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A Sentiment Analysis on Islamic Library

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Abstract

This study was conducted to review the perception of Islamic libraries in Indonesia within the scope of Islamic economics in terms of scientific research in published journals that discuss the development of Islamic libraries. The method used is descriptive statistical analysis with meta-analysis and sentiment analysis from secondary data in the form of 43 published and Scopus-indexed papers in the last 32 years, then processed using Microsoft Excel 2016 software and SentiStrength. The results show that research on Islamic libraries in the scientific literature has increased. The sentiment analysis results show a tendency for good perceptions in the scientific literature of the existence of Islamic libraries, with the high positive sentiment of 5%, positive at 47%, then neutral sentiment at 43% and the remaining negative sentiment at 5%. This research is the first to discuss the sentiment analysis of Islamic library theme research with primary data.

Keywords Islamic Library, Sentiment Analysis, Perception

INTRODUCTION

When it comes to the preservation and transmission of human knowledge from one race to another and from one community to another, the library is an organization that has played a critical role in this process. Libraries collect various items, process them, arrange them, and make them readily available to library patrons at their convenience, as described above (Idrees & Mahmood, 2010). A remarkably rapid transformation when you consider that library 3.0 is being gradually incorporated in libraries all across the world. This rapid transformation has also been met with swift and favourable responses from the library community, including the Islamic library in this instance.

As the industry entered the Fourth Industrial Revolution (4.0), the issues faced by librarians and Islamic libraries were not dissimilar from those confronted by their colleagues in conventional libraries, particularly in countries with sophisticated librarians. In addition to financing challenges and the lack of established quality assessments, one of the most pressing issues facing Islamic librarianship is the revitalization of the role and professionalism of librarians. As a fundamental difficulty in Islamic libraries, they have not yet achieved their potential as the centre of higher education. This is especially true given their current status as a supporter rather than as a determinant of public opinion in the world of Islamic libraries. The fact that libraries have been neglected does not imply that they have been completely abandoned; several extensive Islamic libraries, both public and private, are committed to improving their library facilities and infrastructure. One indication of this seriousness is the expanding use of digital technology and increased access to the internet, particularly electronic journals (Rodin, 2021).

Given that Islamic knowledge is one of the areas that has not been adequately addressed, libraries that have developed extensive collections on Islam are faced with the challenge of determining how to organize their collections while utilizing classification systems to the best of their abilities. Such libraries have a diverse collection of materials on Islam, not only as a religion but also as a source of information on various fields of knowledge from an Islamic perspective. In most Muslim nations, this perspective is considered to be associated with Islamic studies, including topics such as Islam and politics, Islamic economics, the Quranic approach to science, and other related topics. This study investigates the issue and makes a recommendation for a possible remedy (Idrees, 2013).

From this background, the authors are interested in discussing the perception of Islamic libraries from the primary data of published journals for the last 32 years (1990-2021). Some of the benefits obtained from this research are knowing how far the portrait of the development of Islamic library research perceptions in the world is through the selected publication articles. In addition, this study looks at a meta-analysis related to trends in Islamic library research.

RESEARCH METHODS

This study uses data from research journals and other research publications from 1990 to 2021, which have been published regarding the theme of Islamic library perception in Islamic economics and finance research and is indexed by Scopus. The methodology used in this

study is a qualitative method approach with descriptive statistics of literature studies on 43 publications related to Islamic libraries.

The qualitative research method is based on post-positivist philosophy, which is used to examine the condition of natural objects (as opposed to experimentation) where the researcher is the key instrument. The data collection technique is done by triangulation (combined), the data analysis is inductive/qualitative, and the results of qualitative research emphasize meaning rather than generalization (Sugiyono, 2010).

Qualitative research is a type of descriptive research. The information collected is not used to confirm or disprove the theory (if any). Research findings can be in the form of a description of visible symptoms, not numbers or coefficients between variables (As-salafiyah et al., 2021). Descriptive statistics is a branch of statistics that studies collecting, compiling, and reporting summaries of research data. As a basis for making various decisions, data must be well and consistently summarized, both in tables, diagrams, and graphic presentations. Microsoft Excel was used to conduct this research.

Purposive non-probability sampling was used in this study. A purposive sample is a sample designed to help you understand certain information. This sample can be divided into two categories: judgment sample, which selects sample members who meet specific criteria based on previous records or research objectives to be met, and quota sample, which is a sample selected based on a certain quota or category, which describes the population dimensions (proportions).

The approach used in this research is sentiment analysis or opinion development. Sentiment analysis is research commonly used to measure public sentiment on a theme issue. Sentiment Analysis is a branch of research in the Text Mining domain which began to be widely used in early 2002. Sentiment analysis is research that is commonly used to measure public sentiment on a theme. As a source of data, five specific sources were selected who are academics of sharia economics experts. To measure the sentiment map on the Hajj financial investment perception questionnaire results, the researcher uses SentiStrength software, which is widely used in sentiment analysis research.

Simply put, text analysis is meant for word processing and does not process numbers. Sentiment analysis consists of three main subprocesses: Subjectivity Classification, Detection Orientation, and Holder Opinion & Target Detection. To date, most of the research in sentiment analysis has been devoted to English because there are so many tools/resources for English. Some of the frequently used sources for sentiment analysis are SentiWordNet and WordNet. The primary task in sentiment analysis is to classify the polarity of the text in the level of documents, sentences, or features and aspects, whether the opinions expressed in documents, sentences and feature entities have positive, negative or neutral aspects. Furthermore, sentiment analysis can be expressed emotionally sad, happy, or angry to produce an analysis that can be a reference for developing perceptions of specific themes (Rusydiana & Marlina, 2020).

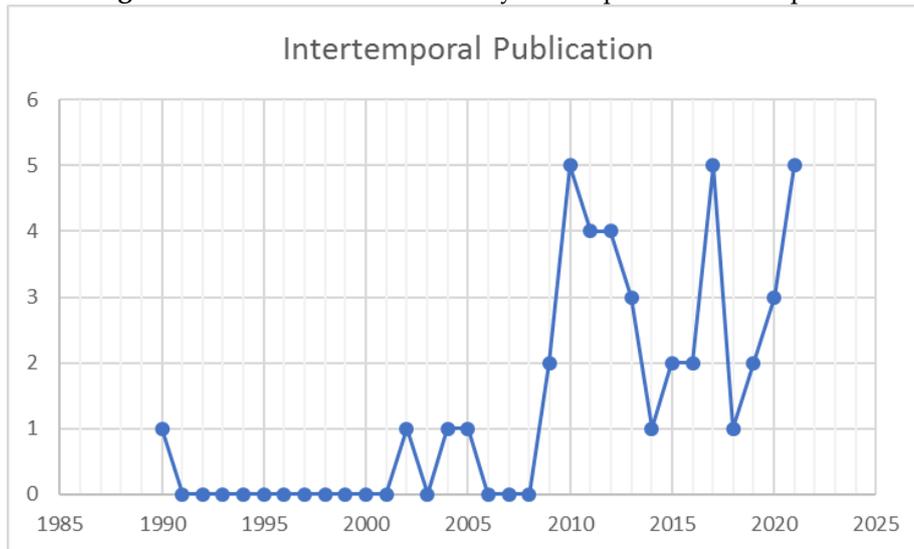
Data in the form of trends in the development of the number of publications on the perception of Islamic library themes and top authors who are the locations of research objects related to published articles were analyzed using Microsoft Excel 2016. As for measuring the sentiment

map on the Islamic library perception questionnaire results, researchers used SentiStrength software, which is widely used in sentiment analysis research.

RESULTS

Meta-Analysis

Figure 1: Number of Islamic library's Perception Theme Papers



This section describes the number of paper publications on the theme of Islamic library perception. There are 43 papers published in an observation period of 32 years, from 1990 to 2021. Table 1 describes the distribution of papers per year that varies over the last 32 years with a range of 0 to 23 paper papers. The most widely published Islamic library perception theme papers were in 2010, 2017 and 2021, with the number of publications each year as many as five papers. The least number of publications were from 1991 to 2001, 2003, 2006 and 2008, where Scopus did not index the number of publications in that year.

Table 1: Number of Islamic library's Perception Theme Papers

Year	Number of Papers
1990	1
2002	1
2004	1
2005	1
2009	2
2010	5
2011	4
2012	4
2013	3
2014	1
2015	2
2016	2
2017	5
2018	1
2019	2

2020	3
2021	5
Total	43

Based on the table and graph above, there is a tendency to increase the number of papers published on the theme of Islamic library perception indexed by Scopus, wherein in 1990 there was one paper. There was a vacancy in indexed publications from 1991 to 2001 except for one paper in 1992, then after 2002, there was a fluctuating increase, until it reached the highest number of publications in 2010 with a total of 5 papers, decreased and increased until it remained at number 5 publications in 2021. However, this data is still temporary because 2021 has not been completed until December, so it is still possible to increase and increase the collection of papers in this research is until October 2021.

Research conducted in the past has identified Islamic library research trends published by leading journals, its historical development, and classification. Since 1921, there has been an increase in the number of articles published on Islamic library-related topics, according to the study's findings. Research into Islamic libraries has been conducted in several different countries. It has been shown that an increase in the score of an Islamic library in a country is positively related to economic growth in that country, prompting economists to conduct extensive research on Islamic libraries (Antonio et al., 2021).

The following table shows the ranking of the top 5 journals that publish the most papers with the theme of Islamic library perception in the last 32 years.

Table 2: Top Journals

Journal Name	Number of Papers
Library Philosophy and Practice	10
Journal of Islamic Manuscripts	6
Library Review	4
International Information and Library Review	2
Australian Journal of Basic and Applied Sciences	2

Based on the table above, five authors published more than one paper on the theme of Islamic library perception, where the most productive journal in publishing research on Islamic library themes is Library Philosophy and Practice with a total of 10 papers, followed by other journals.

Among the research papers released by the Library of Philosophy and Practice is a paper entitled 'Students' perception of digital library services: A case study of International Islamic University, Malaysia', which examines how students perceive the IIUM digital library services and how they make effective use of them. It investigated the methods by which people searched for and accessed the digital resources given by the IIUM digital library as part of the research. Moreover, the information gathered was examined, which indicated some existing weaknesses on the part of both the students and the digital library due to the data collection. The low usage of digital library resources by engineering postgraduate students, the unavailability of some old question papers, and the impossibility for students to access the complete contents of IIUM publications are all examples of issues that have arisen. It was a

potent instrument in assisting postgraduate students in producing their research papers because it served as a guide to students in conducting research and even other learning activities, which was highly beneficial (Bagudu & Sadiq, 2013).

The following table shows the ranking of the top 5 affiliated authors' institutions that contributed to producing researchers who wrote published papers on the theme of Islamic library perception in the last 32 years.

Table 3: Top Institutions

Institution	Number of Papers
Department of Library and Information Science, Kulliyah of Information and Communication Technology, International Islamic University Malaysia, Kuala Lumpur, Malaysia	4
University of Florida, College of Design, Construction & Planning, School of Architecture, P.O. Box 115702, 1480 Inner Road, Gainesville, FL 32611-5702, United States	3
Department of Library and Information Science, Allama Iqbal Open University, Islamabad, Pakistan	2
Islamic Research Institute, International Islamic University, Islamabad, Pakistan	2
Young Researchers Club, Islamic Azad University, Hamadan Branch, Hamadan, Iran	2

Based on the table above, five institutions consist of various universities in the world. The results showed that the most prominent institutions as affiliates of the authors were the Department of Library and Information Science, Kulliyah of Information and Communication Technology, International Islamic University Malaysia, Kuala Lumpur, Malaysia, with a total of four papers.

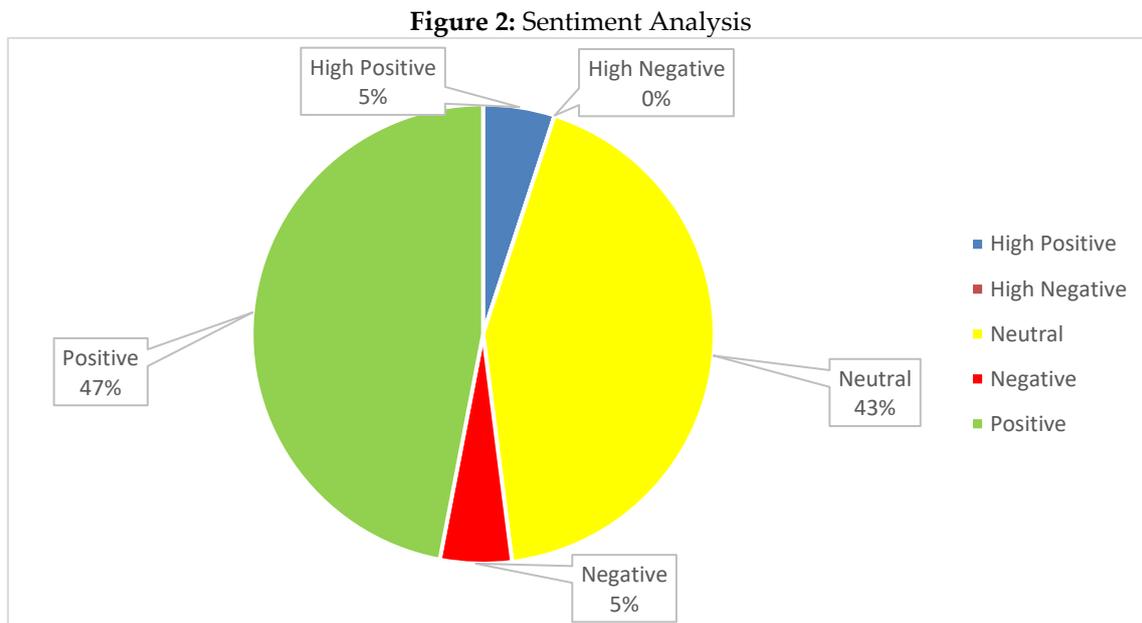
One such researcher, Amina Adamu Bagudu, affiliated with the Department of Library and Information Science Kulliyah of Information and Communication Technology International Islamic University Malaysia, researched to examine students' perceptions of digital library services at the International Islamic University, Malaysia (IIUM). An online questionnaire was used to collect data from 164 graduate students from the engineering faculty chosen through a random sampling process. Responses demonstrated that respondents were well-aware of and used digital libraries and had positive sentiments regarding IIUM's digital libraries, according to the results of the data analysis.

Sentiment Analysis

This study tries to calculate the sentiment of published research that discusses Islamic libraries. As is well known, sentiment analysis is research that is commonly used to measure public sentiment on a theme. As a primary data source, research was conducted on 43 pieces of literature. The tool used in this research is SentiStrength as a tool for processing data obtained from the questionnaire.

Based on the results of questionnaires distributed to all Indonesian people, it was found that the results of opinions were classified into five types of ranking: namely opinions with high positive (very good), positive (good), neutral (neutral), negative (bad) and high negative (very

bad). The results of sentiment analysis on Islamic libraries throughout Indonesia, which are divided into five types of categories, can be seen in the following figure:



From the picture above, it can be seen that the existence of Islamic libraries in Islamic economics and finance literature published and indexed by Scopus is quite a lot and has various sentiments according to the grouping of SentiStrength, namely the very good category (high positive) at 5%. The sentiment is good (positive) which is 47%, bad sentiment (negative) is 5%, very bad sentiment (high negative) is 0% and the rest has neutral sentiment (neutral) 43%.

Sentiment results are obtained from the opinions expressed by the researchers in their research, then the words in the form of written text are ranked from very negative intervals (-5) to very positive (5) with a value of 0 being neutral. The opinion score of the sentence submitted by the respondent is calculated by adding up the sentiment score of each word listed in SentiStrength.

The good sentiment (positive) is the opinion of the questionnaire respondents who are positive and tend to be optimistic in responding to the existence of Islamic libraries in Indonesia by looking positively at the existence of Islamic libraries and supporting the development of Islamic libraries. Meanwhile, negative sentiment is the opinion of the questionnaire and tends to express criticism in reviewing the development of Islamic libraries. In other words, its existence is still not optimal and requires improvement, and states that Islamic libraries have not been applied professionally for various reasons.

This data shows that most people have more positive sentiments in responding to the existence of Islamic libraries. The following sentiment that is quite a lot is neutral. However, it was also found that there was a small proportion of positive and negative high responses. Therefore, this positive perception must continue to be developed by increasing the number of scientific literature publications in indexed journals and improving the quality and quantity of Islamic libraries. Islamic library education also needs to be facilitated with a system that follows the conditions of the community.

FINDING

Many types of research on Islamic libraries have been carried out based on the results of literature reviews. However, Islamic libraries still face many challenges and threats and various reasonable goals expected to increase literacy in the Muslim community. This study found the level of sentiment analysis from various studies in assessing the things that need to be improved and maintained from the existence of Islamic libraries.

Libraries have played a significant role throughout Islamic history. Especially in the eighth and tenth centuries A.D., it is not easy to separate the existence of this institution from the development and progress of science and Islamic civilization as a whole. It is possible to argue that science and civilization would not have evolved if there had not been a library available at the time in question. If there is no library, the advancement of science will be highly sluggish and halting. There are two primary sources of classical Islamic intellectual treasures: first, translations of ancient manuscripts from various pre-Islamic civilizations and comments provided by Muslim scholars; and second, original works of Muslim scientists themselves from various kinds of scientific traditions that have been passed down through generations (Antonio et al., 2021).

The good sentiment (positive), which dominates the results with a percentage of 47% and very good (high positive) with a percentage of 5%, indicates that various efforts have been made to improve the quality and quantity of Islamic libraries in order to provide more benefits. These results also show that various studies have seen that Islamic libraries provide facilities and infrastructure, one of which is digital library development.

Because of the constantly-changing nature of technology in today's digital age, academic libraries must update and improve their current services and systems to ensure that their products or services suit the information needs of students. Libraries have had to adapt their access procedures due to the introduction of current information technology and information resources in a dynamic digital format. Information is disseminated much more quickly through the internet, and patrons have access to the most recent versions of information resources virtually as soon as they are made accessible to them. One of the outcomes of applying information technology in libraries has been the development of the digital library, which has been particularly successful in the academic context (Bagudu & Sadiq, 2013).

The seventh century saw the incorporation of Persian literature and Greek science and philosophy into Islamic literature and libraries, which impacted the history of Islamic literature and libraries. Most of the remaining Greek manuscripts were translated into Arabic as a result of this initiative. Not only were the Moslems translators, but they also made significant new contributions to several existing sciences and developed entirely new fields of knowledge in their own right. They made significant contributions to astronomy, astrology, medicine, arithmetic, geometry, botany, zoology, and the natural sciences in general. They also made significant contributions to the humanities and social sciences, besides their other accomplishments (Elayyan, 1990).

Some sentiments with a percentage of 43% view Islamic libraries with a neutral view, where Islamic books and literature related to Islam are not limited to Islamic libraries, but all libraries

around the world. So no specificity makes Islamic libraries better than other libraries. This is also shown by the availability of Islamic literature in various libraries that do not have an Islamic library label.

Many of the collections of Islamic manuscripts that have been donated or bequeathed to the world's great libraries have come from scholars and travellers, and the majority, if not all, of these collections, have some relation to world universities. Others were purchased by skilled curators who made significant contributions to the collection's development over several centuries. The complete list of donors includes more than seventy names, ranging from individuals who donated only a volume or two to prominent philanthropists with extensive collections, such as the Cambridge library of philanthropists such as Erpenius, George Lewis, J.L. Burckhardt, E.H. Palmer, and, E.G. Browne, who donated more than a thousand volumes in total (Ansorge, 2016).

Another negative sentiment with a percentage of 5% indicates that there are still some shortcomings that need to be improved by Islamic libraries, but this point of criticism is not much considering the percentage is very small. The improvement is, for example, by paying attention to the literature classification scheme.

Islamic libraries, which house extensive collections on Islam, are confronted with difficulties in organizing their collections of Islamic knowledge. This is since neither standard categorization systems nor indigenous classification systems have produced optimal solutions. The background of the people who designed the standard classification systems could be one of the factors contributing to this difficulty. Perhaps they were not aware of the extent and breadth of the expansion of Islamic knowledge and the wide range of themes and resources that were being developed. Perhaps they did not anticipate that their systems would spread throughout the world or that such a diverse range of libraries from all over the world would use these schemes at some point in the future when they developed them (Idrees, 2013; Idrees & Mahmood, 2010).

CONCLUSION

This study presents an overview of the meta-analysis in the form of tables and graphs of the main trends in the perception of Islamic libraries in the last 32 years, from 1990 to 2021 to be exact. Content analysis is carried out from each category, consisting of the number of publications per year and the top authors. The results obtained indicate that the quantity of research publications on Islamic libraries has increased in the last 32 years so that it has the potential to continue to be studied and developed.

Regarding sentiment analysis, the assessment of the Islamic library from various pieces of literature indexed by Scopus shows a positive sentiment of 47%. In comparison, 43% shows a neutral sentiment, and the remaining 10% shows a positive and negative high sentiment with a percentage of 5% each. The scientific literature shows variations in sentiment, dominated by positive sentiment, followed by neutral sentiment and then high positive and negative sentiment.

It should be noted that the purpose of this study is to present an overview of the perception of Islamic libraries from the Scopus indexed scientific literature, but the limitation is only in publications from 1990 to October 2021. This research has been carried out using specific meta-analytical indicators and sentiment analysis so that readers can get a representation general of the most critical data. However, the results presented are still dynamic and may change over time, with new trends emerging or variables increasing and decreasing in the future.

REFERENCES

- Ansorge, C. (2016). Cambridge University Library Islamic Manuscript Collection. Origins and Content. *Journal of Islamic Manuscripts*, 7(2), 127–151. <https://doi.org/10.1163/1878464X-00702001>
- Antonio, M. S., Rusydiana, A. S., Purwoko, D., Khatimah, H., & Puspita, A. T. (2021). Islamic Library: History, Classification, and Waqf Role. *Library Philosophy and Practice (e-Journal)*, October, 1–19.
- As-salafiyah, A., Rusydiana, A. S., & Mustafa, M. I. (2021). Meta Analysis on Mosque Economics. *Library Philosophy and Practice (e-Journal)*.
- Bagudu, A. A., & Sadiq, H. (2013). Students' perception of digital library services: A case study of International Islamic University, Malaysia. *Library Philosophy and Practice*, 2013.
- Elayyan, R. M. (1990). The history of the Arabic-Islamic Libraries: 7th to 14th Centuries. *International Library Review*, 22(2), 119–135. [https://doi.org/10.1016/0020-7837\(90\)90014-7](https://doi.org/10.1016/0020-7837(90)90014-7)
- Idrees, H. (2013). Role of classification schemes in organization of Islamic knowledge in libraries: A survey of LIS scholars. *Library Review*, 62(3), 98–117. <https://doi.org/10.1108/00242531311329455>
- Idrees, H., & Mahmood, K. (2010). Classification of Islamic literature in Pakistani libraries: A survey. *Library Review*, 59(3), 149–164. <https://doi.org/10.1108/00242531011031142>
- Rodin, R. (2021). Islamic College Libraries in Indonesia Facing Era 4.0: Analysis of Challenges and Readiness. *Library Philosophy and Practice*, 2021(August), 1–13.
- Rusydiana, A. S., & Marlina, L. (2020). Analisis Sentimen terkait Sertifikasi Halal. *Journal of Economics and Business Aseanomics (JEBA)*, 5(1), 69–85.
- Sugiyono. (2010). Metode penelitian kuantitatif dan kualitatif dan R&D. In *Alfabeta Bandung*.