

# On the Ranking of University Libraries

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This study aims to compensate for the absence of a system for ranking university libraries. It contains detailed research, including the compilation and analysis of opinions, interviews with 13 librarians in six countries, and the identification of fundamental metrics for ranking university libraries. The primary goal is to develop concrete criteria for ranking university libraries in Türkiye, which can serve as a valuable resource for scientists, researchers, and library professionals in the field. By providing a concrete framework, we seek to enhance the effectiveness and transparency of the ranking process, and to ultimately improve university library services in Türkiye.

## Introduction

Ranking is the process of arranging a set of elements based on their degree of success, achievement, or competitive outcomes based on specific criteria. Ranking contributes to the identification of areas for improvement in institutions, fosters continual improvement, and facilitates the development of a competitive environment. Furthermore, it enables institutions to enhance their visibility, and allows for the periodic renewal and update of the criteria for evaluation and ranking according to contemporary conditions. Within this context, various rankings are conducted in numerous fields. A few examples are as follows:

- Since the 1970s, countries have been ranked as developed, developing, or underdeveloped based on such criteria as their gross domestic product (GDP), labor force, trade, production, consumption, and economic power (UN, 2014).
- The Organization for Economic Cooperation and Development (OECD) evaluates the knowledge and skills acquired by 15-year-old students attending formal educational institutions, within the scope of the Program for International Student Assessment (PISA), and ranks countries according to the level of education offered by them (OECD, 2020).
- More than 100 national and international institutions, including the Webometrics Ranking of World Universities, Times Higher Education, QS World University Rankings, Academic Ranking of World Universities (ARWU), and University Ranking by Academic Performance (URAP), rank universities according to basic criteria, such as academic performance, core areas of activity, and teaching and research environments.
- Scientific journals are ranked as Q1, Q2, Q3, and Q4, or gold, silver, bronze, honorary, and quality-compliant journals (SCImago, 2020) based on such criteria as the number

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of articles they publish, the number of citations of these articles, and their impact value.

Just as various countries, economies, journals, and universities are subjected to ranking procedures based on a variety of criteria, rankings related to universities are also important. Engaging with systems of ranking of international universities yields important results that allow these institutions to enhance their visibility and academic success and to improve their competitiveness and quality. Moreover, the data collected for such an evaluation covers a wide range of information, including but not limited to international collaborations, entrepreneurial activities, the number of scientific publications, frequency of citations, patent records, student enrollment figures, faculty composition, measurements of satisfaction with teaching, and expenditure on research and development (Aydın, 2019). Such versatile information can significantly influence the strategic planning, collaborative initiatives, and financial allocations of universities, and in turn influences the decision-making processes of students and academics regarding their choice of institution. Also, the creation and implementation of rankings will prevent duplicate data collection by different institutions.

Despite this, university rankings have been criticized for their methodological inconsistencies and limited scope in evaluating higher education institutions. Many ranking systems prioritize research output through citation counts, faculty qualifications, and reputation surveys, leading to biased and often misleading comparisons (Saisana et al., 2011). The similarity and redundancy of ranking indicators raise concerns about their reliability and highlight how major rankings, such as ARWU, NTU, and URAP, use overlapping criteria, making them susceptible to manipulation (Doğan & Al, 2019). The statistical volatility of rankings further undermines their validity, as small methodological changes can significantly alter a university's position, questioning its credibility as an objective measure of institutional quality (Saisana et al., 2011). Beyond methodological flaws, university rankings create perverse incentives that can distort institutional priorities. Universities often allocate resources toward improving ranking positions rather than enhancing student-centered learning and community engagement (Muller, 2018). Performance-based funding models, such as those examined by Beach and Milne (2019) in Ontario, demonstrate how institutions increasingly prioritize metrics that influence rankings rather than addressing fundamental educational responsibilities. Furthermore, rankings reinforce hierarchical structures within academia, commodifying education, and justifying austerity-driven policies that do little to improve accessibility or quality (Welsh, 2021).

In addition to critics of university rankings, there are also critics of library assessments. These issues extend to library assessment models, where traditional evaluation methods fail to capture the true impact of library services on student learning. Didin Sonmez et al. (2021) argue that simplistic usage metrics, such as book circulation and database searches, are insufficient for assessing library effectiveness and advocate for outcome-based assessment models aligned with accreditation standards. As higher education institutions navigate these challenges, scholars emphasize the need for alternative evaluation frameworks that incorporate qualitative measures, multidimensional ranking systems, and mission-driven assessments to more accurately reflect the diverse contributions of universities and libraries to academic and societal advancement (Milot, 2015).

In contemporary societies characterized by heightened competition, the capacity of organizations to not only endure within a competitive milieu, but also to advance within the sectors in which they operate requires the formulation of strategic policies grounded in a comprehensive understanding of both their internal strengths and weaknesses, as well as

the external landscape constituted by other entities in the sector. The assimilation of such information plays a pivotal role in effecting organizational change and transformation; it serves as a catalyst for engendering and fortifying the competitive volition and power of these organizations. As current organizational structuring is prominently predicated upon the production, acquisition, and dissemination of knowledge, the entities within universities, which are recognized as central hubs for the generation of sophisticated knowledge, are expected to spearhead the competitive milieu. Within this framework, the establishment of a hierarchical assessment of university libraries—distinguished by their facilitation of the production of scientific knowledge through contemporary and high-quality information services—can not only enhance the importance and prominence of libraries, but can also foster a competitive atmosphere through access to library-related data and the cultivation of sophisticated services.

In this context, this study comprehensively investigated the rankings of university libraries by compiling and analyzing various opinions and suggestions regarding the rankings of university libraries. Moreover, the study solicited the viewpoints and insights of university librarians to enrich discourse on the subject and reinforce its significance. A crucial aspect of this research involves the identification and delineation of fundamental criteria for ranking university libraries. The concrete and ultimate aim of this study is to formulate a comprehensive guideline that delineates the criteria for ranking university libraries, specifically within the context of Türkiye.

## Literature Review

Library rankings are important in helping libraries assess their position, identify areas for improvement, and enhance their services. Research on library rankings has primarily gained momentum since the 2000s. In addition, other evaluation tools, such as standards, satisfaction surveys and statistical analyses that measure, evaluate and compare library resources and services at regional or national levels, also serve as important references in determining ranking criteria. Studies in this domain date back to the 1960s. The American Association of Research Libraries (ARL) has been publishing statistics on collections, expenditures, staffing, and service activities since 1961 under the title ARL Statistics (Piternick, 1977). The National Center for Education Statistics (NCES) and the Association of College and Research Libraries (ACRL) also play an important role in gathering data on library collections, services, information literacy, staff, expenses, and usage across libraries in the United States (ACRL, 2025; NCES, 2025). Similarly, the American Association of College and Research Libraries (ACRL) introduced standards for higher education libraries in 1979 (ACRL, 2018). The International Federation of Library Associations and Institutions (IFLA) included university library standards in its medium-term plans from 1981 to 1985 (Lynch, 1987). The Society of College, National and University Libraries (SCONUL)—which represents all universities in the United Kingdom and Ireland, as well as major higher education institutions, the National Libraries of Britain, Ireland, Scotland, and Wales, and select private research libraries—has been active in this area since 1987 (Creaser, 2009). Meanwhile, the Canadian Association of Research Libraries (CARL) has been compiling annual statistics on staffing, expenditures, collections, and facility usage since 1976 (CARL, 2025).

In addition to statistical sources, the *LibQUAL* study, initiated in 1999, evaluates library user satisfaction across various dimensions, including reliability, responsiveness, physical infrastructure, trust, enthusiasm, access to collections, and available space (Akbayrak, 2005).

Also, the National University Library of Australia conducts the Library Client Survey in collaboration with Insync Surveys Pty Limited to identify user priorities, enhance satisfaction levels, support quality improvement initiatives, monitor library performance, and benchmark with other libraries (Insync, 2025; Australian National University Library, 2021). Moreover, the ISO 11620 Information and Documentation-Library Performance Indicators Standard, published by the International Organization for Standardization (ISO), provides a framework for comparing libraries and assessing their services and activities since 1998 (Akbayrak, 2005).

To enhance the quality of services, increase visibility, and actively contribute to the advancement of universities, libraries must establish a ranking system that is aligned with fundamental criteria encompassing such aspects as their infrastructure, budget, staffing, user engagement, technological integration, diversity of collections, and societal impact. The establishment of such a system is crucial for the development and dissemination of standards within the domain of the academic library. In this context, this study provides a comprehensive literature review focusing on the criteria according to which university libraries are ranked, by drawing upon national and international scholarly sources available in both print and electronic formats.

There is a lack of publications dedicated to the ranking of university libraries in the literature. The few articles that have addressed this subject have not provided a detailed examination of the issue. Studies use different methodologies to collect data and to rank university libraries, such as Webometrics university ranking (Verma & Singh, 2023), Higher Education Commission ranking (Jan & Hussain, 2021), Multi Attribute Decision Making (Javad et al., 2020), the VIKOR (ManČev, 2014) and a composite index (Kao et al., 1998). This study focuses on determining a wide range of criteria and providing a guideline for university library ranking. The ranking methodology and indexation are out of the scope of this study.

The current academic landscape lacks a comprehensive and up-to-date examination of university libraries in terms of their facilities and services to subsequently provide national or international rankings. Prevalent studies in this context are often insufficient in their scope. For instance, the study titled “Top universities, top libraries: Do research services in academic libraries contribute to university output?” (Fernandez Marcial et al., 2016) lacks the requisite qualifications for ranking university libraries. A seminal study in this field is “Ranking university libraries: The Taiwan case.” This study, conducted in 1997, involved 10 directors of university libraries in Taiwan; it ranked 24 university libraries based on such criteria as collections, staff, expenditures, buildings, and library services (Kao et al., 1998).

Der Bibliotheksindex (BIX) was launched by the Bertelsmann Foundation and the German Library Association in October 1999 as a project to measure and benchmark the performance of public and academic libraries. This project initially focused on public libraries, and was subsequently expanded to include academic libraries in 2004 (Wimmer, 2009). The BIX study lasted until 2015 (Berndtson & Öström, 2020).

A recent study titled “University libraries ranking in Khyber Pakhtunkhwa Pakistan: A proposal” aims to rank the university libraries of Khyber Pakhtunkhwa-Pakistan. Nineteen public sector university libraries were ranked based on the parameters, such as library services, resources, budget, user visits, automation, and application of emerging technologies (Jan & Hussain, 2021). Verme and Singh (2023) conducted a study aiming to examine the library websites of the Top 10 Universities that have been ranked by the National Institutional Ranking Framework for the year 2020 in India. The study focused on the efficiency of library



websites using webometric indicators that rank the websites on the basis of their internal and external web impact factors and domain authority.

Although the subject of this study is the ranking of university libraries, it examines the “ranking of public libraries” developed in the United States of America (U.S.) as a suitable example to determine the relevant criteria of evaluation and understand this method, owing to a lack of sufficient resources in the literature. The ranking of public libraries in the U.S. first started in 1999 as “Hennen’s American public library ratings.” Since 2008, it has continued as “America’s Star Libraries: The LJ Index of Public Library Service” (Lance, 2020).

Another study on the ranking of public libraries is the European Library Ranking. Maija Berndtson from Finland and Mats Öström from Sweden, who have extensive experience in the field of librarianship, founded the European Library Ranking in 2014 as an independent organization to create a tool to help improve the quality of service in public libraries (Berndtson & Öström, 2022).

In 2018, 67 public libraries in the East Azerbaijan Province of Iran were ranked according to their services (Zandiyin et al., 2018). In 2016, 10 juries—consisting of literary scholars, historians, researchers, and writers—ranked the 10 best libraries in Türkiye (Onat, 2016). This ranking covered all types of libraries; however, the basic criteria on which this ranking was based remain unclear. In a study titled “Foundation Higher Education Institutions,” published by the Turkish Council of Higher Education in 2020, libraries were ranked according to the library space per student, total number of printed books in libraries, and library-related expenditures (Koçak Tufan & Güran, 2020). This ranking is incomplete in terms of the basic elements that constitute libraries and covers only Foundation Higher Education Institutions<sup>1</sup> but not public universities.

Only a few studies have been published on the rankings of university libraries, most of them since the 2000s. All these studies have certain shortcomings, which suggests that more research might be devoted to the subject in the future so that its importance is recognized.

## Methodology

This study uses the descriptive method to explain the concepts, events, and institutions related to the subject at hand. This method seeks to explain events, assets, institutions, groups, and various fields. Descriptive research explains the interactions between situations by considering the relationship between current and past events, and conditions (Kaptan, 1998).

The study also uses the survey technique, which is defined as “the preparation of a list of questions to be read and answered directly by the people to be informed” (Seyidoğlu, 2009), for data collection. The survey was conducted to gather the opinions of university library directors in Istanbul regarding the necessity of ranking university libraries.

Content analysis was used to examine research on library rankings, forms of data collection, reports, criteria for the performance of libraries, and standards. Content analysis is a technique in which certain words in a given text are coded and summarized into categories within the scope of certain rules (Karadeniz et al., 2020). The general purpose is to simplify complex texts, make them manageable, and classify and code the information to make it more understandable (Celebi, 2021).

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<sup>1</sup>Foundation Higher Education Institutions: In addition to public universities in Türkiye, there are also foundation universities that are nonprofit, fee-paying institutions (Saglam, 2013).

Furthermore, semi-structured interviews were used to investigate the criteria to be used for the ranking. An important advantage of this technique is that the questions and topics are prepared in advance, and different questions can be asked during the interview (Güngör, 2022). The interview was conducted with librarians working in university libraries to gather their perspectives on university library ranking criteria.

## Findings

This study examined the formulation of criteria for the ranking of university libraries through a tripartite investigation encompassing a questionnaire survey, a comprehensive literature review, and in-depth interviews.

### *Survey*

As of 2020, there were 207 universities in Türkiye, including 129 state universities, 73 foundation universities, and five foundation vocational schools (Council of Higher Education, 2020). A total of 30% of the universities in Türkiye (61) are located in Istanbul, of which 12 are state universities and 49 are foundation universities. Therefore, this study focused on a representative sample of universities in Istanbul and conducted a survey to obtain the opinions of the directors of university libraries in Istanbul regarding the necessity of university library ranking system.

The survey (Cuhadar, 2023) was sent via email to the directors of university libraries in Istanbul; 40 of 61 university libraries participated. A total of 58% of libraries of public universities and 67% of libraries of foundation universities participated in the survey, for an overall average participation of 63%. Some of the findings of the survey were as follows:

- In response to the question “Should university libraries be ranked according to certain key criteria?” 85% of the participants agreed.
- In response to the question “Should the ranking of university libraries within the scope of key criteria contribute positively to education at the university?” 83% of the respondents expressed a positive opinion.
- Another question was designed to measure whether the ranking of university libraries in terms of key criteria would contribute positively to improving library services and practices. A total of 90% of the respondents indicated such a ranking of university libraries would do so.
- The participants were also asked whether the ranking of university libraries in terms of key criteria would contribute positively to the visibility of libraries and would increase competition among libraries. A total of 83% of the participants agreed.

In summary, the directors of university libraries in Istanbul agreed that university libraries should be ranked, and that such a ranking would positively influence the services, activities, and research of the library and enhance the visibility of the university library.

### *Evaluation: Quality Assurance Reports and Practices of Libraries*

To the best of our knowledge, no active system is available to rank only university libraries at the international level. Some country-based studies have been conducted on ranking university libraries over a certain period, but have not been continually maintained. We first provide information on these studies. Given that these studies are insufficient in their scope, we determine the criteria according to which university libraries collect data. We thus include

some data collection surveys and reports for university libraries, in addition to national and international standards.

The library rankings and data that were reviewed are as follows:

- studies on library rankings in general,
- reports on university libraries published in higher education, library reports, and forms of data collection from university libraries in the field,
- performance measures for libraries and university libraries,
- standards for university libraries,
- the contribution of the libraries to the accreditation of programs at their respective universities or colleges,
- the consideration of the visibility of libraries on the web in their ranking,
- the consideration of the contribution of the libraries to society in their ranking, and
- the consideration of the level of satisfaction with the libraries in their ranking.

Table 1 shows general topics considered in the studies that were reviewed. Certain topics that were considered unimportant for ranking university libraries are not included in Table 1. They include topics that were pertinent to public libraries, such as the location of the library, information on the library in tourist guides, and access to it through public transportation. Table 1 presents the criteria for ranking libraries under 11 categories: collection, space, expenditures, users, staff, technology, services/reference, usage, satisfaction, visibility on the web, and contribution to society.

**TABLE 1**  
**Summary of Data Used to Rank University Libraries**

| Data Used for Library Rankings                                          | Criteria   |       |              |       |       |            |                    |       |              |                |
|-------------------------------------------------------------------------|------------|-------|--------------|-------|-------|------------|--------------------|-------|--------------|----------------|
|                                                                         | Collection | Space | Expenditures | Users | Staff | Technology | Services/Reference | Usage | Satisfaction | Web Visibility |
| <b>Studies on Ranking Libraries</b>                                     |            |       |              |       |       |            |                    |       |              |                |
| America's Star Libraries (A)                                            |            |       |              |       |       | X          | X                  | X     |              |                |
| Library Ranking Europe (B)                                              | X          | X     |              |       |       | X          | X                  |       |              | X              |
| Iran, Ranking of Public Libraries in East Azerbaijan Province (C)       | X          |       |              | X     |       | X          | X                  | X     |              | X              |
| Bibliotheksindex, Germany (D)                                           | X          | X     | X            |       | X     | X          | X                  | X     | X            |                |
| Taiwanese university libraries (E)                                      | X          | X     | X            |       | X     | X          | X                  | X     |              | X              |
| Top universities, top libraries (F)                                     |            |       |              |       |       | X          | X                  |       |              | X              |
| Ten best libraries of Türkiye (G)                                       |            |       |              |       |       |            |                    |       |              |                |
| <b>University Libraries—Reports and Forms</b>                           |            |       |              |       |       |            |                    |       |              |                |
| Foundation higher education institutions report (H)                     | X          | X     | X            |       |       |            |                    |       |              |                |
| Council of Higher Education (CoHE) Monitoring and Assessment Report (I) | X          |       | X            |       |       |            |                    |       |              |                |

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**Summary of Data Used to Rank University Libraries**

|                                                                                                    | Criteria   |           |              |          |           |            |                    |           |              |                |                         |
|----------------------------------------------------------------------------------------------------|------------|-----------|--------------|----------|-----------|------------|--------------------|-----------|--------------|----------------|-------------------------|
|                                                                                                    | Collection | Space     | Expenditures | Users    | Staff     | Technology | Services/Reference | Usage     | Satisfaction | Web Visibility | Contribution to Society |
| <b>Data Used for Library Rankings</b>                                                              |            |           |              |          |           |            |                    |           |              |                |                         |
| Council of Higher Education data collection form for university libraries (J)                      | X          | X         | X            | X        | X         | X          | X                  | X         |              |                |                         |
| The Turkish Statistical Institute's (TurkStat) university library statistics form (K)              | X          | X         |              | X        | X         | X          | X                  | X         |              |                |                         |
| Association of Research Libraries Statistics (L)                                                   | X          |           | X            | X        | X         |            | X                  | X         |              |                |                         |
| Society of College, National, and University Libraries (SCONUL) statistics (M)                     | X          | X         | X            | X        | X         |            | X                  | X         |              |                |                         |
| <b>University Libraries—Performance Indicators</b>                                                 |            |           |              |          |           |            |                    |           |              |                |                         |
| ISO 11620 library performance indicators (N)                                                       | X          | X         | X            |          | X         | X          | X                  | X         | X            |                |                         |
| IFLA library performance indicators (O)                                                            | X          | X         | X            |          | X         | X          | X                  | X         | X            |                |                         |
| <b>University Libraries—Standards</b>                                                              |            |           |              |          |           |            |                    |           |              |                |                         |
| Association of College & Research Libraries (ACRL) Standards for Libraries in Higher Education (P) | X          | X         | X            |          | X         | X          | X                  | X         | X            |                | X                       |
| CoHE standards for university libraries (R)                                                        | X          | X         | X            | X        | X         | X          |                    |           |              |                |                         |
| <b>University Libraries—Accreditation</b>                                                          |            |           |              |          |           |            |                    |           |              |                |                         |
| MÜDEK (S)                                                                                          | X          | X         | X            | X        | X         |            |                    |           |              |                |                         |
| FEDEK (T)                                                                                          | X          | X         | X            | X        | X         |            |                    |           |              |                |                         |
| WASC (U)                                                                                           | X          | X         |              |          |           | X          | X                  |           |              |                |                         |
| AACSB (V)                                                                                          | X          | X         | X            |          | X         | X          | X                  | X         |              |                |                         |
| <b>University Libraries—Additional Indicators</b>                                                  |            |           |              |          |           |            |                    |           |              |                |                         |
| Web visibility (Y)                                                                                 |            |           |              |          |           |            |                    |           |              | X              |                         |
| Contribution to society (Z)                                                                        |            |           |              |          |           |            |                    |           |              |                | X                       |
| Satisfaction survey (W)                                                                            |            |           |              |          |           |            |                    |           | X            |                |                         |
| <b>Total</b>                                                                                       | <b>18</b>  | <b>15</b> | <b>14</b>    | <b>8</b> | <b>13</b> | <b>14</b>  | <b>15</b>          | <b>12</b> | <b>5</b>     | <b>1</b>       | <b>6</b>                |

Table 1 shows that studies on ranking libraries have been conducted in Türkiye, U.S., Taiwan, Germany, Iran, and Europe. America's Star Libraries (Lance, 2020), Library Ranking Europe (Berndtson & Öström, 2022), and the ranking of Iranian public libraries pertained to public libraries (Zandiyin et al., 2018), while Bibliotheksindex (Der Bibliotheksindex, 2022), Taiwanese university libraries' rankings (Kao & Hung, 2003), top university rankings, and the ranking of the 10 best libraries of Türkiye (Fernandez Marcial et al., 2016; Onat, 2016) were related to the ranking of university libraries.



Regularly published reports and statistics on university libraries are important sources of data. Determining the kind of data requested on university libraries and the areas that were assessed constitute valuable information for studies on ranking university libraries. The data requested from libraries and the statistics on university libraries can be seen in Table 1. It includes studies by the Council of Higher Education (Council of Higher Education, 2021a, 2021b; Koçak & Günay, 2021; TÜİK, 2022) and the Turkish Statistical Institute, which are state institutions that regularly collect data on university libraries. Moreover, the Association of Research Libraries (Mian & Roebuck, 2022), which has been working in this field for many years in the U.S., and SCONUL (SCONUL, 2022), which conducts studies on university libraries in the U.K., were included. The table shows that similar kinds of data were collected by these institutions, such as information on expenditures, services, staff, collection, and users.

The extent to which services provided by libraries meet the needs of users, as well as the criteria used to measure library performance are both important issues. As ISO 11620: 214–“Information and Documentation Library Indicator” (ISO, 2014) and IFLA’s work on the subject (Poll & Te Boekhorst, 2007) are internationally recognized and accepted, this study examined them. Table 1 presents the criteria used to assess the performance of libraries.

Standards serve as guidance documents for establishing the general characteristics of libraries according to certain rules. They are used to compare libraries, determine the criteria for their evaluation, and improve their services. We considered the study published by CoHE, titled “University libraries in Türkiye towards 2023: Current situation, problems, standards, and solution suggestions” (Akbatürk Çanak et al., 2014), as well as the ACRL standards for libraries in higher education (ACRL, 2018), in order to determine the basic standards for university libraries. The main topics considered in these studies are presented in Table 1.

Accreditation in higher education contributes to the achievement of the goals of a university in many areas, including effective management, participation, innovation, sustainability, student orientation, and continual improvement. The importance of accreditation has grown progressively because students’ education continues outside the classroom, and because the library makes an important contribution to the accreditation of the university and its programs. It is typical to see libraries being mentioned either in a sentence or under infrastructure headings, rather than being a criterion for accreditation. As an example, in the MÜDEK accreditation process, the library amenities provided to students must be of adequate quality to fulfil the educational goals and program outcomes. From this sentence, it appears that the library should have a sufficiently large working space, a collection, a budget, staff, and technical infrastructure. The criteria for university libraries during accreditation are presented in Table 1. It shows the MÜDEK (MÜDEK, 2020) and FEDEK (FEDEK, 2020) accreditations at the national level, and the WASC (WSCUC, 2021) and AACSB (Guth & Stonebraker, 2022) accreditations at the international level. These accreditations require libraries to provide adequate incentives for studying and research and to have a budget, staff, collection, and reference services. University libraries support the quality of education and training as this is among their basic purposes.

It has become increasingly important to monitor, research, analyze, and manage the discussions and posts on the web pages and social media accounts of libraries. For instance, data concerning library usage, including the number of views, likes, dislikes, and shares of videos, can be obtained from these forums. Table 1 shows that the visibility of libraries on

the web can be measured by the impact of their websites as well as their internal and external links (Brahma et al., 2019). The utilization of social media tools has the potential to extend the reach of library services and applications, thereby facilitating more efficient access to a broader spectrum of content, including text, audio, and video materials, irrespective of temporal and geographical constraints. Research indicates that social media tools, which employ a multifaceted approach to communication with users, are utilized in 70% of libraries, and that 30% of librarians share at least one post per day (Eroğlu & Çakmak, 2021). Conversely, factors such as posting frequency, content quality, and user engagement are crucial in the utilization of social media tools (Mufadhol et al., 2024). According to social media experts and platform data, the ideal posting frequency for institutions is three to five times a week on Instagram, one to two times a day on Facebook, two to three times a day on X (formerly Twitter), and one to two times a day on LinkedIn (Tufan, 2025). In this context, the quantity of social media tools, the number of posts, and interaction are significant factors in determining the ranking of university libraries.

University libraries need to not only serve their own users but also to contribute to society in order to meet quality-related criteria (KalDer, 2002). The library should strive for the development of professional ethics and standards, share its thoughts by participating in events and activities, and open its facilities to all users. Table 1 shows that the contribution of libraries to society can be measured through their participation in NGOs, use of their space, their events, activities, social and economic support, and awards (Council of Higher Education, 2022; Nureña, 2019; Cuhadar, 2020). University rankings, such as QS (QS, 2021) and URAP (URAP, 2023), generally use data for the preceding five years. We follow this practice in this study. The number and types of criteria can be adjusted accordingly.

The Turkish University Satisfaction Survey (TÜMA) investigates user satisfaction with universities in the country, including university libraries. Table 1 shows that satisfaction is evaluated at six levels. TÜMA (Karadağ & Yücel, 2022) asks the same questions of all universities for an objective evaluation. Some of these questions pertain to students' satisfaction with the library (Karadağ & Yücel, 2022).

Table 1 shows that the collections of libraries (18) have been considered as a criterion in almost all studies on the subject. Buildings (15) and services/reference (15) are the second most frequently cited criteria, followed by technology (14) and expenditures (14). As new additions to the literature, visibility on the web (1), contribution to the community (6), and level of satisfaction (5) have been less frequently included in the rankings of university libraries.

Based on these studies, we propose that university libraries be ranked according to 11 criteria: collection, building, expenditures, users, staff, technology, services/reference, usage, satisfaction, visibility on the web, and contribution to society. We interviewed 13 officials, each with at least 10 years of experience in university libraries, from six countries over four continents and 13 institutions. We used semi-structured interviews to finalize the basic criteria for our ranking.

## ***Interviews***

Semi-structured interviews were conducted with people working in university libraries from Türkiye, Azerbaijan, the United Kingdom, the United States, Norway, and Australia. The semi-structured interviews made a significant contribution because they were flexible, and allowed the interviewees to share their experiences, knowledge, and insights in detail.

The interviewees were selected on the basis of having a degree in librarianship, having worked in a university library for at least 10 years, and having experience in librarianship in different countries to obtain different perspectives. We denote the interviewees by G1–G13 instead of using their names to ensure their confidentiality. Their demographic and other characteristics are presented in Table 2.

| <b>TABLE 2</b><br><b>General Information About the Interviewees</b> |                                             |                    |                   |            |
|---------------------------------------------------------------------|---------------------------------------------|--------------------|-------------------|------------|
| Interviewee                                                         | Title                                       | Library Experience | Education         | Country    |
| G1                                                                  | Library Director                            | 28 Years           | Master's Degree   | Türkiye    |
| G2                                                                  | Library Director                            | 34 Years           | Master's Degree   | Türkiye    |
| G3                                                                  | Library Director                            | 34 Years           | Master's Degree   | Türkiye    |
| G4                                                                  | Library Director                            | 27 Years           | PhD Candidate     | Türkiye    |
| G5                                                                  | Library Director                            | 22 Years           | Master's Degree   | Türkiye    |
| G6                                                                  | Collection Analysis and Planning Specialist | 24 Years           | Master's Degree   | U.S.       |
| G7                                                                  | Library Management Consultant               | 43 Years           | Master's Degree   | Australia  |
| G8                                                                  | Library Director                            | 18 Years           | Assoc. Prof. Dr.  | Türkiye    |
| G9                                                                  | Library Director                            | 33 Years           | Bachelor's degree | Türkiye    |
| G10                                                                 | Law Library Director                        | 30 Years           | Master's Degree   | U.S.       |
| G11                                                                 | Manager                                     | 18 Years           | Master's Degree   | Norway     |
| G12                                                                 | Scholarly Communication Lead                | 24 Years           | Master's Degree   | U.K.       |
| G13                                                                 | Library Director                            | 18 Years           | PhD               | Azerbaijan |

Table 2 shows that 13 librarians from six countries in four continents (Asia, Europe, North America, and Australia) participated in the interviews. Each participant had at least 18 years of experience working in university libraries, with an average of 27 years. A majority had a master's degree in library science.

In order to collect the data, the interviewees were first contacted by email. General information about the subject was shared via email, and an appointment was requested for the interview via Zoom. Then, the ranking criteria and interview questions were sent to the librarians who were willing to be involved in the interview. The interview was conducted online in a quiet environment during the time period that the participants made an appointment. Audio and video recordings were made with the permission of the participants.

The questions (Cuhadar, 2023) for the interviews were prepared in advance. Additional questions were posed according to the participants' responses during the interview when it was seen necessary. The same questions were asked of each participant. All interviews spanned a total of 819 minutes, with the shortest interview lasting 39 minutes and the longest interview lasting 90 minutes. The average duration of the interviews was 63 minutes. In addition to making audio recordings, the interviewers took notes during the interviews when necessary. The interviewees were also asked for a copy of the written and visual documents that they wished to share on the subject.

Before the interview, we had identified 11 basic criteria and 67 sub-criteria by reviewing literature, reports, and some basic statistics used in this field. Following the interviews,

we maintained the 11 main criteria which were agreed on. According to participants' suggestions a sub-criterion listed in the questionnaire, namely "number of library staff memberships in non-governmental organizations in the year under review" was eliminated. The main reason for removing this sub-criterion is that voluntary and individual NGO membership is not considered appropriate when ranking the institutions. They also suggested two more criteria; "Number of full-text resources in the open access system of the institution until the year of evaluation," and "Is there information about the protection of personal data and the conditions of use of library resources on the library website?" be added. Using these suggestions, the guideline was revised, and also the descriptions of 12 sub-criteria were updated.

While 92.3% of the interviewees stated that their libraries should be ranked according to certain criteria, one participant was undecided on the issue.

The final version of the guidelines that delineates the criteria for ranking university libraries was developed based on the literature review, questionnaires, and interviews. The ranking of university libraries and criteria for Türkiye constructed in this study consists of 11 main criteria—namely, collection, building, expenditures, users, staff, technology, services/reference, usage, satisfaction, visibility on the web, and contribution to society—and 68 sub-criteria, each of which are explained in Appendix I.

## Conclusions and Recommendations

Our findings offer important insights for librarians, university administrations, and library users. Instead of the traditional evaluation of university libraries according to building, budget, staff, users, and criteria for collections, it is important to evaluate and rank them by using a larger number of more varied criteria that are continually updated according to the needs of the contemporary educational environment. This study was conducted with the assumption that ranking university libraries according to certain criteria can help them to identify their weaknesses, strengths, and areas in which there is room for improvement, increase their visibility, enhance their capacity to adapt to changes, strengthen communication between the libraries and the university administration, and contribute to the collection, analysis, and sharing of data of good quality relating to libraries.

Previous studies on the ranking of university libraries have traditionally focused on five main criteria: collections, space, expenditures, staff, and users. However, this study goes beyond those main criteria by including additional criteria that are crucial in a contemporary information environment, such as technology, services/reference, usage, satisfaction, web visibility, and contribution to society, all of which are examined in detail.

We contribute to the literature through our insights into the academic community, administrators, researchers, and university libraries. Interdisciplinary studies can be conducted to enrich the literature on the ranking of university libraries and obtain more comprehensive results. Such studies can help libraries, librarians, users, researchers, and anyone else interested in this field.

The proposed criterion list to be used in a possible ranking system in the study not only provides a structured approach for evaluating libraries, but also promises to make positive contributions to various facets of academic life. The anticipated benefits include heightened visibility of the library, increased adaptability to change, and strengthened communication between the library and the university administration. This, in turn, can make libraries more



effective in their roles within the academic ecosystem. Another noteworthy contribution of this study is the creation of a ranking guide tailored to Türkiye, which encompasses such criteria as the collection, budget, and societal contribution. The guide, when put into practice, empowers institutions to determine their standing across these parameters, and offers valuable insights into areas of strength and facets that need improvement.

This study's literature review underscores the scarcity of active and up-to-date ranking systems for university libraries and positions the proposed criteria as a pioneering effort in the field. As libraries increasingly become the focal points of academic discourse, the implementation of ranking systems promises to render library data richer, more transparent, and readily accessible. This, in turn, is expected to inform the formulation of library budgets, bolster scientific work, enhance user satisfaction, and contribute to various other dimensions of library services.

The anticipated impact on university administrations is substantial, with the ranking of libraries set to feature prominently on their agendas. This shift can fortify the channels of communication between libraries and administrations and can foster an environment in which libraries play an integral role in supporting the overarching goals of academic institutions. In the context of education and research, a detailed ranking system, aligned with key criteria, can be a positive force. Libraries are presented with the opportunity to assess and monitor themselves to promote a culture of continual improvement. This is anticipated to have a cascading effect, such that it will improve the quality of service, and will contribute to the broader educational and research-related goals of universities.

A significant advancement affected by this study is the use of computer technologies to enhance the accuracy of the data used for ranking, where this ensures their integrity, and facilitates seamless archiving and sharing. This technological integration is expected to enhance the credibility and reliability of the ranking system. Moreover, we anticipate that the proposed criteria for the ranking system will naturally contribute to the expansion of library services. This, in turn, may catalyze wider opportunities for research, increase the number of publications, enhance their academic impact, and lead to greater international collaboration to ultimately result in a more vibrant and globally interconnected academic landscape. The potential of the library ranking system would significantly impact the visibility of institutions on the internet. This shows the need for the regular reporting and sharing of rankings, to not only facilitate comparisons with meaningful data, but also to encourage cooperative activities within the academic community.

The results of studies on the university library ranking should be disseminated widely through various media channels, including print and electronic formats. Similar to the rankings of international universities, this approach can enhance the visibility of libraries and make valuable information accessible to a diverse audience, including students, parents, academics, politicians, funders, and companies. The dissemination of such information can lead to a better-informed community and stakeholders, and in turn, stimulate informed decision-making processes.

In addition, the ranking system developed for university libraries here can serve as a model for ranking other types of libraries, including public, school, and research libraries. This expansion can help develop a standardized and systematic approach to evaluating libraries across diverse sectors, thus enhancing the overall quality of library services and their contributions to their communities.



The dynamic nature of information technologies suggests the need for scheduling an international conference on the rankings of university libraries every two years. Such a conference can provide a forum for discussing evolving criteria, addressing technological challenges, and exchanging best practices. Moreover, organizing seminars, workshops, and training sessions focused on data collection, report generation, and system integration is recommended. This approach can motivate the development of a community of practice and ensure the ongoing enhancement of ranking systems. Given the rapid pace of academic advancement, the publication of an annual electronic newsletter or magazine to announce and discuss the latest results of the rankings of university libraries is also recommended. This consistent dissemination of information can help develop a sense of continuity and engagement within the academic community.

Another suggestion is to address deficiencies in the technological infrastructure of library automation systems and customer relationship management. Studies with the aim of identifying and eliminating these deficiencies can not only enhance the accuracy of the data used in the rankings, but can also contribute to the overall efficiency of library services.

This study also highlights the role of the library staff and emphasizes the need for an appropriate number of skilled personnel to effectively rank university libraries. The motivation of the staff, particularly those in libraries at the forefront of the rankings, is a key factor influencing their efficiency and satisfaction. Supporting and incentivizing the library staff can be instrumental in ensuring the success of ranking initiatives.

Furthermore, the ranking system can serve as a compelling factor in shaping the preferences of universities by emphasizing the influence of this information in institutional decisions. To maximize the impact of the rankings, universities should make these outcomes prominent on their websites, library portals, and entrances to their buildings. This can have a positive effect on users, and can enhance the reputation of the library and the institution as a whole.

Inspired by the rankings of international universities, we also propose categorizing university libraries by region (e.g., World, North America, Latin/South America, Europe, Asia, Africa, Arab World). This regional categorization can provide a more nuanced understanding of the performance of libraries in different contexts.

The limitations of this article present avenues for future research. First the survey conducted in this paper includes the view of directors; further studies could broaden the survey by including librarians, managers and stakeholders. Second, further research is needed for index creation by considering weighted average of basic criteria provided in this study. The continued exploration of ranking methodologies, criteria, and their implications, can significantly contribute to the academic literature, and can provide a deeper understanding of the evolving landscape of library services.

Finally, collaborations with existing surveys, such as the Turkish University Satisfaction Survey (TÜMA), should be expanded. Increasing the number of questions related to the criteria for satisfaction in the ranking of university libraries within these surveys can provide a more comprehensive and holistic understanding of user perceptions and satisfaction.

In conclusion, this study's recommendations offer a comprehensive and forward-looking approach to the evaluation and ranking of university libraries. Emphasizing the importance of disseminating information widely, leveraging technology, addressing deficiencies in infrastructure, and fostering a collaborative academic community have the potential to enhance the credibility, transparency, and global impact of the rankings of university libraries. The

proposed framework, which is rooted in contemporary criteria and technological integration, represents a transformative effort to improve the effectiveness of library services in supporting education and research. The implementation of these suggestions can usher in an era of informed, dynamic, and collaborative scholarly pursuits that not only benefit individual libraries, but also contribute to the broader academic community. This integrated approach can lead to the continual improvement of library services worldwide, and can have a meaningful impact on the academic landscape.

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## Appendix I – The Criteria for Ranking University Libraries and Their Definitions

### *Criteria for Collections and Their Definitions*

| <b>C Collection Criteria</b>             |                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C.1</b>                               | Total number of unique titles in the print collection until the year under review                                                                                                                                                                                                                                                                                          |
| <b>C.2</b>                               | Total number of titles in the print collection until the year under review                                                                                                                                                                                                                                                                                                 |
| <b>C.3</b>                               | Total number of unique titles in electronic format owned until the year under review                                                                                                                                                                                                                                                                                       |
| <b>C.4</b>                               | Total number of titles in electronic format owned until the year under review                                                                                                                                                                                                                                                                                              |
| <b>C.5</b>                               | Total number of unique titles in electronic format subscribed to in the year under review                                                                                                                                                                                                                                                                                  |
| <b>C.6</b>                               | Total number of titles in electronic format subscribed to in the year under review                                                                                                                                                                                                                                                                                         |
| <b>C.7</b>                               | Number of full-text resources in the open access system of the institution until the year of evaluation                                                                                                                                                                                                                                                                    |
| <b>C.8</b>                               | Number of unique titles (C1 + C3 + C5) in the collection until the year under review                                                                                                                                                                                                                                                                                       |
| <b>C.9</b>                               | Number of titles (C2 + C4 + C6) in the collection until the year under review                                                                                                                                                                                                                                                                                              |
| <b>C Collection Criteria–Definitions</b> |                                                                                                                                                                                                                                                                                                                                                                            |
| <b>C.1</b>                               | The total number of unique books, bound journals, theses, musical scores, audiovisual resources, rare materials, and manuscripts in printed format that were added to the library collection. New editions were considered to be new publications.                                                                                                                         |
| <b>C.2</b>                               | The total number of books, bound journals, theses, e-musical scores, audiovisual resources, rare books, and manuscripts in printed format that were added to the library collection. New editions were considered to be new publications. The number of full-text resources in the open access system of the institution were not added to this.                           |
| <b>C.3</b>                               | The total number of unique e-books, e-journals, e-theses, e-musical scores, e-audiovisual resources, and digitized rare and manuscript works in electronic format that were added to the library collection. The number of full-text resources in the open access system of the institution were not added to this.                                                        |
| <b>C.4</b>                               | The total number of e-books, e-journals, e-theses, e-musical scores, e-audiovisual resources, and digitized rare and manuscript works in electronic format added to the library collection. The number of full-text resources in the open access system of the institution were not added to this.                                                                         |
| <b>C.5</b>                               | The total number of unique e-books, e-journals, e-theses, e-musical notes, e-audiovisual resources, and digitized rare and manuscript works that were made available electronically through subscription in the year under review. Publications made available under such models as patron-driven acquisition (PDA) and demand-driven acquisition (DDA) were not included. |
| <b>C.6</b>                               | The total number of e-books, e-journals, e-theses, e-musical scores, e-audiovisual resources, and digitized rare and manuscript works that were made available electronically through subscription in the year under review. Publications made available under such models as user-oriented provision (PDA) and demand-driven provision (DDA) were not included.           |
| <b>C.7</b>                               | Number of full-text resources in the open access system of the institution until the year under review                                                                                                                                                                                                                                                                     |
| <b>C.8</b>                               | The sum C1 + C3 + C5 was taken as the total number of unique titles in all formats.                                                                                                                                                                                                                                                                                        |
| <b>C.9</b>                               | The sum C2 + C4 + C6 was taken as the total number of titles in all formats.                                                                                                                                                                                                                                                                                               |



*Criteria for Library Space and Their Definitions*

| <b>B Space Criteria</b>                 |                                                                                                                                                                                                  |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>B.1</b>                              | The total physical area of the library (m <sup>2</sup> ).                                                                                                                                        |
| <b>B.2</b>                              | Total seating capacity of the library.                                                                                                                                                           |
| <b>B.3</b>                              | Is the library accessible for people with disabilities? Yes/No                                                                                                                                   |
| <b>B Criteria for Space-Definitions</b> |                                                                                                                                                                                                  |
| <b>B.1</b>                              | The gross (m <sup>2</sup> ) indoor area allocated to and managed by the library.                                                                                                                 |
| <b>B.2</b>                              | The total number of seats available for each user in the indoor spaces allocated to and managed by the library. For example, a seat for three people was counted as three seats.                 |
| <b>B.3</b>                              | This was ascertained by considering the criteria specified by the Turkish Higher Education Council's Barrier-free University "accessibility to space" award (Council of Higher Education, 2025). |

*Criteria for Expenditures and Their Definitions*

| <b>H Criteria for Expenditures</b>            |                                                                                                                                                                                                                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>H.1</b>                                    | Total expenditure on print and electronic publications provided through the ownership method in the year under review.                                                                                                                                             |
| <b>H.2</b>                                    | Total expenditure on electronic publications provided through subscription in the year under review                                                                                                                                                                |
| <b>H.3</b>                                    | Total expenditure on print and electronic publications (H1 + H2) in the year under review.                                                                                                                                                                         |
| <b>H.4</b>                                    | The total expenditure, other than H3, including the preservation and maintenance of collections, resource sharing, article processing fees, etc., in the year under review                                                                                         |
| <b>H.5</b>                                    | Total expenditure on development of library staff, events, and memberships in the year under review                                                                                                                                                                |
| <b>H.6</b>                                    | Total (H3 + H4) expenditure by the library in the year under review                                                                                                                                                                                                |
| <b>H.7</b>                                    | Percentage of total (H6) expenditure for the library in the university's budget in the year under review                                                                                                                                                           |
| <b>H Criteria for Expenditures-Definition</b> |                                                                                                                                                                                                                                                                    |
| <b>H.1</b>                                    | Total expenditure on print and electronic publications provided through the ownership method in the year under review.                                                                                                                                             |
| <b>H.2</b>                                    | Total expenditure on electronic publications provided through subscription in the year under review                                                                                                                                                                |
| <b>H.3</b>                                    | H1 + H2 was used for print and electronic publications in the year under review                                                                                                                                                                                    |
| <b>H.4</b>                                    | The total expenditure, other than H3, including the preservation and maintenance of collections, resource sharing, article processing fees, etc., in the year under review. Expenses on elevators, building maintenance, and repair were not added to this amount. |
| <b>H.5</b>                                    | The total expenditures from the library budget on activities such as seminars, meetings, conferences, training for the development of library staff, and the library's membership of NGOs in the year under review.                                                |
| <b>H.6</b>                                    | The sum H3 + H4 was used as the total expenditure by the library for the year under review.                                                                                                                                                                        |
| <b>H.7</b>                                    | Calculated as (H6/university budget) × 100 in the year under review.                                                                                                                                                                                               |

*User Criteria and Definitions*

| <b>U</b>   | <b>User Criteria</b>                                                                                                                                    |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>U.1</b> | Number of students enrolled in associate and undergraduate programs in the year under review.                                                           |
| <b>U.2</b> | Number of students enrolled in master's and doctoral programs in the year under review.                                                                 |
| <b>U.3</b> | Number of full-time academics in the year under review.                                                                                                 |
| <b>U.4</b> | Total number of users in the year under review ( $U_1 + U_2 + U_3$ ).                                                                                   |
| <b>U</b>   | <b>User Criteria–Definitions</b>                                                                                                                        |
| <b>U.1</b> | The number of students enrolled in undergraduate and associate degree programs, based on data in CoHE's Higher Education Information Management System. |
| <b>U.2</b> | The number of students enrolled in master's and doctoral programs, based on data in CoHE's Higher Education Information Management System.              |
| <b>U.3</b> | The number of full-time academics, based on the data in CoHE's Higher Education Information Management System.                                          |
| <b>U.4</b> | The sum $U_1 + U_2 + U_3$ was taken as the total number of users.                                                                                       |

*Criteria for Staff and Their Definitions.*

| <b>P</b>   | <b>Staff Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>P.1</b> | Number of full-time staff with a degree in librarianship, working in the library in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>P.2</b> | The number of full-time staff with a bachelor's or graduate degree, who did not have a degree in librarianship, working full-time in the library in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>P.3</b> | The number of other full-time staff who did not have a degree in librarianship, but worked in the library in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>P.4</b> | Number of part-time staff in the library in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>P.5</b> | Total number of staff in the year under review ( $P_1 + P_2 + P_3 + P_4$ ).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>P</b>   | <b>Staff Criteria–Definitions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>P.1</b> | Number of personnel with a bachelor's or graduate degree in information and document management/librarianship.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>P.2</b> | The number of full-time staff with a bachelor's or graduate degree, who did not have a degree in librarianship but were working full time in the library                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>P.3</b> | The number of other full-time staff who did not have a degree in librarianship but worked in the library. Cleaning and security staff were not included.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>P.4</b> | The total number of working hours of students, consultants, etc., who worked in the library on a per-project basis, or as hourly employees, were added over the course of a year. On average, a full-time staff member worked 2,080 hours per year (40 hours per week $\times$ 52 weeks). In this context, the total number of hours worked by part-time employees in a year was divided by 2,080 to determine the number of employees. If this process resulted in a fraction, and the fractional part was 0.5 or larger, the number was rounded up; if the fractional part was smaller than 0.5, the number was rounded down. |
| <b>P.5</b> | The sum $P_1 + P_2 + P_3 + P_4$ is taken as the total number of staff.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

*Criteria for Technology and Their Definitions*

| <b>T Technology Criteria</b>             |                                                                                                                                                                                                                                                         |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T.1</b>                               | The number of Internet-connected computers and devices available to users.                                                                                                                                                                              |
| <b>T.2</b>                               | The number of social media platforms used by the library.                                                                                                                                                                                               |
| <b>T.3</b>                               | Is there a library automation system? Yes/No                                                                                                                                                                                                            |
| <b>T.4</b>                               | Can the library automation system be integrated with other systems/portals? Yes/No                                                                                                                                                                      |
| <b>T.5</b>                               | Is the library webpage mobile compatible? Yes/No                                                                                                                                                                                                        |
| <b>T.6</b>                               | Is the library webpage suitable for disabled use? Yes/No                                                                                                                                                                                                |
| <b>T.7</b>                               | Is there a discovery tool in the library? Yes/No                                                                                                                                                                                                        |
| <b>T.8</b>                               | Is there off-campus access to the library's electronic resources? Yes/No                                                                                                                                                                                |
| <b>T.9</b>                               | Is there a system used for open access in the library? Yes/No                                                                                                                                                                                           |
| <b>T.10</b>                              | Is there a research information system managed by the library? Yes/No                                                                                                                                                                                   |
| <b>T.11</b>                              | Is there an "ask a librarian" system for online communication with users? Yes/No                                                                                                                                                                        |
| <b>T.12</b>                              | Is there a system for the security and inventory of library resources, and the number of people entering the library? Yes/No                                                                                                                            |
| <b>T.13</b>                              | Is there information about the protection of personal data and the conditions of use of library resources on the library website? Yes/No                                                                                                                |
| <b>T Technology Criteria–Definitions</b> |                                                                                                                                                                                                                                                         |
| <b>T.1</b>                               | The total number of desktop and laptop computers, tablets, and electronic book readers available to users.                                                                                                                                              |
| <b>T.2</b>                               | The total number of social media platforms, such as Twitter/X, YouTube, Instagram, Facebook, and LinkedIn, and communication platforms, such as WhatsApp, Telegram, and Messenger, used to communicate with users.                                      |
| <b>T.3</b>                               | Availability of the automation system used to manage library processes and transactions.                                                                                                                                                                |
| <b>T.4</b>                               | Integration of systems/portals, such as directory access protocol (LDAP), single sign-on (SSO), etc., that provide easy and secure access to library resources and services for users in the library automation system.                                 |
| <b>T.5</b>                               | Compatibility and accessibility of the library webpage with mobile devices.                                                                                                                                                                             |
| <b>T.6</b>                               | Compatibility of the library webpage for disabled users. The compatibility of web pages for users with disabilities will be assessed as either "Yes" or "No" according to the Web Content Accessibility Guidelines (WCAG) 2.1 standards. (W3.org, 2025) |
| <b>T.7</b>                               | Availability of a discovery tool that allows library users to search online catalogs, databases, e-journals, e-books, and other resources from a single access point.                                                                                   |
| <b>T.8</b>                               | The ability of off-campus users to access electronic resources subscribed to or purchased by the library.                                                                                                                                               |
| <b>T.9</b>                               | Availability of open access systems that bring together the institution's publications, and make information available to more people quickly, easily, and free of charge.                                                                              |
| <b>T.10</b>                              | Availability of an integrated research information management system that has been developed, purchased, or subscribed to by the institution that collects, organizes, reports, and shares all academic output and researchers of the institution.      |
| <b>T.11</b>                              | Availability of an "ask a librarian" system for online communication with users.                                                                                                                                                                        |
| <b>T.12</b>                              | Availability of a system for the security and inventory of library resources and the number of people entering the library.                                                                                                                             |

|             |                                                                                                                                                                                                                                                                                                                                                                             |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>T.13</b> | The availability of information regarding personal data protection and usage conditions on library websites demonstrates the library's transparency and commitment to legal and ethical standards. Is information about the protection of personal data and the use of library resources under copyrights and license agreements available on the library website? (Yes/No) |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### *Criteria for Reference/Services and Their Definitions*

| <b>R</b>   | <b>Reference/Services Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>R.1</b> | Total number of reference questions answered in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>R.2</b> | Total number of instructions for users in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>R.3</b> | Total number of people who participated in user instructions in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>R.4</b> | Total number of hours for which the library was open in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>R.5</b> | Number of printed and online guides and documents on the use and promotion of the library and its resources in the year under review.                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>R</b>   | <b>Reference/Services Criteria–Definitions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>R.1</b> | The total number of questions answered by the library via online communication channels, such as phone, e-mail, ask a librarian, and face-to-face in the year under review. Questions answered on social media platforms, such as Instagram and Twitter/X, were added to the social media interaction field.                                                                                                                                                                                                                            |
| <b>R.2</b> | The number of instructions given by library staff that lasted at least 30 minutes in the year under review. The instructions were on such topics as research, library, information literacy, etc. Instructions may have been offered as elective/required courses at the university, as part of a course, or as seminars organized by the library. Online courses were based on the calculated number of hours in face-to-face courses. Library presentations at university-wide general orientations were not included in this number. |
| <b>R.3</b> | The number of people who participated in instructions in the year under review was the total number of people who attended each elective or compulsory course taught by library staff, including research, library, information literacy, and other instructions. This number did not include those who attended library presentations at university-wide orientations.                                                                                                                                                                 |
| <b>R.4</b> | Total number of hours for which the library was open in the year under review. If there was more than one university library, the number of hours for which the library that was open for more hours was taken as the basis. The number of hours for which study halls were open was not included. Public holidays were not included either.                                                                                                                                                                                            |
| <b>R.5</b> | Number of print and online guides and documents on the use and promotion of the library and its resources in the year under review. Updated documents were not included in this number. Documents with multiple copies were counted as a single document.                                                                                                                                                                                                                                                                               |

### *Usage Criteria and Definitions*

| <b>K</b>   | <b>Usage Criteria</b>                                                             |
|------------|-----------------------------------------------------------------------------------|
| <b>K.1</b> | Number of print resources borrowed in the year under review.                      |
| <b>K.2</b> | Number of electronic resources borrowed in the year under review.                 |
| <b>K.3</b> | Number of resources downloaded online in the year under review.                   |
| <b>K.4</b> | Number of searches performed from databases in the year under review.             |
| <b>K.5</b> | Total number of resources sent to other libraries in the year under review.       |
| <b>K.6</b> | Total number of resources obtained from other libraries in the year under review. |



|             |                                                                                                                                                                                                                                                             |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>K.7</b>  | Number of online uses of library guides in the year under review.                                                                                                                                                                                           |
| <b>K.8</b>  | Number of interactions on the library's social media accounts in the year under review.                                                                                                                                                                     |
| <b>K.9</b>  | Number of online accesses to the library webpage in the year under review.                                                                                                                                                                                  |
| <b>K.10</b> | Number of people physically entering the library in the year under review.                                                                                                                                                                                  |
| <b>K</b>    | <b>Usage Criteria–Definitions</b>                                                                                                                                                                                                                           |
| <b>K.1</b>  | Total number of books, bound journals, theses, musical scores, audiovisual materials, etc., in print format in the library's collection in the year under review.                                                                                           |
| <b>K.2</b>  | The number of borrowed resources in electronic format in the library collection through devices such as tablets, book readers, desktop computers, etc., for a certain period of time in the year under review.                                              |
| <b>K.3</b>  | Number of downloads of e-resources available from the library in the year under review according to COUNTER (Calculating Online Usage of Electronic Resources on the Web; <a href="https://www.projectcounter.org/">https://www.projectcounter.org/</a> ).  |
| <b>K.4</b>  | Number of searches of e-resources available from the library in the year under review according to COUNTER.                                                                                                                                                 |
| <b>K.5</b>  | Total number of print or electronic resources sent to other libraries in the year under review.                                                                                                                                                             |
| <b>K.6</b>  | Total number of print or electronic resources obtained from other libraries in the year under review.                                                                                                                                                       |
| <b>K.7</b>  | Number of users of online guides on the library's webpage in the year under review.                                                                                                                                                                         |
| <b>K.8</b>  | The total number of interactions, such as likes, views, etc., with posts on the library's social media accounts in the year under review.                                                                                                                   |
| <b>K.9</b>  | Total number of accesses to webpages on the library website in the year under review.                                                                                                                                                                       |
| <b>K.10</b> | The total number of people who physically entered the library in the year under review. If the systems that keep track of the number of people entering the library separately kept the number of entrances and exits, the total number was divided by two. |

### *Satisfaction Criteria and Definitions*

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>M</b>   | <b>Satisfaction Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>M.1</b> | Level of Satisfaction A+, B, C, D, FF                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>M</b>   | <b>Satisfaction Criteria–Definitions</b>                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>M.1</b> | The Turkish University Satisfaction Survey (TÜMA) conducts an annual survey of university students in Türkiye. Under the section on the "richness of learning opportunities and resources" in this survey, the level of satisfaction of students with the library is one of A+ (very high satisfaction), A (high satisfaction), B (satisfaction), C (not fully satisfied), D (low satisfaction), and FF (lowest satisfaction). |

### *Criteria for Visibility on the Web and Definitions*

|            |                                                                                                                                                |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>G</b>   | <b>Web Visibility Criteria</b>                                                                                                                 |
| <b>G.1</b> | Overall Web Impact Factor (WIF): the ratio of all links to the number of pages.                                                                |
| <b>G.2</b> | On-site Web Influence Factor (WIF): the ratio of internal links on a webpage to the number of pages.                                           |
| <b>G.3</b> | External link Web Impact Factor (WIF): The ratio of links from external webpages to the target webpage, to the number of pages on the website. |

| <b>G Web Visibility Criteria–Definitions</b> |                                                                                                                                                                                                                           |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>G.1</b>                                   | Data were taken from <a href="https://moz.com/link-explorer">https://moz.com/link-explorer</a> , which measures the impact factor of webpages to determine the overall WIF of the library webpage.                        |
| <b>G.2</b>                                   | Data were taken from <a href="https://moz.com/link-explorer">https://moz.com/link-explorer</a> , which measures the on-site WIF of webpages to determine the on-site WIF of the library webpage.                          |
| <b>G.3</b>                                   | Data were taken from as <a href="https://moz.com/link-explorer">https://moz.com/link-explorer</a> , which measures the external link impact factor of webpages to determine the external link WIF of the library webpage. |

*Criteria for Contribution to Society and Their Definitions*

| <b>S Criteria for Contribution to Society</b>             |                                                                                                                                                                                     |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>S.1</b>                                                | Number of memberships of the library with non-governmental organizations in the year under review.                                                                                  |
| <b>S.2</b>                                                | Number of external visitors to the library in the year under review.                                                                                                                |
| <b>S.3</b>                                                | Number of library staff participating in events and activities in the year under review.                                                                                            |
| <b>S.4</b>                                                | Number of publications by library staff in the year under review.                                                                                                                   |
| <b>S.5</b>                                                | Number of presentations made by library staff at events and activities in the year under review.                                                                                    |
| <b>S.6</b>                                                | The number of events and activities organized by the library for the community in the year under review.                                                                            |
| <b>S.7</b>                                                | Number of social responsibility projects carried out by the library in the year under review.                                                                                       |
| <b>S.8</b>                                                | Number of awards received by the library in the last five years.                                                                                                                    |
| <b>S Criteria for Contribution to Society–Definitions</b> |                                                                                                                                                                                     |
| <b>S.1</b>                                                | The number of memberships of the library with national or international non-governmental organizations related to librarianship in the year under review.                           |
| <b>S.2</b>                                                | Total number of people physically entering the library from outside the institution in the year under review.                                                                       |
| <b>S.3</b>                                                | The number of people who participated in national or international events and activities related to librarianship with the support of the library staff in the year under review.   |
| <b>S.4</b>                                                | The number of publications by library staff in the year under review. If a publication had more than one author from the same institution, it was counted as a single publication.  |
| <b>S.5</b>                                                | The number of presentations and sessions moderated by library staff at national or international library-related events and activities in the year under review.                    |
| <b>S.6</b>                                                | The total number of workshops, seminars, conferences, exhibitions, etc., organized by the library for the participation of people outside the institution in the year under review. |
| <b>S.7</b>                                                | The number of social responsibility projects related to librarianship that the library organized or participated in during the year under review.                                   |
| <b>S.8</b>                                                | Number of national or international awards received by the library or library staff in the last five years.                                                                         |