
The Effect of Time of Day on Reference Interactions in Academic Law Libraries

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Libraries and librarians generally aspire to provide the best services they can to their user communities. But what does that mean? Assumptions about what is needed may not necessarily align with the actual preferences of a given user group. In this column, Seth Quidachay-Swan presents a case study that explores the interaction between time of day and medium of information delivery. Examining data gathered in a law library environment, the author concludes that modern presumptions about the diminishing need for traditional information services may not allow for effectively managing user expectations.—*Editor*

Since its introduction by Samuel Green in 1876, the reference desk has been a staple of libraries with a dual function of increasing the use of a library's collection and demonstrating the need for the library.¹ By the beginning of the twentieth century, the reference desk became defined by the services provided to patrons to assist them with various types of research.²

Through the years, libraries have undergone many changes, especially with the advent of the information age. The introduction of virtual reference services has allowed patrons to receive assistance without physically entering a library.³ The increase in electronic resources has been accompanied by a transformation in how patrons understand the library and the reference desk. While the core of reference services remains largely unchanged (i.e., a librarian interacting with a patron one-on-one to aid in research), advances in technology have greatly altered the circumstances under which this interaction can take place. Historically, reference services were provided face-to-face, but the current availability of mediating technologies (e.g., telephone, email, and instant messaging) has transformed the methods of accessing research assistance. In addition, the rise of technology and the proliferation of electronic communication have also shaped patron expectations about when information and service should be available. If reference desks are only available during business hours, they may no longer be fulfilling the research needs of patrons due to modern presumptions of twenty-four-hour information access.

In response to the digital revolution, many academic libraries have extended reference hours and provided more electronic resources.⁴ These changes have led some to question whether reference services should adopt a twenty-four-hour electronically supported model.⁵ Others have gone further by suggesting that in-person reference services can be replaced completely as the Internet is now the preferred source of information for patrons.⁶

MEDIA CHOICE THEORY (MCT)

Despite the increase in electronic reference options, other factors may lead to the continued popularity of face-to-face reference contact. Media Choice Theory (MCT) may help explain which attributes influence patrons to choose among possible reference options. MCT was initially developed in the 1970s and 1980s to understand communication by business managers,⁷ and it examines the characteristics of technologies used for contact (e.g., telephone), as well as the reasons why people choose one method over another. MCT suggests that people choose their modes of communication based on a number of factors. Early versions of MCT hypothesized that media choice was mostly based upon the ability of the medium to convey the nature of the relationship between the communicators.⁸ Later versions of MCT suggested that media preferences depend on the richness of available options to convey a broad range of ideas, meanings, and emotions through varying levels of language.⁹ Research found that face-to-face communication is the “richest medium” followed by telephone and email.¹⁰ The theory assumes a rational selection process in which users select a media choice based upon the complexity of their message, thus reducing ambiguity in their communication.¹¹

Other research demonstrates that additional factors influence patrons’ preferences besides the desire to reduce ambiguity, such as group norms and peer attitudes in selecting media.¹² Therefore, younger generations may be more likely to choose digital media because of greater comfort with electronic forms of communication.¹³ Research has shown that the Internet has become the primary communication tool for young Americans; some 81 percent of people aged twelve to seventeen years use it for emailing friends and relatives and 70 percent use it for instant messaging. These numbers are even higher for teens eighteen to nineteen years old.¹⁴ Although in-person reference interaction may be most effective for answering challenging questions, social norms may lead to greater preferences for electronic options.

One variable that has not been fully explored in this line of research is the role that time of day may have on a chosen method of contact. Users’ access to certain modes of communication varies throughout the day. For instance, if a library patron is working at home late in the evening, it would be inconvenient to drive to the library to ask a face-to-face question, even if the complexity of the question might warrant this type of communication. Additionally, attentional demands fluctuate throughout the day, so the available resources that one has to spend on a specific task may differ depending on the time of day. For example, only simple questions may adequately be answered during the day when classes and meetings are being held and time is in short supply.

THE CHANGING FACE OF LEGAL REFERENCE

One arena in which to explore the evolution of reference services is the law library. Law libraries fall into the category of

special libraries, which serve a specific clientele (e.g., lawyers) and are dedicated to a specialized topic (e.g., legal writing). American legal education centers around the law library, and the library has become the core of law students’ legal study experience.¹⁵ The American Bar Association’s (ABA) standards further require that academic law libraries have an appropriate range and depth of reference services.¹⁶ Technology has revolutionized the way law is taught and practiced. In the past decade, legal education has embraced email, course websites, classroom technology, distance education, electronic libraries and textbooks, online tutorials, and electronic research and scholarship.¹⁷ Chiorazzi estimates that 80 percent of an academic law library’s collection accounts for 20 percent of all legal materials that are available online.¹⁸ This boom in technology has contributed to less foot traffic and decreased use of physical resources.¹⁹ For instance, today law students rely more and more on commercial electronic databases like Westlaw and LexisNexis or on the Internet.

These changes in the ways patrons use the law library have transformed reference services. In order to better serve their students, academic law libraries have begun instituting virtual reference services for law students to supplement traditional options.²⁰ While some of these virtual resources can stand alone (e.g., webpages require no staffing other than a webmaster), other virtual offerings, including email and instant messaging, may require extra staff. For example, the Lillian Goldman Law Library reference desk at Yale University provides research assistance by email, its own chat program, AOL Instant Messenger, Yahoo Messenger, Google Talk, and text message beyond its more traditional in-person and telephone services. These additional electronic services need to be staffed by personnel in a similar manner to the physical reference desk.

Mode of communication and time of day likely interact within a law library reference setting. First, the questions posed to legal reference librarians vary widely in their level of complexity. Second, legal reference services have multiple types of communication options available, specifically in-person, telephone, and online. Finally, law library patrons, especially students, have different demands on their attention that are affected by the time of day, such as coursework and social obligations, as well as varying access to resources throughout the day (e.g., greater access to computers than in-person services at night). In an attempt to understand the changing face of reference services such as the increased modes of communication and extended hours, the reference statistics from the Yale Law Library were evaluated for (1) the frequency of law library reference use throughout the day and (2) the association between mode of patron contact and time of day. Examining these factors will result in a better understanding of the relationship between modes of communication and time, and it may also inform future decisions about what modes of communication for reference service deserve greater investment within law libraries and other types of libraries.

DESIGN AND RESULTS

Reference librarians collected observational data at the Yale Law School, an ABA accredited law school. The Lillian Goldman Law Library at the Yale Law School was selected because it offers face-to-face, telephone, and electronic reference services, as well as extended reference hours. The data set provided information recorded over the period from February 5, 2010 through June 26, 2010. The Yale Law School data set measured the time of day and method of request for all reference questions.

The frequency of use of reference services was measured by how many people contacted the reference desk within a given hour. If one person came to the reference desk with multiple questions, it was coded as one use. This decision was made for ease of measurement and to reduce demands on library reference staff. The mode of contact used by the patron was also recorded, including (1) all electronic communication (e.g., email and instant message), (2) phone, or (3) in-person. Finally, the time of day was also recorded, which was coded as morning (8:00 a.m.–11:59 a.m.), afternoon (noon–3:59 p.m.), evening (4:00 p.m.–7:59 p.m.), or night (8:00 p.m.–midnight).

Overall, the reference desk received 315 reference questions from confirmed law students during the period of data collection. The greatest percentage of contacts occurred in the afternoon (135 contacts, 42.9 percent), followed by the early evening (99 contacts, 31.4 percent), morning (45 contacts, 14.3 percent), and night (36 contacts, 11.4 percent). The vast majority of law students walked into the library for reference assistance (244 contacts, 77.5 percent), followed by electronic contact (64 contacts, 20.3 percent), and finally phone calls (7 contacts, 2.2 percent). The method of contact differed by the time of day. Walk-in reference contacts were more likely to occur in the afternoon and early evening (80.8 percent) and were the least frequent during the night hours (8.6 percent). Electronic contacts were more equitably distributed across time of day, with the largest number occurring during the afternoon (32.8 percent) and the fewest during the evening (18.8 percent). Finally, phone calls occurred only during the morning (42.9 percent) and the afternoon (57.1 percent).

DISCUSSION

Despite the increased focus on electronic resources, the majority of reference interactions occurred in-person. This corresponds with research that has identified in-person requests to provide the richest level of information.²¹ While social norms regarding electronic resources have changed drastically, electronic reference requests occurred significantly less often than in-person contacts. This may be due to a mismatch between the complexity of the question and the ability to adequately express this information using electronic channels. In contrast, phone calls are a richer medium than electronic communications, but phone calls represented a

small minority of contacts. Thus, law students' comfort with electronic resources may not have supplanted in-person contact but may have replaced the phone as a convenient mode of communication.

In-person reference requests took place mostly during the afternoon and evening, which may reflect time periods when law students are still on campus but not in class. Electronic communication was more evenly distributed throughout the day. This may be related to the growth in wireless connectivity in law schools and residences, which would likely provide continuous access to electronic modes of contact throughout the day. Phone calls were constrained to the morning and afternoon hours. This may be related to the typical use of the phone during normal business hours.

In sum, the mode of communication used to ask reference questions in a law library setting is likely affected by the factors outlined in Media Choice Theory (MCT), such as the complexity of the questions being asked and the richness of the mode of contact. As in-person reference services provide the best option for patrons to ask challenging questions, this may explain face-to-face reference services being the dominant contact source in this study. An important follow-up question suggested by MCT would be to code the nature of patrons' questions for complexity and difficulty and to explore how these variables relate to media choice. Additionally, the current study suggests that time of day can moderate the mode of communication used. This may be due to practical factors, such as varying access to and social norms for different modes of communication. Although the complexity of questions might naturally lead to a preference for in-person communication, attentional demands throughout the day also likely contribute to reliance on electronic contact due to continuous access to these resources.

CONCLUSIONS

This study has real-world implications. Specifically, these findings suggest that it is important for law libraries to continue their development of in-person reference services. Contrary to suggestions that virtual reference can replace face-to-face services, electronic resources appear to supplement traditional physical services instead of supplanting them. There are a number of reasons that in-person contact appears to be the preferred method of contact compared with electronic methods. Some have suggested that virtual reference services "have proven ill-suited for personal interactions like reference and customer service" due to software difficulties, increased time required to ask and answer questions, and user preferences to receive "serious" information through other modes of communication.²² The preference for in-person resources in comparison to electronic reference options has also been identified in non-law library settings. Despite patrons reporting that they are open to using electronic-based reference services such as on-line chat and giving high user satisfaction ratings for these services,²³ actual usage statistics

for virtual reference services in academic law libraries are relatively low.²⁴ Electronic options appear to have a place on the menu of services provided by reference staff, but investment in face-to-face options should continue to be a main focus of the library.

Finally, the study suggests that expanding services to meet perceived patron expectations of twenty-four-hour access to reference help may not be as important as some would argue. Reference services were rarely sought out during nighttime hours according to this study. Libraries may therefore be able to avoid the costs associated with staffing and purchasing software capable of providing synchronous reference services and instead rely on less expensive asynchronous options during low-use periods.²⁵

In conclusion, law library reference resources appear to be impacted by variables such as complexity, richness, and social norms. Further, time of day also appears to be an important factor in the choice of mode of contact. It is likely that these components interact to predict patterns of reference usage. These factors are not unique to law libraries; therefore, the current study's findings may well generalize to other library settings.

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