Evidence Based Library and Information Practice

Differences Between the Perception and Use of Virtual Reference Services for Complex Questions

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Résumé de l'article

Objective – To investigate the differences that exist between the users' perception of virtual reference tools (chat, email, and texting) and how these virtual reference tools are used.

Design – Multimodal research that includes a descriptive summary of user perspectives of virtual reference tools and a descriptive and correlation analysis of question categories (complexity, reference interview, question category, and instruction) compared to the type of virtual reference.

Setting – A large university library in Montréal, Québec, Canada.

Subjects – A summary of in-person interview results from 14 virtual reference users and a sample of chat (250), email (250), and texting (250) transcripts.

Methods – The authors describe their research as part of a larger project. In Phase One, which was published in a previous report,1 the first author interviewed 14 users and collected their preferences among virtual reference tools and factors that impacted their use. Participants were interviewed in fall 2019. They were eligible if they used one or more virtual methods. In Phase Two, the users' perceptions among virtual reference tools were compared to the analysis of question complexity in a sample of chat, email, and texting transcripts. Transcripts were collected from January 1, 2018, to December 31, 2019. Text conversations were grouped as a single transcript. A total of 250 texts were collected and were matched in number with a random sample of chat and email transcripts; 750 transcripts were analyzed. The transcripts were coded by question type, question complexity, and the presence of reference interviews and instruction. The READ Scale was used to categorize questions by complexity and READ 3 and above were deemed to be complex. A codebook was used for consistency and intercoder reliability. A random 10% of transcripts were coded by both authors with an agreement of 84%. After discussion, agreement reached 100%. The remaining 90% of the transcripts were coded by the first author. The Chi-Square test of independence (X2) was used to determine if there was a difference in the frequency of the delivery method in the categories analyzed. Cramer's V was used to determine the strength of associations.

Main Results – The authors state the main findings signify "dissonance between users' perceptions of virtual reference methods and how they actually use them." Results from the user interviews suggest that participants felt that chat and texts should be used for basic questions and that email be used for more complex ones. They appreciated the quick answer from text for things such as library hours, and the back-and-forth nature of the chat for step-by-step instruction but did not believe these were suited for complex questions. Participants expressed that an email to the library liaison rather than the library general email is the best for research questions. Of note, library liaison emails were not collected as part of the virtual reference tools for this research project. The results from the transcript evaluation revealed that chat interactions were used for complex questions as reflected by the READ Scale rating. Questions were categorized from READ 1 (requiring the least amount of effort) to READ 5 (requiring considerable effort and time) with the following results: READ 1 - 0% chat, 0% email, 13% text; READ 2 - 4% chat, 8% email, 43% text; READ 3 - 72% chat, 75% email, 38% text; READ 4 - 20% chat, 15% email, 6% text; and READ 5 - 4% chat, 2% email, 0% text. The authors demonstrated a moderate strength of association between the delivery method and the READ Scale (V=0.41), reference interview (V=0.43), question category (V=0.34), and instruction (V=0.21). There were significant differences between the delivery method and complexity, p< 0.001. The email and chat transcripts were more complex than text and the chat transcripts were marginally more complex than email. Chat transcripts were also more frequent in reference and instruction categories, p<0.001. The types of questions were divided into 10 categories: reference/ research, library systems, problem with access, interlibrary loan, known item, access policies, collection acquisitions, library physical facilities, hours, and other. The most popular question types for chat transcripts were reference/research questions (24%), library systems (17%), problem with access to e-resources (14%), interlibrary loans (14%), and known items (13%). The most popular question types for email were reference/research (18%), library systems 16%), problem with access (15%), and access policies (16%). The most popular for text transcripts were reference/ research (15%), library systems (18%), library physical facilities (18%), and hours (16%).

Conclusion – Mawhinney and Hervieux establish that disagreement exists between the users' perception of and the use of virtual reference services. After researching the types of questions and level of complexity associated with each virtual reference tool, the authors were able to provide a list of practical implications of their research to improve documentation and workflow and make suggestions for staffing needs. They recommend multiple reference methods, training on the reference interview and virtual methods chosen, advertising virtual resources, and making chat available on the website in places of research. They found that their institution had a high number of questions categorized as access policies and they suggested that easier ways to report problems be considered.

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Evidence Based Library and Information Practice

Evidence Summary

Differences Between the Perception and Use of Virtual Reference Services for Complex Questions

A Review of:
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Abstract

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Commentary

This research was appraised using the critical appraisal review form developed by Letts (2007). Mawhinney and Hervieux conducted a comprehensive literature review on the perception of virtual reference services. They describe a conflict in the literature regarding the use of chat as a virtual tool. Chat has been reported as both an unsuitable tool for reference and research projects as well as an acceptable tool for all questions. Chat exchanges have been reported to be more complex than email and also reported to be less complex. The justification for their research was clear, and the participant users and virtual tool samples were clearly described.

The authors discuss appropriate limitations to their research. They mentioned that one limitation to be considered was that transcripts of library liaison emails were not collected as part of their research project and conclude that they are likely rated as more complex on the READ scale and suggest further investigation would be needed to confirm.

The authors include that this research was done at one institution and may not apply to others. They mention that the perception of question complexity, how users perceived their own questions, may vary among users. Another limitation regarding transcript collection was described. In August 2019, McGill Library moved from using QuestionPoint to LibChat. These two virtual reference services are different in delivery and in the way they account for text transactions. The authors discuss that they accounted for the differences by including an equal number of chats, emails, and texts from QuestionPoint and LibChat.

The last limitation mentioned was that this study collected perceptions of virtual tools prior to the COVID-19 pandemic. The authors mention that the use of all virtual tools increased during the pandemic, staffing virtual reference was reevaluated, and that there was a need to make virtual references more visible. What authors did not mention is that perceptions of virtual reference post COVID-19 may have changed as well. Users may have adapted.

The study aimed to investigate differences between users' perception of and the use of chat, email, and texting as virtual reference tools and raises the possibility of other limitations.

Mawhinney and Hervieux (2022) describe McGill University at the time of publication as a publicly funded institution with an enrollment of 40,000 students. Participants were recruited through online and on-campus solicitation and described as both men and women; as undergraduate (5), masters (4) and doctoral (2) students, faculty (2), and alumni (1). The sample was described by the first author as being based on "theoretical saturation" where interviews were discontinued when the author did not gain "additional insights" from the interviews.[1] Questions were appropriate to elicit from the user how the question type influenced the choice of virtual reference. However, fourteen participants is a very small sample size and may not reflect the perceptions of users from an institution of this magnitude which is a potential bias.

Potential bias is reflected in the analysis of text chat and email transcripts. Not all questions were coded independently by two authors. The first author, who interviewed all participant users, coded 90% of the transcripts. Although there was an 84% match in the first 10% of questions coded, with 100% agreement after discussion, it is possible there could be a slight change in the percent complexity per virtual reference tool in the overall results. This, however, is unlikely to change the overall message. A count and a measure of complexity also does not imply if the user obtained a complete answer, or if there was resolution of the problem after using the virtual tool. The authors state that transcripts were assessed for level of complexity, question category, and the presence of a reference interview and instruction. There is no description if the use of the virtual tool was successful. A user could potentially use text or chat for a complex question and then move to general library email or library liaison email because they did not receive a complete answer, or their issue was not resolved.

This may be outside the scope of this research. Mawhinney and Hervieux provide suggestions that are useful to library practice that can help address this.

The authors suggest improved policies and workflows. They recommend librarians staff virtual references such as chat and general email, and that library assistants and/or students staff text reference. The authors suggest that due to the number of complex questions, more training is needed on the reference interview and methods of virtual reference, and that the user be made aware when a question needs to be transferred to a subject specialist. They support virtual reference tools be placed where users conduct library research.

Librarians can have an impact on virtual reference services, including how they are used and where they are located, and how they are staffed to respond to complex questions.

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