Examination of Academic Library Websites Regarding COVID-19 Responsiveness

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Abstract

The COVID pandemic has affected all aspects of life including academic libraries. While many are now open, services have changed to accommodate social distancing such as limiting guests to those within the university community and requiring face coverings for those who enter and study. In order to determine a library's COVID policy, users may examine the library website, but is this information easy to find? In a study of library websites from 132 "R2" academic libraries, it was found that most libraries displayed COVID-related services and hours directly on the library's webpage or one click away. Opening status and hours were readily displayed on library webpages, however, user populations accepted in the library and face covering requirements were not as easily discovered. During this time of uncertainty, it behooves libraries to make their COVID policies clear on their websites.

Keywords: University Libraries, COVID response, Library Hours, Face Coverings, COVID-19

Introduction

The COVID-19 pandemic has changed many aspects of daily life. People have responded to the COVID-19 pandemic in different ways, from eating out to staying in, going to work or setting up a home office, and stocking up or taking it one day at a time. Are academic libraries responding in different ways as well?

At the beginning of the pandemic's onset in the United States in March 2020, many academic library buildings closed. While users could still access online databases and, in many cases, receive reference assistance, they were unable to browse the physical collections and study within the building. Then, as libraries progressed through the various stages of COVID-19 responsiveness, many libraries began opening their doors to users, albeit with reduced services and various restrictions. As of December 2020, when this article was written, many but not all libraries had re-opened. Some open libraries have limited visitors to those within the campus community, and some have required users to wear a face covering in the building. Given the varied levels of access, potential library users have a heightened need for information about their library's COVID-19 adjustments, and it has become necessary for each library to provide clear guidance on its new policies and protocols. How easy is it for library users to find this information?

Literature Review

Many authors have discussed the importance of clear web communications during a disaster or public emergency. Schmidt (2010) highlighted the importance of using the latest web technologies to enhance communications, including Google Documents and Google Talk. The Auburn University libraries used these services internally as well as externally to distribute

information effectively. Following the 9/11 terrorist attacks, Eng (2002) positioned the Borough of Manhattan Community College (BMCC) library's "Ask a Librarian" button prominently on the library's webpage. While library services were up and running five days after the 9/11 attacks, BMCC librarians felt it was vital to provide open communications with the public.

Many libraries have turned to their disaster plans to guide them through best practices during times of crisis. Though numerous disaster plans address procedures for elevated security risks such as 9/11, floods, and hurricanes, these plans may still be appropriate to use for addressing the current pandemic. Hamilton and Brown (2016) studied how library disaster plans have shifted focus from item recovery to maintaining library services, and noted the importance of providing up-to-date, accurate information. This recommendation is certainly applicable during the current pandemic.

Having clear information on the library website is important at all times but it becomes a necessity during a pandemic. In a thorough literature review, Riley-Huff (2012) identified best practices for effective web content, and these include:

- blocking or "chunking" information so that only one idea is outlined in one paragraph;
- presenting information as bullet points to allow for more effective comprehension compared with paragraphed prose;
- avoiding use of images as a way to present textual information; and
- refraining from using color to highlight desired text since some users are colorblind and would not catch the emphasis placed on red lettering.

QuickSprout, a website devoted to search engine optimization, encourages web designers to keep navigation simple so that users can find desired information quickly (Lofgren, 2020). Other

recommendations include minimizing text and using short sentences (Lofgren, 2020). Hick's law can be applied to web design, and this law states that users faced with many choices will take longer to make decisions than users faced with fewer choices (What is Hick's Law, n.d.). Optinmonster, a web design site, applies Hick's Law and asserts that users can make decisions quicker from website content if extraneous material is removed (Thompson, 2021). Applying this theory of simplicity and straightforwardness can guide web designers as they enter updated information about a library's hours and services. Additionally, users tend to view websites as if they were reading a big letter F across the website (Nielsen, 2006). As a result, important notices need to be located at the top or in the middle of the webpage (Thompson, 2021). Similarly, Dominguez, Hammill, and Brillat (2015) determined that it is prudent for librarians to provide time-sensitive information to users efficiently so as not to waste their time. This includes providing jargon-free text, as well as a simplistic layout with a limited number of links.

Other medical emergencies and crisis situations have illustrated the need for accurate information. Majid and Rahmat (2013) surveyed students and working adults in Singapore regarding their information needs during the H1N1 virus outbreak in 2009 and discovered that the primary purpose for users to seek information was to understand the proper measures to take in order to stay healthy. The authors found that one of the major concerns identified by users was too much information – the important nuggets were getting lost in the vast amount of information provided. In a similar vein, Zach (2011) examined public library websites in the United States during emergencies and found that libraries tend to share information about the library itself as opposed to information about the emergency. They concluded that libraries are in a great position to enhance their reputation by providing trustworthy information that users can easily find. The New York Public Library showed one approach to doing this while responding

to COVID-19, by using Twitter to notify the public of latest developments related to the pandemic, as well as announcements regarding health and financial support (Alajmi & Albudaiwi, 2020).

How have academic libraries in the United States addressed the COVID-19 pandemic? Hinchliffe and Wolff-Eisenberg (2021) developed an ongoing survey to academic libraries seeking information on many topics including library building hours, general access to the library, library services provided during the pandemic, and student resident status. Mehta and Wang (2020) described a case study of Bridgetown State University's shift from in-person services to remote. This was also the case in Nigeria, where many libraries closed but still provided electronic resources for their users (Fasae, Adekoya, & Adegbilero-Iwari, 2020). Rafiq et al. (2021) described the issues encountered by seven Pakistani university libraries when making the shift to remote services, such as unreliable internet connectivity and the digital divide. In the United States, Wang and Lund (2020) examined public library websites during March and April 2020 and found that over 90% of the libraries were closed and 98% announced programs that were suspended or discontinued.

How easily can a potential user determine if an academic library is open, if the general public is permitted to enter, or if face coverings are required while in the building? Does the user need to burrow deep within a website to find answers to these questions, or are these issues addressed on homepage of the library's website? The purpose of this study is to determine the ease of finding COVID-19-related information on the library's website.

Methods

Websites from 132 academic libraries in the United States were examined between October 29 and November 5, 2020, to determine if library buildings were open, if the general public was permitted to enter, and whether face coverings were required. The selected libraries were "R2" Carnegie classification institutions – doctoral universities with high research activity. "R1" institutions, doctoral universities with very high research activity, were not included, since many of these libraries tend to have branches, and it was easier to focus on the status of main libraries. A list of libraries whose websites were examined in this study is listed in the Appendix.

In order to search for information on the library's website about building closures, non-affiliate access, and requirements for face coverings, the researcher initially examined the homepage of the website. First, it was assessed whether the homepage presented an indication that COVID-19-related information was available. That information might be explicitly stated, in the form of information about library access, or indirectly presented, in the form of a link to COVID-19-related information on another page.

The researcher also recorded the number of clicks needed to view the actual information. If information regarding building closure, face covering use, or non-affiliate access was present, then the researcher recorded that incident as zero clicks. If COVID-19-related information was found on the next page after clicking on a homepage link, that was recorded as one click. Two clicks were recorded if another link needed to be clicked, and so on. The key question the researcher wanted to answer was: how many clicks does it take before one of the three types of information (building closure, face covering requirement, or non-affiliate use) was answered?

Regarding homepage links that counted as a first click, these included links specifically labelled as COVID-19-related information and also generic, non-COVID-19 links. However, if COVID-19 related information was not readily apparent, links such as "Library Hours" and

"News Items" were investigated. If no information was found, the university's homepage was then explored.

It is important to note that data were gathered from websites of main libraries, not branch libraries. In addition, many times information regarding building closure, face coverings or community use was not found in the same location on the website, however, if one of these issues was addressed, then the number of clicks was recorded for that once piece of information.

Results

First, did the library homepage provide any COVID-19-related information or any indication that services had been adjusted? See Figure 1.

[PLACE FIGURE 1 HERE]

Of the 132 R2 libraries, 109 (83%) did provide some level of COVID-19-related information or an indication that COVID-19 updates were available on another page, for example with helpful labels such as "COVID-19 Updates", "Returning to Campus", or "Latest COVID-19 Message". However, the remaining 23 libraries (17%) did not provide any sort of COVID-19-related information on the homepage, in other words, the webpage appeared not to have changed since the onset of the pandemic.

If the desired information on library status, non-affiliate users, and requirements for face coverings was not readily available on the website, then links would need to be followed. How many clicks did it take to find information about any one of these issues (Figure 2)?

[PLACE FIGURE 2 HERE]

Many libraries provided relevant information right on the library's homepage (42%, n = 55). This means that a notice was on the homepage providing information about the library's opening or closure, face covering requirement, or non-affiliate use. However, more libraries required users to click on a link to find specific information about these adjustments. Library information was most commonly found within one click (45%, n = 59) and was usually clearly labeled as a COVID-19 update or message. However, in the case of nine libraries, relevant library information about COVID-19 related services was found after two clicks, and two libraries positioned it even deeper under three links. In these cases, the researcher needed to peruse the website using links labeled "About the Library" and "Library Hours". In other words, the information about COVID-19 was on the library's website but not easily located.

Seven libraries provided no COVID-19-related information regarding a change in library hours, the need for a face covering or building use for the general public. In these instances, COVID-19-related information was found on the university website, usually quite easily.

How many libraries were open at the time of evaluation (between October 29 and November 5, 2020)? Eighty-eight percent (n = 116) of the library buildings were open, while the remaining 12% (n = 16) were closed. (See Figure 3.) Of the 116 open buildings, three were open by appointment or reservation-only, while two were open every other day or three days/week. These statistics reflect the building status of the general libraries. On one campus, a specialized library was open while the general library was closed.

[PLACE FIGURE 3 HERE]

If the building was open, was it open to non-affiliate users such as the general public as well as area researchers, or was building access limited to those affiliated with the university?

(See Figure 4.) While 52% (n = 68) had restricted library access to university students, faculty, and staff, 8% of library websites (n = 10) explicitly stated that the general public may enter. In addition, 29% (n = 38) did not mention whether non-affiliate users could enter the building. There were two noteworthy idiosyncrasies: of the 68 libraries that restricted access to the campus community, two stated that university retirees were welcome in the library. In addition, two libraries, identified as libraries not allowing non-affiliate use, did permitted the general public to use the building during daytime and weekday hours only.

[PLACE FIGURE 4 HERE]

Are library users required to wear face coverings? While face coverings are one of the overt signs that a pandemic is taking place, are they required within the library building? (See Figure 5.) Over 91% (n = 106) of the libraries that were open required users to wear face coverings. The information presenting this kind of requirement was usually straightforward. The most extreme policy was one library's emphasis on the need to wear face coverings even when studying alone.

The other cases need some explanation. No library website explicitly indicated that face coverings were not required in the library. Rather, there was either no mention for the need for face coverings (n = 2), or a statement (usually on the university, not library, website) indicated that the wearing of a face covering was either recommended, encouraged or promoted. In two cases, website viewers were asked to go to other websites (such as the Centers for Disease Control (CDC)) for clarification.

[PLACE FIGURE 5 HERE]

Discussion

Libraries have addressed this pandemic on their websites in different ways. Some sites contain brightly-colored banners boldly announcing COVID-19-related policies and services. Others provide COVID-19 information via links that blend into the background. A few libraries have placed COVID-19-related information on pages with homepage links ambiguously labeled "Working Together" or "Updates to Library Services". However, too many bury the information in news announcements or updates that, in some cases, scroll across the page like mini ticker tapes.

The literature states that the best way to make sure that users receive messages is through clear, straightforward web design. In other words, if the library building is closed, it should be stated on the front page of the library's website. If face coverings are required while users are in the building, this should be stated clearly. In some cases, information regarding face coverings was buried under PDF links labeled "COVID-19 procedures", only to be found by users who are willing to spend time searching for the desired information in a text-heavy PDF document. If non-affiliates are not allowed in the building, libraries should state this clearly on the homepage. Libraries should not find themselves needing to turn away users, possibly including potential donors, because of an ambiguous or unstated directive.

In order to communicate effectively with users during emergencies and disasters, the following practices are recommended:

- Keep navigation simple. Position important information on the homepage and under a series of links.
- Remember the letter F and place important items at the top or in the middle of the page.

- Focus on one announcement at a time. If the building is closed, state so explicitly. Do not bury that information in large blocks of text.

- Display the information using bullet points.

- Avoid placing text-based information within images or PDFs.

- Avoid using colorful lettering to provide emphasis. Instead, use bold lettering, or better yet, use <strong> for greater accessibility.

- Keep in mind Hick's Law and remove extraneous material so that users can focus on the important issue.

- Keep vocabulary simple. Avoid jargon and flowery language.

- Use short sentences and phrases.

- Recognize that users spend minimal time viewing a website. If the information is not clearly presented or labeled, they likely will not find it.

While many of these recommendations can be applied to web design in general, it is imperative that library web designers present pandemic-related information as clearly as possible.

This study found that almost 90% of the libraries were open at the time the data was gathered in early November 2020. Many of the library websites indicated that the library building was re-opening or that new hours were in place indicating that libraries are adjusting their building status and hours as COVID-19 related statistics change. A majority of the libraries restricted access to the campus community, though 38 libraries made no mention of community restrictions. Non-affiliate users would likely find this lack of clarity on the library's website quite frustrating. Face coverings were required for entrance into most libraries in early November during a time when COVID-19 hospital admissions and deaths were high, however, even then,

not all libraries explicitly stated that face coverings were mandatory. As building status, community use, and face covering issues change because of a decrease in COVID-19 deaths and hospital admissions, it remains vital that libraries state their requirements for entry clearly on their library homepages.

One of the limitations of this study is the thoroughness of the search. First, the library's home page was examined for links to COVID-19 related information. In some instances, the information was readily available on the home page or links were provided where more information could be found. If COVID-19 related information was not readily apparent, links such as "Library Hours" or "News Items" were investigated. If no information was found, the university's homepage was then explored.

Conclusion

In summary, most libraries have provided useful information about COVID-19-related policies on their website. The goal is to make sure that users can find COVID-19-related information quickly, and this can be achieved through clear, straightforward web design. Keeping the message simple and directly on the library homepage are key factors. Given the extraordinary times people face with this pandemic, it is best that libraries provide COVID-19-related policies as clearly as possible for the health and welfare of their users.

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APPENDIX: Library websites examined

Air Force Institute of Technology-Graduate School of Engineering & Management

American University

Arizona State University-Downtown Phoenix

Arkansas State University-Main Campus

Azusa Pacific University

Ball State University

Baylor University

Boise State University

Bowling Green State University-Main Campus

Brigham Young University-Provo

Catholic University of America

Central Michigan University

Chapman University

Claremont Graduate University (Claremont Colleges Libraries)

Clark Atlanta University

Clark University

Clarkson University

Cleveland State University

College of William and Mary

Colorado School of Mines

CUNY City College

Delaware State University

DePaul University

Duquesne University

East Carolina University

East Tennessee State University

Eastern Michigan University

Florida A&M - Agricultural and Mechanical University

Florida Atlantic University

Florida Institute of Technology

Fordham University

Gallaudet University

Georgia Southern University

Hampton University

Howard University

Idaho State University

Illinois Institute of Technology

Illinois State University

Indiana University-Purdue University-Indianapolis

Jackson State University

Jefferson (Philadelphia University + Thomas Jefferson University)

Kennesaw State University

Kent State University at Kent

Lehigh University

Louisiana Tech University

Loyola Marymount University

Loyola University Chicago

Marquette University

Marshall University

Mercer University

Miami University-Oxford

Michigan Technological University

Missouri University of Science and Technology

Montclair State University

Morgan State University

New Mexico State University-Main Campus

North Carolina A & T State University

North Dakota State University-Main Campus

Northern Arizona University

Northern Illinois University

Nova Southeastern University

Oakland University

Ohio University-Main Campus

Old Dominion University

Portland State University

Rochester Institute of Technology

Rockefeller University

Rowan University

Rutgers University-Camden (original in New Brunswick)

Rutgers University-Newark

San Diego State University

Seton Hall University

South Dakota State University

Southern Illinois University-Carbondale

Southern Methodist University

St Louis University

Stevens Institute of Technology

SUNY College of Environmental Science and Forestry   SUNY = State Univ of NY

Teachers College at Columbia University

Tennessee State University

Tennessee Technological University

Texas A & M University-Corpus Christi

Texas A & M University-Kingsville

Texas Christian University

Texas Southern University

Texas State University

The New School

The University of Montana

The University of Texas at San Antonio

The University of Texas Rio Grande Valley

University of Akron Main Campus

University of Alabama in Huntsville

University of Alaska Fairbanks

University of Arkansas at Little Rock

University of California-Merced

University of Colorado Colorado Springs

University of Dayton

University of Denver

University of Idaho

University of Louisiana at Lafayette

University of Maine

University of Maryland Eastern Shore

University of Maryland-Baltimore County

University of Massachusetts-Boston

University of Massachusetts-Dartmouth

University of Massachusetts-Lowell

University of Memphis

University of Missouri-Kansas City

University of Missouri-St Louis

University of Nebraska at Omaha

University of New England

University of New Orleans

University of North Carolina at Charlotte

University of North Carolina at Greensboro

University of North Carolina Wilmington

University of North Dakota

University of Rhode Island

University of San Diego

University of South Alabama

University of South Dakota

University of Toledo

University of Tulsa

University of Vermont

University of Wyoming

Utah State University

Villanova University

Wake Forest University

Western Michigan University

Wichita State University

Worcester Polytechnic Institute

Wright State University-Main Campus

Yeshiva University

FIGURES

Figure 1

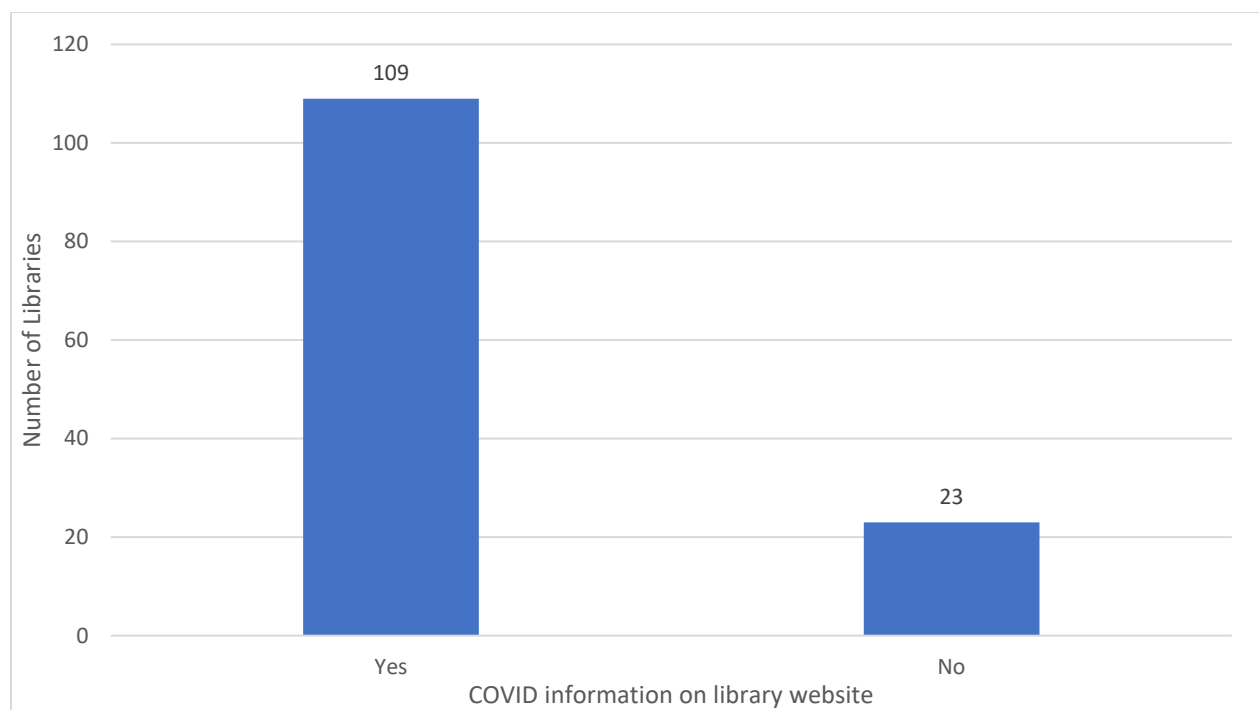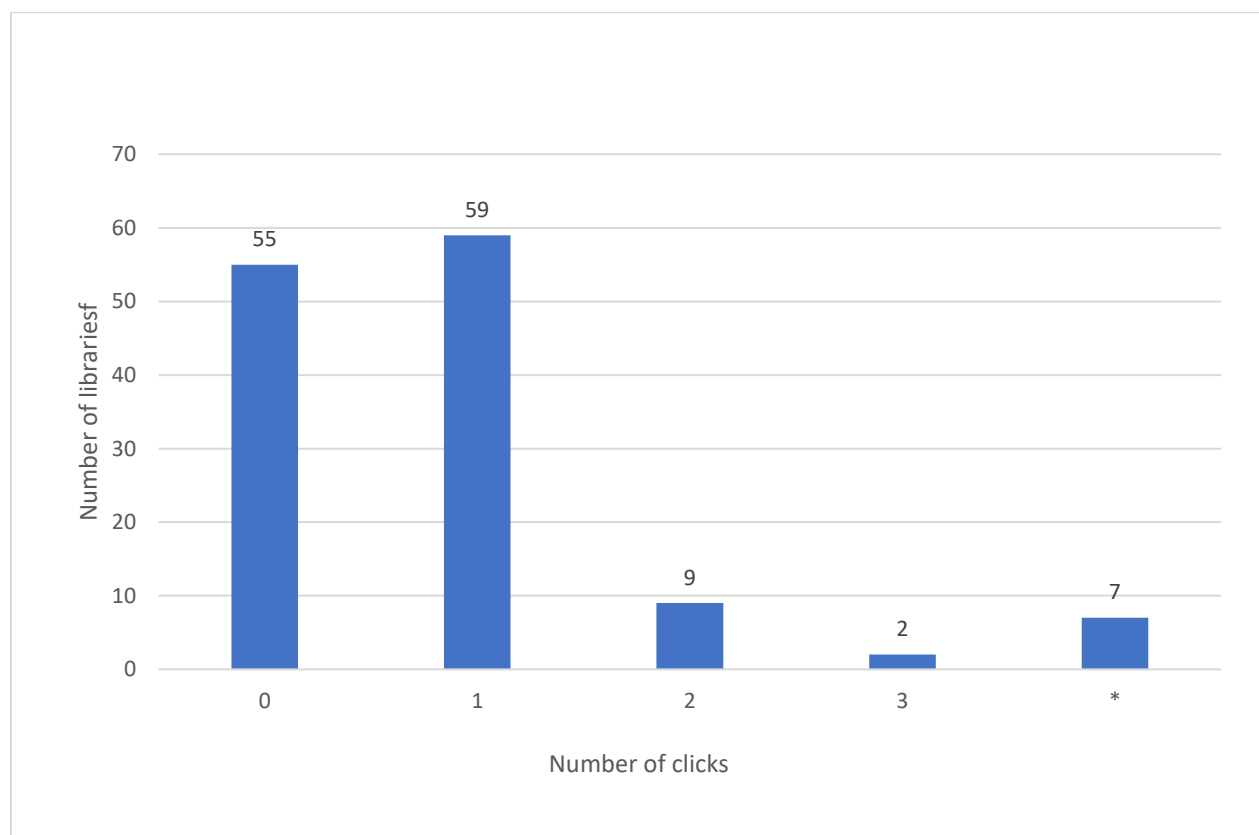COVID Information on Library Website

Figure 2

Number of clicks to find COVID-related information

* indicates that the information was found on the university's website.
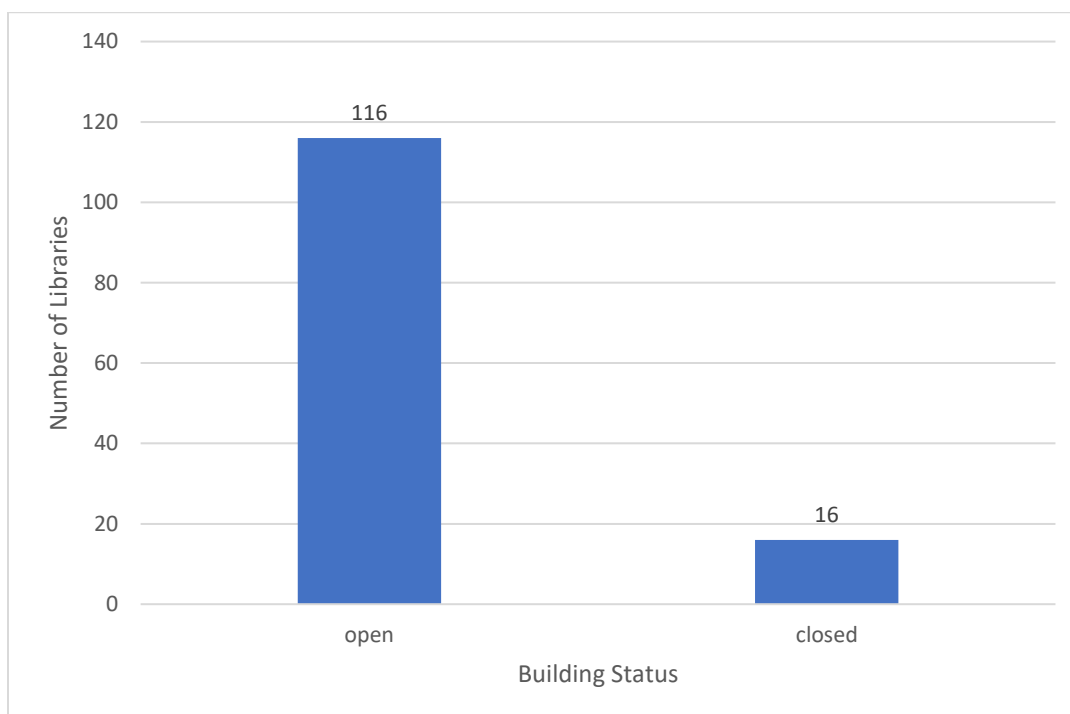
Figure 3

Library Building Status

Figure 4

Is building use restricted to the campus community?

Bar chart showing Number of Libraries on the y-axis (0 to 80) and Campus Community Restriction on the x-axis with four categories: yes = 68, no = 10, no mention = 38, closed = 16.
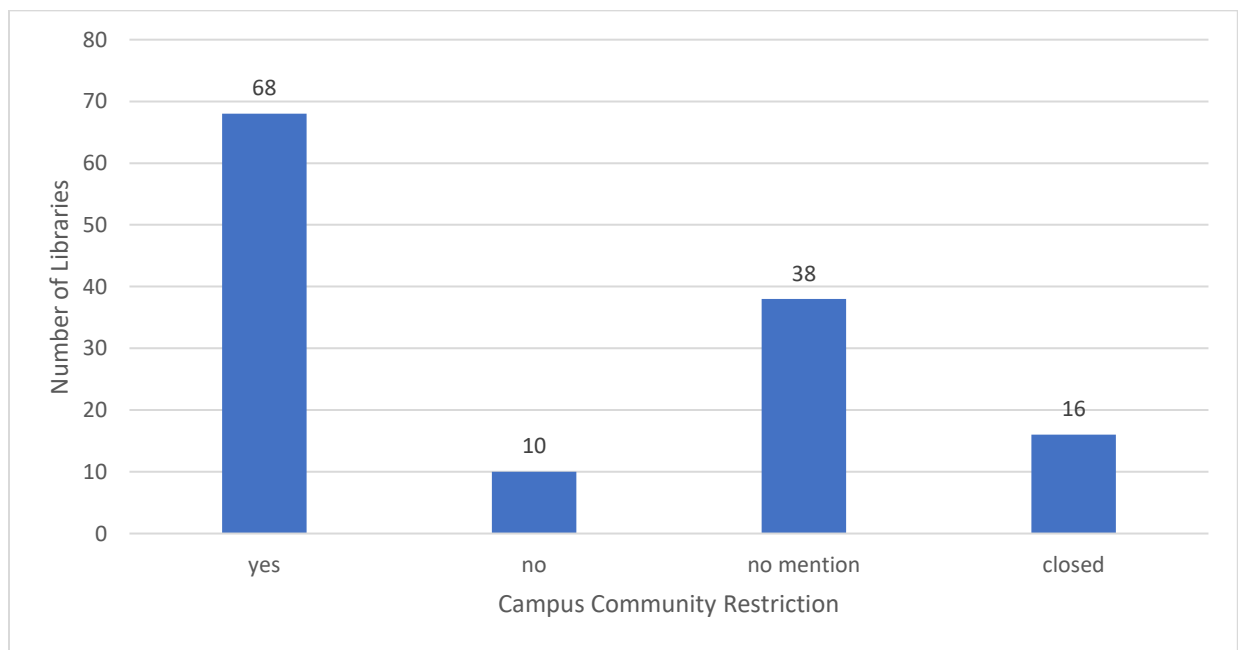
Figure 5

Are Face Coverings Required?