writing in the categories of Fiction (26 %) and Poetry (13%). The majority of the books published in academic and subject-specialist topics may be to increase the subject-related resources and for their promotional requirements. The study also explored the number of books published to date, with the majority (69%) having published between 1-5 books, followed by 11-15 books (13%), and 6-10(9%) 15 or more books (9%).

Authors' completion times for writing books varied, with 61% taking 1-2 years, 30% taking 3-4 years, and less percentages taking 5-6 years or more. A substantial portion of authors (52%) published their books under the patronage of publishers, and 48% reported that they published their books as author publications. Moreover, the primary language used for publication was Sinhala (83%). The study identified the primary purposes of writing books, with the majority of authors (87%) indicating that they write books to disseminate knowledge. Others included fulfilling subject gaps (39%), meeting promotional requirements (26%), and pursuing writing as a hobby (26%). The majority of respondents (83%) used social media marketing as a strategy to promote their books, followed by book exhibitions (48%), email newsletters (39%), and book reviews (30%). However, the authors' views on the effectiveness of these strategies varied, and they highlighted social media marketing as the most effective way to promote books (83%). Respondents overwhelmingly believed that having a strong online presence is crucial for effective book promotion in the digital age, with 87% in agreement. Common challenges mentioned by the authors included bookshops not willing to stock author-published books, outdated distribution methods, and limited demand from libraries and readers. All respondents (100%) reported no issues related to copyright, intellectual property, or plagiarism during the publishing process of their books. In response to the question about what additional support or resources could ease the challenges faced during the book publishing process, the following suggestions were made: Providing financial support for publishing, increasing institutional support and awareness of book publishing, creating marketing opportunities and mechanisms, offering guidance, establishing a university press for publications, setting up specific funds

at the university, and facilitating distribution mechanisms.

Conclusion and Recommendations

The conclusion of this survey can highlight the significant accomplishment of publishing books and the challenges faced by the authors in the university sector. It also acknowledged the types of challenges that the University authors encounter such as, including lack of experience and confidence, finding a publisher, editing and revising, marketing and promotion, financial considerations, building a readership, and sponsorship. With determination and support, the authors can successfully navigate these challenges and fulfil their dream of sharing their knowledge. To overcome these challenges, the authors should be encouraged by the university in many ways, such as preparing a guide books, conducting awareness programs to follow before the publishing of books, there should have proper marketing plan, proper appreciation system, such as an awarding ceremony, book launching ceremony, the University should have a press to publish books, Library should purchase more copies to the readers.

References

A Guide to Self-Publishing Your Book. (2007). Montana: The Magazine of Western History, 57(4), 60–63. <http://www.jstor.org/stable/25485665>.

The Library Trailblazers: A Satisfaction Survey Expedition

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Abstract

Within the ambit of libraries, library user education is a vital service that serves as a conduit for users to gain the fundamental skills and information needed for efficient information access, evaluation, and usage. Notably, guided library tours are an effective way to introduce new patrons to the library's wealth of resources and provide insightful advice on how to utilize them wisely. The primary objective of this survey was to assess the ability of 2965 newcomers to use the library services of the University of Kelaniya after taking part in a tour of the facility. It also aimed to determine how satisfied these beginners were overall with their guided library tour experience. A complex research strategy included qualitative and quantitative approaches in the quest for a complete understanding. The distribution of structured questionnaires using Google Form was used to collect data, and the outcome was the compilation of a sizeable dataset comprising 343 replies. The distribution of responses across faculties was as follows: The Faculty of Humanities attracted 87 responses (25.4%), the Faculty of Science attracted 81 responses (23.6%), the Faculty of Social Sciences attracted 78 responses (22.7%), and, proportionally, the Faculty of Computing and Technology contributed four responses (1.2%) via the Google Form. Both male and female students demonstrated unwavering pleasure with their library tour experiences across various faculties. In conclusion, this study's results unambiguously support the library-guided tour's effectiveness in providing newcomers with the necessary skills and information, as seen by their noticeably higher satisfaction ratings.

Keywords: *Information Competency, Library User Education, Guided Library Tours, Skills Development, User Satisfaction*

Introduction

Library user education is a critical and multifaceted service libraries provide to equip users with essential skills and knowledge for adequate information access and utilization. This abstract explores various dimensions of library user education, emphasizing its adaptability to diverse user communities and its role in promoting lifelong learning and critical thinking. One fundamental component of library user education is information literacy, which involves recognizing the need for information, locating relevant sources, evaluating their credibility, and effectively using the acquired information. Effective teaching methods and communication are vital in this context. (American Library Association, 2023; Walsh, 2011)

In the digital age, technical training has become increasingly important as users rely on technology for various purposes (Zhu & Tianhui, 2009). Libraries ensure users possess the skills to navigate technology confidently, including using specific software, online safety practices, and safeguarding personal information. Reader advisory services play a distinctive role in helping users discover materials aligned with their interests and needs. This includes personalized book recommendations, curated reading lists, and literary activities like book clubs (Trott, 2009).

Research support is another crucial aspect of library user education, assisting users in complex research endeavors (Hensley et al., 2014). This can involve one-on-one consultations with librarians, research skills workshops, and citation management software guidance. Digital literacy education has gained prominence in the digital landscape, with libraries educating users on effective digital resource utilization, source evaluation, and online privacy and security (Mulat and Natarajan, 2020)

Library orientation is essential for introducing new users to library resources and policies. Online orientation has become increasingly important to cater to the growing reliance on digital resources (Alperin et al., 2020). Online guides and tutorials are essential in this context. Dynamic and interactive library tours offer an engaging means of introducing users to library services, collections, and policies, helping users feel comfortable and informed about library resources (Reed & Miller, 2020; Chiya et al., 2022).

In conclusion, library user education is a cornerstone of library services, aiming to empower users with skills for adequate information access and utilization. By providing diverse programs, libraries can meet the unique needs of their users while fostering lifelong learning and critical thinking skills.

Problem Statement

The University of Kelaniya Library has implemented comprehensive library orientation programs to cater to the needs of new students, commonly referred to as "freshers." During these events, the librarian delivers the initial library orientation lecture, while faculty librarians organize primary and supplementary workshops tailored to specific faculties. The Reader Service Division and Subject Liaison Library Service librarians also collaborate to create Guided Library Tours, introducing the library's facilities and services.

Significant changes were implemented to enhance the effectiveness and efficiency of the guided library tour technique. The primary objective was to furnish users with information about the library and its services, ultimately enhancing user efficiency by streamlining processes and incorporating digital technologies to optimize the library tour

experience and save users' valuable time. To boost demand for our library tours and disseminate information among users, a Google form was utilized for user registration on a first-come, first-served basis. This initiative aimed to reduce the user registration queue and alleviate the workload of library staff. Before the tour, all user information was seamlessly integrated into the library administration system.

The main challenge lay in assessing whether the alterations to the library tour process effectively met the desired level of reader satisfaction. Simultaneously, efforts were made to ascertain whether the library tours adequately imparted a comprehensive understanding of the library's operations and the full spectrum of services available to readers.

Objectives

During the academic year 2021/2022, the central library conducted a guided library tour as an integral component of the orientation program. Post-tour, we aimed to appraise newcomers' skills and gauge their satisfaction. The survey objected to:

- Assess newcomers' proficiency in utilizing library services after the tour.
- Gauge newcomers' overall satisfaction with the library tour.
- Solicit user feedback and comments regarding the library tour.

Materials and Methods

This study employed a mixed-method approach involving both qualitative and quantitative methods. The research population consisted of 2965 students who took part in a guided library tour. Utilizing SurveyMonkey's sample size calculator, the recommended sample size

was 341 students. However, a structured Google Form distributed via institutional emails received 343 responses. The survey instrument primarily gathered quantitative data and included open-ended questions for qualitative insights. Data from the newcomers who participated in the library tour were collected using a structured questionnaire via Google Form, and analysis was conducted using IBM SPSS 26.

Significant of the Study

The survey findings hold significance for all individuals engaged in reader services, providing valuable insights for the planning, execution, and evaluation of future library tours. This study aimed to evaluate newcomers' post-tour abilities in utilizing library services and measure their overall satisfaction with the tour.

Results and Discussion

Responses

The amassed data encompassed a total of 343 responses; in terms of faculty distribution, participation was as follows: Faculty of Commerce and Management Studies garnered 93 responses (27.1%), the Faculty of Humanities saw 87 responses (25.4%), the Faculty of Science received 81 responses (23.6%), Faculty of Social Sciences collected 78 responses (22.7%), and lastly, the Faculty of Computing and Technology accounted for four responses (1.2%) via the Google Form.

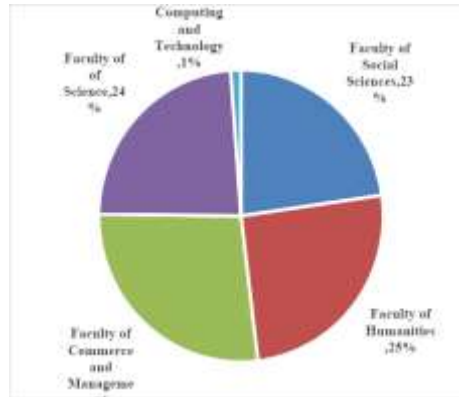


Figure 1: Responses of the study by faculty

Encompassing participation from all academic faculties. Among these, 97 responses (28.3%) were from male students, while 246 (71.7%) were provided by their female counterparts via the Google form.

Abilities that they have taken after the library tour

The survey assessed newcomers' competence in utilizing library services after the tour. Essential abilities, specifically chosen to be acquired by participants through library tours, were employed as benchmarks to analyze newcomers' proficiencies.



Figure 2: Abilities after the library tour

Note: 1 Strongly Agree, 2 Agree, 3 Neutral, 4 Disagree, 5 Strongly Disagree

In this study, individuals demonstrated adept navigation of the Online Public Access Catalog (OPAC), employing criteria such as author and title to locate diverse library materials. Their skillful use of information sources supported research and assignments. They effectively identified relevant databases aligned with their research themes and applied filters for efficient database search results. Participants also distinguished between library databases and internet search engines. They showcased proficiency in borrowing limits, reference materials, and optimizing textbooks. Additionally, they exhibited a strong understanding of conventional and electronic journals, research theses, and rare books, showcasing expertise in academic information retrieval.

Satisfaction with the library tour

The survey assessed the satisfaction of newcomers with library tours. Findings revealed that newcomers were pleased with well-organized and informative tours, starting promptly and led by engaging presenters. The tours effectively introduced library resources, services, and study areas, enhancing participants' understanding. Overall, satisfaction with the tours increased among participants.

Table 1: satisfaction with the library tour

	N	Mean	Std. Deviation
SatisfactionMean	343	1.4922	.76625

Note: 1 Strongly Satisfy, 2 Satisfy, 3 Neutral, 4 Dissatisfy, 5 Strongly Dissatisfy

The mean score for Satisfaction with the guided library tour test is 1.4922, with a standard deviation of 0.76625 (M=1.4922; SD=0.76625).

Feedback and Suggestions

Participants overwhelmingly praised the guided library tour based on their feedback, describing it as exceptional, highly valuable, informative, engaging, and well-organized. They also provided constructive suggestions, including enhancing participant facilities, reducing time constraints, shortening the overall duration, and incorporating more hands-on activities.

Conclusion and Recommendations

Conducting guided library tours is essential for introducing newcomers to library services and resources. This study emphasizes the tour's key components, including an introduction to library facilities, services, circulation policies, and database usage. Participants showcased various skills, such as OPAC navigation, accessing research resources, and database selection.

Survey results demonstrated exceptionally high satisfaction with the library tour, encompassing session quality, punctuality, engaging lectures, information clarity, facility comprehension, and technical tool utilization. Notably, satisfaction levels did not significantly differ across genders or faculties.

In conclusion, newcomers gained valuable skills through the guided library tour, with high satisfaction levels. This study encourages

continuous improvement based on user feedback, rectifying previous flaws and enhancing tour efficiency.

References

- Alperin, M., Gaydos, L. M., & Phillips, J. C. (2020). The role of orientation programs to prepare students for online learning: a case study from an executive MPH program. *Pedagogy in Health Promotion*, 6(4), 239–245. <https://doi.org/10.1177/2373379920953375>
- American Library Association. (2023). Information Literacy. ALA's Literacy Clearinghouse. Retrieved August 13, 2023, from <https://literacy.ala.org/information-literacy/>
- Chiya, K. P., Onyancha, O. B., & Ezema, I. J. (2022). Students' perceptions of the user education programmes at a South African university. *IFLA Journal*, 49(2), 419–431. <https://doi.org/10.1177/03400352221130775>
- Hensley, M. K., Shreeves, S. L., & Davis-Kahl, S. (2014). A survey of library supports for formal undergraduate research programs. *College & Research Libraries*, 75(4), 422–441. <https://doi.org/10.5860/crl.75.4.422>
- Mulat, T., & Natarajan, M. (2020, May 11). DIGITAL LITERACY SKILLS AMONG LIBRARY PROFESSIONALS IN JIMMA UNIVERSITY LIBRARIES. DigitalCommons@University of Nebraska - Lincoln. <https://digitalcommons.unl.edu/libphilprac/4629>
- Reed, K., & Miller, A. J. (2020). Applying gamification to the library orientation. *Information Technology and Libraries*, 39(3). <https://doi.org/10.6017/ital.v39i3.12209>
- Trott, B., & Van Fleet, C. (2008). Education for Readers' Advisory service in library and information science programs. *Reference and User Services Quarterly*, 47(3), 224–229. <https://doi.org/10.5860/rusq.47n3.224>
- Walsh, J. (2011c). *Information Literacy instruction: Selecting an Effective Model*. Chandos Publishing.
- Zhu, & Tianhui. (2009). Library user education under the circumstance of network. *美中教育评论*, 6(12), 81–84. <http://www.cqvip.com/QK/88583X/200912/32417629.html>

Intelligent Synoptic Discovery and Semantic Annotation of Ubiquitous Library Literature

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Abstract

Key to all academic ventures and scholastic exploits is bibliographic reference. Traditionally however, the eager student has been burdened by the significant toll involved in researching for referential content. Volumes not available in the local physical libraries, have to be searched for online. Text-related indexes are abstract and terse, often not fully-reflective of the actual backend content, its depth, breadth, and/or knowledge-rendering quality. Critical comparison of multiple texts of the same subject area are near-impossible. This research presents a novel, intelligent technique for semantic evaluation and synoptic discovery in ubiquitous library texts, both physical and online, affording efficacious volume searching, comparison, and optimal selection. This paper is organised into multiple sections. The first section provides an introduction to this research, the second section enunciates the problem statement, the third section states the objectives of this research, the fourth section provides the methodology used to achieve the findings herein, the fifth section asserts the significance of this research, the sixth section provides the results and the discussion, the seventh section asserts the conclusions and recommendations, and the eighth section lists the key references used.

Keywords: *intelligent, referential, metadata, synchronous, synoptic*

Introduction

Students typically devote long hours in physical libraries or online, perusing volumes of reference literature looking for the right text. The showcased reference volumes often do not provide adequate outlines of

their inherent content, depth, breadth, or knowledge value; the respective indexes simply paraphrasing contained topics. Clearly, this traditional researching technique needs revamping; intelligent synoptic discoveries in reference texts is key to facilitating optimal volume selection.

Problem Statement

How can an intelligent, online, library catalog be enacted which would synchronously generate synoptic annotations of the earmarked texts, enabling real-time, critical analysis and optimal text selection?

Objectives

The objectives of this research are:

- Enable critical comparison and evaluation of candidate texts.
- Enable machine-driven referrals of suitable literature.
- Afford foolproof, precise, machine-endorsed optimal text selection.

Materials and Methods

The Title, Index, and Introduction sections of each candidate text is parsed in turn, and preprocessed as follows.

Syntactic Recasting

Discard all occurrences of *Conjunctions* (2) in the parsed text.

Coordinating Conjunctions - eg., *for, and, nor, but, or, yet, and so.*

Correlative Conjunctions - eg., *both/and, either/or, neither/nor, etc.*

Subordinating Conjunctions - eg., after, although, as, as if, as long as, as much as, etc.

Discard all occurrences of *Articles* or *Determiners* (1) in the parsed text.

Definite Article - the Indefinite Articles - a, an

Model the remaining parsed text into *unigram*, *bigram*, and *mgram* syntactic symbols according to meaningful *words*, *phrases*, and *clauses*. These symbols are termed *Syntactic Nuggets* (SNs) in this research.

Key language syntactic constructs (SNs) should conform to all language-defined grammar rules derived from the system *Lexicon*, eg.,

noun prefixed with the related *adjective/s*

verb postfixed with the related *adverb/s*

nouns matched with the related *pronouns* occurring in later usage.

subjects > objects > predicates in linguistic precedence

ie., subject dominates the phrase/sentence semantics

object supports the phrase/sentence semantics

predicate indicates nature of association

Semantics Preservation

The SNs in the book title (SN_{BT}S) are matched with the SNs in the book index (SN_IS) and the SNs in book introduction section (SN_{IS}S), ensuring semantic preservation across the three component SNs. This is because the book title presents the key topic of discussion and argumentative thrust, in the chosen text.

SN Notation

SNs can be represented by the following Regular Expression or regex.

(**adj****nn** | **vv** **adv**^{**}) where $\text{adj} \in \{\text{adjectives}\}$, $\text{nn} \in \{\text{nouns}\}$, $\text{vv} \in \{\text{verbs}\}$, $\text{adv} \in \{\text{adverbs}\}$

Process

Compute *Occurrence Probabilities* of each SN in the parsed corpus. Key notion is that high probability SNs along with their associated (semantically-linked) neighbours provide greater meaning, thrust, and dominate the text's content and discussion.

Occurrence Probability $P(\text{SN}_i) = \frac{\sum \text{SN}_i}{n}$, where $i = [1..m]$

m is number of distinct SNs in the parsed

n is the size of the parsed corpus

Entropy $E(\text{SN}_i) = -\sum P(\text{SN}_i) \log_{2,p}(\text{SN}_i)$ ----- (A) according to (3)

where i denotes the SN index, and

Entropy is measure of Information represented by the particular SN, in bits.

The optimal (x) *Feature* (F) matrix is prepared in accordance with *Features* identified in the SNs in the corpus, in ascending order of their respective *Entropies* (E). The empirical value of x , the number of rows in the F matrix is determined based on the particular experiment and intended synoptic granularity.

The key notion is that low entropy *Features* provide highly informative value in text; in essence dominating the book content in concept and description.

Compose a terse, machine-generated, lexicon-driven, synoptic commentary based upon the tabulated corpus Features and their text-wide significance in description and discussion. Additionally, for volume comparisons, individual text-annotations of a weighted bibliographic factor is effected, based upon the strength of each candidate bibliography.

Significant of the Study

The semantic analysis and synoptic discovery process is fully automated, meaning machine-driven; optimal text comparison/selection being based on text-inherent, rendered *knowledge quality* and *significance*.

Results and Discussion

Consider the simple English sentence “The quick brown fox jumped over the lazy dog”. After syntactic recasting, the parsed text would be:

{delArt1] quick brown fox jumped over [delArt2] lazy dog ---(B)
adj,adj,nn₁ vv,adv₁ adj,nn₂

Consider the following *syntactically-recasted* corpus

$SN_0 =$ quick brown fox $SN_1 =$ jumped over $SN_2 =$ lazy dog

$SN_0 =$ quick brown fox $SN_3 =$ leaped over $SN_4 =$ grey wall

where $SN_0 \equiv$ subject, $SN_1, SN_3 \equiv$ predicate, and $SN_2, SN_4 \equiv$ object

Using equation (A) in section 4.4, it can be shown that SN_0 being the principal corpus *subject*, possesses the least Entropy value, thereby presenting the highest potential information in the corpus; the principle property of all referential text themes.

Any descriptive text corpus of *SNs* that *surrounds associatively* with the above recasted phrase (B), will portray primarily the *subject* “quick brown fox”, rehearsing its athletic exploits on more sedate objects, such as the “lazy dog”.

Automated synoptic annotations can be performed on multiple, parallel texts, enabling synchronous comparisons in terms of the knowledge rendered. Evaluation notifications enable the earnest reader to spend less time searching for referential content, and devote more time to the actual text reading, its comprehension, and the subsequent knowledge application effort, if any.

Conclusion and Recommendations

These machine-generated synopses should be precise, foolproof, and substantiate the inspected piece of literature for usefulness, value, and currency. It should afford seamless analogies with parallel literatures, meaning other text which cover the same topics from other authors, or even different editions of the same text.

The key significance of this research is that implementation is synchronous and fully automated, *prompting* the user with the optimal, machine-endorsed, choice of reference text on demand.

References

Oxford House Language School. (February 2022). How to use Articles in English? Oxford House Language Courses. [Online]. Available: <https://oxfordhousebcn.com/en/how-to-use-articles-a-an-the-in-english/>

Grammarly Inc. (2023). What are Conjunctions? Definition and Examples. Grammarly. [Online]. Available: <https://www.grammarly.com/blog/conjunctions/>

Montanar. (November 2007). Introduction to Information Theory. Stanford University Press. [Online]. Available: <https://web.stanford.edu/~montanar/RESEARCH/BOOK/partA.pdf>

Soil erosion hazard zonation mapping using gis-based rusle model, a case study from kegalle district

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Abstract

This research integrates the revised universal soil loss equation. Modeling erosion potential with a geographic information system for soil conservation planning from Kegalle District in Sri Lanka. The topography, recorded rainfall patterns and soil variations of Kegalle district are characterized here. These unique climatic and topographic features required a modification of the standard RUSLE factors and their derivatives. The resulting RUSLE GIS model provides a robust soil conservation tool that is easily transferable and accessible to other land managers in similar environments. The changes in agriculture and land use in Kegalle district of Sri Lanka, as well as the rainfall and the nature of the land, can be assumed that the damage in the future will be high. Soil erosion in this region results in high rates of sediment loading in waterways. A number of years ago, there was no reliable or suitable means of mapping or modeling such soil erosion. This recent increase in reliability and resolution has made remote sensing techniques represent significantly improved tools that can be applied to both change and model watershed-scale soil erosion modeling techniques. The revised universal soil loss equation (RUSLE) has not yet been derived for any district in Sri Lanka. Soil loss is high and extreme in the high mountain tops of Kegalle district and the nature of soil erosion is significant in the wet and dry mountainous areas. It can be revealed by the maps mentioned here that it is changing.

Key words: *Kegalle, RUSLE Model, Soil Erosion, Sri Lanka*

Introduction

Soil erosion is a natural process that happens when the top layer of soil is removed by wind or water. It is an important issue because it can lead to the loss of fertile soil, making it difficult for plants to grow. Soil erosion is often caused by human activities such as deforestation, improper farming practices, and construction. The Kegalle District is an area in Sri Lanka that is known for its diverse landscapes, including forests, agricultural lands, and human settlements. Unfortunately, these areas are vulnerable to soil erosion due to various human activities and the region's climate. To understand the extent of soil erosion in the Kegalle District and find ways to prevent it, researchers have developed a model called the Revised Universal Soil Loss Equation (RUSLE). The soil erosion is highlighted as a significant issue with adverse impacts on people's quality of life, agricultural activities, and the occurrence of natural disasters. Notably, in several districts of Sri Lanka with high rainfall, there is a concurrent threat of landslides. Landslides and soil erosion share common processes, where soil particles fall, roll, slide, and flow. To address this concern, it is crucial to assess the risk of soil erosion in various regions of Sri Lanka and implement appropriate conservation measures and land use changes to mitigate further soil loss (Jayasekara, 2018).

Problem Statement

Soil erosion in Sri Lanka has become a severe environmental and socio-economic problem. It is initiated by irregular and unsafe human activities, but ultimate results of which are silt depositing in hydropower generating reservoirs, lowering of land productivity and silt depositing in natural water ways and irrigation tanks (Ministry of Agriculture.,

2012). In Srilanka GIS-based RUSLE frequently used specially the soil erosion assessment on a river basin scale (Amsalu and Mengaw 2014; Ramesh 2016; Prasannakumar et al., 2012). This kind of research has not been applied for any district. Then the among soil erosion hazard prone district Kegalle hazard percentage is significantly high. 6 districts of Sri Lanka have been designated as soil erosion prone districts. Badulla 36.5% (High erosion hazard), Kandy 32%, Kegalle 38.5%, Nuwara-Eliya 40.7%, Rathnapura 38.7%, and Matale 20.3% (Jayasekara & Kadupitiya, 2018). Most of the river basins located in the Kegalle district rapidly increase the rainfall in Kegalle district.

Objectives

The research process was guided by two main objectives.

- To develop spatial model for soil erosion.
- To develop soil erosion and potential map

Materials and Methods

This chapter aims to conduct a spatial analysis of soil erosion in the Kegalle District using the Revised Universal Soil Loss Equation (RUSLE) model. The Revised Universal Soil Loss Equation (RUSLE) has proven to be a valuable tool in predicting soil erosion rates by considering various factors that influence erosion, including rainfall, slope, soil erodability, and land cover, and land management practices.

This includes data on rain fall, soil type, slope, vegetation cover and land use. This data can be collected through remote sensing and other methods. A soil erosion model is used to calculate soil loss rate. There are number of different soil erosion models available, each of them has

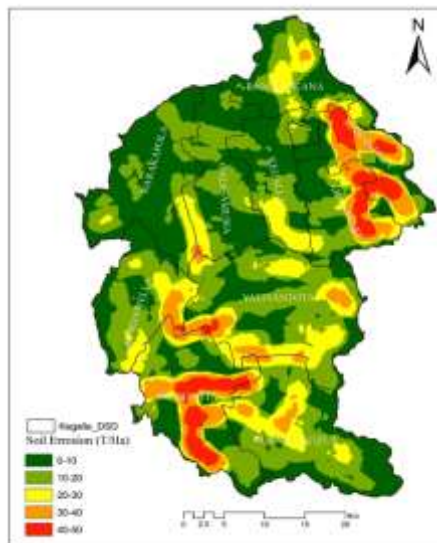
its own strengths and weaknesses. The best model to use well depends on the specific conditions on the study area.

In this study is based on mainly secondary data, Rainfall, land use, soil, and contour were collected in a shape file format from different government department.

Results and Discussion

Kegalle district is high hazard soil erosion zone.it is 38.5%. According to this study the Kegalle district has experienced significant challenges related to soil erosion. The results show significant differences in soil erosion rates across different land cover types and topographic. Identifying factors that contribute to soil erosion is critical for designing effective soil conservation measures. The analysis revealed that precipitation. Intensity, steep slopes and land cover were the main causes of soil erosion in Kegalle district.

Figure: 2 Soil erosion Potential Map in Kegalle District



Source: Author Developed, 2023

Conclusion and Recommendation

The results indicated the spatial distribution of soil erosion across the Kegalle District, highlighting areas prone to high erosion rates. The study also contributes to the existing body of knowledge on soil erosion assessment and modeling, particularly in the context of the Kegalle District. The accuracy of the RUSLE model relies on the quality and availability of input data, and uncertainties may exist in the parameterization process. Arc GIS and RUSLE model are used for all calculations and make map through this study. Overall, this research provides valuable insights into the spatial patterns of soil erosion in the Kegalle District. Implement Erosion Control Measures, Land Use Planning and Zoning, Awareness and Education, Monitoring and Evaluation, Soil Erosion Mitigation Strategies, Collaboration with Local Institutions.

References

- Demirci, A., & Karaburun, A. (2012). Estimation of soil erosion using RUSLE in a GIS framework: a case study in the Buyukcekmece Lake watershed, northwest Turkey. *Environmental Earth Sciences*, 66, 903-913.
- Dissanayake, D. M. S. L. B., Morimoto, T., & Ranagalage, M. (2019). Accessing the soil erosion rate based on RUSLE model for sustainable land use management: A case study of the Kotmale watershed, Sri Lanka. *Modeling Earth Systems and Environment*, 5, 291-306.
- Jayasekara, M. J. P. T. M., & Kadupitiya, H. K. (2018). Mapping of soil erosion hazard zones of Sri Lanka.
- Panditharathne, D. L. D., Abeysingha, N. S., Nirmanee, K. G. S., & Mallawatantri, A. (2019). Application of revised universal soil loss equation (Rusle) model to assess soil erosion in “kalu Ganga” River Basin in Sri Lanka. *Applied and Environmental Soil Science*, 2019, 1-15.
- Perera, K. H. K., Udeshani, W. A. C., Piyathilake, I. D. U. H., Wimalasiri, G. E. M., Kadupitiya, H. K., Udayakumara, E. P. N., & Gunatilake, S. K. (2020).

Assessing soil quality and soil erosion hazards in the Moneragala District, Sri Lanka. *SN Applied Sciences*, 2(12), 2175.

Marambe, B., Silva, P., & Athauda, S. (2017). Agriculture and rural development under central government and provincial council setup in Sri Lanka. *Decentralization and Development of Sri Lanka Within a Unitary State*, 111-145.

Ganasri, B. P., & Ramesh, H. (2016). Assessment of soil erosion by RUSLE model using remote sensing and GIS-A case study of Nethravathi Basin. *Geoscience Frontiers*, 7(6), 953-961.

Amsalu, T., & Mengaw, A. (2014). GIS based soil loss estimation using rusle model: the case of jabi tehinan woreda, ANRS, Ethiopia. *Natural Resources*, 2014.

Manjusree, P., Prasanna Kumar, L., Bhatt, C. M., Rao, G. S., & Bhanumurthy, V. (2012). Optimization of threshold ranges for rapid flood inundation mapping by evaluating backscatter profiles of high incidence angle SAR images. *International Journal of Disaster Risk Science*, 3, 113-122.

Empowering Education in Challenging Times: Unveiling the Virtual Reading Room Initiative at General Sir John Kotelawala Defence University Library Through Open Access Resources

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Abstract

This study explores the successful implementation of Virtual Reading Rooms (VRRs) at Kotelawala Defence University (KDU) Library as a solution to financial constraints in higher education. It focuses on the adoption of Open Access Resources (OAR) to enhance information access. The paper discusses how digital transformation addresses changing user preferences, especially through open science initiatives. The compilation of virtual reading rooms (VRRs) of the KDU are presented as solutions to financial constraints faced by Sri Lankan higher education due pandemic situation. The objectives of the study are to present designing of the VRR and its implementation. The study employs a case study design to explore into KDU Library's experiences in establishing VRRs. The discussion outlines parameters considered, the implementation process, challenges (content selection, technical expertise, OA content longevity), and recommendations for future VRR expansion. In conclusion, this study underscores VRRs' importance in overcoming financial constraints and accommodating diverse information needs. It highlights Open Access as a means to promote knowledge dissemination. The challenges and recommendations provide insights for future library services and information access.

Keywords: *Virtual Reading Rooms, Open Access Resources, higher education, financial constraints, and information access*

Introduction

The economic challenges facing the country have posed significant obstacles to higher education, which include reduced government funding for resources and facilities, affecting libraries, which are essential for teaching, learning, and research. Libraries need help maintaining information access due to budget constraints, aggravated by the digital transformation's impact on user demands and learning modes. The COVID-19 pandemic has led to a shift in teaching and learning behaviours, with students relying more on e-learning platforms, prompting libraries to revert to traditional information delivery methods (Subashini et al., 2022).

Open Science initiatives, such as Open Access Resources (OAR), have gained popularity. OAR aims to remove paywalls and make research and information globally accessible, a concept promoted by IFLA and the Lyon Declaration (<https://www.lyondeclaration.org/>, 2014). This transition to Open Access is influencing the financial commitments of higher educational institutions. Open Access Resources serve as a vital solution for libraries facing financial constraints. They are widely accepted for sustainable development, with a positive global trend toward their adaptation in various forms (Okuonghae & Achugbue, 2022).

Objectives

This paper delves into the analysis of Virtual Reading Rooms, focusing on their role in promoting Open Access concepts within institutional information provision facilities, with a specific emphasis on the KDU (General Sir John Kotelawala Defence University) Library. It explores how the library implemented Virtual Reading Rooms using Open

Access resources to support scholarly research while also aiming to share the experience and concept of these rooms as gateways to global information access. Additionally, the abstract examines how Virtual Reading Rooms can offer practical solutions in the library and information sector, aligning with emerging trends in information access. The KDU Library's approach is poised to serve as a model for the country's library and information sector, presenting a market-oriented and service-oriented solution to enhance information accessibility.

Objectives of the study are;

- Relate the significance and necessity of going for an alternative resource access solution through the Open Access initiative.
- Describe the design created and the implementation process adopted in setting up Virtual Reading Rooms at the KDU library website.
- To explore the challenges faced when implementing the Virtual Reading Rooms and,
- To make suggestions for further expansion of the Virtual Reading Room.

Literary account on OA Initiative

Emerging technologies have revolutionized information access and sharing, leading to numerous open-access initiatives worldwide (Joshi et al.,2012). The Budapest Open Access Movement began in 2001, with the term "open access" initially not being widely accepted. Two approaches, Green OA (self-archiving) and Gold OA (open-access publishing), were developed. Contributions to OA include the Budapest

Open Access Initiative (BOAI) in December 2001, the Berlin Declaration in 2003, the Organization for Economic Cooperation and Development (OECD) Declaration in 2004, and the Brazil Salvador Declaration in 2005. The International Federation of Library Associations (IFLA) declared open access in 2011, and in 2022, an Open Access Working Party was established to promote open access further. The International Federation of Library Associations (IFLA) and the Lyon Declaration emphasize the importance of libraries as intermediaries in providing access to information (<https://www.lyondeclaration.org/>, 2014). According to the UNESCO Continuum of OA, Open scientific publications, Open research data, Open educational resources, Open source Software, and Open hardware formulate the first pillar, 'Open Scientific Knowledge' of the Open Science Continuum (<https://www.unesco.org/en/open-science/about>; https://en.wikipedia.org/wiki/Open_science#/media/File:UNESCO-Open_science-pillars-en.png.). Slowly yet steadily, OA OA-based publishing has been picking up on par with the reputed indexing services. In 2012, almost 200 journals from many countries contributed to the Directory of Open Access Journals (DOAJ). Librarians have found a significant relationship between digital access tools, such as library websites and institutional repositories, and the provision of open educational resources in academic libraries (Nisrim, 2023).

University libraries are increasingly interested in Open Access (OA) due to its ease of access, searchability, and online assistance (Kaur & Chia, 2009). Collaboration with OA movements can help overcome research visibility constraints (Lrhoul & Ameer, 2022). Sinha (2008) emphasized the significance of scholarly journals available through open-access channels. However, challenges such as costs, author unwillingness to

generate content, unclear coordination systems, lack of institutional support, and copyright issues hinder OA adoption (Chisita & Chiparausha, 2019). Knowledge about licenses, such as Creative Commons' "CC BY-NC-ND" and "CC BY" frameworks, is crucial for libraries. These licenses authorize various uses, including reading, printing, downloading, displaying on repositories, translating, and using for data mining purposes. Understanding these licenses is essential for successful OA adoption ((Open Access Essentials for Librarians, 2023).

Materials and Methods

The study examines the institutional experience of senior staff at KDU Library in compiling Virtual Reading Rooms (VRRs) for all faculties using a case study design.

Results and Discussion

Basic parameters considered

VRR has been implemented by considering different parameters.

User needs - The KDU library faces challenges in providing authenticated resources to facilitate technical advancement in the fast-paced digital environment, as user needs become diverse and access to information resources needs to be improved to meet these needs.

Curriculum-based / tailored information provision – with learning contracts assigned by the faculties, students need instant and deadline-based information. Access to data from different mobile devices by users and for the library staff in mediating the requirements is essential for an alternative solution.

Anytime /Anywhere access - VRRs aim to reduce government funding

and costs for research-based information resources, enabling anytime-anywhere access, particularly for Z-generation, and promoting online digital content.

OAR platform adoptions by libraries globally have also been examined to understand the phenomenon as a pre-requirement of the implementation process.

Implementation process

Identifying user Needs: The library gathered user needs from faculty curricula, reading lists, faculty views, and student queries through surveys, interviews, and occasional user queries.

Open Access Initiative: The KDU Library implemented the Open Access model to facilitate knowledge dissemination and collaboration within the academic community, enabling users to access research articles, journals, and other scholarly resources (Joshi et al., 2012).

Categorizing VRRs: VRRs are categorized based on institutional structures, with KDU's VRR structured to provide quick access to information related to their field of study.

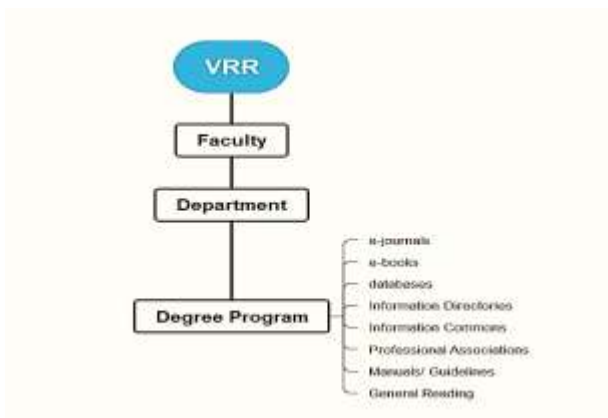


Figure 1: Basic structure of the VRR

Curating Resources: Virtual Reading Room (OAR) includes databases, scientific presentations, video material, podcasts, discussion forums, e-journals, e-books, reference materials, media channels, primary evidence, guidelines, procedures, manuals, and learning supportive tools. OA license framework has been considered when selecting the resources.

Technical Infrastructure: The university and library have implemented a robust technical infrastructure for seamless VRR access, ensuring device compatibility, regular updates, and proper staff training.

Training and promotion: The library provided training and promotion for VRRs, assisting staff and students through demonstrations, coordinating faculty liaison librarians, and promoting VRR content through emails, awareness sessions, and discussions.

Challenges in the implementation of VRR

Selection of content: Selecting VRR-linked content requires consideration of authority, accuracy, updating status, relevancy, and license policies. A solid content management system fulfills user information needs with quality OARs.

Technical Expertise: The library invests in qualified IT (Information Technology) workers to design and administer VRRs, diagnosing technical difficulties and ensuring smooth system operation through training and specialist hiring.

Lifetime of the OA contents: It is observed that the lifetime of the OARs is not stable, and some content may terminate its OA provision. Thus, it is required to monitor the VRR content frequently to ensure the OA provision is still available.

Continuous usage: The Library should implement a strategic strategy for continuous VRR usage, integrating it with teaching, learning, and research activities through workshops, training sessions, promotional materials, and social media engagement.

Suggestions for future expansion of VRR

The Virtual Reading Rooms (VRR) are designed for user-centric use, focusing on intuitive design, user-friendly interfaces, and device adaptability. They aim to improve efficiency and productivity by incorporating advanced search functionalities, learning guides, and quality information evaluation. Policy documents should be developed to maintain format and content standards, and a mechanism for user feedback should be implemented to enhance the VRR's quality.

Conclusion and Recommendations

To address the financial restrictions, user needs, and digital transmission through OARs, the Virtual Reading Room was implemented by the Kotelawala Defence University Library. It enabled access to a vast range of OARs through virtual platforms that cater to the information needs of the staff and students at the university. The implementation process carried out by different steps and contents is on par with the curriculums of each degree program. Additionally, it caters for the information needs of the military user community, both officers and other rankers. This initiative also supports SDG Goal No.4 for managing Quality Education. OA license frameworks, the lifetime of the OA content, technical expertise, selection of the content and maintaining continuous usage were identified as the challenges in the implementation of VRR. Developing a policy document, adding learning guides, incorporating

classroom activities, establishing mechanisms to obtain user feedback, and enhancing search options are the suggestions for the future development of the VRR.

References

Chisita, C. T., & Chiparausha, B. (2019). Open Access initiatives in Zimbabwe: Case of academic libraries. *Journal of Academic Librarianship*, 45(5), 102047. <https://doi.org/10.1016/j.acalib.2019.102047>

Joshi, A. N., Vatnal, R. M., & Manjunath, G. A. (2012). Open access initiatives: A boon to academic libraries. *Library Philosophy and Practice*, 2012(1), 8–14.

Kaur, K., & Chia, Y. P. (2009). Open Access initiatives in academic libraries: Challenge to the user. *World Library and Information Congress: 75th IFLA (International Federation of Library Associations) General Conference and Council*, May 2014, 1–22.

Lrhoul, H., & Aneur, A. (2022). A Virtual Library for the Maghreb? Opportunities and Challenges of Open Access to Scientific. *Journal of the Information Science*, 21(1), 43–55.

The Lyon Declaration (2023). <https://www.lyondeclaration.org/>, Retrieved August 28, 2023

Nsirim, O. (2023). Digital Access Tools and Provision of Open Educational Resources by Librarians in Academic Libraries in Rivers State. July. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=15162&context=1ibphilprac>

Okuonghae, O., & Achugbue, E. I. (2022). Digital librarianship practice and open access technology used for sustainable development in Nigeria. *Digital Library Perspectives*, 38(3), 318–331. <https://doi.org/10.1108/DLP-01-2021-0007>

Open access essentials for librarians. (2023). Elsevier Connect. <https://www.elsevier.com/connect/library-connect/open-access-essentials-for-librarians>, Retrieved August 20, 2023

Open Science (2023), https://en.wikipedia.org/wiki/Open_science#, Retrieved August 28, 2023

Pinfield, S. (2008). Libraries and open access: The implications of open-access publishing and dissemination for libraries in higher education institutions. In *Digital Convergence-Libraries of the Future* (pp. 119–134). Springer London. https://doi.org/10.1007/978-1-84628-903-3_10

Sinha, M. K. (2008). Open Access, Open Source Archives, and Open Libraries Initiatives for Universal Access to Knowledge and Information: An Overview of Indian Initiatives. 6th Convention PLANNER - 2008, November 2008, pp. 305–319. <http://ir.inflibnet.ac.in/handle/1944/1142>

Subashini, N., Udayanga, L., De Silva, L. H. N., Edirisinghe, J. C., & Nafla, M. N. (2022). Undergraduate perceptions on transitioning into E-learning for continuation of higher education during the COVID pandemic in a developing country: a cross-sectional study from Sri Lanka. *BMC Medical Education*, 22(1). <https://doi.org/10.1186/s12909-022-03586-2>

UNESCO Recommendation on Open Science (2023), <https://www.unesco.org/en/open-science/about>, Retrieved August 28, 2023

Usage of Kelaniya University Digital Repository contents by the undergraduates: a case study based on Department of Library and Information Science, University of Kelaniya.

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Abstract

Digital libraries can be introduced as a gateway to easily access information needed in the quest for knowledge. Everyone can access digital library using computer networks. Since the turn of the twenty-first century, there has been a phenomenal increase in the number of digital libraries and repositories the world over. This library concept is famous in the world therefore every University and education institution should have a digital library and many intuitions maintain them. However, students face many challenges when finding information in the covid 19 situation. This paper provides an overview of awareness of the student's usage of their digital e-repository and services conducted by the library of University of Kelaniya. The main objectives of the study were to identify usage of e-repository, to examine services, to offer under digital repository and to study problems in using digital repository. The sample of the study was 108 students of the Department of Library and Information Science, University of Kelaniya (DLIS). A case study research approach was used for this study purpose. Primary data was collected by administering an online questionnaire circulated among the DLIS students. The study found that Research has revealed that the readers' understanding of the use of the digital repository of the University of Kelaniya is minimal, the tendency towards the traditional library rather than the use of a digital repository, it has been identified that there are connectivity issues as well as device issues that arise when using digital repository and that the for a significant amount of time each day. However, that retrieving from a digital from a digital repository is easy

for rrader and provides a successful service and many readers found that they had problems accessing the digital repository of the University of Kelaniya.

Keyword: *Digital Repository, University of Kelaniya, Department of Library and Information Science, Digital Library, E-repository*

Introduction

“Digital libraries are an important part of modern information management, along with the development and extensive application of information technologies and networks, digital libraries are the booming development in the world.” (Zhou, 2005) The digital content may be stored locally or accessed remotely via computer networks. A digital library is a type of information revival system. The concept of the digital library is diffused with different people meaning different things, as well as various phrases such as digital repositories, digital archives, and institutional repositories; institutional archives etc. appearing in the literature.

Institutional repository is a new method for capturing, collecting, managing, disseminating, and preserving scholarly works created in digital form by the constituent members of an institution. For the present study, the term ‘digital libraries and repositories’ include digital collections, institutional repositories and digital archives developed using the digital library and IR software packages. (Chang,2003)

Most libraries and institutions are closed for Covid 19 pandemic; therefore, not every learner could find information. The Library of the University of Kelaniya, Sri Lanka has a Digital library, which is called E-repository. It is open access for university internal students.

Currently, many Universities maintain a digital library or digital repository. However, the students face many challenges when finding

sources of information in the Covid 19 situation. Even though the Kelaniya University library maintains a digital repository, it is much beneficial to study the use of this repository by the users specially the student groups. This study was conducted based on the following objectives.

- To examine services to offer under digital repository
- To study problems in using the digital repository

Materials and Methods

A case study method was used for the study. Students currently offering BA honors in Library and Information Science in 1st year, 2nd year and 3rd year at the Department of Library and Information Science were the sample of this study. Accordingly, a finite sample totaling 108 students were used for collecting data by administering an online questionnaire. The questionnaire was the principal data collection instrument. The percentage of the respondents is 88%. The data were analyzed by using frequency counts and simple percentages.

Results and Discussion

Use of the digital repository of the University of Kelaniya

This study examined the extent to which digital repositories at the University of Kelaniya are used by users. Accordingly, 94.3% of the respondents revealed that they use the digital repository of the University of Kelaniya. This graph (fig.1) below demonstrates the data.

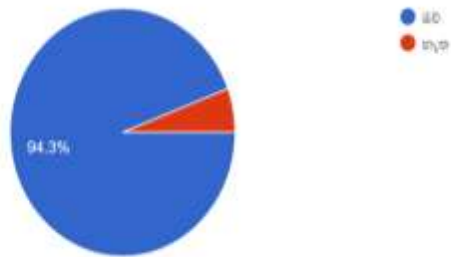


Figure 1: Orientation of users' digital repository

The chart below shows how successful the use of digital repositories is, especially in the traditional library. Accordingly, the majority stated that the digital libraries were more successful in obtaining information than the traditional library information service. That percentage is 73.3%.

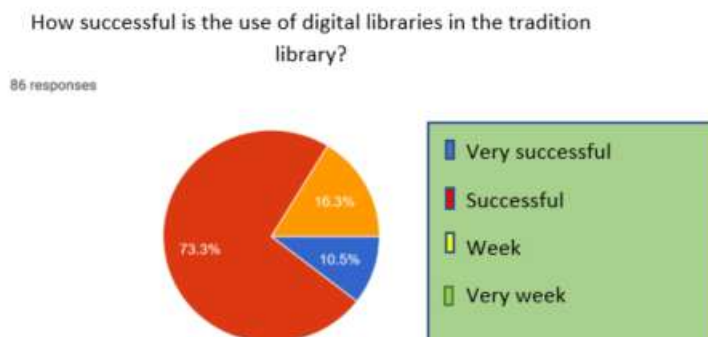


Figure 2: Use of publication in the digital repository

The study examined the nature of the publications and reading materials reserved for the digital repository service. The most widely used sources of publication in the collection of this digital repository is the periodicals. Following chart confirmed that the percentage is 43%.

What are the publications used in the digital repository of the University of Kelaniya?

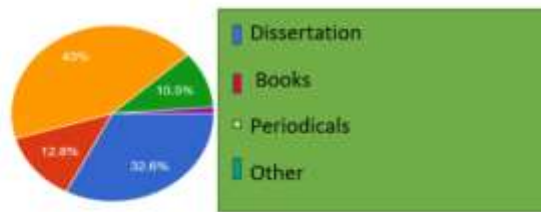


Figure 3: Evaluation of the service of the digital repository

This graph shows the study of whether the service provided by the digital repository of the University of Kelaniya is satisfactory. The majority said the service was a success. It is 72.1% as a percentage.

Are you satisfied with the university of Kelaniya

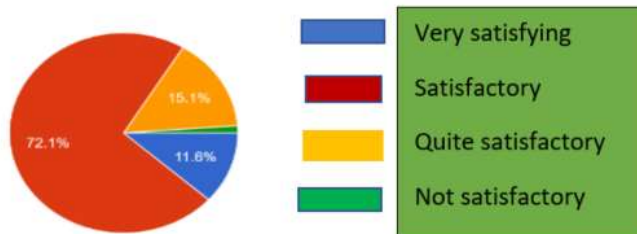


Figure 04 Digital library Services of Kelaniya university

- Research has revealed that readers' understanding of the use of the digital repository of the University of Kelaniya is minimal.
- The tendency towards the traditional library rather than the use of a digital repository.
- It has been identified that there are connectivity issues as well as device issues that arise when using the digital repository.

- The digital repository is used to retrieve information for a significant amount of time each day.
- However, research has shown that retrieving information from a digital repository is easy for readers and provides a successful service.
- Many readers found that they had problems accessing the digital repository of the University of Kelaniya.

Discussion and Conclusion

This study conducted on how the contents of the Digital Library of the University of Kelaniya are being used by undergraduates. The sample for this research was 108 students pursuing a Bachelors' Honors Degree in Library and Information Science from the University of Kelaniya. Eighty-eight percent of all students responded to this research. The total number of students is 12% from first-year students, 34% from second-year students and 52.9% from third-year students studying for a Bachelor of Arts degree in Library and Information Science. 87.4% of the students are female and 12.6% are male. Out of the total number of students who responded, 2.3% are aware that the University of Kelaniya has a digital library. Of these, 94.3% have used the digital library and 5.7% have not used the digital library. 76.1% of the subjects used mobile phones and 22.7% used computers at the University of Kelaniya Digital Library. 73.3% of subordinates indicated that the digital library was more effective in obtaining information in stock than the traditional library, with 16.3% of the total responding against it. 10.5% of the total volume showed that the digital library was more successful in obtaining information than a traditional library.

72.1% said that they are happy with the digital library service at the University of Kelaniya, 11.6% are very happy with the digital library service at the University of Kelaniya, 15.1% are a little satisfied with the digital library service and 1.2% show that they are unhappy with the digital library service. Only 12% of the people have identified the digital library of the University of Kelaniya as a digital library. 86.7% identified as a digital repository. Only 1.3% identify it as a scholar bank. Considering the above, it is evident that the knowledge of the undergraduates regarding the use of the Digital Library of the University of Kelaniya is minimal. This shows that undergraduates prefer to use a traditional library rather than a digital library. In this research, undergraduates were asked about the problems they face in using digital libraries at the University of Kelaniya and identified the problem of signals and devices as the main problems. Undergraduates to gain access to digital libraries often use mobile phones. Undergraduates of the University of Kelaniya spend a significant amount of time per day using the digital library.

Conclusion and Recommendations

- The library should start user orientation programs for the digital repository.
- Presenting a guide on how to use a digital repository
- More practical sessions should be given as demonstrations on how to use digital repositories specially the students at their first year in the University of Kelaniya during they learn in classrooms or in online classes.

References

Patrick Mapulanga. (2013). Digitising library resources and building digital repositories in the University of Malawi Libraries. Retrieved from:

<https://www.emerald.com/insight/content/doi/10.1108/EL-02-2012-0019/full/html>

PaulAlonso Gaona-García , David Martin-Moncunill , Carlos Enrique Montenegro-Marin .(2017). Retrieved from:

<https://www.emerald.com/insight/content/doi/10.1108/EL-03-2015-0046/full/html>

Raj Kishor Kampa, Nihar Kanta patra (2020) Determining the factors influencing the level of aware and usage of open source digital repository software by academic libraiains in India. Retrviwed from: <https://www.emerald.com/insight/content/doi/10.1108/DLP-05-2020-0042/full/html>

Rekha Mittal, G, Mahesh Digital libraries, and repositories in India: an evaluative study. Retrieved from: <https://www.emerald.com/insight/content/doi/10.1108/00330330810892695/full/html> 2008

Sumeer Gul, shzia Bashir, Ahamand Ganaie (2020). Evaluation of institutional repositories of South Asia. Retrieved from: <https://www.emerald.com/insight/content/doi/10.1108/OIR-03-2019-0087/full/html>

Promotion of speaking skills in language classes: a strategy tried out in the Department of Library and Information Science, University of Kelaniya, and tested at the Institute of Human Resource Advancement (IHRA), of University of Colombo, Sri Lanka

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Abstract

The objective of this presentation is to state briefly a solution the investigator identified through a research for a complicated pedagogical issue evident in English L2 classes in Sri Lanka. Students' reluctance to take part in oral activities done in these classes is an impediment that obstructs above speech activities. Language teachers in general define this as a result of students' low grammar proficiency. Some attribute the problem, to students' indifference towards English speech. Yet, the above research identified lack of confidence on the part of students to speak English through fear of errors and vindictive peer reaction as most threatening drawbacks that hinder speech, scoring the highest mean values: 2-62025316 and 2.6, respectively. Grammar related difficulties turned out to be less relevant. Apart from questionnaire No 1, on the basis of which the above facts were gathered, two other questionnaires were administered. The most important information solicited from questionnaire No 2 administered to respondents domiciled abroad was, examining whether English Language errors were ridiculed in those territories. None of the countries was afflicted with that issue, according to data. Third questionnaire given to 18 second language teachers inquired whether error phobia and vindictive peer reaction impeded work in their classes. examined, except English experienced error phobia and vindictive peer reaction from the point of view of the teachers consulted. As was evident from above data fear of English errors was a phenomenon specific to Sri Lanka

As such instead of seeking solutions to that issue from foreign countries where the issue was non-existent, finding a remedy for it locally was felt to be a prudent step. Initial steps necessary in that connection were: proving the hollowness of error phobia related to English and also convincing the students that error occurrence is an inevitable phase during language mastery; not necessarily in respect of second languages but with regard to first languages as well. Major task out of these two being the first one, above research focused more attention on that aspect and in view of that this presentation predominantly discusses data related to that task.

Keywords: *Applied Linguistics, Language errors, Peer reaction, Spoken English, Stigma, Syntax*

Introduction

All four segments of a Second Language are difficult for mastery. Yet in respect of English, the component that poses the most number of impediments is speech due primarily to a psychological factor. Technical issues emerging often as a result of language discrepancies mislead the learner further, making speech more arduous. A Sinhala learner can inquire about both actions and states using a single syntactic form. Therefore, he can ask: “Does the bus stop here?” to inquire about an action. He tends to use the same pattern: “Does the bus full?” to check a state related to the bus. This is responsible for the relatively simple grammar format; namely in flexional ending pattern Sinhala learners use to formulate interrogatives. There are numerous other linguistic drawbacks that disorient Sinhala learners mastering English. The limited time available for one to respond to an oral question too makes speech still difficult. This however is not a major problem to L1 learners mastering English and other learners trying to acquire languages other than English for they tend to use whatever language they have at their

disposal to put across their message. Second language learners of English remain silent if they cannot speak perfect English because of the stigma attached to erroneous English. People proficient in English are considered as an educated, wealthy, intelligent and socially powerful set of beings in Sri Lanka. Yet to claim this status one's English should be perfectly accurate. Proficiency levels below this norm are treated as erroneous English and positive qualities associated with English proficiency are denied to those who use substandard English that abounds with errors, reducing them to virtual nonentities in society. Speech being the language skill where the learner is most susceptible to make errors, L2 learners of English refrain from speaking English to avoid the stigma attached to errors in Sri Lanka.

Problem Statement

Speaking ability is specifically important to library science undergraduates. To make course related oral presentations in English they need speech. First-hand information related to the discipline – a vital segment woven into the library science degree syllabus - has to be gleaned from both state and private institutions. To deal with the latter, English is a must. On completion of the degree, these students have to seek a career in the open job market that adopts varying recruitment procedures. Though the state aspires to enroll candidates having academic excellence, the private sector which attaches relatively less importance to this aspect prefers candidates fluent in English. Although it is possible to gain writing ability through sheer perseverance, that is not a feasible strategy for speech acquisition. Hence taking part in oral activities is an indispensable language function necessary for library science students. The fear of English errors is a severe drawback, which

jeopardizes that task.

Objectives

The above facts prove that the fear of English errors, which is an outcome of the uncalled-for reverence Sri Lankans attach to English as the main cause of the research problem. The aim of this investigation, therefore, was to prove that the exalted position English occupies in Sri Lanka is a result of a series of events – both natural and engineered – related to Colonial era.

Materials and Methods

The issue at hand being one predominantly psychological in character, data needed for the study had to be gathered indirectly. The research tools used as such were, mainly: questionnaires, structured interviews, classroom observations, focus group discussions.

Research site

IHRA, Classes at the University of Colombo

Population: 592 students

Sample size: 114 students

Results and Discussion

Data collected from questionnaire one, two and three were examined thoroughly as they were related to the issue at hand directly. The first one was administered to students, requesting them to select the most burdensome causes that impeded speech. Though conventional teachers argued poor grammar knowledge as the main cause of the issue, it turned out to be a less important concern. The lack of confidence to speak

English and vindictive peer group reaction emerged as the most threatening impediments scoring the highest mean values, namely 2.62025316 and 2.6, respectively.

Table 1-Mean values applicable to the items examined

Question	No of Respondents	Total Marks	Mean	St. Dev.	Rank (According to Means)
1. Unable to frame questions necessary for communication (Q1)	70	174	2.48571429	1.05211158	4
2. Difficult to select the appropriate grammar patterns Needed for speech (Q2)	85	220	2.58823529	1.1711645	3
3. Can't recall grammar vocabulary quickly to maintain the speed needed for speech (Q3)	103	244	2.36893204	1.05195418	5
4. Pronunciation not satisfactory (Q4)	57	133	2.33333333	1.01451455	6
5. Don't have confidence to speak (Q5)	79	207	2.62025316	1.0943329	1

6. Fear that others will misinterpret efforts to speak English as a sign of exhibitionism (Q6)	70	182	2.6	1.26942057	2
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Questionnaire No. 2 given to respondents domiciled in 50 foreign countries revealed English language as being a linguistic apparatus that occupied varying levels of importance in their territories.

Most crucial data solicited through it was checking whether English errors were ridiculed in their countries. There was not a single country, which experienced that phenomenon. Questionnaire No. 3 administered to 18 Second Language teachers in Sri Lanka proved that it was only in English L2 class that students avoided speech through fear. Vindictive peer group reaction too was totally absent in other L2 classes. As could be seen from the above data, the fear of English errors was the main cause that prevented students from taking part in oral work done in class. As dispelling this fear was thought to be a prerequisite needed to encourage speech, the investigator examined the circumstances that helped elevate English to its esteemed position.

The British government's reluctance to impart English education to all and sundry in the country, conventional elites' desire to have the monopoly of English education to themselves, vital social changes that took place during colonial era turned out to be the hindrances that discourage speech in English L2 classes. (Details of these developments are annexed to this paper).

The constant exposure of students to the above facts helped soften their ingrained fear of English errors to a certain extent. However, they needed more incentives to commence speech. The investigator presented specially drawn ambiguous illustrations to enable students to interpret those diversely. In view of the ambiguity, none of the interpretations produced was incongruent with the pictures. Students were also encouraged to focus more attention to meaning applicable to the visuals without struggling to maintain grammar accuracy. Although the technique did not bring about a startling change in the L2 class, it instilled some confidence in students to speak English.

Conclusion and Recommendations

The perusal of L2 related research alone was found to be inadequate. The examination of L1 learning tactics, particularly those related to “conducive emotional climate” inherent to L1 acquisition helped the investigator to plan strategies to overcome the error phobia and promote speech. Therefore, the discovery of more innovative strategies is a goal worth achieving in this regard.

References

- De Silva, C.R. (1953). Ceylon under the British occupation Colombo Apothecaries Ltd. Colombo
- De Silva, K.M. (2005). A history of Sri Lanka.Colombo: Vijitha Yapa publications.
- Fernando, S. (1986). E.L.T.U. papers. Colombo: University of Colombo.
- Goonathilleke, DCRA. (2005). Sri Lankan English Literature and Sri Lankan People. Colombo: Vijitha Yapa publications.
- Gunasekara, M. (2005). Post-colonial identity of Sri Lanka. Colombo: English Katha Publications.
- Hutchinson, T. and Waters, A. (1987). English for specific purposes. Cambridge: Cambridge University Press
- Jack.C.R. (1974). Error analysis. London: Longman Group publications
- Jayasuriya, J. E. (1969). Education in Ceylon 1939-1968. Colombo: Associated Educational Publications.
- Littlewood, W.T. (1984). Foreign and second language learning. Cambridge: Cambridge University Press
- Silva, C.R. (1997). Sri Lanka, A history. New Delhi: Vikas Publishing House.
- Sumathipala, K.H.M. (1968). History of education of Ceylon. Colombo: Thisara Publishers.

Academic Library Outreach: Relevance of Information Literacy in e-environment for Physical Fitness Trainers in Kurunegala District

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Abstract

The study evaluates the impact of Wayamba University's Outreach Program on physical fitness and information literacy for Kurunegala District Physical Fitness Trainers. The program, addressing the underserved target group, emphasises the importance of information literacy in an online environment for trainers. Survey results from 103 participants reveal positive perceptions, with 79.5% female and 20.5% male respondents. Notably, 83.65% of volunteers found the program significantly beneficial. Participants expressed challenges in accessing reliable information, indicating a need for guidance in information search strategies. The study concludes that academic libraries play a vital role in community development by enhancing educational attainment and fostering information literacy. It emphasises the necessity of information literacy to maximise traditional and electronic resources, thereby improving access to electronic information sources and breaking down barriers. The findings underscore the crucial role of information literacy in a digital era for societal well-being.

Keywords: *Academic libraries, Outreach services, Information literacy, Physical Fitness, Training, e-information*

Introduction

Any programme or activity such as customised library instructions that is designed “to meet the information needs of an underserved inadequately served target group” is referred to as Library Outreach (OR) (Rothenberg and Thomas, 2000). University libraries have

developed OR programmes which aim to increase the general public level of education and skills that are considered essential for economic prosperity and as a key instrument in building a more equitable society (Putnam, 2000). People are observed to be more inclined these days to use information from the internet to fill in knowledge groups. Studying e-information makes it evident that Information Literacy (IL) skills are required for searching it (Mishra and Mishra, 2010). Diverse media are used by Athletes to enhance their performance, particularly to preserve their physical health (Iortimah, and Tyoakaa, 2020).

The man's illness has been caused by this exact development. In this context, academic libraries bear a great deal of responsibility for preserving individual health and fostering a healthy society. As a result, community-based academic libraries run a number of initiatives to help people find the information they need and contribute to community development and national development (Chukwudo, Abubakar, Adeoye, Abubakar and Sule, 2023). Consequently, the academic library is dedicated to providing accurate information in an appropriate manner. In response to community needs, the library at Wayamba University of Sri Lanka regularly organizes a range of outreach programs to raise awareness of these issues among the user communities in the community. These initiatives focus on effectively utilizing the internet to foster the growth of a healthy society. As a result, the Physical Fitness Instructors ought to be well-versed in information and computer literacy. The program included hands-on practical training, videos, images, and guides to other online resources and tools based on events (sports events, athletes or trainees pursuing performance development, workouts, diet plans, exercises, injuries, first aid, fitness-related measurements, etc.).

Objectives

The purpose of the study is to evaluate the Wayamba University Outreach program on the importance of physical fitness and information literacy in an online environment for Kurunegala District Physical Fitness Trainers. Identifying the value of information literacy in an online environment and investigating the difficulties associated with using digital information tools for physical fitness training were specific objectives of the study.

Materials and Methods

The research employed a survey method and a self-structured questionnaire used to collect data. The questionnaires were distributed among 103 trainers selected from the Divisional Secretariat areas (30) in the Kurunagala District in the 2021 physical fitness project, which was conducted in December 2021. The data collected through the closed questions of the questionnaire were analysed using the descriptive-analytical method.

Results and Discussion

Table 1: Background Information of the Participants

Category of the Participants	No. of participants	No. of respondents	Percentage of respondents
Sports Officers	30	25	24%
Youth Service Officers	30	23	22%
Active Young leaders (Volunteers) from Sports Societies and Youth Societies	60	55	54%
Total	120	103	100
(n=103)			

Table 1 provides the breakdown of the participants' details. Out of 120 Physical Fitness Trainers, 103 responded with a response rate of 85% and out of them 79.5% were female and 20.5% were male.

Table 2: Obtain an opportunity to gain knowledge about ICT tools and search strategies for web information

Category of the Participants	Strongly Agreed	Agreed	Disagreed	Strongly Disagreed	Total
Sports Officers	05 (20%)	13 (52%)	07 (28%)	00	25
Youth Service Officers	06 (26.08%)	12 (52.17%)	05 (21.73%)	00	23
Active Young leaders (Volunteers) from Sports Societies and Youth Societies	12 (21.84%)	34 (61.81%)	09 (16.39%)	00	55
Total	23 (22.33%)	59 (57.28%)	21 (20.38%)	00	103
(n=103)					

Table 2 shows the participants' opinions of the session: of the 79.61% who took part, sports officers (72%), youth service officers (78.25%), and volunteers (83.65%) thought it had a major positive impact on their ability to find information online. It has been made apparent that this session provided the participants with an opportunity to learn about ICT tools and web information search strategies.

Furthermore, during the concluding open discussion, numerous participants mentioned that even though they use ICT devices for personal purposes, they encounter difficulties in obtaining trustworthy information. This includes access to pertinent videos, diet plans, record management, and other resources. As a result, they require assistance in learning how to access or search for accurate information in the electronic environment. Additionally, it was found that the participants'

common challenges during the online training process included a lack of information literacy (IL) and an ignorance of search strategies as well as linguistic barriers.

Conclusion & Recommendations

The findings of the study indicate that university academic libraries created outreach programs to raise students' educational attainment and recognize community skills as social capital.

The study's discussion led to the conclusion that, in order to maximize the use of information resources both traditional and electronic and to lower barriers to improved access to electronic information sources, information literacy (IL) is crucial.

References

Influence of Information and Communication Technology (ICT) in Sports and Exercise among University Students in Nigeria Donatus U. Chukwudo1, N.O. Abubakar2* , S. A. Adeoye3 , M. N. Abubakar2 , T. O. Sule2. International Journal of Human Kinetics and Health Education (IJoKHE). Vol 8 No.1, 2023, pp 63-72. file:///C:/Users/Admin/Downloads/IJoKHE-2023-vol+8-006+Chukwudo+et+al.+2023.pdf

Iortimah, Charls Gabriel and Tyoakaa, A.A.(2020). The role of Information and Communication Technology (ICT) in sports and exercise psychology development. Journal of Sports Psychology Association of Nigeria, Vol 13, (2020), pp 89 – 95

Mishra1, R. N. and Mishra2, C. (2010). Relevance of Information Literacy in Digital Environment. Journal of Emerging Trends in Computing and Information Sciences. Vol.1 No1, 2010

Putnam R.D. 2000. Bowling Alone: The Collapse and Revival of American Community. New York: Simon & Schuster. <https://library.oapen.org/bitstream/handle/20.500.12657/22257/1007916.pdf?sequence=1#page=42> between people and groups; the trust at which these ties are characterized; and resources or benefits that are obtained and given as a result of social ties and social participation.

An Investigative Study of Historical Reference Sources Used in Ancient Monastic Libraries in Sri Lanka

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Abstract

This study delved into the historical reference sources housed in ancient monastic libraries of Sri Lanka, uncovering their pivotal role in safeguarding and conveying a deep understanding of Sri Lankan civilization. Employing an exploratory approach, data analyzed both primary and secondary sources, focusing on the period from the Anuradhapura to the Dambadeni era. Findings revealed the importance of traditional reference sources like Atthakatha, Tika, Tippani, Getapada, Sanna, Pitapoth, and Glossaries. These include various commentaries on Buddhist scriptures and specialized glossaries, which are instrumental in interpreting Buddhist teachings and philosophical concepts. It concluded that these resources are indispensable for scholars and practitioners of Buddhism, playing a crucial role in maintaining the continuity and accessibility of Sri Lanka's rich historical and cultural knowledge.

Keywords: *ancient monastic libraries, cultural knowledge, historical reference sources, reference sources.*

Introduction

A reference source is a source that should be read only to get unique information but should not be read continuously. It is a print or electronic source designed by the arrangement and treatment of its subject matter to be consulted for definite items of information rather than to be read consecutively. Some examples are Glossaries, Bibliographies, Almanacs, Directories, Dictionaries, Encyclopedias, Handbooks (Manuals), Indexes and abstracts, Yearbooks, Statistical sources, Biographies, Geographical sources (Gazetteers, Guidebooks,

Maps, Atlases, Globes), Government Publications (Katz, William A. 1992). Reference sources are fundamental in providing reliable and comprehensive information to aid research and understanding.

The historical context of Sri Lanka reveals the significance of monastic libraries as centers of learning and repositories of knowledge. Monastic libraries played a crucial role in preserving and disseminating sacred texts, historical chronicles, and other important documents related to Sri Lankan civilization. Ancient libraries in Sri Lanka have preserved additional reference sources that exhibit distinct characteristics and offer unique insights. This research involves a systematic examination of various types of historical reference sources used in monastic libraries of Sri Lanka.

Objectives

This study aims to investigate the historical reference sources used in ancient monastic libraries in Sri Lanka. The monastic libraries of Sri Lanka hold a wealth of historical and cultural information that has been preserved and passed down through the generations. Understanding the reference sources that were available in these libraries and how they contributed to the understanding of Sri Lankan history is essential for comprehending the rich cultural heritage of the country.

Materials and Methods

The research methodology for this study is exploratory, combining both primary and secondary sources. As the sample of this study, only the classical language literary information sources used in the monastic libraries belonging to the period from the ancient period to the early medieval period or from the Anuradhapura period to the Dambadeni

period were investigated. Primary sources will include ancient manuscripts and documents that have been preserved in ancient monastic libraries. Secondary sources will encompass scholarly articles, books, and publications that discuss the topic. By analyzing and correlating primary and secondary sources, the study aims to provide a comprehensive understanding of the historical reference sources used in ancient monastic libraries of Sri Lanka. This study was limited only to Sinhala, Pali from the Anuradhapura era to the Dambadeni era.

Results and Discussion

It can be identified that there are some traditional reference sources in ancient monastic libraries in Sri Lanka such as Atthakatha, Tika, Tippani, Getapada, Sanna, Pitapoth, and Glossaries. Commentaries on Buddhist scriptures, known as Atthakathas, and sub-commentaries, known as Tikas, will also be investigated. These commentaries provide insights into the interpretation and understanding of Buddhist teachings during ancient times. In this comprehensive study of ancient monastic libraries in Sri Lanka, spanning from the Anuradhapura to the Dambadeni periods, we unearthed a rich tapestry of historical reference sources, pivotal in understanding the intricate fabric of Sri Lankan civilization and Buddhist teachings. Our exploration revealed an array of traditional reference materials, including Atthakatha (detailed commentaries on Buddhist scriptures), Tika (sub-commentaries elucidating textual meanings), Tippani (glosses offering clarifications), Getapada (verses summarizing complex teachings), Sanna (concise summaries facilitating memorization), Pitapoth (indexes categorizing knowledge), and specialized Glossaries. These sources, preserved with remarkable fidelity in the monastic libraries, offer invaluable insights

into the philosophical underpinnings and cultural heritage of ancient Sri Lanka. They not only illuminate the scholarly and religious practices of the time but also significantly contribute to the continuity and accessibility of a profound historical and cultural legacy for future generations of scholars and practitioners of Buddhism.

The Atthakatha represents a genre of commentaries on Buddhist scriptures, providing detailed explanations and interpretations. Tika refers to annotations or commentaries that elucidate the meaning and implications of specific texts. Timpani are glosses, providing clarifications and supplementary information on important terms and concepts. Getapada is verses or stanzas that summarize complex teachings. Sanna denotes concise summaries of canonical texts, facilitating easy memorization. Among the old Sinhala palm leaf manuscripts, there is a type of book called Pitapoth. It is a type of book written to describe only the difficult words in the content of a major Sinhala literature palm leaf manuscript. They are attached to the outside of the main palm leaf manuscript. Such books are called Pitapath. Pitapath are catalogs or indexes that organize and categorize vast amounts of knowledge. Finally, Glossaries compile definitions and explanations of specialized terms for quick reference.

References

Abesiriwardhana, Ananda. (2012). Sanskrutha, Pali, Prakruta bhashawanhi nighanthu (Kosha) grantha pilibanda adyayanayak. mahacharya jayasiri linkage abhinandana granthaya, 157-180.

Adikaram, E. W. (1946). Early History of Buddhism in Ceylon. Ceylon: Migoda.

Endo, T. (2013). Studies in Pali Commentarial Literature, Hong Kong: Centre for Buddhist Studies.

Pannakitti, H. (2003). PalisahityayeItihasaya. trans. Colombo: S. Godage.

Pannasara himi, Okkampitiye, (1997). Sinhala Wyakhayana Sahithyaya Pilibanda wigrahayak. Manawashasthrapeetha Shasthreeya sangrahaya. Kelaniya Wishwawidyalaya.

Katz, William A. (1992). Introduction to Reference Work. Vol. 1: Basic Information Sources. 6th ed. New York: McGraw-Hill.

Yasassi himi, Okkampitiye (2017). Kosha Sahithyaya Arambhaya Wishayehi bala pe chathurtha padarthayan. pranama, 229-246.

Preserving The Manuscript Heritage for Posterity: An Evaluative Examination of Manuscript Conservation Efforts in Maharashtra, India

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Abstract

The geo-cultural landmass of the Indian subcontinent was the fountainhead of an illustrious civilization that held sway over greater part of the world economically, culturally and intellectually for well over two millennia. This great civilization of the ancient world produced enormous literature on virtually every subject under the sun which was enshrined in manuscripts and transmitted to generations after generations. However, owing subjugation of people of this region by invading cultures for several centuries as well as ushering and transitioning into the new world, the local populace of this region lost interest in preserving their cultural heritage and so, the manuscript wealth in these countries took a bad hit. Several hundreds of thousands of manuscripts were lost to the pilferage and arson of the invading forces as well as ravages of time in the last couple of centuries. Oflate, thankfully, there is a renaissance and ‘waking up’ in these countries about their ‘forgotten heritage’ and the governments, institutions and individuals are taking renewed interest in the preservation of their cultural heritage. The present paper describes a first of its kind research about the conservation activities of the National Mission for Manuscripts (NMM), a government of India initiative and its partner centres in the Indian state of Maharashtra. This study may be replicated to know the current state of affairs of manuscripts in other parts of the world as well.

Keywords: Cultural heritage, manuscript custodianship, maharashtra, manuscript conservation.

Introduction

Just as the stone-monuments and other antiquities, the literary treasure enshrined in manuscripts help us to understand the history and the cultural heritage of a country. India has more manuscript collection than any other country in the world and there is no other world civilization which has produced such a proliferation of hand written literature. Manuscripts are found on a variety of material ranging from the palm leaves (tala-patra), birch bark (bhurja-patra), stones, metals (like tamrapatra) and lastly from 10th century A.D. onwards, on paper.

According to a conservative estimate there are over five million manuscripts in India in various forms and scripts, 60,000 in European countries and 1.5 million in South Asia and Asian countries. Sanskrit manuscripts form 67 per cent of the total number (“National Mission for Manuscripts,” 2002). Of these 5 million manuscripts in India 67% are in Sanskrit and 25% in Indian languages such as Bengali, Hindi, Kannada, Malayalam, Oriya, Pali, Tamil, Telugu, Urdu etc. The rest 8% are of non-Indian languages (Nandi & Palit, 2010). In India, only a small percentage of manuscripts available have been surveyed and catalogued. Catalogues are perhaps available for not more than 20-25% of the manuscript collections in the country (Rani, 2010). It is roughly estimated that over 3.5 million manuscripts are preserved by agencies and 30% of the remaining total manuscripts are stored in temples, Mutts and in private hands (Singh et al., 2010). In 2003, the government of India has set up National Mission for Manuscripts (NMM aka NaMaMi) to locate, document, conserve and digitize the manuscript heritage of India by partnering with local manuscript custodians.

Problem Statement

Evaluative Study of Manuscript Conservation and Digital Preservation Efforts by National Mission for Manuscripts (NMM) and Its Partner Centers in Maharashtra.

Objectives

- To study the present status of conservation and preservation of Indian Cultural Heritage in general and efforts of National Mission for Manuscripts (NMM) in particular.
- To study the availability of manuscripts, type of collection and efforts taken in preservation of heritage collections (Manuscripts) in Maharashtra.
- To ascertain the availability of infrastructure (Building, furniture, equipments, Human resources and budget) for the conservation and digital preservation of heritage collections in NMM centers in Maharashtra.
- To examine traditional as well as modern procedures and practices adopted in conserving the heritage collections (Manuscripts) in NMM centers in Maharashtra.
- To understand the challenges for conservation and digital preservation of heritage collections faced by NMM in general and partner centers particularly in Maharashtra.

Materials and Methods

The data for analysis is collected through questionnaires, and direct interaction with the Heads of the partner centers, interviews and observation. Data is also collected by means of surveying various

official documents published by NMM and its partner centers such as annuals reports, procedure guidelines, and brochures, Websites, etc.

Significant of the Study

Maharashtra, like any other state in the historically and culturally rich nation of India, the state of Maharashtra also produced very rich literature that was preserved in manuscripts, thanks particularly to the rich legacy of saints and seers of this land. Nashik, one of the four sites of *Kumbh Mela* has been a place of pilgrimage for the people across the country thereby becoming home for vast manuscript collection. Owing to the hard work and dedication of stalwarts like Bhandarkar, Rajwade, Apte and others in the late 19th and early 20th centuries several thousand manuscripts were collected and preserved which later became institutional repositories of manuscripts. The National Mission for Manuscripts (NMM) has tied up with 13 such centres having considerable manuscript collection across Maharashtra as Manuscript Resource Centers or Manuscript Conservation Centers. The present research conducted during 2018-21 examined the manuscript collections of these institutions and evaluated their strengths and weaknesses in respect of their objectives, manpower, budget, financial standing, conservation equipment and facilities, facilities for the researchers, organization and technical procedures carried out on the manuscripts such as classification, cataloguing, shelving, publication of catalogues and books, disaster preparedness and future plans, etc. (Author 2022).

Results and Discussion

1. Of the 13 NMM partner centers, only 3 centers (23.07%) are established in the last 25 years. 2 centers (15.38%) have been

established between 25 -50 yrs., 4 centers (30.76%) between 76 -100 yrs., 2 centers (15.38%) between 101-125 yrs., and 1 center each are established between 126 -150 yrs., and 150 - 175 years.

2. It is found that all the NMM partner centers in Maharashtra (100%) acquired their MSS collection through voluntary donation by individuals and sometimes by institutions. Very few centers actually spent money in acquisition.
3. Almost all partner centers suffer from inadequacy of funds. 6 out of 13 centers (46.15%) are operating using their own funds and only 3 centers receive fund from NMM in the capacity of Manuscript Resource/ Conservation Center. 6 centers (46.15%) have received funds from other government agencies in the past. 5 centers (38.46%) rely on the donations received from time to time from the donors. The budgetary allocations of these NMM partner centers range from 2 lakhs per annum to 9 lakhs per annum. 9 out of the 13 centers (69.23%) claim inadequacy of funds and 10 centers maintain that they have not received regular funding from the NMM. 11 centers (84.61%) are located in their own building and 12 centers (92.30%) report that the condition of their building is good. 8 centers (61.53%) point out need for repair of their existing infrastructure. Two centers are located in leased premises.
4. Only 2 centers (15.38%) have 3 trained personnel and 2 (15.38%) other centers have 2 and 3 (23.07%) centers have one trained personnel in manuscript conservation. 11 of the 13 centers (84.61%) point out that their staff members did not receive adequate training in manuscript conservation. 10 out of

13 centers (76.92%) maintain that their staff members do not get exposed to periodic training with regard to preventive and curative procedures and latest trends and developments in conservation of MSS.

5. The primary collection in all the NMM partner centers is of paper MSS. The number of paper MSS possessed by the partner centers vary widely with MJC having least number of MSS (339) and BORI having the highest number (30000). Other centers have MSS between 3000 to 12000 numbers. Apart from paper MSS, almost all the centers (12 out of 13 – 92.30%) have rare books and other antic collections. On an average about 20% MSS bundles in the collection of various centers are found to be incomplete. Subject wise on an average each partner center has about 17 subject heads under which their MSS collection is classified. Most of the MSS primarily belong to the period 1601 AD to 1900AD. Sanskrit and Marathi are the predominant languages with Farsi MSS also found in many partner centers. Devanagari, Modi are the most common scripts found in the MSS. Only 2 of the 13 centers (15.38%) claim to have a written collection development policy.
6. It is observed though every partner center claims a particular figure as the total number of their collection, a close inspection in almost every case revealed disparity in numbers. It is a fact that most of the MSS custodian centers do not have exact number of their MSS collection.
7. Of the thirteen centers, ten centers (76.92%) report their MSS collection to be reasonably in good condition. Two centers

(15.38%) consider their collection to be average in condition and only one center (7.69%) reports its collection to be in bad condition. All the centers (100%) identify aging and environmental factors are the main reason for the deterioration of their MSS collection.

8. 8 centers (61.53%) use steel almirahs for storing their MSS and 4 centers (30.76%) use wooden almirahs. 2 (15.38%) centers are using mobile compact storage system for stacking their MSS collection. 6 centers (46.15%) have showcases to exhibit their MSS collection. 12 out of 13 centers (92.30%) claim adequacy of storage facilities. As regards to equipment and conditions for maintenance of MSS in good conditions, only 2 centers (15.38%) have Air conditioning to control the room temperature and none have humidity control mechanisms in place. 6 centers (46.15%) have fumigation chambers and 12 (92.30%) have fire extinguishers installed. Except for one center none have smoke alarms. While 11 centers (84.61%) have CCTV cameras set up, only 3 centers (23.07%) have thermometers to measure daily temperature variations and 3 centers (23.07%) use pH strips to check acidity of MSS. Only 1 center (7.69%) has hygrometer installed.
9. Seven centers (53.84%) use one or other form of traditional methods of conservation and six centers (46.15%) employ modern methods such as sprinkling of pesticides, use of fumigation chamber and use of naphthalene balls. Five centers (38.46%) have fumigation chambers which are sparingly used. Barring three centers (23.07%), none of the centers have neither

the wherewithal nor the expertise in employing the modern methods of conservation of MSS using chemicals. 12 out of 13 centers (92.30%) wrap their MSS with red/yellow/white cloth to prevent exposure to dust and insects. Of the thirteen custodian centers, only five centers (38.46%) have been practicing conservative practices in their respective centers.

10. Eight out of thirteen custodian institutions (61.53%) have published both descriptive catalogues and books based on their manuscript collection. In all 29 catalogues and 470 books were brought out by the custodian centers.
11. Eleven out of 13 centers (84.61%) have digitized their manuscript collection either partially or completely. However, digital copies of only 4 out of 11 centers have been uploaded either on internet or on intranet.
12. It is disheartening that very few researchers take interest in the MSS. The number of visitors in last 5 years in 8 centers (61.53%) is less than 30 per year even though 6 centers (46.15%) even offer boarding and lodging facilities to the visitors.
13. Seven out of 13 custodian centers (53.84%) have envisioned definite future plans for their institutions.

Conclusion and Recommendations

The above evaluative study throws light about the strengths as well as the shortcomings of various partner centres of NMM in Maharashtra and points at what is desired to be done. All the partner centres of NMM complain of inadequacy of funds and trained manpower. The NMM may chalk out separate budgetary provisions in line with the National

Archives of India for preservation and extend financial support to these partner centers. Instead of making the training voluntary, the NMM should ensure that mandatory periodic training is imparted to all technical staff members of the custodian institutes, particularly the manuscript conservation staff. The centers will have to be encouraged to make the mss content openly available to the researchers. Training is utterly inadequate. Hardly very few staff members of resource centers have any knowledge of preventive conservation, leave alone curative aspects of conservation.

Periodic meeting with all the MCC and MRC Coordinators is to be conducted on a single platform at least once in three months so that NMM officials come to know the practical difficulties faced by various partner centers.

The NMM must publish a hand book with specific guidelines and supply it to partnering agencies containing every detailed dos and don'ts starting from guidelines on surveying, locating, acquiring, accessioning, cataloguing, digitizing, conserving, storing, transporting and plethora of other issues that require professional counseling. The handbook must also contain all the formats, condition reports, proposals, contact details of conservation professionals and experts, other partnering agencies, etc.

Financial discipline must be practiced by all those involved in the noble task of heritage conservation, including the employees of the apex agency. A lot of money is spent on conducting workshops on preventive and curative conservation by the NMM. The trainers, NMM staff spend a lot of money on air travel and luxurious stays during such training programs. The auditing agencies must advise the NMM and its training

partners to practice reasonable austerity in their spending particularly on such spending which does not have direct bearing on the actual act of conservation.

The NMM must tie up with National Information Networks (NIC) or Information and Library Networks (INFLIBNET) center which have huge cloud storage facility used for storing the national repository of theses and dissertations produced in Indian universities. This cloud storage facility is to be used for storing the digitized MSS content.

References

- Kanchi, V. (2022). Manuscript Conservation in Maharashtra. Kaveri Books.
- Nandi, S. G., & Palit, P. K. (Eds.). (2010). Manuscript and Manuscriptology in India.
- National Mission for Manuscripts. (2002). Vihangama The IGNCA Newsletter, IV(July-Aug). <http://ignca.gov.in/national-mission-for-manuscripts/>
- Rani, S. (2010). Manuscript Collections in Indian Public Libraries. In S. G. Nandi & P. K. Palit (Eds.), Manuscript and Manuscriptology in India.
- Singh, R., Kumar, S., & Agarwal, D. (2010). Preservation, Conservation and Digitization of Manuscripts: Problems & Prospects. In S. G. Nandi & P. K. Palit (Eds.), Manuscript and Manuscriptology in India.

Factors Affecting Young Consumers' Online Buying Behavior in Sri Lanka

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Abstract

This study focuses on investigating the factors influencing online purchase intentions among young consumers in Sri Lanka, with a specific emphasis on undergraduates in Faculty of Social Sciences, University of Kelaniya. It examines a range of factors, including product quality, price, trust, convenience, payment methods, security, return policies, after-sale services, firm reputation, and health considerations, to understand their impact on the online shopping behavior of young consumers. The study employed a quantitative research approach and collected data through a questionnaire survey involving 342 young consumers within the Faculty of Social Sciences at the University of Kelaniya. According to previous findings reveal that while price and product quality are important, they are not the dominant factors in the decision-making process for the young consumers in this study. Instead, the study underscores the critical role of building trust between e-commerce providers and consumers in shaping online purchase intentions. In a contemporary world where e-commerce is becoming increasingly integral to the consumer experience, this research provides valuable insights for businesses and policymakers seeking to understand and cater to the evolving demands of young consumers. By bridging the gap between theoretical constructs and real-world behavior, this study contributes to a deeper comprehension of the factors that propel young Sri Lankan undergraduates toward online shopping.

Keywords: Online purchase, Consumer behavior, Young generation, E-Commerce

Introduction

Consumer behavior encompasses the multifaceted decision-making process individuals undertake when acquiring products and services, influenced by personal attributes and external factors. It's a dynamic and complex field, emphasizing not only what people buy but also why and how often. In 1994, the advent of e-commerce via the Internet marked a transformative moment, turning the Internet into a dynamic platform for marketing and transactions. Cheaper Internet access and the growth of Internet Banking services have fueled the rapid expansion of e-commerce, aided by technological advancements and free applications for building e-commerce websites. Recognized brands have embraced online storefronts to reach consumers, catering to the preference for the convenience of online shopping over traditional methods with their associated challenges. The global impact of the COVID-19 pandemic, originating in China in December 2019 (Kumaravel et al. 2020), has been profound, affecting various aspects such as psychology, society, and economics (Bostan et al. 2020). Notably, a significant outcome of the pandemic has been the shift in consumer behavior towards online shopping. This change is driven by factors like the need for social distancing, safety precautions, and adjustments in customer-business interactions. Given the transformation in consumer behavior accelerated by the pandemic, it's crucial to investigate how these changes influence the purchasing decisions of young consumers in Sri Lanka.

Problem Statement

Limited research has delved into the determinants of online buying behavior in Sri Lanka, particularly concerning young consumers and the post-Covid-19 context. The pandemic accelerated the shift toward e-

commerce, resulting in substantial growth in Sri Lanka's e-commerce sector, including the emergence of social commerce on platforms like Facebook. This study seeks to fill this knowledge gap by examining the factors shaping the online purchasing decisions of young consumers in Sri Lanka's evolving market. The findings will offer valuable insights for businesses aiming to adapt to this transformed landscape, contributing both to academic understanding and practical applications in the e-commerce and marketing sectors.

Objectives

The main purpose of this study is to identify the factors affecting young consumers' online buying behavior in Sri Lanka, drawing insights from existing literature. This endeavor seeks to establish a comprehensive framework through which causal relationships can be hypothesized.

Significant of the Study

Existing research extensively explores the factors influencing online purchase intentions across various contexts, a notable research gap exists in examining these dynamics specifically among the young generation within government universities in Sri Lanka. To address this void, the current study gathered data from young generation respondents in Sri Lanka, aiming to provide insights into this unexplored area.

Materials and Methods

The study's population comprises all students currently enrolled in the Faculty of Social Sciences at the University of Kelaniya, totaling approximately 3103 undergraduates. Following Krejcie and Morgan's guidelines, a sample size of 342 was determined for this population,

considering a 95% confidence level. A convenience sampling method was employed to collect data via a questionnaire based on a conceptual framework developed through secondary research. The questionnaire had two sections: one for demographics and another employing a Five-Likert scale to assess variables related to online purchase behavior. This study utilizes quantitative methodology and employs SPSS for data analysis.

Results and Discussion

Correlation Test

Table 1: Correlation Test

Hypothesis	Pearson's Correlation	Sig. (2-tailed)	Results
Product H1	0.639	0.000	Accepted
Price H2	0.623	0.000	Accepted
Trust H3	0.781	0.000	Accepted
Convenience H4	0.645	0.000	Accepted
Payment H5	0.554	0.000	Accepted
Security H6	0.734	0.000	Accepted
Return Policy H7	0.499	0.000	Accepted
After Sale service H8	0.320	0.000	Accepted
Firm Reputation H9	0.220	0.000	Accepted
Health H10	0.606	0.000	Accepted

Table 1 describes the correlation values of the independent variables based on sample of 342 individuals. The correlation table reveals that all hypotheses (H1 to H10) exhibit positive relationships with young consumers' online buying behavior in Sri Lanka, as indicated by Pearson's correlation coefficients well above 0.2. The significance value (p) being less than 0.05 is widely accepted as a valid criterion for making decisions regarding hypotheses. Therefore, the statistical significance of

these relationships, with all p-values below 0.01, reinforces the reliability of the findings. Therefore, it can be confidently concluded that the variables under study, including product, price, trust, convenience, payment methods, security, return policy, after-sale service, firm reputation and health factor are influential factors in shaping the online buying behavior of young consumers in Sri Lanka.

Regression Analysis

Table 2: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.693	.229		3.025	.003
Product	0.156	.056	.178	2.013	.0001
Price	0.106	.052	.126	2.039	.043
Trust	0.280	.026	.320	5.736	.0001
Convenience	0.295	.006	0.352	5.246	.000
Payment	0.029	.013	.027	2.191	.029
Security	0.693	.011	.352	5.246	.0001
Return Policy	0.311	.012	.319	25.923	.0001
After Sale service	0.167	.019	.147	8.683	.0001
Firm Reputation	0.052	.024	.046	2.207	.028
Health	0.185	.064	0.211	3.535	.001

According to the regression equation, if Online Purchase Intention increases by one unit with other factors unchanged, the increase in Product is approximately 0.156 units, Price contributes about 0.106 units, Trust adds roughly 0.280 units, Convenience is associated with an

increase of approximately 0.295 units, Payment contributes about 0.029 units, Security adds approximately 0.693 units, Return Policy leads to an increase of about 0.311 units, After Sale Service is associated with an increase of roughly 0.167 units, Firm Reputation contributes approximately 0.052 units, and Health adds around 0.185 units. These coefficients represent the estimated changes in Online Purchase Intention for each one-unit change in the respective independent variables while keeping all other factors constant in the model.

Conclusion and Recommendations

In January 2023, Sri Lanka experienced a significant online presence, with approximately 14.58 million internet users and a 66.7 percent internet penetration rate. The study investigated the factors affecting young consumers' online buying behavior in Sri Lanka, employing regression and correlation tests for data analysis. Notably, the research identified a positive relationship between product quality, price, trust, convenience, payment methods, security, return policies, after-sale services, firm reputation, and health considerations with online purchase intention. Interestingly, in contrast to some prior research, price and product quality were not the dominant determinants of online purchases in our study. Instead, young consumers expressed reservations about product quality when prices were reduced. The study highlights the pivotal role of trust in enhancing the relationship between e-commerce providers and consumers and suggests strategies for building consumer trust in online transactions.

Recommendations

To build consumer trust in online transactions, businesses can adopt strategies such as providing transparent product information, ensuring secure payment methods, displaying visible contact information, featuring user reviews and ratings, offering responsive customer service, safeguarding customer data, providing clear return and refund policies, securing the website with encryption, ensuring prompt delivery, seeking customer feedback for improvement and consistently delivering high-quality service and products. These strategies collectively create a trustworthy online shopping experience.

Investigating how emerging technologies, such as augmented reality, artificial intelligence, and blockchain, influence online buying decisions can shed light on the changing dynamics of e-commerce in Sri Lanka.

Considering the multicultural and diverse nature of Sri Lanka, research should explore how cultural factors, such as language, religion, and societal norms, impact online shopping behavior.

This study has some limitations, and we hope it inspires further investigation in this field.

References

Alam, J. (2020). Buying Behavior under Coronavirus Disease (Covid-19) Pandemic Situation: A Online Perspective Case in Bangladeshi Shoppers. *Chinese Business Review*, 19(3), 82-90

Alarooj, N. (2019). Which Factors Influence Consumers' Choice of Payment Method When Purchasing Online? Department of Marketing. Faculty of Business, Economics and Law.

Bucko, J., Kakalejcik, L. and Ferencova, M. (2018). Online Shopping: Factors that Affect Consumer Purchasing Behavior. *Cogent Business & Management. Marketing Research Article*, 5(1).

Chua, A.P.H., Khatibi, A. and Ismail, H.B. (2006). “E-Commerce: a study on online shopping in Malaysia”, *J. Soc. Sci.*, Vol. 13 No. 3, pp. 231-42

Hossain, A., Rahman, M. L. and Hasan, M. M. (2018). Consumer’ Internet Shopping Decision toward Fashion Apparels and Its Impact on Satisfaction in Bangladesh. *Business Ethics and Leadership*, 2 (4), 74-82.

An Investigative Study of Symbolism in Punch marked Coins: Perspectives from Domestic and International Scholars

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Abstract

Punch-mark coins are ancient coins that can be found in both India and Sri Lanka. They feature various marks on both the obverse and reverse sides. These coins were in circulation from the 6th century BC to the 2nd century AD. With over 600 different symbols found on these coins, there is no unanimous consensus among scholars regarding the interpretation of these symbols. The aim of this research is to explore the diverse interpretations of these symbols and propose a more appropriate understanding. To accomplish this objective, we employed a methodology that involved a comprehensive review of relevant literature. The symbols found on punch-mark coins encompass representations of the state, the emblem of the coin maker, the emblem of the family associated with the coin, and the emblem of the authority responsible for verifying the coin's legitimacy. It is important to note that these symbols do not exclusively pertain to a single religious or social group. Instead, they reflect the thoughts, beliefs, and attitudes of the general populace at the time.

Keywords: *Investigative Study, Symbolism, Punch marked Coins, Perspectives from Domestic and International Scholars*

Introduction

Punch-mark coins play a significant role in the study of ancient coins in Sri Lanka. These coins are named as such due to the presence of distinct marks on both the obverse and reverse sides of the metal coins. They were utilized in both Sri Lanka and India. According to literary and archaeological sources, these coins were in use in India as early as the 6th century BC. In Sri Lanka, it is believed that these coins were in circulation from the 2nd century BC to the 2nd century AD. These coins

are often referred to as "Karshapana" or "Kahapana" in literary sources.

The manufacturing of these coins predominantly involved silver with a smaller proportion of copper. Thin sheets of silver were crushed and cut into geometric shapes of the required size, and the corners of these metal pieces were trimmed to ensure uniform weight among the coins. Subsequently, distinctive marks were applied.

The interpretation of the meaning of these marks on the coins remains uncertain. This ambiguity arises from the limited information available in historical sources. Durga Prasad suggests that these symbols are connected to Hinduism, while V.A. Smith posits that these marks were employed by private trading companies in their commercial transactions. D. C. Sharthar, on the other hand, suggests that these tokens were marked by certain monopolies to guarantee the standardized weight of the coins they represented.

Objectives

These coins feature over 600 distinct symbols, encompassing representations of the sun, moon, mountains, animal figures, human figures, tree figures, and various unrecognizable geometric shapes. Different scholars have proposed diverse interpretations of these symbols.

However, the extent to which these interpretations align with historical accuracy presents a significant challenge. The objective of this research paper is to ascertain the true meaning of these symbols within the context of ancient society.

Materials and Methods

To accomplish these objectives, the primary methodology employed was the examination of literature sources. This involved studying archaeological information pertaining to punch-mark coins, both from domestic and international sources, as well as investigating historical literary records concerning punch-mark coins.

Results and Discussions

Archaeological evidence suggests that these coins were highly popular during the Mauryan Empire. The book "Arthashastra," authored by Kautilya, the advisor to Mauryan King Chandragupta in the 4th century AD, mentions the existence of a post called "Panyadhakshaka" responsible for verifying the authenticity of coins. Consequently, it is possible that one of the symbols on these coins served this purpose.

The "Saddharma Ratnavaliya," written by Dharmasena Thero in Sri Lanka, also provides significant insights into the symbolism of these coins in the narrative "Kumbhagoshaka Katha Puvata." This narrative tells the story of Kumbhagoshaka, a young man from an affluent family who disguises himself as a pauper. When the king investigates, he discovers some coins in Kumbhagoshaka's house. Upon inquiry, Kumbhagoshaka claims these coins as his own, indicating that they bore the mark of his clan or family.

In addition, an essential reference to a parable found in the book "Vishuddhi Marga," authored by Buddhaghosa Thero, provides valuable instructions on meditation. This parable suggests that a skilled goldsmith possesses the ability to examine a coin and determine which craftsman produced it and from which region within the state it

originated. Consequently, it is plausible that one of the marks on these coins could have represented the state where they were issued.

For instance, the sun symbol and the six-armed symbol can be identified on almost every coin dating back to the Mauryan Empire period. Therefore, it is reasonable to infer that these symbols likely represented the Magadha or Maurya Empire.

Furthermore, a myriad of distinct symbols exists, with varying interpretations offered by different scholars. Let us delve into their perspectives on some of these symbols and evaluate the extent to which their explanations are justified

Mountain Symbol

The mountain symbol, frequently observed on these coins, takes the form of one arch above two arches. Mr. Theobold suggests that this symbol represents the crest of a stupa. Mr. D.P. Hettiarachchi proposes that it signifies Lord Buddha's parinirvana. However, if the ancient artists intended to symbolize a stupa, it could have been achieved by depicting a scepter standing upright on a single arch.

Meduyangoda Vimalakitthi Thero posits that this symbol signifies the "Triakuta Parwatha" in Hinduism. J. N. Banerjee claims that it represents Lord Shiva. Nevertheless, there are instances where the symbol exhibits 5, 6, or 7 arches, and some coins display animal figures such as dogs and peacocks atop these arches. Therefore, it becomes challenging to associate this symbol exclusively with the Triakuta rock or Lord Shiva.

John Allen and Ananda Kumaraswamy point out that in China and Central Asia, people used this type of symbol to represent mountains. This interpretation appears to be plausible, depending on how

significant mountains were in the realm of human thought and belief.

Tree Symbols

One of the prominent symbols is a tree with branches, featuring a slender trunk enclosed within a fence. This symbol exists in various forms, often with a square fence surrounding the tree, imparting a sense of sanctity to it.

According to Mr. Spooner, this symbol represents the Asatu or Bodhi tree. D.P. Hettiarachchi suggests it symbolizes the enlightenment of Prince Siddhartha. Some scholars propose that it signifies the Kalpa tree, a source of profound wisdom. J.N. Born posits that it represents the "Chaithya Vruksha" and the "Sthala Vruksha" mentioned in ancient Hindu literature.

Nonetheless, the symbol lacks sufficient characteristics to definitively identify the specific type of tree it represents. Moreover, it cannot be attributed exclusively to one religious community, as it was a widely used symbol in a region with a rich tapestry of religions and philosophies.

There are historical evidences indicating the sacred significance of trees dating back to ancient times in the Indus Valley. Information also exists about deities who have chosen trees as their abodes; for instance, Vedic literature designates the Tulsi tree as the abode of Lord Vishnu. Consequently, it is plausible that this symbol was employed based on people's deeply held beliefs regarding trees

Animal Symbols

These coins feature a multitude of animal symbols, with the cow being a prominent figure. Various forms of cows, including "Cow with HUMP," "Cow without HUMP," "Cow turning left," and "Cow turning right," are evident. Some argue that the cow represents Lord Shiva, as it is considered his vehicle. However, during this period, the worship of Shiva was not widespread. Nevertheless, the cow held significance as a symbol of wealth and was frequently used in barter transactions.

Additionally, the elephant symbol is another commonly encountered motif, with variations based on the direction the elephant faces, the shape of its feet, and the form of its trunk, among other factors. The elephant has been regarded as a symbol of good fortune since ancient times. According to Mr. Senarath Paranavithana, an elephant represents rain. There is also a depiction known as "Gaja Lakshmi," where Goddess Lakshmi, the goddess of fortune, is anointed by two elephants. The Tripitaka contains numerous references likening Lord Buddha to an elephant, illustrating that past societies regarded the elephant as an auspicious symbol transcending religious boundaries.

Furthermore, a wide array of animal symbols, including cobras, peacocks, owls, moths, frogs, fish, and more, can be discerned among these symbol

Conclusion and Recommendations

To sum up, the symbols found on punch-mark coins encompass representations of the state, the emblem of the coin maker, the emblem of the family to which the coin belongs, and the emblem of the authority responsible for verifying the legitimacy of the coin.

These symbols should not be confined to a single faith or belief system. This is because these coins were in circulation in both Sri Lanka and ancient Indian society, which featured a rich tapestry of diverse faiths and beliefs. Consequently, these symbols likely conveyed a multitude of ideas believed by the people in these regions, which could include concepts related to wealth, fortune, fertility, superhuman power, and security, among others

Acknowledgment

I would like to extend my special thanks to Dr. Chandima Bogahawatta, Senior Lecturer in the Department of Archaeology at the University of Kelaniya, who provided invaluable guidance in the field of numismatics. I am also grateful to my batchmates, Rajaka Maduwantha, Nisansala Sewwandi, Dinusha Sandamali, and Sanjeevani Indika, for their invaluable assistance in conducting this research.

References

Guptha, P. L., & Harder, T. R. (2014). Punchmarked Coinage of the Indian Subcontinent. Mumbai: IIRNS Publication Pvt. Ltd

https://www.academia.edu/27908959/Indian_silver_punch_marked_coins_in_ancient_Ceylon_a_case_study_The_Tissamah%C4%81r%C4%81ma_hoards

https://www.academia.edu/27908959/Indian_silver_punch_marked_coins_in_ancient_Ceylon_a_case_study_The_Tissamah%C4%81r%C4%81ma_hoards

Kulathunga, T.G (2002). Sri lankawe kasi ha Mudal vivaharaya. Colombo: Maddhayama sanskruthika aramudala,

Sirisoma, H.M (2001), Purana Indiyawe kasi purana indiyawe kasi, Puravidya Departhumenthuwe

Importance of the Human Library Programmes: a Literature study

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Abstract

The Human Library Programmes have emerged as innovative initiatives aimed at promoting empathy, challenging stereotypes, and fostering understanding among individuals from diverse backgrounds. This literature study examines the importance of Human Library Programmes in achieving these goals. Through a comprehensive review of scholarly articles, books, and reports, this study analyzes the impact of Human Library Programmes on participants and society. Findings indicate that Human Library Programmes are highly effective in breaking down barriers and promoting dialogue between people with different experiences and perspectives. Participants report increased empathy, reduced prejudice, and improved understanding through conversations with Human "Books." These interactions facilitate personal growth and expanded worldviews by challenging biases and preconceptions. Additionally, Human Library Programmes provide safe spaces for marginalized individuals to share their stories, empowering them to challenge stereotypes and contribute to societal change. However, scalability, long-term impact assessment, and inclusivity pose challenges that require further research. In conclusion, this literature study confirms that Human Library Programmes effectively promote empathy, challenge stereotypes, and foster understanding. Ongoing evaluation and research will enhance our understanding of long-term impact and potential improvements, ensuring the continued success of these programs in creating a more inclusive and tolerant society.

Keywords: *Human Library, Literature study, Human Library Programs, Sharing information, Human book*

Introduction

Inspired by the concept of a traditional library, where books can be borrowed, the Human Library introduces "human books" - individuals who have experienced marginalization or stigmatization based on their identities. Participants in Human Library events engage in one-on-one conversations with these "human books," allowing them to gain firsthand insights into the lived experiences of others.

The importance of Human Library programs has gained attention from scholars and practitioners seeking to explore their impact on attitudes, beliefs, and behaviors. This literature study aims to examine existing research and scholarly articles to understand the outcomes and potential of Human Library initiatives. By delving into the existing literature, this study seeks to provide valuable insights into the importance of Human Library programs, identify factors contributing to their success, and highlight potential limitations and areas for further research. Understanding the impact of Human Library programs can inform the development and enhancement of initiatives aimed at fostering inclusivity, understanding, and social cohesion in diverse communities. Lots of time training is confused with development, but both are different in certain respects yet components of the same system. Training may be described as an endeavor aimed to improve or develop additional competency or skills in an employee on the job one currently holds in order to increase the performance or productivity. While development implies opportunities created to help employees grow (Management study guide, 2018). Kara Blizzard, Becker & Goebel (2018) observed human library successfully engages students, staff, faculty, and the Camrose community in a learning experience that

benefits both readers and human books. The human library provides an opportunity for unique information literacy assignments that increase students' engagement with relevant topics and demonstrate the importance of consulting a variety of source types during the research process. Wong & Lin (2023) examined Human libraries are special libraries that give access to real persons known as "human books." Readers "check out" human books by attending reading sessions organized by the human library. The majority of previous studies focus on reporting the achievement of human libraries, especially on reducing prejudice and promoting social inclusion. There is a dearth of research to investigate how a human library serves and interacts with society.

Materials and Methods

This literature study utilized a systematic approach to examine the importance of Human Library programs. The Literature study methodology encompasses the use of quantitative techniques on data. The research data was obtained Google Scholar advanced search tool. The keywords "Human Library", "Human book", "Information Sharing" and "Human Library programme" were used in the data filtering procedure anywhere in the article. The search was conducted for articles published in the 2012-2022 range. From the search, the totals of 58 articles were published. Relevant articles published in the English language were selected for analysis. The data extracted from the selected articles were synthesized to identify common themes and outcomes. The methodology focused on analyzing and synthesizing existing research to provide an overview of the current state of knowledge regarding the importance of Human Library programs. Excel package was used to analyze and visualize data in the study.

Results and Discussion

The analysis of the literature on the importance of Human Library programs reveals consistent and positive outcomes. The Human Library helps to overcome stigma, combat prejudice, dismantle stereotypes, inform ignorance, clarify misconceptions, debunk myths, end discrimination, and challenge negative attitudes through conversations with Human Books. Many Human Library Programs are designed to challenge stereotypes and prejudices by allowing individuals to engage in meaningful conversations with people from different backgrounds or with different life experiences. Research may examine how effective these programs are in changing attitudes and reducing biases.

The importance of Human Library programs can be attributed to the authentic and interactive nature of the experiences. By engaging in direct conversations with individuals from different backgrounds, participants have the opportunity to humanize and empathize with others' experiences. The open dialogue and safe space provided by these programs facilitate genuine connections and transformative learning.

The Human Library is designed to build a positive framework for conversations that can challenge stereotypes and prejudices through dialogue. The Human Library is a place where real people are on loan to readers. A place where difficult questions are expected, appreciated and answered. While the existing literature provides promising evidence, further research is needed to explore the long-term effects of Human Library programs and their impact across diverse populations and settings. Additionally, studies investigating the specific mechanisms through which these programs lead to attitude and behavior changes would provide deeper insights into their importance.

Conclusion and Recommendations

In conclusion, the literature on the importance of Human Library programs demonstrates their significant impact in promoting understanding, empathy, and challenging. The findings consistently indicate that participation in Human Library events leads to increased awareness, reduced prejudices, improved interpersonal skills, and enhanced empathy among participants. The personal interactions with "human books" create a safe and transformative space for dialogue, fostering connections and breaking down barriers. These programs offer valuable opportunities for individuals to engage with diverse perspectives, challenge their own biases, and contribute to building inclusive communities. Further research and evaluation are necessary to deepen our understanding of the long-term effects and potential of Human Library programs.

References

- Bjarnason, S., & Jónsdóttir, S. Þ. (2015). Human Library: A Diversity Project in the Reykjavík City Library. In *Library as a Place: Rethinking Roles, Rethinking Space* (pp. 63-77). De Gruyter.
- Kruger, L. (2018). The Human Library: Using Library Space to Create Conversations About Stigma and Marginalization. *The Library Quarterly*, 88(1), 25-44.
- Nguyen, J. (2019). Talking Books: An Examination of the Human Library Experience on College Campuses. *Journal of Library Administration*, 59(3), 306-323.
- Sonnenschein, L. (2016). Beyond Books: The Human Library as an Educational Tool for Teaching Social Justice. *Journal of Academic Librarianship*, 42(6), 647-654.

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Section II

A Sociological Study of the Barriers to the Popularization of Counseling in the Sri Lankan School System

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Abstract

Out of the school system in Sri Lanka, counseling services are available in rural and urban areas. In order to solve student problems, school counselors and client students operate in three main areas: educational development, professional development and personal social development. Accordingly, there are barriers to popularize the psycho-counseling process in the Sri Lankan school system. The main objective of the study is to analyze the barriers to popularizing the counseling process in the Sri Lankan school system. The sub-objectives here are to study how the obstacles/limitations to the counseling process affect the students psychologically and to analyze the awareness of the students about the counseling process.

The two questions that the researcher was interested in were whether the students undervalue the counseling process and whether they face other problems in participating in the counseling process and making independent decisions. Analytical research methodology has been used for this purpose. Grounded theory has been used in data analysis. In Puttalam district, Pallama Nandimitra National School and Vendakaduwa Junior College were selected as the field of study. One hundred fifty students each from both schools were selected under random sampling. Open-ended questionnaires and interviews were used as primary data sources. Newspapers, magazines and research articles

were used as secondary data source. In the counseling process, it can be identified that factors such as trust, protection of the ethical system, which should arise in connection with the counselors to the clients, are not fulfilled. Due to educational problems, romantic relationship problems, sexual problems, economic and social welfare problems, students who refer to counseling have problems related to the implementation of the correct counseling pattern.

This reduces the interest in counseling services. According to the study results, it was revealed that uncertainty related to confidentiality, underestimation of counseling services and ignorance are the reasons for this. It can be concluded that the school counseling service is essential not only in the case of students' problems but also to make them feel at ease. In this regard, proper awareness should be created in the students and the counseling service should be implemented with up-to-date knowledge and protecting ethics.

Keywords: *School Counseling Process, Counseling Barriers, Students' Problems, Up-to-date Knowledge, Proper Awareness*

A study on misuse of library materials by university students with special reference to Kelaniya, Peradeniya, and Wayamba University Libraries.

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Abstract

The study sought to identify the misuse of library materials by university students. This study focused on ways university students misuse Library resources, the factors affecting such misuse, and the means to protect resources from such misuse. The study was conducted by using questionnaires with close and open-ended questions. The numerical approach proposed by Krijici and Morgan was carried out. Using that table students (378) were selected for the study and out of them 325 responded and the rate was 86%. When data were analyzed, 59% of respondents pointed out that the resources were seriously damaged by drawing lines on documents. And 50% stated that removing essential pages from the documents harmed resources.

The issues of hiding books and removing pages of books also played a prominent role in this. The high cost was the main factor affecting students' misuse of library resources. It was 76% as a percentage. Also, inefficient library photocopying services, insufficient reader awareness programmes, inadequate self-reading facilities, and unsatisfactory opening hours of libraries were significant factors. Several strategies were offered to guard resources from misuse. They were reducing the price of photocopying services, organizing user awareness programmes, and expanding electronic library services. The librarians also stated that they had to organize user awareness programmes, install electronic

security systems and cameras, and expand library services. To evade the misuse of library materials, university students need to improve their library usage. In that case, library management should extend the opening hours of the university library. Awareness programmes should be organized as one of the main activities to improve the present status. These programmes can provide them with a practical understanding of the distribution of library resources and how they are organized and accessed. In conclusion, this study identified the factors affecting university students' misuse of resources and the measures and remedies to be adopted by the libraries to reduce them.

Keywords: *Library resources, Academic libraries, Resource theft, Library security, Preservation*

Use of Research Support Services and Tools by Undergraduate of the Wayamba University of Sri Lanka

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Abstract

Research Support Services (RSS) and Research Tools (RT) play an increasingly important role in research. The research and education factions are two sides of a coin. Being undergraduate students, they should set up the research environment to fulfill their academic life. As the heart of the university, the main library offers several types of RSS services. “Namely”, Document Delivery Service (DDS), OPAC, ask a Librarian service, Wayamba University Institutional Repository (WUiR), and conducted workshops and Seminars to make aware of RT. (Reference management tools, Literature search, Editing tools, Anti-plagiarism Software, Thesis and Dissertation Databases). This study investigated the use of research support services and tools by undergraduate students at Wayamba University. The main library gives its services to three faculties. There are the Faculty of Business Studies and Finance, the Faculty of Applied Science, and the Faculty of Technology. The objectives of the study are to identify the use of RSS and RT in Wayamba University’s main library, the purposes for using these services, and to identify the difficulties associated with using these services. Using the Krejcie and Morgan sampling table, 340 questionnaires were distributed via Google Forms using Web 2.0 technologies (E-mail, WhatsApp, and Facebook). A result shows that 72% of students were aware of research support services and tools in

Wayamba University's main library. Most of them are highly aware of the availability of the "Ask a Librarian" service.

Students stated that they used RSS to find research articles, fulfill research projects, and enhance their academic work. Students mentioned that they used research tools to avoid grammar errors, create bibliographies, decrease the plagiarism level, and find more information. Major barriers reported by the students to the use of the research support services are lack of proper marketing, lack of free time, and lack of computer lab and internet facilities. Improved research support services may motivate students to fulfill their research work and academic career development.

Keywords: *Research support services, Research tools, WUiR, Wayamba University, Sri Lanka*

The Impact of Organizational Culture on Employee Engagement: with Special Reference to Library System of State Universities in Sri Lanka

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Abstract

Culture in organizations is considered as one amongst the most significant factors that results in the creation of a competitive advantage. An organizational culture which is highly effective also leads to the creation of superior levels of engagement and effectiveness amongst the employees which translates into high levels of productivity. Most of the past studies have concentrated on the link between organizational culture and employee engagement or have treated the concepts separately. Relatively very few studies have focused on the impact of organizational culture on employee engagement. There is a lack of empirical evidence that directly addresses this type of investigation, especially in Sri Lanka and particularly in the library field. Through this study, researchers intend to identify the salient dimension of organizational culture and assess the impact of organization culture on employee engagement with special reference to the Library system in Sri Lanka. This study is descriptive, correlation and conclusive in nature. To collect data, a sample of library academics attached to state universities in Sri Lanka (n=100) was selected by using the convenience sampling method. It was revealed that organizational culture had a strong and significant influence on employee engagement. The findings of this study contribute to the existing literature in the aspects of service quality and employee behavior. Also, the results can be used in

developing strategies to enhance the level of service quality in libraries, particularly in the areas of training and development, creating new roles and responsibilities and maintaining an effective database system and information systems. These strategies will ultimately lead libraries to enhance the positive and motivated work environment, contributing to the stability and prosperity of higher education of Sri Lanka.

Keywords: *Organizational Culture, Employee Engagement, Service Quality*

Impact of ‘Tik Tok’ Social Media Platform as a Tool for Building Personal Brands

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Abstract

The social media platform has transformed from a space for individual and personal entertainment into a bustling hub for business. Many personal businesses now utilise social media as an instant tool to establish their brands among a wider audience. Platforms like YouTube, Facebook, and WhatsApp have already become saturated with business promotions. Consequently, social media platforms such as TikTok have introduced new trends and interests, attracting a diverse audience, both young and old. This presents a significant challenge for businesses and influencers aiming to capture attention for a specific video. The ability to captivate audiences on TikTok has become a powerful tool for building personal brands, allowing brands to instantly stand out among competitors and reach a vast audience. A study was conducted to assess whether the TikTok platform can effectively serve these purposes, through a questionnaire evaluating TikTok videos. The questionnaire was presented to three experts in a related field. Based on the analyzed responses, TikTok emerged as a successful platform for establishing personal brands and creating a distinct presence. Furthermore, this research serves as a foundation for future studies exploring the integration of social media platforms and personal branding.

Keywords: *social media, personal branding, TikTok, influencers, visual frames*

A Comparative Study on Weeding Out University Library Collections in Sri Lanka: special reference to Peradeniya, Kelaniya and Ruhunu University Libraries

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Abstract

A university library is a formal corporation run to fulfill the university's objectives in a wide range. It should help to maintain educational sustainability in the parent organization. Therefore, it is essential to maintain an updated collection to maintain a sustainable library collection. The library weeding process plays a pivotal role in this regard. Thus, this study's objectives were to identify the weeding process of the university library collections, the problems and challenges associated with the weeding process occurring at the library, and to give possible solutions to overcome the difficulties and challenges. University Grant Commission-governed university libraries were selected as the study population, while three university libraries, namely, Peradeniya, Kelaniya and Ruhunu University Libraries, were purposely selected for the study. Questionnaires were used as a primary data collection method, and three questionnaires were administered to the respective librarians. Data analysis was conducted accordingly. According to the findings, a special methodology is followed by weeding out the university library materials. This research identified criteria, such as physical condition, relevance, historical value, reading levels, and material transcription, for consideration when selecting materials for the library weeding process. The specialized parties have taken final decisions, namely, the library committee and the Senate. Further, time consumed, lack of specialized staff, belief in the future

need for books, unwillingness to reject sources of information, incapability to establish criteria for the purposeful misuse of library materials, non-cooperation from academic departments, and indifferent attitudes from higher authorities were identified as problems and challenges raised the weeding process. Audit objections and an inability to discriminate against unused material have also been identified as other challenges. Therefore, carrying out the weeding of library materials according to specific policies and methods, recruiting a trained staff to the library, getting the advice of experts in the field of library and information science for the weeding policies, and creating positive attitudes in the library staff are recommended through this study.

Keywords: *Library Collection, Collection Management, Weeding Process, University Libraries, Sri Lanka.*

A Study of the Impact of the Current Economic Situation on the Publishing Industry in Sri Lanka.

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Abstract

The Book Publishing Industry is very slowly adapting to the modern industrial culture in Sri Lanka. However, the National and Social values of the Book Publishing Industry are not reduced at all. The only happen is to ignore its values. Accordingly, the Book's Publication directly affects the country's economic, social, political, cultural, and educational aspects. At present, the book publishing industry has become a sector that contributes to the development of the country, which has an impact on all sectors. This study mainly considered the impact of the Sri Lankan publishing industry under the current economic situation.

In the early days, book publication in Sri Lanka was a very advanced process through the contribution of one of the four modes of publications like author publications, commercial publications, public sector book publications, and non-governmental corporate book publications. Until the middle of the 18th century, this situation was mainly carried out for domestic purposes without commercial purposes. After that, the local needs that have gradually changed to suit various social, political, and economic changes have been seen several times since the beginning of the twentieth century until today. Among them, it can be mentioned that the process of local book publishing has also started giving importance to commercial needs. It can be mentioned that in the publishing industry, the entire book publishing process has taken

a new face with the current COVID-19 epidemic situation and the current economic depression.

It can be pointed out that the recent process of book publishing giving a prominent place to the opportunities of market and financial provision, has greatly impacted writers and publishers in view of the current climate in Sri Lanka.

Thus, it can be stated that this study is an important contribution to a process to take the impact of the current economic conditions on book publishing in Sri Lanka to a qualitative and quantitative growth level. In order to achieve these objectives, a questionnaire was used to collect information in this study. In this regard, only the Western Province was selected for this purpose among the existing provinces of Sri Lanka, and three main publishers were selected from among the existing publishers in that province and data was collected. Here, primary and secondary data were used to obtain information, and the data belonging to the respective masters were computerized and then turned into a written report. After that, the results analyzed and presented the nature of the impact on book publishing under the current economic conditions through graphs and tables. Therefore, whether the book publishing industry in Sri Lanka has been affected by the current economic situation, a fair investigation was done based on all the data obtained.

Keywords: *Book Publishing Industry, Book Publishing, Economy, Board of Library Services, Modern Industrial culture, COVID-19 epidemic situation*

Effectiveness of Documentation Services in Libraries in Sri Lanka: With Reference to the National Library and Documentation Services Board of Sri Lanka

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Abstract

Documentation services play a crucial role in meeting the information needs of individuals in a technology-driven society. However, despite significant investments in documentation services, readers often encounter challenges in accessing proper and effective assistance. This research aims to address the problem of the effectiveness of documentation services by examining their current status, identifying the types of documentation services available, pinpointing the underlying issues, and assessing the integration of information communication technology techniques within these services. This study utilized a mixed research method, employing questionnaires, interviews, and secondary sources for data collection. Data was gathered from officers at the Sri Lanka National Library through interviews and questionnaire surveys. The study focused on comparing the documentation services offered by the National Library of Sri Lanka. Purposive sampling was used, and the research sample comprised the Sri Lanka National Bibliography and Index to Postgraduate Theses. For quantitative data analysis, Excel software was utilized. The study findings revealed that among the documentation services compiled by the National Library of Sri Lanka, 75% were found to be operational in the National Library. However, 25% of these services were not currently operational despite being initiated earlier. Additionally, it was observed that the National Bibliography of Sri Lanka and the Sri Lanka Post-

Dissertation Series were not published in print within the designated timeframe, lacked information on all publications, and faced challenges in keeping them up to date. As a solution, the study proposed the implementation of a user-friendly online search system for the National Bibliography of Sri Lanka, compiled by the National Library of Sri Lanka, along with the automation of documentation services using information communication technology.

Keywords: *Documentation Services, Sri Lanka National Bibliography, Index to Postgraduate Theses, National Library of Sri Lanka*

Impact of Bibliotherapy for Solving the Students' Matters Using the 'IMIF' Model: Case Study

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Abstract

Bibliotherapy is a therapeutic technique for different mental problems. Although it is a popular therapeutic tool in foreign countries, it is a rare experience in Sri Lanka. The researcher has been practicing this tool in the selected university. The IMIF model is a model that the researcher herself introduced based on the experiences she had collected from the bibliotherapy practice. The research objective of this research was to identify the impact of the 'IMIF' model to solve the student's matters. The model has four stages: Initial, mirroring, insight, and follow-up. Identifying and analyzing the issue, assessing the problem, deciding the risk level, and giving book prescriptions are included in the initial stage. Task allocation through reading, writing, drawing, role-playing, and post-reading discussion are included in the Mirroring process. The Insight increases awareness, empowers problem-solving skills, and strengthens inner feelings. The final stage is the follow-up, where an assessment is carried out. According to the evaluation process, clients can return to the mirroring or insight stage. The 'IMIF' model was used to solve student matters of the selected university. This is qualitative research. Data collection tools were observations and interviews. The population of this research study was the students of the selected university. Thirty students were included in the sample according to the purposive sampling method. Thematic analysis was used to analyze the data. The majority have been cured with bibliotherapy. At the follow-up stage, it was observed that 10% of the participants had not followed the

counselor's recommendations. 60% of the participants requested a list of book prescriptions from the counsellor. 30% of the participants selected books from the Library according to their preference and got the counselor's recommendation. 20% of the participants requested a new list of book prescriptions from time to time without fulfilling the tasks. The counselor used creative bibliotherapy techniques to assign different tasks accordingly. Almost all students have pointed out the benefits they received after attending these sessions. This research was limited to a small sample since it needed in-depth analysis. Further research is needed to create different book prescription lists for each mental disease.

Keywords: *bibliotherapy, creative bibliotherapy, counseling, IMIF Model, library*

Investigating the effective techniques for the promotion of library services and resources among the academic staff members of University College of Kuliyaipitiya

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Abstract

In the modern educational landscape, libraries play a crucial role in supporting the teaching, research, and professional development activities of academic staff members. However, ensuring that academic staff members are aware of and fully utilize the available library services and resources remains a challenge. A significant Percentage decrease in the number of academic staff members borrowing books or accessing e-resources was the main research problem of the study. Therefore, the main objective of the study was to investigate the effective techniques for promoting library services and resources among the academic staff members of the University College of Kuliyaipitiya. For in-depth understanding, contextual insight and flexibility, this study used a phenomenological qualitative research design. The population of the study consisted of the staff of the University College of Sri Lanka, and all the academics were selected as a sample. According to the findings, techniques such as personalized assistance, customized resource lists, library newsletters, digital marketing, faculty testimonials, library open houses and incentives and recognition are found to be effective techniques for the promotion of library services and resources among the academic staff members of the University College of Kuliyaipitiya. These research findings will contribute to the broader academic community's understanding of effective library promotion strategies, serving as a benchmark for other institutions seeking to improve their

library services. These insights will aid the University College of Kuliyaipitiya in developing targeted and tailored initiatives to effectively communicate, engage, and support their academic staff members in making the most of the library's offerings. By enhancing the promotion and usage of library services, this research endeavors to strengthen the collaboration between the academic staff and the library, ultimately fostering a more enriched teaching and research environment at the University College of Kuliyaipitiya. The study proposes evidence-based recommendations and effective strategies to optimize the promotion of library services and resources.

Keywords: *Techniques, Library, Services, University College of Kuliyaipitiya*

Exploring the impact of design elements on children's books: visual literacy, physical layout, content, and illustrations

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Abstract

Children's books play a foundational role in early education and development. Design attributes of these books wield a profound influence on a child's reading experience, imprinting their cognitive growth and overall engagement. This research aims to explore and understand the impact of design elements on children's books, with a particular focus on the physical layout, content, and illustrations. The population of this research was the early childhood children's picture books. The sample for this research comprises 100 children's picture books, selected through a systematic random sampling method. This method involves the use of well-defined criteria and a randomised process to ensure that the sample is representative of the broader population of children's picture books. Data gathered from the research were analysed through descriptive analysis techniques. Through an analysis of various design choices and their implications, this research seeks to show how the arrangement of elements, the structure of content, and the art of illustration collectively contribute to the educational and emotional resonance of children's literature. The study addresses challenges encountered in the utilisation of external structure, internal organisation, typography, and illustrative components in storybooks designed for children. This qualitative research incorporates a comprehensive review of literature and fieldwork. It underscores the techniques arranged in children's storybooks, with a particular

emphasis on the fundamental role of illustrations. These illustrations serve as a bridge for children, facilitating a deeper comprehension of text and enriching their understanding of the world around them. Consequently, this research not only recognizes the vital significance of the interplay between design and content in shaping children's literary experiences and lifelong reading habits but also delves into the challenges faced by authors and publishers in the realm of children's storybook writing. These challenges encompass a wide range of factors, such as maintaining age-appropriate content, engaging storytelling, and the need for diversity and cultural sensitivity in an increasingly globalised world.

Keywords: *Story Books for Children, Visual Literacy, Story Book Content. Illustrations, work of art*

Preserving the Sri Lankan Buddhist-pothgul tradition Amid English Colonial Rule: The role of Atthadassi Thero of Doratiawe and Hanguranketha Pothgul Maliga vihara

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Abstarct

Of the most valuable gifts which the world received from Sri Lanka, during the period of time from antiquity to the present day, the Sri Lankan Buddhist Pothgul tradition holds an important place. From the period of Rajarata civilization AD among the Buddhist institutions that preserved the tradition of Sri Lankan Buddhist books until 1815, regional monasteries such as Maha Vihara, Abayagiriya, Situlpavwa, Ashtamulayatnaya, Vijayasundararamaya, Sunethra Devi Pirivena in Papiliyane, Karagala Padmavathi Pirivena and Niamakande Shrine, Suriyagoda Rajamaha Vihara are significant. Amidst the Buddhist Institutions that secured the Pothgul tradition in this country during the English colonial period, the Hanguranketha Pothgul Maliga Vihara, which was modernized by Atthadassi Thera of Doratiawe, holds a prominent place. The aim of this research is to examine how the Portugal tradition in Sri Lanka was preserved through the Pothgul Vihara at Hanguranketha during the English colonial period. Historical research method is research method in this research. Atthadassi Thera of Doratiawe first searched for the center of the Pothgul Viharaya of Hanguranketha and collected the Tripitaka, local medicine, animal medicine, Yantra Mantra history and Buddhist literature subjects which were scattered on the island through his disciple monks and by himself. Furthermore, Atthadassi Thera of Doratiawe gathered the puskola in the Hanguranketha Vihara and went around the island by himself to collect

money from the Buddhist sages and built a complete library and stored about 2000 puskola in cabinets made of Black wood. In addition, he selected 25 disciple monks and through them collected the Palm-leaf manuscripts from the island and read and wrote new copies of them as assignments and placed them in the library. Today, Hanguranketha Vihara is the only temple in Sri Lanka with 2000 books as it is the largest library containing Palm-leaf manuscripts where the Tripitaka was written. Accordingly, it is logical to consider Atthadassi Thera of Doratiawe and the Hanguranketha Pothgul Vihara, which he ruled, as a center that secured the tradition of Pothgul Vihara in this country for a long time during the English colonial period. we must protect this knowledge hub.

Keyword: *Pothgul Sampradaya, Maha Viharaya, Atthadassi Thera of Doratiawe, Palm-leaf manuscript, Tripitaka*

The Impact of Oral Tradition (Vedagata, Guru Mushti and Kem methods) on the Circulation of Knowledge in Indigenous Medicine: With Special Emphasis on Kurunegala District

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Abstract

The purpose of the research “The Impact of Oral Tradition (Vedagata, Guru Mushti, and Kem methods, etc.) on the Circulation of Knowledge in Indigenous Medicine: With Special Emphasis on Kurunegala District” was to identify the role of oral methods in sharing the knowledge of the indigenous medicine. In addition, there were several purposes such as identifying the nature of public consciousness on oral tradition and indigenous medicine, identifying the studying oral methods regarding the indigenous medicine, and oral methods regard to the preparation of indigenous medicine. The sample was selected only from the registered traditional specialists (physicians) in the Kurunegala district, due to the limited access to an island-wide basis. All these participants were advanced in the respected subject and were expected to have a reasonable generalization about the research. The ethnographic research method has been used for the study. To accomplish the objective of the study, several methods were used for data collection, including semi-structured questionnaires, supplementary interviews, and observations. The supplementary interviews were conducted with the above-mentioned selected sample in Kurunegala district. The method that has been used to select the sample was the purposive sampling method. The researcher was able to reach the data saturation point once sharing 50 questionnaires and conducting the supplementary interviews with the same count. Therefore, the sample size can be

defined as 50 (The size of the sample was not pre-defined, and data was collected through semi-structured questionnaires with the sample until the researcher arrived at the data saturation point along with the relevant process). Findings were confirmed by data obtained through secondary sources of literature review. The main finding of the study is that oral tradition has played a very important role in the circulation of knowledge of indigenous medicine since ancient times and it still plays a significant role in that field. The primary methods used to transmit traditional medical knowledge orally are, Vedagata, Guru Mushti, and Kem methods etc.

Keywords: *Oral Tradition, Indigenous Medicine, Traditional Specialists' Physicians, Intangible Cultural Heritage.*

**A Study on Parent Organizations' Contribution to Functioning
Special Libraries in Sri Lanka: with special reference to
International Water Management Institute Library, National
Institute of Education Library and National Science Foundation
Information Center Library**

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Abstract

The main objective of this study was to study the contribution of the parent organisation to the functioning of special libraries in Sri Lanka. For this, 03 out of 70 special libraries were selected as the sample using convenience and non-random sampling methods. The survey method and interviews were used as the research method of data collection for the study. Accordingly, data were collected through the questionnaire. In this study, data were collected under the following sections on the contribution of parent institutions to library performance. That is, the provision of library resources and services, how to obtain financial resources, human resource management, provision of infrastructure, etc. A qualitative method was used for data analysis. As revealed by the data analysis, in the study of the contribution of the parent Organization to the library function of the special libraries in Sri Lanka, the contribution of the mother organisation to the library function of the three libraries, namely the International Water Management Institute Library, the National Institute of Education Library and the National Science Foundation Information Centre Library is at a reasonable level. It was revealed that the contribution of the parent institution in library resources and service provision, financial resources, human resource management and infrastructure provision is reasonable. In this study, compared to the other two libraries, it was found that the contribution of

the mother organisation to the International Water Management Institute library is high. It was revealed that delays in purchasing computers and other equipment from the parent institution, insufficient financial provision, various rules, and regulations existing in the mother organisation, and delay in fixing errors in the equipment have adversely affected the functioning of the special libraries as the problems faced by these libraries. This study also presents solutions to solve these problems.

Keywords: *Library Parent Organization, Special Libraries, IWMI, NSF Information Centre, NIE Sri Lanka.*

The Affect of Online Reading to Improve the Effectiveness of University Student’s Learning Process, With Special Reference to University of Kelaniya

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Abstract

Information and communication technology has developed, rapidly with the advancement of information and communication technology, people in the modern society tend towards online media instead of print media. The development of this information and communication technology has also brought about a great change in the field of study. Accordingly, the university students in Sri Lanka are getting information through online access instead of physically using the library. But with the development of information and communication technology, due to the proliferation of online sources, online reading should be done more carefully. Through this study, the main objective was to study the effect of online reading to develop the effectiveness of the learning process of university students and to make necessary suggestions to develop the effectiveness of online reading of university students. For this study, the third-year students of the faculty of social sciences of the University of Kelaniya were used for the sample and thirty students were randomly selected from each field of study and the necessary primary data was collected through online questionnaires, interviews and via telephone lines. For Secondary data were used books, journals, theses and e – resources. The collected data is analyzed by quantitative data analysis method. Although online reading can contribute to a high level of learning process for university students, it was found through the analysis of research data that the effective use of online reading for

students' academic activities is at a moderate level. There are several reasons for this. This is due to insufficient understanding of information literacy and information search among students, problems with language and facing various difficulties in reading online. Accordingly, as suggestions of this research, it is possible to educate students about choosing the right online reading source, develop language skills, provide students with practical knowledge about the use of electronic resources through the university library, and implement motivational programs to increase online productivity.

Keywords: *University, University students, Reading, Online reading, Effective*

A Cross-Cultural Exploration of 'Magicae' in Imperial Rome and 'Hooniyam' in Ancient Sri Lanka

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Abstract

This comparative research delves into the intricate world of dark art practices by examining the phenomena of 'Magicae' in Imperial Rome and 'Hooniyam' in Ancient Sri Lanka. Through a meticulous cross-cultural analysis, this study unveils the fascinating parallels and disparities between these distinct manifestations of occultism. Contextualized within the historical, cultural, and societal backdrops of Imperial Rome and Ancient Sri Lanka, the study explores the nuanced rituals, spells, and beliefs associated with 'Magicae' and 'Hooniyam'. By scrutinizing historical documentation, folklore, oral traditions, as well as literary and archaeological evidence, the research illuminates the integral role these practices played in shaping the spiritual and social landscapes of their respective civilizations. The research unearths the profound influence of cultural beliefs, religious outlooks, and societal norms on the development and reception of these dark art practices. By juxtaposing the cultural frameworks that birthed 'Magicae' and 'Hooniyam', the study uncovers the multifaceted nature of human spirituality and the diverse avenues through which individuals sought to navigate the mysterious forces surrounding them. Through an examination of modern interpretations, differing viewpoints, and scholarly debates, the research underscores the enduring relevance of these practices in contemporary discourse. Furthermore, the study contemplates how the remnants of 'Magicae' and 'Hooniyam' practices

have permeated modern belief systems and worldviews, reinforcing their enduring significance. In essence, this research transcends the confines of time and geography to weave a comprehensive tapestry of the human propensity for exploring the arcane. By meticulously comparing 'Magicae' in Imperial Rome and 'Hooniyam' in Ancient Sri Lanka, this study not only enriches our understanding of these ancient civilizations but also provides a profound insight into the profound intricacies of the human quest for the mystical and enigmatic.

Keywords: *Cross Cultural Exploration, Cultural Beliefs, Hooniyam, Magicae, Dark Arts*

The impacts of the television on G.C.E (O/L) Examination results of the school children in Sri Lanka.

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Abstract

Television is a medium that has made such an impact on human society and the world that we are always creating metaphors to describe its role and place as a communicator. Although it is indeed correct to view television as a “Window to the world,” a fitting metaphor that relates most closely to the thrust of this book is to also see it as an audiovisual tapestry on which is being woven a complex and ever-changing national and international set of images that are hung on the small screen for all to see. In accordance with the aforesaid fundamental reveals, grass-roots evidence-based studies are important to human beings towards the perspective of the true-to-type impacts of watching television. The present study has made an attempt to investigate the impact of the television on the G.C.E. (O/L) examination results of the school children in Grama Niladari Division 574, Mampe-West, in the Piliyandala Divisional Secretariat of the Colombo District in Sri Lanka. The study mainly used sample surveys. The stratified sampling method has been used for the study. Size of the sample: 50 children. Data was analyzed in the respondent with the help of questionnaires. The collected data was analyzed by the computer using the statistical package for social sciences. This empirical study highlights the evidence-based relationship between the number of hours devoted to watching television and the G.C.E. (O/L) examination results, and it introduces the attitudes of the school children on the impact of watching television on their

educational achievement. Further, it presents information about the parent's attitudes towards their children watching television and their educational achievements. According to the findings of the research, it has been debated that the majority of examination failures have watched television for more than three hours per day. This finding provides clarification that children who watch television more than three hours per day have lower examination results. It has been examined that there is a relationship between the number of hours devoted to watching television and the examination results. The majority of children's attitudes were that watching television has been less helpful to their examination results. On the other hand, the majority of parents' attitudes were that watching television has both positive and negative impacts on their children's educational achievements. There is no doubt that these research findings may be helpful for parents and children to genuinely understand the impacts of watching television programs on educational achievements.

Keywords: *Television, School children, Examination results, Educational achievements, parent's attitudes*

An exploratory study, how the user orientation conducted by the University Libraries in Sri Lanka, during COVID Pandemic period.

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Abstarct

Library user orientation is a planned programme of giving library instructions either on lecture or a demonstration, program of instructions or a face to face or computer based method or demonstration of library physical arrangement, resources and services conceivably with library functional aspects in a rudimentary manner, specially targeting student categories exposing library services for promoting good library relations and publicity through the process in order to become effective library users. It is a splendid opportunity to "sell" the library to the students, to promote the services making a very friendly atmosphere between library staff and those users nearer to resources and service. COVID 19 pandemic severely affected to the user orientation programmes conducted physically for the new entrants in University libraries in Sri Lanka. The four objectives of this paper were to identify how university libraries conducted their user orientation during this period, to explore the attitudes of Librarians towards conducting user orientation on online mode to examine the problems faced by the libraries in conducting user orientation in this COVID 19 period. This study utilized mixed methods. Sample comprised of four university libraries with their Librarians. Questionnaire was distributed Kelaniya, Wayamba, Ruhuna and Sabaragamuwa university libraries to collect data, which reflect their preference on physical a virtual user orientation programme. Study found that all four universities used online mode for their user

orientation programmes, which means the validity of this process. Attitudes of four Librarians towards this online use for the user orientation were unsatisfactory which underscore that conducting user orientation in physical participation is more fruitful than online mode. The problems faced by the students are the signal and connectivity issues, meager knowledge of the usage of this online mode, the scarcity of computer facilities while the librarian faced problems like how physical demonstration session should be conducted on online mode, mediocre knowledge of the Learning Management System usage, time management issues related to online user education sessions including the shortage of computer facilities.

Keywords: *User orientation, University Libraries, User education, Library orientation, Library instructions, online education*

A study on how Sri Lankan public education should prepare students to face sustainability challenges in the 21st century.

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Abstract

Sri Lanka is a developing country with a rich cultural heritage and a solid commitment to education. However, the country faces several sustainability challenges, including climate change, environmental degradation, and social inequality. Public education plays a vital role in preparing students to face these challenges and to build a more sustainable future for Sri Lanka. Therefore, the main objective of this study is to identify the best methods for integrating sustainability education into the Sri Lankan public school curriculum. This study will also examine the key sustainability challenges that Sri Lanka is facing in the 21st century and how well is Sri Lankan public education preparing students to face these challenges. This study is significant because it has the potential to help Sri Lanka to build a more sustainable future by preparing its students to face the challenges of the 21st century. This information can be used to develop policies and programs to integrate sustainability education into the Sri Lankan public school curriculum. Looking at the methodology, this research is a mixed method of mixing qualitative and quantitative data and content analysis carried out using secondary data. The key findings of this study are using a place-based approach to sustainability education, active learning methods, partnering with community organizations, and using technology best methods for integrating sustainability education into the Sri Lankan public school curriculum. Also, this study found that Sri Lanka is facing several sustainability challenges, including climate

change, environmental degradation, and social inequality, and Sri Lankan public education needs to prepare students to face sustainability challenges effectively. This study concludes that by justifying the implementation of these best methods, Sri Lankan public education can better prepare students to face the sustainability challenges of the 21st century and build a more sustainable future for the country.

Keywords: *Sustainability Education, Public Education, Sri Lanka, 21st Century*

Use of Digital Libraries for the Learning Process by Students of Sri Lankan Universities in the post Covid-19 era: Special reference to Faculty of Social Sciences, University of Kelaniya, Sri Lanka

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Abstract

Digital libraries are needed to successfully address the strategic goals of higher education with appropriate technologies. This study was conducted based on the research problem of how Sri Lankan university students use the digital libraries for the learning process in the post-Covid era. The aim of this research with this background is to examine the use of digital libraries for searching information needed for the learning process of university students in the post Covid era. The research approach used in this is the quantitative method and research strategy is the survey research method. All the BA Hons undergraduate's students of the Faculty of Social Sciences in University of Kelaniya were considered as the selected research population. The sample was selected with a confidence level of 90% using the mathematical formula called "Sample Size Calculate" and the stratified random sampling method was applied in selecting the sample. Primary data was collected through an online questionnaire and the Excel software was used to analyze the quantitative data. Secondary data were collected through the printed sources, which were considered relevant to the research. The study revealed that 63.4% of university students used digital libraries had increased in this period and that digital libraries had received more attention during the Covid pandemic and 63.4% of them used both local and foreign digital libraries. Suggestion is made

to implement the awareness programs through Seminars, Webinars and interactive sessions for the first year students of the university on the digital literacy for improving the knowledge and application of including the need and utility of such libraries. It reveals that an adequate number of digital libraries and sources are yet to develop relevant to local curriculum based subjects hence initiatives have to be taken by relevant stakeholders to design and develop such digital libraries for the education system of Sri Lanka as done by the other countries of the world.

Keywords: *Digital Libraries, Digitization, Post-Covid 19, Information and Communication Technology*

A Study on E-services Introduced During the COVID-19 Pandemic by Kelaniya University Library

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Abstract

University libraries have a unique place in teaching and research activities. Due to the COVID-19 epidemic, the fulfillment of educational needs and maximum support to users through university libraries has been hindered, as most activities were paralyzed. As a result, e-services such as Digital Repositories, Past Paper Repository, Subject Liaison, Library Services (SLLS), Chat Services, Audio Book Collection, Braille Collection, Mobile App, Webinar Series have been established as challenges to the COVID-19 epidemic. The case study research method was used for this research, and for data collection, users of the University of Kelaniya were taken as the entire population, and data was collected from all the students. Online questionnaire-interview methods were used for data collection. In focusing on the use of electronic library services by Kelaniya University students, it was possible to identify the lack of awareness of the use of electronic services and those services as a major problem. Also, the inability to use the mobile app for some phones, the non-functionality of some programs, the non-implementation of reader education programs on new electronic programs started with the spread of the COVID-19 epidemic, and the non-availability of books in electronic form as required by each subject, as well as other problems, were possible. The library already has a mobile app. Taking the department as a whole to carry out awareness programs about electronic services in the library through librarians, implementing information delivery services for students who do not

have internet facilities, and starting courses for readers that include the English and computer knowledge required to use library electronic services have been suggested.

keywords: *Library, University Library, Covid-19, Library Services, Electronic Library Services*

Use of Open educational resources for improving the academic performances of university students: based on the University of Kelaniya, Sri Lanka

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Abstract

Higher education plays a crucial role in the education system of Sri Lanka. Within this context, universities occupy a prominent place among other institutions that provide higher education. Open Educational Resources have been an essential type of resource for Sri Lankan higher education, especially in the effect of political, economic, and social including technological turbulence. The purpose of this study is to investigate the awareness and usefulness of Open Educational Resources among university students. The research approach used in this is the quantitative method and the research strategy was the survey research method. All the B. A Hons undergraduate's students of the Faculty of Social Sciences at the University of Kelaniya were considered as the selected research population. It is a size of 2442. The sample was selected with a confidence level of 90% using the mathematical formula called "Sample Size Calculate" and the stratified random sampling method was applied in selecting the sample. It was a size of 243. Primary data was collected through an online questionnaire and the Excel software was used to analyze the quantitative data. The study revealed that university students are aware of Open Educational Resources. However, the use of Open Educational Resources by students was not at a positive level. Open Educational Resources are useful in the academic performance of university students for research activities, evaluation activities, projects, new skills development,

research skills development, and for the preparation for exams. Providing proper guidance and training on Open Educational Resources to every university student, directing students to use Open Educational Resources in all higher education institutions including universities, and developing a proper policy and infrastructure on Open Educational Resources could be used for improving the academic performance of university students.

Keywords: *Higher education, University education, Open Educational Resources, Open sources, Open Science*

The usage of Machine-Readable Cataloguing format (MARC) for University Library Online Public Access Catalogues (OPACs) in Sri Lanka.

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Abstract

The rapid development of technology has revolutionized the way information is managed and accessed in libraries worldwide. In this context, the Machine-Readable Cataloguing (MARC) format has emerged as a crucial tool for the efficient management and accessibility of library resources, particularly in university libraries catering to the research and educational needs of the academic community. This research paper explores the utilization of the MARC format in the Online Public Access catalogues (OPAC) systems of two arbitrarily selected university libraries in Sri Lanka. The study aims to investigate the level of uniformity in MARC implementation and improve easy access to bibliographical information. Furthermore, the research examines the collaborative functions performed by university libraries to facilitate the exchange of cataloguing data, benefiting both readers and library staff. The research methodology employs a combination of qualitative and quantitative methods, involving the administration of questionnaires and participatory observations. The sample consists of forty university readers and heads of the cataloguing departments in the selected universities. The findings indicate a lack of uniformity in the utilization of the MARC format across the library system, with variations in MARC tag usage and issues with accurate cataloguing data entry. To address these challenges, the study recommends raising awareness within the entire university system regarding the Descriptive

cataloguing framework for the MARC format introduced by the National Library. The establishment of cataloguing guidelines and standards for staff is crucial, ensuring adherence to prescribed practices when creating or editing MARC records. These guidelines should undergo periodic review and updates to ensure efficient data entry. To improve OPACs, a unique Sinhala transliteration system for the entire university system is also essential.

Keywords: *Machine-Readable Cataloging (MARC), Online Public Access Cataloging (OPAC), university libraries, cataloguing data, standardization*

A bibliographic study of the knowledge tradition contained in the palm leaf manuscripts: In reference to the districts of Anuradhapura, Kandy, and Kurunegala

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Abstract

The main objective of the research is to conduct a bibliographic study on palm-leaf manuscripts in Sri Lanka aiming to disclose the knowledge traditions based on these bibliographic conventions in palm leaf manuscripts. The sample was selected based on the historical periods covering three districts. As a limitation of the study, it was identified of covering only three districts where palm leaf manuscripts are dominant in Sri Lanka Total of 575-palm leaf manuscripts from six temples was selected as a sample. First, Kahatagasdigiliya Gonagiri Rajamaha Viharaya in the Anuradhapura district which has a long history back to the reign of King Pathis II and Ruwangiriya Rajamaha Viharaya in Anuradhapura district, Secondly Ginipenda Vardhanaramaya and Medadepola Rajamaha Viharaya in Kurunegala district and the Arattana Rajamaha Viharaya and the Attaragama Temple in Kandy District were selected and all those temples were holding historical and culturally significant collections in Sri Lanka. Identifying the subject areas contained in the collections under the study, exploring the bibliographic nature and characteristics of those pamphlets as bibliographic standards followed, how the art of writing done on palm-leaf manuscripts, and their preservation and conservation were examined as knowledge tradition imbued on palm leaf manuscripts were the objectives. The other objective was to compile a descriptive bibliography for achieving some aims like emphasizing of developing a national level bibliographic

standard, revealing the contents of palm leaves, and showing the validity of a bibliography. It was revealed that adequate and properly furnished bibliographic information is not available which hinders readers to access it. The other issue is that there is no properly accepted and approved bibliographic standard for the collection, organization, and dissemination of this valuable manuscript literature. The other obstacle faced by these palm leaf depositories is the lack of use of preservation and conservation methods. The study focused on the origin and the evolution of the art of palm leaf writing including historical methods of preservation and conservation as found to be a knowledge tradition that should be sustained for re-use. Classification of palm leaf manuscripts is a dire need and thus the users will be able to easily access the information, when and where they need them. Based on this principle, a descriptive bibliography was compiled under this study as a requirement to stress the need and identification of developing a national bibliographical standard in the Sri Lankan context as well as revealing the significance of compilation and study of bibliographies on palm leaf manuscript literature. The conclusion of the study was that there had been knowledge tradition, which is embedded with the historical bibliographic conventions, practiced in palm leaf literature in the country. It was able to identify the characteristics and features relevant to these conventions like notation, art of writing styles, illustrations, conservation and restoration techniques and practices and generally found the gradual decadence of palm leaf manuscripts. A National Level Planhs been identified for developing a bibliographic standard for conservation and the preservation for palm leaf manuscript in Sri Lanka.

Keywords: *Art of Writing, Bibliography, Bibliographical Standards, Conservation, Descriptive Bibliography*

A study on the palm leaf manuscripts containing indigenous medical systems (with reference to Anuradhapura District).

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Abstract

The principal aim of this study was to explore the original Knowledge of Indigenous Medicine, which avails in the Palm leaf Manuscripts (PMs) in order to clear out what are indigenous medical systems practiced in Sri Lanka. History indicates that there was a prosperity in the Indigenous Medicine, which spread through popular usage, orally, as well as through PMs. The research problem of this study is the investigation of how and whether there existed an Indigenous Medicine in the PMs.

The objectives of this paper are to examine the indigenous medical systems practiced in Sri Lanka conventionally, to identify the diagnosis methods in indigenous medicine and to explore the reasons for dwindling use of this valuable medical method. Method of the study was the historical method. Population was the PMs, which contained Indigenous Medicine in Sri Lanka. Sample of the study is 104 PMs which contained Indigenous Medicine that were available in the Anuradhapura district. Primary sources were the study of PMs, interview technique and field observation. When focusing on the Indigenous Medicine, main indigenous medical systems related to the medical subject like pathology, ophthalmology, pediatrics, gynecology, treatment of cancer, veterinary medicine, mystical medicine, science of healing and organ treatment revealed including the treatment of abscess were found. The methods of diagnosis were messenger method, care and treatment including use of certain medicines, pulsology, and

venomology. The factors related to dwindling use of indigenous medicine and medical systems were the ignorance of the validity of this medicine, undue recognition, found including the deviation of the indigenous medical practitioners and their generations owing to socio-economic and familial factors. The youngsters of indigenous medical practitioners were very reluctant to learn and use this practice instead, they prefer joining other employment. This has affected very seriously the propagation of this noble profession.

Keywords: *Indigenous knowledge, Indigenous Medical Systems, Indigenous medicine, Palm leaf manuscripts, Traditional medicine, Manuscript studies*

Mythological origins of Traditional Medical systems of Ancient Greek medicine and Ayurveda medicine

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Initially, Medicine has been the Divine art or the gift in many cultures including Greek and Indian. To primitive man, the ability to heal and cure diseases seemed magical, even miraculous. From this, an awareness grew in him that diseases that ultimately cause death and suffering result from Demonic work while health and continuation of life are God related. In the identified traditional medical systems of Greek and Ayurveda, it is also noteworthy that Medicine had always been considered divinely gifted pointing out the fact that both systems have their beginnings in mythology and consequently in religion. For instance, the Greeks believed that medicine was a gift from the Olympian God Apollo while in Ayurveda it was the knowledge received from God Brahma. The objective of this paper was to analyze the mythological origins of the identified traditional medical systems of Greek and Ayurveda and identify the possible diffusions and the originality of each culture in terms of medicine and health. Thereby, the mythological origins connected with the Olympian religion for Greek medicine and Hinduism for Ayurveda medicine were analyzed along with Historical analysis and thematic analysis of primary and secondary sources under content analysis method in the light of the research objectives. The mythological origins of Greek and Ayurveda medicine suggest that both cultures had a sophisticated understanding of the human body and its healing processes, even at an early stage of their

development. The divine associations of medicine in both cultures reflect the belief that healing is a sacred act and that the ability to heal is a gift from the gods. The fact that both systems have their roots in mythology and religion highlights the importance of these aspects in the early understanding and practice of medicine witnessing their individual and independent origins in the West and East free from any assimilation from either of the cultures.

Keywords: *Greek, Ayurveda, medicine, Olympian, Hinduism*

A comparative study on Television Media Libraries and their collection.

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Abstract

In the electronic media of Sri Lankan mass communication, television occupies a special place. “It is necessary to create an existing library for a concerned institution. To achieve these objectives, a library is maintained in a building or a small room owned by the institution.” (Thompson, 1943, P. 80). This is a study on television media libraries and their collections. Libraries are also created in association with electronic mass media institutions with the purpose of depositing and preserving them. The programmes that were aired at the beginning of television will end after the end of their broadcast time. Due to this, the opportunity of re-broadcasting certain programmes was not available. Re-production of the programmes required a lot of money, time, effort, and resources, so the programmes were broadcast and recorded. Rebroadcasting of broadcast programmes also enables the production of other programmes. The libraries built by storing the tapes and discs created by the recording of programmes can be called media institute libraries or electronic media institute affiliated libraries. As the task assigned to these media libraries, it can be pointed out that programmes are deposited for broadcast, programmes are released for broadcast, and programmes are deposited after broadcast, recording, and reproduction of recorded programmes. (Electronic media institutions affiliated libraries in Sri Lanka; collection; services; User study,2000, P.2) This study is aimed at determining the organisation and collection of television media libraries. Two television media libraries were selected

as samples from the public and private sectors in the television media library. To collect primary data, a detailed questionnaire was distributed among a random sample selected from the relevant categories of media personnel within the selected two broadcasting organizations. The data analysis shows that the library collections of both media institutes are made up of different types of audio and visual discs. The respondents indicated that they primarily resort to media resources. Establishing proper categorization systems for all media libraries, As a suggestion to construct the collection, a consortium to exchange human and other resources, developing an all-encompassing collection rather than audio or video materials, is offered.

Keywords: *Television Media, Media Libraries, Media Collections, Collection Organization.*

Leveraging Social Media Analytics for Enhanced Library Services: A Case Study of User Engagement and Feedback

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Abstract

Libraries are rethinking their roles as information hubs and community spaces in the age of digital transformation, and social media has become a potent tool for communicating with users. Furthermore, in the millennial era, SM (Social Media) plays a crucial role in our day-to-day lives. SM Provides a dialogic approach to the production of content as well as to the exchange of ideas, distribution, interpersonal connections, and social orders. As a result, social media outpace traditional media in developing readership and authorship relationships. Thus, in the current era of computerized innovation, the unique distribution of information and the quick delivery of that information to the readers can easily be done through this SM (Social Media). SM has been gaining importance in recent times due to the 3.5 billion active users' presence on Facebook, Instagram, Twitter, linked, etc. In such an atmosphere, an exploration of leveraging social media analytics to improve library service should be initiated, with special emphasis on improving user engagement and gathering valuable feedback. It explores the nexus between SM data Analytics and information science with the goal of utilizing the abundance of data presenting social media platforms to support libraries in their endeavor to deliver services that are focused on the needs of library users. .The research uses qualitative research methods for qualitative exploration. In this qualitative analysis, the collection and

analysis of user engagement such as SM shares, comments, click-through rates, and reaching social media platforms was done. Using these obtained data, the information needed for SM data analysis was created and explored through the SMA (Social media Analytics) Dashboard. At the end of the research, best practices and recommendations will be developed for libraries looking to use social media analytics to improve their service. These suggestions will include methods for enhancing user participation, gathering feedback more successfully, and using data to inform decision-making. In a time when digital engagement is essential to community outreach, this study attempts to equip libraries with the tools they need to use social media analytics wisely. Wayamba Library may increase user enrolment, expand service, and obtain priceless input by judiciously employing social media platforms. This will ultimately strengthen its position as a vibrant user-focused organization in the digital age.

Keywords: *Social Media Analytics, Library Users, Library Services*

Awareness of Academic Integrity among the Undergraduates: A Case Study based on the Department of Library and Information Science, University of Kelaniya, Sri Lanka

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Abstract

Academic Integrity is considered a vital parameter to protect from academic dishonesty. Currently, undergraduates use these concepts in their studies and research. However, it was still looking for the survey related to the awareness of academic integrity among the Department of Library and Information Science (DLIS) undergraduates. Therefore, this case study focused on identifying an awareness of Academic Integrity among BA honours degree undergraduates of the DLIS, University of Kelaniya. The main objective was to examine the awareness of the academic integrity of the DLIS undergraduates under the main concepts of plagiarism, making false claims, paraphrasing, limitations on getting and giving help, and summarising. Under the non-probability sampling method, a convenient sample was used to select BA honours degree 106 undergraduates from the DLIS. An online questionnaire was distributed to the undergraduates as a tool for data collection. According to the findings, 80.4% of undergraduates knew the concept during the lectures, while 7.5% had the idea through self-studies. The rest of the 12.1% of percentages represented that they were aware of the concept when searching the internet, from friends, reading journal articles and through the final year research supervisor. Most undergraduates had a good understanding of plagiarism, making false claims, paraphrasing, and limitations on getting than the giving help than summarizing. All undergraduates would like to learn these concepts via the curriculum,

and they proposed teaching the concept in detail in the syllabus. The study proposed establishing a compulsory course module for all undergraduates to complete before their final year.

Keywords: *Academic integrity, Department of Library and Information Science, Undergraduates, University of Kelaniya, Sri Lanka*

Library professional ethics and its related problems and challenges faced by Library and Information Science students during their library training

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Abstract

Internships are hands-on experiential training for many careers. Many professional apprentices enter the world of work with the experience gained from these internships. Training and ethics are not concepts unique to the library field. It is an interrelated process if followed it will bring multifaceted effects. In order to successfully run any field in the world, one must maintain its own ethics as well as training. Training ethics are three fold, one is in trainee's perspective, the other is in trainer's perspective and the next is those who direct the trainees for trainers. Therefore, library training is essential to efficiently manage the library career of the students leading to the library profession. Department of Library and Information Science, University of Kelaniya, Sri Lanka also hired the students for the internship. Thus, students are employed in various institutions to get library training. Thus, it is essential for all institutions providing training to maintain a code of ethics related to this training. Accordingly, the principal aim of this research is to conduct a detailed investigation of the issues and challenges faced by students who studied library and information science during library professional training and to create a value system in developing a code of ethics associated with library training in anticipation of a solution. Accordingly, a researcher has used mixed methodology for this research. The sample used for this purpose is the

2015/2016, 2016/2017 groups of students who studied in the Department of Library and information Science including those lecturers who were in charge of training and some selected staff of the principal two institutions which offered training, namely the Library of the University of Kelaniya and the National Library and Documentation Board. Questionnaires and interviews were used to collect the primary data. Accordingly, it was identified that many of the institutions that provided the training did not have a formal documented code of ethics of trainees. They used this trainee ethics by practice. A simple code ethics for trainees was stated in the Departmental training guide book/record book given to student trainees. Accordingly, a formal ethical system should be introduced for three categories namely the trainee students, those lecturers who are in charge of training and the trainers attached to training institutions.

Keywords: *Ethics, Human Resource Management, Internship, Library profession, Professional ethics, Training ethics*

The Factors Affecting to Female Labor Force Participation: Case Study of Sri Lanka.

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Abstract

Female labor force participation (FLFP) is a key indicator of gender equality and economic development. Sri Lanka has made significant progress in gender equality, with high female literacy rates and educational attainment levels. However, FLFP in Sri Lanka remains low, at around 30-35% for the past two decades. This is significantly lower than the global average of 49.6%. The low FLFP in Sri Lanka is a significant economic and social challenge. It limits women's economic opportunities and potential and deprives the economy of a valuable labor pool. Therefore, the main objective of this study is to identify the factors affecting FLFP in Sri Lanka. This study will also examine the impact of these factors on FLFP and provide recommendations for increasing FLFP in Sri Lanka. This study is significant because it will provide valuable insights into the factors that are preventing women from participating in the labor market in Sri Lanka. This information can be used to develop policies and programs to increase FLFP and promote gender equality in Sri Lanka. Looking at the methodology, this research is a mixed method of mixing qualitative and quantitative data and content analysis carried out using secondary data. The key finding of this study is the main factors affecting FLFP in Sri Lanka. According to sociocultural norms and attitudes, lack of affordable and accessible childcare, discrimination in the workplace, and limited job opportunities in female-dominated sectors are the significant findings. This research concludes that the low FLFP in Sri Lanka is a complex issue influenced

by various factors. To increase FLFP, it is essential to address all of these factors, including sociocultural norms and attitudes, the lack of affordable and accessible childcare, discrimination in the workplace, and limited job opportunities in female-dominated sectors.

Keywords: *Woman, Labor Participation*

Sustainable Development Goals: Sri Lankan policies and projects of Environmental Governance to protect ‘life on land’

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Abstract

Nowadays, Environmental insecurity is the major threat to the human security in the modern developing international system. The degradation of the local environmental systems and spill over there consequences to the global system can be made minatory area to the human being. As a result of this, in 2015 The United Nation Organization adopted Sustainable Development Goals for protect human security, Environmental security and protect future generation etc. There are seventeen goals in the Global Indicator Framework of for the sustainable development goals and targets of the ‘2030 Agenda’ for Sustainable Development. In this sustainable development goals, 13, 14 and 15 goals are squarely adjoined for the global environmental problems. In this study underlying the fifteen-goal named, ‘Life on land: sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.’ It is most valuable goal for Sri Lanka. Because Sri Lanka is a country which has full of biodiversity and natural beauty. This study examined, how Sri Lankan government work of the environmental policies and projects and there strengths and weaknesses during the time period of 2015 to 2019. This study confirmed a positive and negative relationship between Bellanwila-Attidiya wetland and Sri Lankan government. This paper is analytical to survey how the collapse of Biodiversity effects in the Attidiya wetland in the present, the issues related and the solutions for them. The main purpose of this study is demonstrating a ‘Good Governance’ element

related to the ‘Environmental Governance’ and Sri Lankan process of the good governance after 2015. This study increases the understanding of the relationship between good environmental governance and sustainable environmental system.

Keywords: *Sustainable Development, Human Security, Environmental Security, Good Governance, Good Environmental Governance.*

A Review of Entrepreneurial Opportunities and Strategies for Library and Information Science (LIS) professionals in Sri Lanka

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Abstract

Entrepreneurship is a crucial driver for any economy. Sri Lanka has a deficient presence of entrepreneurs in the market, numbering less than 1.5% of the population. This, compared to some of the other countries in the Asian region, such as Vietnam and Thailand, is very low. Socioeconomic changes in societies have resulted in massive turnovers regarding unemployment, changes in information needs, emerging technologies, policies, and lifestyles. Such dynamic changes significantly impact the way Library and Information Science (LIS) professionals operate since traditional working styles are likely to be affected by a higher wave of new categories of professionals with high competencies in emerging technologies. The main objective of this study is to analyze the importance of entrepreneurial opportunities and strategies related to LIS professionals to improve the library sector. This study employed the content analysis methodology to examine pertinent literature aligned with the research's objective. The purposive sampling method has been used to select the relevant literature. The study examined significant parts, namely, definitions of entrepreneurship and its importance, introduction to entrepreneurial opportunities, and strategies related to the LIS professionals in Sri Lanka. Based on the literature, entrepreneurial librarians may start their consulting practices. They act as freelance librarians or information brokers and provide services to other libraries, businesses or government agencies. Librarians do not have to work only in established institutions; they can

set up their own libraries or information centers and become information brokers or business librarians, searching and finding user information. In conclusion, individuals in Library and Information Science (LIS) who possess a strong passion for turning their profession into a personal calling, aspire to establish their own businesses, seek independence, and develop on challenges in the field, should consider pursuing entrepreneurship as a career path and become entrepreneurs. This choice can have a positive impact on the country's economy while allowing library professionals to contribute more effectively. 45.91 percent of undergraduates who are referred from entrepreneurial backgrounds are more inclined than other students. But some students are doing small businesses while they are studying. After graduation, they expect to join organizations rather than self-entrepreneurship. If we focus on this study, it is much more difficult to start and establish self-entrepreneurs in each profession. For this, there should be the proper direction and motivation from responsible organizations and the government.

Keywords: *Entrepreneur, Entrepreneurship, Entrepreneurship Strategies, Librapreneur, Library Science Profession*

Investigating issues and challenges in Information Services Marketing in the Special Libraries of Sri Lanka: with special reference to selected libraries.

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Abstract

Special libraries differ from other libraries as a type of library with a collection based on special subject preferences and diversified with specialized services. Many special libraries are under-utilized owing to the fact that a reasonable number of staff are unaware of the services provided. This context, steps have to be taken to make aware of the Library and Information Services by the special libraries. In this context, information service marketing is an important tool for special libraries in providing regular and efficient service by creating user awareness. The aim of the study is to identify the issues and challenges faced in marketing information services in special libraries in Sri Lanka. The mixed research method has been used while the case research method has been used as a research strategy. The study sample consisted of 05 librarians in five selected special libraries in the Colombo district. The questionnaire was administered to collect primary data. Data analysis was carried out with Microsoft Excel. This study identified issues in the marketing of information services in special libraries as, lack of knowledge of marketing principles and strategies (60%), lack of public relations expertise (80%), language barriers (80%), and a non-visionary approach in information service at the library managerial levels (60%). The challenges identified in the research were, lack of government support (60%), lack of a marketing policy (80%), inadequate infrastructure (80%), lack of trained staff (80%), and lack of

professional networking among special libraries (80%). Special libraries should concentrate on working in partnership with their parent institution to implement the appropriate countermeasures to the highlighted issues and challenges. Making plans for government assistance for Sri Lanka's special libraries should be a priority. Further, among special libraries collaboration in Sri Lanka should be established for that. Overall marketing of information services in the special libraries of Sri Lanka was not at a satisfactory level.

Keywords: *Special libraries, Information marketing, Information services, Information services marketing, Issues and Challenges.*

An investigation into the implementation into the implementation of the Human library concept at the Sabaragamuwa University library

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Abstract

The concept of human library can be identified as a concept used in university libraries to supply the unlimited information needs of readers. This research has been done based on the research problem of studying the functioning of the human library concept and reader satisfaction in the Sabaragamuwa University library. The main purpose of this study is to study the importance of applying the human library concept to the Sabaragamuwa university library system. Mixed research methodology was used for this research on human libraries operating in the Sabaragamuwa university library. The Questionnaire method was used in the collection of primary data and also data was collected by giving questionnaires to 106 readers who participated in the human library programs implemented in the Sabaragamuwa university library and to the Assistant librarian engaged in the coordination of the human library programs in the library. The population of this study is the entire university library system operating under the university grants commission of Sri Lanka. From the total population, using the purposive sampling method, the Sabaragamuwa university library, where the human library concept is implemented was selected as the sample here. It was revealed by 100% that the performance of the human library concept in the Sabaragamuwa University Library and the satisfaction of the readers in this regard is at a positive level. It was identified that 92% of the readers were properly educated by the library staff, 64% online,

24% physically and 12% of the readers participated in human library programs and the concept of human library is being implemented properly in the library. Further, efforts to increase reader participation, further awareness of the concept of human libraries, digitization of human books, organizing continuous human library programs etc. have been shown as proposals for successful implementation of the concept of human libraries in Sabaragamuwa University Library.

Keywords: *Library, University Library, Human Library Concept*

A case study on eliminating poverty through Public Library Services in Sri Lanka: A Special Reference to the Colombo Public Library

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Abstract

The absence of a typical or socially acceptable level of wealth or material possessions is referred to as poverty. According to the Sustainable Development Goals (SDG), number one calls for eradicating all poverty by 2030. Thus, as in other sectors, Information and knowledge are essential for development, as mentioned by Singh in 2012. Therefore, libraries and information centers are crucial in this greater context. This study aimed to conduct an in-depth, detailed examination of an analysis of the contribution of public libraries to poverty alleviation, a sustainable development objective. The main objectives were to find the types of public library services provided by the Colombo Public Library to upgrade their lives, to find out how it effectively affects the users, and to find out the problems they are facing providing the services by the library. For this, the Colombo Public Library was purposively selected. The case study method was selected as a research method, and data was collected through face-to-face interviews with library staff and users. Qualitative data was analyzed accordingly. According to the findings, several services were provided by the Colombo Public Library to improve their physical and mental sustainability. These services' final aim was to support eliminating their poverty. Accordingly, the Colombo Public Library provides mobile library services, public lectures, book supply services for prisoners, self-employment training programs, gardening encouragement

programs, health camps, counselling, and vocational training guides. Further, providing land in public libraries for the market, plumbing training, and informing about job opportunities directly contribute to poverty eradication. Moreover, readers to access the computer labs they need to become part of the information society, encouraging the enrollment of out-of-school children in classes, providing prison guards with career training, and giving the self-employed the option to pay in low-interest instalments through commercial banks and the setting up of loan arrangements and other ideas can be mentioned.

Colombo Public Library faced some issues when implementing the services to end poverty and promote personal development. The primary issues were a lack of funding, skilled staff shortage, space, computer resources, etc. Further, library users were greatly satisfied with the Colombo Public Library's services, which helped them upgrade their lives to eliminate poverty. Colombo Public Library is also happy to maintain the existing support services for its users.

Keywords: *Sustainable Development Goals, Poverty, Public Library Services, Colombo Public Library Service, Sri Lanka*

A Study on the Usage of Electronic Information Services by University Library Users During the COVID-19 Pandemic Period

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Abstract

The education sector in Sri Lanka experienced a significant setback due to the global Covid-19 pandemic. It is widely acknowledged that university students faced numerous challenges in their study and research activities from 2019 to 2021. One pressing issue was the utilization of information sources by students. Among these issues, a notable concern was whether the electronic information services available online were sufficient for the study and research needs of university students compared to the information accessible through physical university libraries. The primary objective of this study was to assess whether the information provided by the online electronic information services of the university library adequately supported the study and research activities of students, especially considering the constraints imposed by the COVID-19 pandemic. The study focused on the public university system in Sri Lanka, utilizing a cluster sampling method. University of Kelaniya was selected, and within the university, the Faculty of Commerce and Management, Faculty of Computer and Technology, Faculty of Humanities, Faculty of Social Sciences, and Faculty of Science were chosen through stratified random sampling. A sample of 25 students was taken, with 5 students selected from each faculty. Data collection was conducted through a questionnaire method, and analysis was performed using software such as Google Studio and MS Excel. secondary data from other sources relevant to the research were also analyzed. Two methods were employed for the analysis: the

data obtained through the questionnaire method was analyzed using both the descriptive and bivariate analysis methods. Quantitative data were collected in accordance with the research objectives. The data analysis conducted in this research led to the conclusion that the electronic information services provided by the university library during the COVID-19 epidemic were inadequate for the students' study and research activities.

Keywords: *COVID-19, Online Education, Electronic Information, Undergraduates, University Library*

A Study on the user satisfaction of Information Sources and Services of the University Libraries in Sri Lanka

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Abstract

The library plays an integral role of the University for Information sources, services, teaching, learning, and research works. The effectiveness of these sources and services is more beneficial for academic development and country development as well. The objectives of this study were to identify what kind of sources and services are used by the users, how these sources and services are supported to enhance their information needs and the situation of user satisfaction of these library resources. A mixed research methodology was employed as the overarching research approach, with the case research method serving as the research strategy. Primary data for this study were gathered using the questionnaire method. The research sample comprised 15 users of state university libraries in Sri Lanka. A simple random sampling technique was utilized to select a subset of 20 users from each university, resulting in a total sample size of 300 users. The collected data were then analyzed using the Statistical Package for the Social Sciences (SPSS). This study revealed that 33.7% of the users visit once a week, with 11.3% of them making daily visits. Users displayed a high level of awareness, with 90.3% being aware of the lending service, while 65% were knowledgeable about resource renewal. Interestingly, respondents demonstrated limited awareness of online information resources and E-services offered by the library. Nonetheless, user satisfaction with these resources and services was notably satisfactory.

To address these limitations, it is crucial to implement continuous user training and promote the popularity of the aforementioned services and sources.

Keywords: *Information Sources, Information Services, user satisfaction, user awareness, usefulness*

A study on the application of online technologies by university lecturers: special reference to faculty of Social Sciences, University of Kelaniya, Sri Lanka.

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Abstarct

The twenty-first century, which has witnessed notable advances and developments in many disciplines, including higher education, is known as the era of the information economy. This era has been dominated by Information and Communication Technology (ICT), which positively impacted the development and transition process in higher education worldwide. Thus, higher education has undergone a transformational journey from the traditional classroom model to a new online model during the COVID-19 pandemic. Therefore, the online learning environment took over the monopoly of the traditional classroom as the university learning and teaching process took place entirely online. In this context, it is crucial to find out the nature of online technology for university teachers to make their teaching process effective. Therefore, the objective of this study was to find out the use of online technology by university lecturers for the effectiveness of their teaching process. The quantitative research method was used, while the survey method was used as the research strategy for the study. The total population of this study was the academic staff members of the Faculty of Social Sciences at the University of Kelaniya. A study population was identified through the total population, and the study sample was selected using the stratified random sampling method from that study population. The primary data was collected through the questionnaire and analyzed using the SPSS software. The study revealed that

university lecturers used various online technologies effectively in their teaching process in the 21st century. However, online tools were used at a lower level while online teaching. Conducting productive training programs and workshops to uplift lectures' knowledge on online learning methods is recommended.

Keywords: *Online Technology, Online Teaching, Online Tools, TPACK, Information Communication Technology*

Utilization of Library 2.0 in Public Libraries as an Efficient Library ServiceU with Special Reference to Selected Public Libraries in Kandy District

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Abstract

The public library is the central point to fulfill the general public's information needs. For this purpose, public libraries are facilitating traditional and modern library services. Library 2.0 is an efficient library service that Sri Lankan public libraries can use to provide information needs efficiently. Therefore, this study aimed to determine the use of Library 2.0 as an efficient library service with special references to the Kandy district, Sri Lanka. Therefore, the study's objectives were to determine the usage of Library 2.0 in Public Libraries in Sri Lanka and identify existing challenges. DS Senanayake Public Library, Gampola Public Library and Doluwa Public Library in Kandy district were purposely selected as samples for this study. data was collected from 500 readers and 20 staff members through a questionnaire for quantitative data. Also interviewed library staff to collect qualitative data. A mixed methodology was used to analyze the data. A small proportion of public libraries use social media such as WhatsApp, YouTube, and Facebook as library 2.0 tools to share information among public library users; DS Senanayake Public Library was a pioneer among them. However, a key challenge was identified by a lack of fund allocations to get technical equipment needed by the library and a lack of readers and staff awareness of Library 2.0 tools. Further, almost 57.1% of library users preferred to receive traditional library services, whilst 42.9% preferred online library services. The study recommended

an awareness programme for library staff and users to overcome the challenges.

Keywords: *Library 2.0 Information Services, Public Libraries, DS Senanayake Public Library, Gampola Public Library, Doluwa Public Library, Sri Lanka*

Social factors of suicides in Sri Lanka

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Abstract

Suicide is becoming an immense social problem from end of 19th century. Both quantitative and qualitative researches are important to understand the issue. Research findings help to select suicide preventing programs. Eight hundred thousand suicides were reported in 2019 worldwide. Statistics reported that it is nearly about three thousand suicides per year in Sri Lanka. The unexpected/miserable loss of a family member affects directly or indirectly not only to the family but also to the society. The research problem is ‘how does lack of social morals affect to suicides in Sri Lanka? There are four objectives of this research as to reveal social life of person who attempted to suicide, to examine social interrelationships of them, to realize their personal traits, challenges, and barriers, and to recognize preventing techniques. The ontological approach of this research is subjectivism and epistemological approach is interpretivism. The research type is descriptive, cross sectional and qualitative. Underpinning theory is Collective Consciences and Moral Poverty Index which was introduced by Durkheim. Research method is case study method and data collecting techniques are in-depth interviews. Sample consists of persons who have attempted to commit suicide. Theoretical and conceptual review was done. The study looks at the main socio-demographic factors such as ethnicity, age, gender, civil status, educational level and causes about suicides from 2016-2019 based on police crime statistics as first part of the study. Literature revealed the background identification on socio-

demographic information such as; maximum number of suicides was from Sinhalese Buddhists, minimum number of suicides was reported from Muslims and Islamic people; Age between 21-25 and age over 70 can be considered as the age ranges with the highest number of people who committed suicides; Suicide rate of married persons was higher than unmarried; The female students' suicides were higher than male but in all other occupations male suicides were higher than female; Most of the persons who had committed suicide had educated up to secondary education; Most common reasons for suicides were harassments in family, disappointments and harassment, economic issues, psychological disorders and chronic diseases; Unemployed persons had committed suicide more than the employed people; Second highest category who had committed suicide was the agricultural sector and the category with the lowest number of people who had committed suicide was politicians. The main finding of this demographic data is that 90% of the factors that affect suicide are social factors. The integration between the individual and society has diminished, and society has become indifferent to the needs of the individual.

Keywords: *suicide, socio-demographic trends, anomic, moral system*

Study on Public Library Service in Sri Lanka under IFLA/UNESCO Public Library Mission Statement: Based on Polonnaruwa district

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Abstract

Public libraries are a worldwide institution. They exist in different societies with different levels of growth and cultures. As they operate in different contexts, the service provided and the style of providing the service varies. Public library services should operate modern and appropriately, as indicated by the 2022 IFLA/UNESCO Public Library Performance Facts. Through this survey, it was studied that public libraries in Sri Lanka conduct their services based on the performance facts stated in this mission statement. In the study, the awareness of public librarians about the performance facts stated in the mission statement and the level of operation of these facts in public libraries were examined. 07 librarians of main public libraries under the 07 Pradeshiya Sabhas of Polonnaruwa district were used as the study sample. Questionnaires and open interviews were used to collect primary data and the secondary data were obtained using printed and electronic sources. According to the data of this survey, the awareness of the public librarians on the performance facts mentioned in the IFLA/UNESCO was at a minimum level. Libraries face several issues and challenges when they apply those performance facts for their services, such as staff training issues, physical problems, poor reader and staff attitudes and further identified library services in the public library system of Sri

Lanka are very minimally implemented. According to the survey data, among the public libraries selected as the sample, the level of awareness about IFLA/UNESCO public library performance facts is about 57%. 45% of library staff possessed degree or diploma qualifications in library science. As a result, they face many difficulties in providing their services that have greatly affected the service quality improvement. To successfully implement the IFLA/UNESCO performance facts for public libraries, the library services offered by those libraries should be well-planned and implement international standards and guidelines.

Keywords: *IFLA/UNESCO Public library manifesto, Public libraries, Library services, Library standards, Library management.*

A Study on Electronic Services Provided by the National Library of Sri Lanka

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Abstract

Electronic services are information services in electronic format that are handled by a computer device and encoded for handling. The National Library of the world provides a wide range of electronic library services to users. Today, the National Library of Sri Lanka provides e-library services in addition to traditional library services. With the COVID pandemic, there has been a rapid increase in the number of Electronic library services provided by the National Library of Sri Lanka. Today, there are 33 Electronic services provided by the National Library. It remains to be seen whether users will benefit from these services. For this research, numerous studies have studied users' behavior, usage of print resources, evaluation of electronic library services, and evaluation of library services using serverQUAL and LibQUAL, analyzing national and global research publications and printed and electronic media. The primary objectives of this study are four-fold. Firstly, it aims to identify and catalog the various electronic services that have been introduced by the National Library. Secondly, the study seeks to conduct an in-depth analysis of the current usage and adoption of these E-services among library users. Thirdly, it aims to identify any potential vulnerabilities or shortcomings in the existing E-services to ensure their optimal functionality and security. Lastly, the study endeavors to propose practical and effective measures that can be implemented to expand and enhance the range and quality of E-services provided by the National Library. By pursuing these objectives, the study aims to contribute to

the overall improvement and advancement of library services in the digital age. This study has used a web-based survey methodology to study what electronic library services are available to readers, using a list of 59 items. In addition, two online questionnaires have been submitted to National Library users and National Library staff to study the status and use of Electronic services provided by the National Library. Based on the web-based survey methodology and the dual questionnaires, the National Library identifies the weaknesses in the electronic services provided and presents the results in simple frequencies and percentages. The research revealed that the National Library of Sri Lanka provides 69.49% of Electronic library services. Research has shown that 72% of respondents use the Electronic services provided by the National Library, and 28% of respondents do not use the electronic library services provided by the National Library. The research proposes the introduction of state-of-the-art electronic library services, features for the website, publicity of library services among the people of the country, and workshops and projects for staff IT knowledge and development.

Keywords: *National Library, Electronic Library Services, Electronic Library Services Evaluation, Sri Lanka, Covid-19 Epidemic*

Improving Sinhalese Personal Name Authority Control in Sri Lankan Online Public Access Catalogues (OPACs)

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Abstract

Personal names play a crucial role in locating books systematically and identifying individuals. Previous studies have emphasized that searching by an author's name is the most common method used by library users in automated systems. The objective of name authority control is to enhance searching and browsing capabilities by ensuring the accurate retrieval of all works associated with an individual, including variations of personal identity such as pseudonyms and family names. Unfortunately, Sinhalese personal names are quite common. These variations negatively impact information retrieval quality, the linking of related resources, and copyright management. Rather than that misspelled names and duplicated same name in data entries can be easily detected by machines. However, other variations, such as an author using their full name or an abbreviated form, one person having different name forms, or multiple people sharing the same name, cannot be easily identified by machines. Therefore, libraries employ authority control files for personal names, using a single, distinct spelling of the personal name (known as the heading) for each library material. The objective of this survey was to develop an automated authority file capable of accurately identifying books based on specific personal names. In pursuit of this goal, a statistical approach was utilized, which entailed compiling an extensive list of author names extracted from the university libraries of Kelaniya and Moratuwa. The dataset of author

names (n=76,592 names) was obtained from the Tag 100 and Tag 700 data fields present within these libraries. To ensure data accuracy, a series of initial data cleaning steps were implemented to remove redundant, irrelevant, and incomplete entries from the dataset. It has been observed that libraries follow inconsistent patterns of name forms, without considering proper authority forms. Establishing a comprehensive automated author name authority file is essential to minimize confusion in these cases. Furthermore, adopting a proper transliteration process is important for effective authority control functions. To minimize errors in searching personal names, as identified by the survey, suitable name forms were automatically detected and separately compiled for authors. This compilation can help facilitate easier information searching across libraries.

Keywords: *Sinhalese Name, Personal name authority control, Online Public Access Catalogues, National library of Sri Lanka, Sri Lanka*

A Study on Contribution of public libraries in the teaching and learning process: Kandy District

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Abstract

Learning and teaching are two processes. By combining these two processes, a person armed with knowledge makes valuable contributions to society, fostering progress in various fields. Learning is also a basic human need but due to the human incapability of learning everything alone, Public Libraries can be introduced as a community institution that supports the three areas of formal, informal and non-formal education. That is, public libraries can be further introduced as a type of institution that provides information services to people of all ages, from young to old. The world considers educational development as a priority and supporting formal and informal educational activities can be stated as an objective of public libraries. However, there is limited literature regarding the impact of libraries on the learning process. The problem is to study how public libraries in Sri Lanka can enhance their timely contributions to the teaching learning-process in Sri Lanka. The study aims to determine the benefits that readers get through the public library. As it is very difficult to cover all public libraries in Sri Lanka, 104 persons were selected from four public libraries in the Kandy district under a random systematic sample. Qualitative research methodology was used for this study, and a questionnaire method was used to collect primary data. The objective of the study is to identify the contribution of public librarians to formal, informal and non-formal education, examine their contributions to the teaching and learning process, investigate the social mission to the learning and teaching process taking

place in public libraries and to identify barriers and solutions to the teaching- learning process within the public libraries. The findings highlighted that public libraries make a significant contribution to the learning process and that the teaching process progresses at a slower pace. According to the findings, a minimum of 10% is contributed to the teaching process while 55% support the learning process. This study also identified that public librarians contribute about 65% of formal, informal and non-formal education. Libraries support unemployed people to think differently in diverse ways but lack of technical knowledge and lack of understanding of library specialization among the public library staff were identified as major obstacles in the learning and teaching process. This study suggested that staff in collaboration with public libraries, school libraries and other educational institutions should be equipped with technical knowledge to provide services using new technology in public libraries.

Keywords: *Teaching, Learning, Public Libraries, Librarians, users, Formal Education, Informal Education, Non-Formal Education*

A study on the role of public libraries for promotion of the tourist industry in polonnaruwa and anuradhapura public libraries

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Abstract

The contribution of public libraries for the promotion of Sri Lanka's tourism industry has been studied through two selected public libraries. A library is an institution that provides information resources and services to users, services provided by libraries aim to meet specific purposes at any given time. There is no proper dissemination of tourist information about the spots spread across Sri Lanka. There is, almost no palace tourists to get the reliable travel information they need. Public libraries have the potential to act as a hub for the distribution of tourism information. The current importance of maintaining a tourist information service through libraries is crucial need, the impact on the tourism industry through the establishment of a tourist information service, and information on how other libraries in the world use tourist information. The research method of this study was a qualitative research method. Questionnaires, interviews and observation methods were used for this purpose. In this, information was collected through interviews conducted through a questionnaire from the librarians. The main points that emerged from this study are the inability to meet the information needs of tourists. Tourists need information such as places where they can get accommodation, where they can get food, and where they can convert foreign currency into local currency. Especially the information about the tourist place reaches the tourists very minimally. Thus, although the information needs can be met through the libraries, the existing libraries in Sri Lanka show a minimum effort for that.

Although citizens come to the library as readers, they come to the library at least to fulfill the needs of tourist information. Also, the library provides minimal information about tourist spots. Libraries have a negative attitude towards meeting the information needs of tourists. Geographical reference sources that exist over there help meet the information needs of tourists from libraries, at least in both libraries. To start a tourist information service, the governing body should formulate a proper policy in conjunction with the provincial tourism agency in addition to libraries. Furthermore, not only conclusions, but also suggestions, should exist to inform the library staff regarding the diversification of library services; however, programs should also be implemented to inform regarding the location of the library; in addition, the library website should be updated; and websites should be created.

Keywords: *Public Libraries, Tourist Information Service, Tourist Information Need*

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