

Comparing University Libraries in Different Cities in Turkey with regards to Digitalisation and the Impact of the COVID-19 Pandemic

Due to the COVID-19 pandemic, many universities worldwide halted face-to-face education and instead began focusing on distance learning/education. Accordingly, it is necessary to consider the impact of this new digital era in terms of access to university libraries. Thus, the aim of this paper is to examine the digital services provided by university libraries in general and the solutions they have proposed to overcome the impact of COVID-19 on the higher education system in particular. To this end, secondary data from 30 selected state universities related to their library services, as accessed from their websites, is analysed to clarify the suitability of the existing digitalisation process in Turkish universities. It was found that digitalisation effectively equalises these different universities in terms of access to resources, regardless of their history/ranking/ structure or the cities they are physically established in.

Keywords: *COVID-19, digital library, university, e-book, location, distance education*

Author Information

Yahya Aydın, Ankara Yildirim Beyazıt University, Faculty of Humanities and Social Sciences,
Department of Sociology
<https://orcid.org/0000-0001-5082-0187>

How to cite this article:

Aydın, Yahya. "Comparing University Libraries in Different Cities in Turkey with regards to Digitalisation and the Impact of the COVID-19 Pandemic".

Információs Társadalom XXI, no. 4 (2021): 9–18.

===== <https://dx.doi.org/10.22503/inftars.XXI.2021.4.1> =====

*All materials
published in this journal are licenced
as CC-by-nc-nd 4.0*

1. Introduction

Internet access and its active use is one of the most important changes that humanity has experienced since the mid-1990s (though especially since 2010). In 2020, 59% of the world's population (4.54 billion) could actively gain internet access (Kemp 2020). According to the Turkish Statistical Institute (2021), 92% of the Turkish population in 2021 had access to the internet, with the associated data suggesting a constantly rising trend. Furthermore, given the current COVID-19 epidemic, this percentage, or its prevalence of use, will likely have increased and will further continue to increase post-2021 as people need to go online to meet their varied demands and needs in many different areas, ranging from their work and education needs to entertainment, and more.

The accessibility, cost, distribution, sharing and accessing of information, data, resources, services, smart services (Chen 2012; Temiz and Salelkar 2020) are key points to comprehend the popularity of and the opportunities offered by the internet in the contemporary world. In terms of libraries as the focus of this paper, it is clear that while libraries have long been crucial to learning, the role of digital libraries has become increasingly key in learning at all the different stages of education with the rise of the internet era (Marchionini and Maurer 1995). Digital libraries allow users to access sources of information at any suitable time and place (Abifarín et al. 2019) and without differentiation between (in)formal and professional learning (Marchionini and Maurer 1995). With digital libraries, any limitations with regard to time and place are effectively negated, but, perhaps far more importantly, the contribution they makes to reducing inequalities in society is perhaps one of the most significant contributions made by this digitalisation (Abbasi and Zardary 2012). While digitalisation within education is not itself a new concept, especially with regard to libraries and library services, the extent and pace to which this has enhanced such access, both worldwide and in Turkey, are unprecedented.

According to official statistics, the number of new libraries in Turkey is increasing every year, and in 2019, there were 610 university libraries, among 32,411 libraries in total, in Turkey (Turkish Statistical Institute 2019). As Table 1 below illustrates, there has also been an exponential increase in library resources, especially digital resources.

	Number of books	Number of e-books
2015	15.3 million	86.4 million
2016	15.2 million	87.1 million
2017	16.4 million	83.2 million
2018	17.6 million	92.0 million
2019	17.9 million	98.3 million

Table 1. Number of books and e-books available at university libraries between 2015 and 2019 in Turkey (Sources: Turkish Statistical Institute (2019))

One should note in particular that these statistics were produced before the COVID-19 pandemic effectively forced an almost complete digitalisation of such resources, so the numbers are likely to be much greater now. Based on this, digitalisation has rapidly become more popular in the university education system and for students to access literature sources.

2. Background Discussion

Digitalisation has become a significant trend in both social and scientific disciplines. The ability to access the right information, sources, and data is not always possible, or at least not practical, in physical-only libraries; so, digital libraries offer an alternative way to quickly and easily access a significant number of sources (Abifarin et al. 2019). Based on this, regardless of the quality of one's university or institution, or its ranking or history, if one has appropriate permission and an internet connection, it is possible to access the same sources as any student from any part of the world.

Many studies on COVID-19 have widely discussed its effects, or possible effects, on today's world and the near future, especially in the fields of medicine/health (Bonadio and Baldini 2020), economics (Makridis and Hartley 2020), and politics (Bond and Gostyriska-Jakubowska 2020). Additionally, distance education (Özer and Suna 2020) has been extensively discussed as a result of COVID-19; in particular, the associated need for distance education, and the difficulties of achieving this, such as the need to adopt new systems, as well as the opportunities and difficulties from developing distance education systems and their use in universities. However, both lecturers and students or researchers already use online libraries to access material and sources to prepare their homework or to support their research. Therefore, there is a vital need for research to focus on libraries in terms of the aspects of digitalisation within a compulsory distance education environment. Consequently, this study compares 30 different state universities established at different times and in different parts of Turkey. The aim of this research is to answer the following two research questions:

- How is the COVID-19 pandemic affecting universities' digital libraries?
- How are digital libraries organised in universities in response to the COVID-19 pandemic?

3. Methodology

In this paper, secondary data analysis, as a subcategory of a qualitative method, was relied upon to collect and analyse our data. This method is preferred to better answer the research questions of this paper due to the COVID-19 lockdown/limitations and the availability of digital data. The official statistics used are mainly derived from 30 selected state universities' library websites. This method allowed us to overcome the time, funding, and transportation limitations (Clarke and Cossette 2000; Bryman 2008) of performing this research during the COVID-19 pandemic.

As noted above, 30 different state universities in different parts of Turkey were included as case studies to address the research questions. The data collected from their library websites was analysed from a comparative perspective. The 30 universities are: Afyon Kocatepe University, Akdeniz University, Ankara University, Ankara Hacı Bayram Veli University, Ankara Yıldırım Beyazıt University, Artvin Coruh University, Atatürk University, Bingöl University, Boğazici University, Ege University, Gazi University, Hacettepe University, Hakkari University, Hatay Mustafa Kemal University, Iğdır University, İnönü University, İstanbul University, İstanbul Medeniyet University, İstanbul Technical University, Karadeniz Technical University, Mardin Artuklu University, Mersin University, Middle East and Technical University, Muğla Sıtkı Koçman University, Selçuk University, Sinop University, Sivas Cumhuriyet University, Social Sciences University of Ankara, Trakya University, and the University of Health Science, and can be seen in Figure 1.

The level of internet access in Turkey is reach to 92% in 2021 (Turkish Statistical Institute 2021). Like other universities in Turkey, these universities provided digital library access before or during the COVID-19 pandemic. In addition, the inclusion of these universities, which were established in different times ranging from 1926 to 2017, allow comparisons to be made in this regard as well. In other words, these different examples allow the impact of digitalisation on historically or recently established universities' library systems to be clarified. Additionally, these universities are in either the top fifteen or last fifteen ranking universities in Turkey's higher education system. Specifically, these universities clearly have different histories, rankings, and locations, giving a diverse sample set.

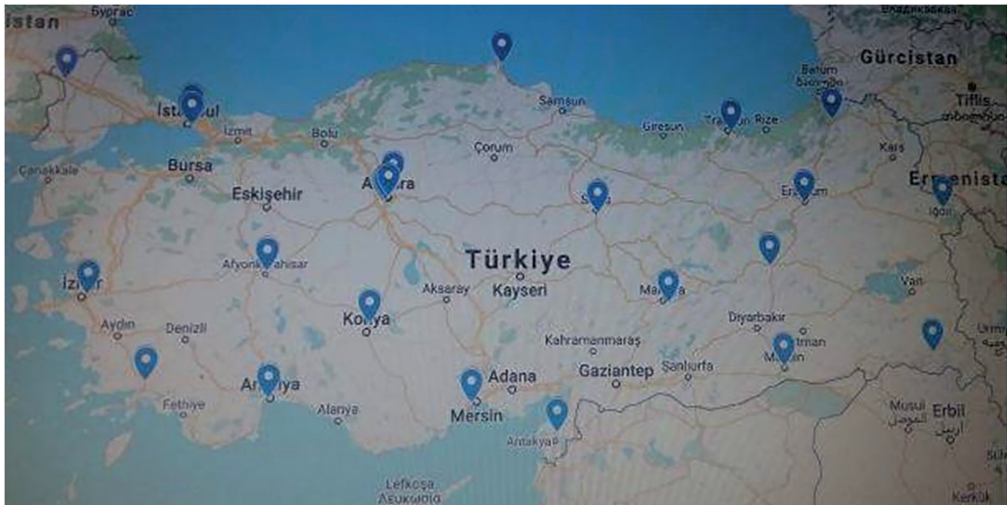


Figure 1. Location of the included universities in Turkey
(Sources: Figure created by author via Google Maps)

The data produced from the above-noted universities' library websites was organised and analysed using the thematic analysis technique. Accessibility of the physical

libraries, accessibility of the digital libraries, and accessibility of the resources were the key themes gleaned from the original data. At this stage, with the help of the NVivo analysis program and by minimizing any relevant data that might be missing, a systematic analysis was performed (Bryman 2008) to identify the key points and to inform the discussion of the existing data. The following section focuses on these findings.

4. Accessibility of Physical Libraries

The COVID-19 pandemic has deeply affected universities with regard to the provision of library services to their students. The above-listed university libraries (in section 3) have been experiencing severe difficulties and limitations since the first case of COVID-19 was recorded in Turkey in March 2020; indeed, during the lockdown from March 2020 to June 2020, they were even completely closed. They later reopened, but with new regulations in place, such as the need to ensure a minimum distance between study tables, a limited number of users, and limited opening times (usually working hours on weekdays), and the need for prior appointments/registration before any visits. This is in direct contrast to before the pandemic, when most university libraries were accessible 12 to 24 hours per day and were typically open during the weekends as well.

The impact of the COVID-19 pandemic is quite clear in terms of the physical access to university libraries. The rules and organisation of library routines (e.g. limited working hours, the required distance between study tables, the number of users at any one time, and postponing the due dates of borrowed sources) have been almost universally adopted regardless of the university's history, location, number of students, and independent structure or organisation.

5. Accessibility of Digital Libraries and Resources

This section also confirms the similarities between the selected 30 universities' practices due to the COVID-19 outbreak and their solutions to such in terms of the accessibility of their digital libraries. All the universities in our cohort allow and even actively promote access for their students and academic staff to digital resources (e.g. articles and e-books). These situations have emerged as alternative ways to overcome the negative impact of the COVID-19 pandemic on libraries.

All the universities have agreements allowing access to key resources in academia, such as Sage Journals, Proquest Central, Jstor Books, e-Book Academic Collection, and Cambridge Journals Online. These kinds of resources are available and accessible in all the listed universities. Additionally, almost all the universities (such as AYBU, ASBU, and METU) prepared listings for their users, giving new open access resources to users due to the COVID-19 pandemic. These extra resources include those from Turkey itself and from around the world as well.

At this point, it is important to note that while the digitalisation of university libraries had already started before the COVID-19 outbreak (see Table 1), based on the num-

ber of new agreements in place (e.g. with journals and the membership of e-books websites) and announcements on university websites, it is clear that the digitalisation of university libraries has been increasing at a rapid rate during the pandemic, regardless of the universities' history, ranking, or city they are physically established in.

Another significant point is that all university libraries have now organised on-line education seminars, meetings, or activities about how to use key programs (e.g. EndNote, Mendeley, Turnitin, academic writing, presentation skills, publishing high impact factor journals) and websites (e.g. Web of Science, ProQuest, Wiley, Sage) more productively. These organised programs are vital for both students and academics to optimise their usage. Without time and place limitations, the library staff have organised these kinds of events to interact with user, to give instruction, and to help solve the issues being experienced by their users. Additionally, all university libraries now recommended communication via email due to their limited working hours and the ongoing risks posed by the pandemic.

Finally, some of the examined Turkish universities teach in English as well and because of that, there are many international students/academicians in these universities. However, typically the university libraries' English version websites are not as well organised as the Turkish versions. Furthermore, there are not so many events organised by the universities librarians in English. This situation has emerged as an issue for the international students and academics wishing to access the opportunities provided by the libraries in these universities. To provide equal opportunities for all users, universities must solve this issue.

6. Discussions and Conclusion

In this study, the above-noted university libraries were examined to address the two key research questions. The 30 universities that were included as the study cohort were established at different times, and mostly in different cities in Turkey and have different rankings and so represent a diverse body. While some of them have quite long histories as part of Turkey's higher education system, a significant number in this list were only established within the last ten years (i.e. since 2010). These universities are mostly different to the older universities in terms of their rankings and student/academic staff numbers.

This paper has clearly demonstrated that the COVID-19 pandemic affects all the universities established in a given country (here, Turkey), even though they may be located in different regions and have different histories and backgrounds. Before the COVID-19 pandemic, it was normal to discuss the quality of university libraries in terms of their physical environment, available resources, or their organisation. However, with the pandemic, all university libraries in Turkey remained closed for a significant period of time (from March to June 2020) and then reopened, but for only a limited time with additional new and similar restrictions and rules for all. The structure and physical environment of such libraries has now becomes less important and at the same time less accessible to university library users during the COVID- 19 pandemic.

However, as noted when discussing the general situation about these universities in the beginning of this section, while there are significant differences between these universities, they all use the same digital tools and platforms to give their users the opportunity to access the same kinds of resources from their homes, or otherwise outside the physical environment of the university, in response to the COVID-19 restrictions. This effectively has equalised these different universities to some degree, at least in terms of accessing resources, regardless of their history, ranking or structure.

However, in the modern internet era and with digitalisation now a common theme, the gap between the universities has been decreasing when considering access to resources and information. With the COVID-19 pandemic, this has become even more apparent and most probably experienced by many students, researchers, and academicians, both in Turkey and, indeed, the rest of the world. Library digitalisation is emerging as an opportunity for all universities, both those established in Turkey and in different parts of the world, to compete on a level footing regardless of their establishment date or the library's physical structure. This situation can be used as an opportunity to reduce any gaps or inequality between different contemporary universities and users as well.

References

- Abbasi, Fahime, and Solmaz Zardary. "Digital Libraries and Its Role on Supporting E-learning." *AWERPocedia Information Technology & Computer Science* no. 1 (2012): 809–813.
- Abifarin, Fasola Petunola, Shaka Apodoghe Imavah, and Ayodele S. Olobashola. "Design Effectiveness of Academic Library Websites: A Comparison of University, Polytechnic, and College Sites In Nigeria." *The Electronic Library* 37, no. 3 (2019): 577–591.
<http://repository.futminna.edu.ng:8080/jspui/handle/123456789/5442>
- Afyon Kocatepe University. "Library Home Page." Accessed February 16, 2021.
<https://kutuphane.aku.edu.tr/> (Turkish) No English library website available.
- Akdeniz University. "Library Home Page." Accessed February 16, 2021.
<http://kutuphane.akdeniz.edu.tr/> (Turkish) No English library website available.
- Ankara University (AU). "Library Home Page." Accessed February 16, 2021.
<http://kutuphane.ankara.edu.tr/> (Turkish)
- Ankara University (AU). "Library Home Page." Accessed February 16, 2021.
<http://library.en.ankara.edu.tr/> (English)
- Ankara Haci Bayram Veli University (AHBVU). "Library Home Page." Accessed February 16, 2021.
<https://lib.hacibayram.edu.tr/> (Turkish)
- Ankara Haci Bayram Veli University (AHBVU). "Library Home Page." Accessed February 16, 2021.
<https://lib.hacibayram.edu.tr/index.php?goto=home-page> (English)
- Ankara Yildirim Beyazit University (AYBU). "Library Home Page." Accessed February 16, 2021.
<https://aybu.edu.tr/kutuphane/> (Turkish)

-
- Ankara Yildirim Beyazit University (AYBU). "Library Home Page." Accessed February 16, 2021.
<https://aybu.edu.tr/library/> (English)
- Artvin Coruh University. "Library Home Page." Accessed February 16, 2021.
<https://kutuphane.artvin.edu.tr/> (Turkish) No English library website available.
- Atatürk University. "Library Home Page." Accessed February 24, 2021.
<https://kutuphane.atauni.edu.tr/> (Turkish) No English library website available.
- Bingöl University. "Library Home Page." Accessed February 24, 2021.
<http://kutuphane.bingol.edu.tr/> (Turkish)
- Bingöl University. "Library Home Page." Accessed February 24, 2021.
<https://kutuphane.bingol.edu.tr/en> (English)
- Boğazici University. "Library Home Page." Accessed February 24, 2021.
<http://www.library.boun.edu.tr/> (Turkish)
- Boğazici University. "Library Home Page." Accessed February 24, 2021.
<http://www.library.boun.edu.tr/en/index.php> (English)
- Bonadio, Enrico, and Andrea Baldini. "Covid-19, Patents and the Never- ending Tension Between Proprietary Rights and the Protection of Public Health." *European Journal of Risk Regulation as part of the Cambridge Coronavirus Collection* (2020): 390-395.
<https://doi.org/10.1017/err.2020.24>.
- Bond, Ian, and Agata Gostynska-Jakubowska. "Covid-19: Can the EU Avoid an Epidemic of Authoritarianism." *Centre for European Reform: Insight* (2020): 1-4.
<https://www.cer.eu/insights/covid-19-can-eu-avoid-epidemic-authoritarianism>
- Bryman, Alan. *Social Research Methods*. Oxford: Oxford University Press, 2008.
- Clarke, Sean P., and Sylvie Cossette. "Secondary Analysis: Theoretical, Methodological and Practical Considerations." *Canadian Journal of Nursing Research* 32, no. 3 (2000): 109-129.
- Chen, Yen-Kuang. "Challenges and opportunities of Internet of Things, Engineering." In *17th Asia and South Pacific Design Automation Conference*, 383-388. Sydney, NSW, Australia: IEEE (Institute of Electrical and Electronics Engineers), 2012.
<http://DOI: 10.1109/ASPDAC.2012.6164978>
- Ege University. "Library Home Page." Accessed February 25, 2021.
<https://kutuphane.ege.edu.tr/> (Turkish)
- Ege University. "Library Home Page." Accessed February 25, 2021.
<https://kutuphane.ege.edu.tr/eng-/Homepage.html> (English)
- Gazi University (GU). "Library Home Page." Accessed March 10, 2021.
<http://lib.gazi.edu.tr/> (Turkish)
- Gazi University (GU). "Library Home Page." Accessed March 10, 2021.
<https://kutuphane.gazi.edu.tr/help> (English)
- Hacettepe University (HU). "Library Home Page." Accessed March 10, 2021.
<http://www.library.hacettepe.edu.tr/> (Turkish)
- Hacettepe University (HU). "Library Home Page." Accessed March 10, 2021.
<http://library.hacettepe.edu.tr/homepage> (English)
- Hakkari University. "Library Home Page." Accessed March 10, 2021.
<https://www.hakkari.edu.tr/kutuphane/anasayfa> (Turkish) No English library website available.
- Hatay Mustafa Kemal University. "Library Home Page." Accessed March 10, 2021
<https://www.mku.edu.tr/departments.aspx?birim=83> (Turkish)

- Hatay Mustafa Kemal University. "Library Home Page." Accessed March 10, 2021.
<https://www.mku.edu.tr/departments.aspx?birim=83> (English)
- Iğdır University. "Library Home Page." Accessed March 11, 2021.
<https://kutuphane.igdir.edu.tr/> (Turkish)
- Iğdır University. "Library Home Page." Accessed March 11, 2021.
<https://kutuphane.igdir.edu.tr/home> (English)
- İnönü University. "Library Home Page." Accessed March 10, 2021.
<https://www.inonu.edu.tr/kutuphane> (Turkish)
- İnönü University. "Library Home Page." Accessed March 10, 2021.
<https://www.inonu.edu.tr/kutuphane> (English)
- İstanbul University. "Library Home Page." Accessed March 12, 2021.
<https://kutuphane.istanbulc.edu.tr/tr/> (Turkish)
- İstanbul University. "Library Home Page." Accessed March 12, 2021.
<https://kutuphane.istanbul.edu.tr/en/> (English)
- İstanbul Medeniyet University. "Library Home Page." Accessed March 12, 2021.
<https://kutuphane.medeniyet.edu.tr/tr> (Turkish)
- İstanbul Medeniyet University. "Library Home Page." Accessed March 12, 2021.
<https://kutuphane.medeniyet.edu.tr/en> (English)
- İstanbul Technical University. "Library Home Page." Accessed March 12, 2021.
<http://kutuphane.itu.edu.tr/> (Turkish)
- İstanbul Technical University. "Library Home Page." Accessed March 12, 2021.
<http://kutuphane.itu.edu.tr/en/home> (English)
- Karadeniz Technical University. "Library Home Page." Accessed March 12, 2021.
<https://www.ktu.edu.tr/library> (Turkish)
- Karadeniz Technical University. "Library Home Page." Accessed March 12, 2021.
<https://www.ktu.edu.tr/libraryen> (English)
- Makridis, Christos A., and Jonathan S. Hartley. "The Cost of Covid-19: A Rough Estimate of the 2020 US GDP Impact." *Policy Brief Special Edition* (2020): 1–7.
- Marchionini, Gary, and Harmann A Maurer. "The Roles of Digital Libraries in Teaching and Learning." *Communication of the ACM* 38, no.4 (1995): 67–75.
<http://DOI: 10.1145/205323.205345>
- Mardin Artuklu University. . "Library Home Page." Accessed March 12, 2021.
<https://www.artuklu.edu.tr/kutuphane> (Turkish)
- Mardin Artuklu University. "Library Home Page." Accessed March 12, 2021.
<https://www.artuklu.edu.tr/en/kutuphane> (English)
- Mersin University. "Library Home Page." Accessed March 18, 2021.
<http://kutuphane.mersin.edu.tr/> (Turkish)
- Mersin University. "Library Home Page." Accessed March 18, 2021.
<http://kutuphane.mersin.edu.tr/> (English)
- Middle East and Technical University (METU). "Library Home Page." Accessed March 18, 2021.
<https://lib.metu.edu.tr/tr> (Turkish)
- Middle East and Technical University (METU). "Library Home Page." Accessed March 18, 2021.
<http://lib.metu.edu.tr/> (English)
- Muğla Sıtkı Koçman University. "Library Home Page." Accessed March 18, 2021.
<https://library.mu.edu.tr/> (Turkish) No English library website available.

-
- Özer, Mahmut, and Eren H. Suna. "Covid-19 Salgını ve Eğitim, Küresel Salgının Anatomisi: İnsan ve Toplumun Geleceği." *Türkiye Bilimler Akademisi-TÜBA* (2020): 71-192.
- Sağlık Bilimleri University. "Library Home Page." Accessed March 19, 2021. <https://sbu.app.deepknowledge.io/> (Turkish)
- Sağlık bilimleri University. "Library Home Page." Accessed March 19, 2021. <https://sbu.app.deepknowledge.io/> (English)
- Selçuk University. "Library Home Page." Accessed March 19, 2021. <https://www.selcuk.edu.tr/Birim/kutuphane> (Turkish)
- Selçuk University. . "Library Home Page." Accessed March 19, 2021. <https://www.selcuk.edu.tr/Birim/kutuphane> (English)
- Simon, Kemp. "Digital 2020: Global Digital Overview." Accessed January 29, 2021. <https://datareportal.com/reports/digital-2020-global-digital-overview>
- Sinop University. "Library Home Page." Accessed March 20, 2021. <https://kddb.sinop.edu.tr/> (Turkish)
- Sinop University. "Library Home Page." Accessed March 20, 2021. <https://kddb.sinop.edu.tr/home/> (English)
- Sivas Cumhuriyet University. "Library Home Page." Accessed March 20, 2021. <http://kutuphane.cumhuriyet.edu.tr/> (Turkish)
- Sivas Cumhuriyet University. . "Library Home Page." Accessed March 20, 2021. <https://www.cumhuriyet.edu.tr/kutuphane-hizmetleri> (English)
- Social Sciences University of Ankara (ASBU). "Library Home Page." Accessed March 20, 2021. <https://kutuphane.asbu.edu.tr/tr/node/23> (Turkish)
- Social Sciences University of Ankara (ASBU). "Library Home Page." Accessed March 20, 2021. <https://kutuphane.asbu.edu.tr/en> (English)
- Temiz, Serdar, and Lakshmi Pradip Salelkar. "Innovation during crisis: exploring reaction of Swedish university libraries to COVID-19." *Emerald Publishing Limited: Digital Library Perspectives* vol. 36, no. 4 (2020): 365-375.
- Trakya University. "Library Home Page." Accessed March 20, 2021. <https://kutuphane-en.trakya.edu.tr/> (Turkish)
- Trakya University. "Library Home Page." Accessed March 20, 2021. <https://kutuphane-en.trakya.edu.tr/> (English)
- Türkiye Yükseköğretim Sistemi. "Hanehalkı Bilişim Teknolojileri (BT) Kullanım Araştırması, 2019." Accessed January 03, 2021. <https://data.tuik.gov.tr/Bulten/OpenPdf?p=x11lj1P0f6uecfk/9XU6D7lziuo3bpAvPpF3JlCcuJ2LFrK/cLStQ/Z5AAROYlb4ae20HGnScj13OcNsb1TWim/8UHF6GymvO0b1OINZLDw=>
- Türkiye Yükseköğretim Sistemi. "Hanehalkı Bilişim Teknolojileri (BT) Kullanım Araştırması, 2021." Accessed February 05, 2021. [https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-\(BT\)-Kullanim-Arastirmasi-2021-37437](https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-(BT)-Kullanim-Arastirmasi-2021-37437)
- Türkiye Yükseköğretim Sistemi. "Kütüphane İstatistikleri, 2019." Accessed December 20, 2021. <https://data.tuik.gov.tr/Bulten/Index?p=Kutuphane-Istatistikleri-2019-33630>
- Yükseköğretim Kurulu. "Türkiye Yükseköğretim Sistemi." Ankara, Turkey: Ocak, 2019. https://www.yok.gov.tr/Documents/Yayinlar/Yayinlarimiz/2019/Higher_Education_in_Turkey_2019_tr.pdf