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## Use of Online Resources among Research Scholars

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Abstract - In online resources digital libraries are the focus of D-Lib Magazine, a journal indexed by the Library and Information Science Index (LISA). Given that it is a free magazine, it is also available to Mizoram University students. When compared to other specialist journals in LISA's index, D-Lib Magazine's SJR of 0.463 was above average. The researchers set out to examine the intellectual structure of academic journals by looking at their long-term publishing trends and subject organization. The study analyzed authorship patterns, cooperation tendencies, and cited references in final articles to get a better picture of how productive institutions were throughout the time period under consideration.

Keywords - Use, online resources, research scholars, etc.

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#### INTRODUCTION

Library and information science literature released today reveals several things about the profession's development as a whole. Various authors have taken unique perspectives and studied the journal articles published in the subject of librarianship. Books, journals, papers, abstracts, and internet publications were consulted as well as bibliographies. (1)

#### **DEFINITIONAL ANALYSIS**

#### Content

- The central thought presented in a work of literature, an address, or a motion picture
- A list of the articles or chapters in a book or magazine, together with the page number at which they first appear.
- The book's or report's subject matter or its range of themes
- That which is intended for artistic or verbal expression, such as a piece of writing, a speech, or a piece of music.

What is contained in a book, magazine, or newspaper is what is meant by the term "content." There are three purposes or viewpoints to consider while creating content:

- Descriptive aspect
- Counseling aspect
- Inferential aspect

Anything that can be described or inferred can serve as content, including spoken words and natural occurrences.

#### **Analysis**

Assessing the scope of the problem, gathering relevant data, and soliciting outside perspectives on the best possible actual, felt causes and solutions constitutes analysis and need assessment.

#### **Content Analysis**

Content analysis is a method for comprehensively defining any type of communication, whether written, verbal, or visual. To be more precise, it gives a numerical description. Newspapers, periodicals, TV shows, movies, and the Internet are only few of the mediums that are analysed in the course of content analysis. (2)

- The objective, methodical, and quantitative description of the overt content of communication is what content analysis is all about.
- Inferences can be drawn from content analysis or any other method that involves the systematic and objective identification of communication features.
- Content analysis is a method that uses quantitative and systematic methods to characterize the meaning of a text.

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- Content analysis is a method of doing research in which certain properties of a piece of text are methodically and objectively identified.
- The terms "content analysis" and "coding" can be used interchangeably to describe the systematic, quantitative, and objective description of any symbolic action.
- Content analysis organises written information by breaking it down into more understandable chunks of information.

#### **Journal**

Researchers rely heavily on journals as their main means of dissemination. Information is consumed, transmitted, and produced in a complicated virtuous cycle. Unfortunately, journals only cover a portion of the cycle at best. Nevertheless, journals play an important part in the dissemination of knowledge. Scholarly journals are periodicals published by an institution or organisation that publishes articles authored by and for experts in a certain topic. Certain publications, known as journals, are evaluated by experts in the subject. (3)

#### Research

Research is an academic probe into the truth, the facts, and the certifications in order to find new information or establish or validate the current knowledge.

#### **BIBILOMETRICS**

Most people prefer to keep up with the newest news by reading periodicals. Scientists and other professionals publish their ideas, thoughts, inventions, and discoveries in scholarly periodicals. As a rule, libraries are the ones to discover, amass, and disseminate data. However, libraries face challenges in subscribing to the types of resources necessary to make an informed choice when selecting journals and other periodicals for their users due to the exponential growth of periodicals, the varying demands of readers, the ever-increasing cost of publication, and the shrinking resources of libraries. (4)

In 1969, Pritchard, Nalimov, and Mulchenko coined the word bibilometrics to describe their field of study.

The study of bibliometrics employs the straightforward statistical technique of collecting citations to assess and measure a field's development.

#### **INFORMETRICS**

Blackert, Siegal, and Nacke coined the word "Informetrics" in 1979, but the International

Informetrics conference didn't get off the ground until 1987. "Informetrics is the study of the quantitative characteristics of information in any form, not only records or bibliographies, and in any social group, not just scientists," as defined by Tague-Sutcliffe (1992). The term "information science" as defined by Egghe (2005) encompasses a wide range of specialised fields of study, such as bibliometrics (the study of libraries and bibliographies), scientometrics (the study of science policy, citation analysis, and research evaluation), and webometrics (the study of metrics related to the web, the Internet, and other social networks, including citation and collaboration). (5)

#### **SCIENTOMETRICS**

According to the definition of scientometry, the field focuses on quantitative analyses of the scientific and technological communities. Scientometrics is the study of scientific progress through the lens of bibliometrics. Scientometrics focuses on scientific articles, researchers, universities, scholarly journals, and geographical contexts. Due to the lack of centralised archives of bibliographic scientometric methods are notoriously consuming. This is because collecting and preparing a clean dataset for analysis is arduous work. To put it simply, scientometrics is the study of quantifying and assessing scientific research. Bibliometrics, the study of how influential certain publications are, is the backbone of much applied scientometrics. Scientometrics, or the study of quantifying scientific production, is analogous to bibliometrics in its usage by librarians and information scientists. It focuses on measuring scientists' productivity, particularly through an examination of their publications and the citations included within them. Scientometry is the study of quantifying and assessing scientific phenomena. Understanding the structure and dynamics of science, as well as its history and development, is made possible through scientometric studies. (6)

#### **WEBOMETRICS**

Several early researchers and investigations propelled webometrics, the quantitative study of Web-based phenomena, forward swiftly after its inception in 1997. Webometrics is the study of Web-based information with predominantly quantitative approaches for social science research purposes utilising methodologies that are not domain-specific; early research focused on three primary areas: link effect evaluation, link connection mapping, and search engine results analysis.

#### **CYBERMETRICS**

Cybermetrics is the study of the growth, stability, spread, and usage of websites and their components and concepts using mathematical and statistical methods, as well as analyzing the veracity of their content and comparing these metrics to the norms

imposed by the law. Researches the efficacy of cyber information goods and systems, and evaluates the influence of the digital era on society.

#### STEPS IN CONTENT ANALYSIS

Over the years, "content analysis" has developed to encompass a wide range of distinct research methodologies; generally speaking, it can refer to strategies for examining and/or recovering useful data from written texts Content analysis is a broad term for a group of methods used to examine the "silent evidence" contained in texts and other types of media. In content analysis, we distinguish between five distinct kinds of writing: (7)

- Books, papers, and other forms of written content
- Texts presented orally, such as speeches and plays
- Illustrations, paintings, and icons that contain illustrative text
- TV shows, movies, and videos are all examples of audiovisual text.
- Hypertexts, or online texts

Examining artifacts, which are documents that aren't written, and traces, which are historical records, are both examples of what content analysis may be used to describe.

## DIFFERENT CATEGORIES OF CONTENT ANALYSIS

#### **Quantitative Analysis**

Because of its nonintrusive nature and independence from subjective impressions, quantitative content analysis has the potential to outperform survey and interview methods. No longer exists the means to probe the communication context of interest. Quantitative methods allow for more extensive research of texts across longer time periods. The purpose of content analysis is to provide researchers with a method of drawing reliable conclusions from texts within their intended settings of use. Printed material, photographs, maps, artwork, sounds, songs, and symbols all fall under the umbrella term "texts." (8)

#### Coding

The coding strategy for quantitative content analysis is decided upon beforehand. Concepts that are vague on their own can be made concrete via the use of a coding scheme. It provides a framework for meaningful and credible classifications to emerge. If they are relevant, then the hypotheses may be tested using them. By definition, validity is "the degree to which a measuring process represents the intended, and only the intended, idea". There are a variety of methods for

determining validity. Frequently used in content analysis, "face validity" describes how well a test "gets at" the core elements of an idea. As a result of this subjectivity, face validity can never be objectively determined. Researchers attempt to be as objective as possible when evaluating the degree to which a measurement tool corresponds to the construct being measured. The notion being measured can be confirmed by having judges work backwards from the measure Construct validity refers to "the extent to which a measure is related to other measures (constructs) in a way consistent with hypotheses derived from theory," while criterion validity examines if the code corresponds to criteria like concurrent or predictive behavior or norms of behavior Construct validity is a good goal, but it is more difficult to evaluate than criteria or content validity.

#### **Analyzing the Coded Data**

Research involves many phases beyond the initial analytical process of coding. Within the context of the hypotheses or research questions, these procedures are carried out as well. First, he restates and reformulates the results of the coding process such that they are readily understood and relevant to his hypotheses or research objectives. Second, it articulates the linkages and patterns among the data in order to put forth hypotheses and provide answers to his research questions. Draws parallels between the results of this study and those of others, some of which are more complex, to demonstrate the relevance of these discoveries. The final stage is putting the findings into context. (9) The content analysis may employ any number of statistical methods for data collection and presentation and analysis. Due to the varying degrees of difficulty and the need for a variety of various units of measurement, the variables themselves present a wide range of challenges.

#### **Qualitative Content Analysis**

When doing qualitative research, content analysis is frequently employed. In practice, content analysis now takes on three unique forms: the traditional, the guided, and the summative. All three methods are consistent with the naturalistic paradigm since they seek to infer meaning from textual evidence. The primary distinctions between the methods lie in their respective coding systems, code histories, and security risks. Coding categories in traditional content analysis are extracted from the text itself. In a guided analysis, theoretical considerations or pertinent research findings are used to inform the creation of preliminary coding. A summative content analysis begins with a count and comparison, often of keywords or material, and continues with an examination of the underlying context. Authors use fictitious cases from the field of end-of-life care to illustrate the various analytic approaches and techniques addressing trustworthiness.

## COMMON RESEARCH CRITERIA FOR QUALITATIVE ANDQUANTITATIVE APPROACHES

Formulating mandatory quality standards useful for quantitative as well as qualitative (and mixed method) research is the best strategy to avoid methodological arbitraries. Already, work has been done to define standard obligatory research requirements. Integrated qualitative and quantitative methods based on a common logic of inference; nevertheless, specific criteria were not established. According to research, Criteria for qualitative research were developed by the Keystone of Science Project and the National Research Council, and they make use of phrases like "common procedures of analysis" and "important problems that may be examined experimentally". It offers a logical and transparent progression of thought. Cross-study replication and extrapolation Share findings to foster criticism and critique from inside the academic community, however, the guidance was still vague since it lacked detailed instructions for doing the research. The Cochrane Qualitative Methods Group has compiled a list of ways in which qualitative research might bolster existina assessments of the evidence (Informing, improving, extending, and supplementing reviews), while still leaving the quantitative experimental gold standard intact. Clear description of procedures, presentation of evidence, reasoning of interpretations, and critical verification are all standards formulated by the American Educational Research Association AERA (2006) for reporting on empirical social science research in its publications, particularly for qualitative projects. A legitimate and useful view of scientific activity may be constructed on such ideas, one that avoids the false choice between the qualitative and quantitative methods. (10)

#### **CONTENT ANALYSIS AS A RESEARCH TOOL**

When information is subjected to content analysis, it is simplified into distinct classes. It's a method for studying texts and collections of texts to see if a particular phrase or concept is there. Words and concepts are "quantified" in order to draw conclusions about the text's content, the authors' intentions, the readers' backgrounds, and the historical context in which the work was written. Any text may be subjected to content analysis by first being coded or broken down into manageable categories on a variety of levels, including word, word sentence, phrase, and theme, and then being investigated using one of the content analysis fundamental methods, conceptual analysis, or relational analysis. This will allow us to organize the material into more digestible chunks. As a result, the next round of statistics will go smoothly. Documentary sources, such as books, are the focus of content analysis. Publications with written or spoken text, such as periodicals and newspapers. Before the 1940s, most content analysis was quantitative, focusing on identifying and counting particular qualities in documentary sources. Content analysis focuses on the overarching meaning or message of the existing materials and is primarily qualitative in nature. It's like

the difference between a light chat and an in-depth investigation. Analyzing content using measurements. The intensity of a force may be gauged by its pervasiveness, which can be measured via content analysis. Any investigation of the written materials' intrinsic qualities must inevitably centre on content analysis. By way of example, analysing the data presented in published research papers is a vital part of any assessment of the relevant literature. The degree of analysis might be quite elementary or rather nuanced. If you base your investigation on easily identifiable and countable features of the paper or spoken materials, you'll be able to go through the levels quickly. Attitude research is conducted at a nuanced level.

Themes identified through content analysis reveal that Kassajian's first themes provided a foundation upon which further study topics might be built. The rise of new topics, data sources, qualitative methodologies, disciplinary self-reflexiveness, and increased interest in quantitative investigation are all examples of how sociocultural and disciplinary shifts have enhanced the existing framework.

#### **JOURNAL STUDIES ON CONTENT ANALYSIS**

The purpose of this content analysis is to ascertain the future role of the librarian in institutional repository (IR) initiatives by identifying subjects that are being addressed in IR literature. To find papers written regarding IRs, a comprehensive search was performed. The literature was subjected to a conceptual content analysis, which involved eight categories of coding, a multi-coder method, and an evaluation of inter-coder agreement. After reviewing 30 publications, we were able to deduce that there are five overarching themes in the IR literature: definition, implementation, management, results, and the librarian's role. The investigation also revealed that librarians' roles are poorly defined, particularly in regards to IRs' fundamental feature: their connection to self-archiving authors. The contribution is in pointing out the gaps in the literature and making suggestions for librarians to fill in the IR setting. Thus, the terms content analysis and information analysis are used interchangeably since the content analysis is a special instance of information analysis. This paper presents the findings of a content analysis conducted on 33 issues of the DESSIDOC bulletin of information technology (DBIT), a periodical that publishes theme issues on various topics related to information technology (IT), library administration, and information marketing. The process comprised identifying the nations from which the articles originated, the industries represented, the primary emphasis of the articles, and the frequency with which those topics were discussed. (11) It was discovered that most publications originated in Asian nations, with Turkey being the primary contributor. Many articles came from other parts of the world as well, including the Orient, Africa, South America, the Americas, Eastern Europe, Western Europe, and Australia. Although

the article quality varied widely, it was clear that significant strides had been made in both research and reporting since the journal's start. Particularly insightful are the writings that offer non-Western points of view.

## PRACTICAL APPLICATION OF CONTENT ANALYSIS

Determine authorship with the use of content analysis. If you want to figure out who wrote a piece, you may, for instance, make a list of possible writers, read everything they've ever written, and see if there are any patterns in the use of nouns and/or function words that could point to who the real author is. Content analysis may also be used to look for recurring themes or issues in a collection of papers. Analyzed the substance of school mission statements to draw conclusions regarding the institutions' fundamental goals, Changes in public opinion may be tracked more objectively with the use of content analysis. It will be possible to objectively compare data obtained in the future with data collected from the mission statements project from the late 1990s to see if policy shifts connected to standards-based reform have been reflected in school purpose statements.

## CONTENT ANALYSIS MEASUREMENT TECHNIQUES

When it comes to summarising and quantitatively analysing messages, content analysis is grounded in the scientific method (paying close attention to objectivity, intersubjectivity, a priori design, reliability, and hypothesis testing) and is not constrained by the nature of the variables that can be measured or the setting in which the messages were created or presented. Methods of Measuring:

- Validity: Measurement accuracy is the degree to which a metric provides accurate information about the target notion.
- Accuracy: A measure of how unbiased a certain measurement method is (nonrandom error)
- Precision: The degree to which distinctions between groups or levels of a metric are sharp
- Reliability: The degree to which the same results may be obtained using the same measurement method over and over again.

## BIBLIOGRAPHICAL CITATIONS AND THEIR PRESENTATION

Whether it's basic or applied research, new discoveries and advances usually emerge from prior work in the subject. This is undeniable proof that prior knowledge facilitates the emergence of novel concepts and ideas. Consequently, it is essential that in all articles where previously recorded material has been utilized, the references to those should be included primarily to establish the link of concepts between his and prior writings. The following justifies the need for referencing documented data: (12)

 To compile a list of readings on the topic for those interested in learning more about it

- For the sake of establishing the veracity of any claim made within the text
- A list of sources used as evidence that they were consulted and used as such should be included. Therefore, it is essential that citations be conveyed without ambiguity.

#### CONCLUSION

By analyzing the frequency with which a topic's keywords and phrases appear together, co-word analysis is a potent method for uncovering hidden patterns and links between seemingly unrelated themes. In this way, scientific discoveries may be better understood and shared with the general study The reveals audience. the underlying frameworks of both fields. A thorough understanding of its history, progression, and assessment may be gleaned by a bibliometric analysis of articles from both periodicals. The methodologies employed in this study could be valuable for scientists, researchers, and library science professionals interested in determining the intellectual organization (subject structure) and trend in the evolution of subjects across a wide range of fields.

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