Evidence Summary

Medical Students in the United States Reveal Their Ideal Expectations to Help Planners of a New Library

A Review of:
Aronoff, N. (2016). Surveying Medical Students to Gauge Library Use and Plan for a New Medical Library. Medical Reference Services Quarterly, 35(2), 187-203. http://dx.doi.org/10.1080/02763869.2016.1152144

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Abstract

Objective – To help plan for a new library by exploring student use of existing library services and identifying their priorities for the new space.

Design – Online survey, sent via email.

Setting – Medical school at a university in New York.

Subjects – 585 medical students.

Methods – The researchers emailed a 45-item online survey to all medical students enrolled at the school. Responses were anonymised and all questions were non-mandatory.

Main results – 27% of students (157 out of 585) took part in the survey by answering at least one question. The questions were categorised into the following six topic areas:

1. Use of space and expectations for the new library space: More than half of the participants (67%) indicated that they rarely or never came to the library during the academic year in question. Of the students who reported frequenting the library on a daily, weekly, or monthly basis, the majority indicated that they preferred independent study to group study. The following resources were ranked as very important for an ideal library space: sufficient electrical outlets, strong wireless connectivity, printing facilities, individual and quiet study
spaces, comfortable seating, online resources, computers, windows/natural light, and group study spaces. Open-ended responses indicated that students desire close proximity to food and beverage services, large study tables to accommodate reading materials and technology, improved opening hours, and satisfactory bathroom facilities.

2. Where medical students study: Of the participants, one third of students reported studying at home, 21% chose to describe the physical characteristics of their place of study rather than name a place, 18% of students studied in multiple places, and 16% studied in the library. The remainder studied in another library, cafés, or other locations on campus. Online resource use was much higher than borrowing figures with the majority of students indicating that they had never borrowed a print book (77%), a reserve book (90%), or a DVD (96%). In addition, 92% indicated never consulting a print reference book. Online resources were used at least once a semester by 90% of students.

3. Resource use and expectations: Most students used lecture notes, presentations, websites, personal copies of books, clinical decision support tools, online tutorials or video content, electronic journal articles, recorded video or audio lectures, medical apps, electronic books, clinical practice guidelines, or pocket manuals or pocket guides. Print books from the library were the least exploited resources with only 13% of students reporting their use. 83% of students ranked online resources as the most important feature of an ideal library.

4. Equipment use and expectations for equipment and technology: In terms of equipment required for an ideal library space, 88% of students indicated printers, 78% computers, and 69% scanners. Therefore, easy access to electrical outlets and strong wireless connections were hugely important.

5. Services: Book or article requests were only sought monthly or once per semester by 18% and 7% of students respectively. More than half of students (54%) felt that assistance from a librarian was a very important or important feature of an ideal library space. However, 68% never consulted a librarian in the past and of those who did they did not do so frequently. In-person or email contact with a librarian was preferred over other methods of communication. 52% of respondents were not interested in training provided by the library. Of those who were, online and virtual training was preferred by 51% when compared to face to face instruction.

6. Additional feedback: The vast majority of students (90%) indicated that they would be interested in using the library outside of the existing opening hours of 9:00a.m. to 5:00p.m., Monday to Friday. Regarding the overall library service, 53% of students were satisfied or very satisfied, 26% were neither satisfied nor unsatisfied, and 21% were unsatisfied or very unsatisfied. Lighting, electrical outlets, and having a place to get food and drink were also prioritized by students in this section of the survey.

Conclusion – The author concluded that since convenience was considered an important factor by students when choosing their place of study, the increased proximity of the new library should attract more students. In accordance with student preferences, both individual and group study spaces are planned for the new library. Sufficient electrical outlets and a glass façade increasing the amount of natural light will feature in the building. Core textbooks and reference books will be made available in a small area onsite despite the fact that this did not feature in the original plan. Computers and printers will also feature in the new library for students who require equipment to facilitate their study activities. A computer lab to accommodate 30 students will enable face to face instruction on library resources. A professional librarian will not be based at the new library. In-person
services will be available at another library with sufficient staffing.

**Commentary**

This study adds to a small body of literature addressing the needs of medical students in relation to library services. A study by Norton (2013) asked multiple user groups about their preferences for a new library. The results were similar in both papers highlighting the importance of online technologies, associated infrastructure, and the importance of creating comfortable study areas.

Exploring survey responses to help understand determinants of library usage by medical students at the current site provides valuable insight into what the participants view to be characteristics of an ideal library.

Glynn’s EBLIP Critical Appraisal Checklist (2006) will be used as a critical appraisal tool for this evidence summary, specifically sections B and D which cover data collection and results.

The survey was hosted on an online platform which collects all data. Although the author provided citations to a number of studies on which the survey instrument is based, they did not specify what has been included or excluded from these studies. The author does not report measuring Cronbach’s alpha (Tavakol & Dennick, 2011) to assess reliability or whether any testing for validity was carried out. There is no mention of the survey instrument being piloted before distribution to students. The instrument is not published with the article, making it difficult to assess whether all the findings were reported or how the wording of the questions may have impacted on the results. The survey was distributed directly before the graduation of fourth year students and during first and second year students’ exams, so this may not have been the optimal time to recruit student participants. However as an incentive, all students who took part were given a chance to win one of five gift cards.

The author discusses confounding variables such as location of the current library and timing of the survey that may have impacted on the survey results. The conclusions reflect the analysis but also highlight the fact that this survey of medical students is only one user type and the task force will also plan ahead taking into account the needs of these users.

The results are presented as numbers and percentages of participants and statistical devices to determine significance such as p values and confidence intervals were not utilised. There is some repetition in the article regarding the results and students’ priorities. Some of the data could have been reported more concisely to improve readability of the results.

External validity was not important to the researcher in this study. The goal was to identify the views of the students at their university so they could be incorporated into plans for the library at that site. However, other researchers interested in medical students’ views of libraries and library services could adapt this study to help them investigate contextual issues specific to their own organizations.

The author provides implications for further research such as the need to investigate how the library might facilitate student learning, what other resources could be offered to students, and how the lack of a large book collection will impact students. The researcher intends to distribute the same survey to students after the new library opens in a follow up study, giving students time to start using it and to establish new behaviours. This will help to gain insight into what has worked, what could be improved, and under which circumstances.

**References**

Glynn, L. (2006). A critical appraisal tool for library and information research. *Library Hi Tech, 24*(3), 387-399. 
http://dx.doi.org/10.1108/07378830610692154
Norton, H. F., Butson, L. C., Tennant, M. R., & Botero, C.E. (2013). Space planning: A renovation saga involving library users. *Medical Reference Services Quarterly, 32*(2), 133–150.  
http://dx.doi.org/10.1080/02763869.2013.776879

Tavakol, M. & Dennick, R. (2011). Making sense of Cronbach’s alpha. *International Journal of Medical Education, 2*, 53-55.  
http://dx.doi.org/10.5116/ijme.4dfb.8dfd