Service Sea Change: Clicking with Screenagers Through Virtual Reference

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Abstract
Web-based reference services such as synchronous, (chat reference or “Ask-a-Librarian” services) and asynchronous (email) virtual reference services (VRS) have become common features of academic library home pages. In the current economic and technological environment, evaluation to determine the sustainability of VRS is crucial. An international research project, funded by the Institute of Museum and Library Services, Rutgers, The State University of New Jersey, and OCLC, Online Computer Library Center, Inc., investigates factors that influence the selection and use of synchronous VRS. This study, one of the first large-scale VRS studies to include both users and non-users of the Millennial Generation, innovatively addresses issues concerning the evaluation, sustainability, and relevance of VRS for academic libraries by soliciting screenagers’ perceptions. Three focus group interviews were conducted with “screenagers”—twelve to eighteen year-old non-users of VRS. These potential future academic library users are comfortable in a virtual environment, use instant messaging (IM) for socializing and collaborative homework, yet perceive VRS differently than these other virtual encounters. The results of these focus group interviews provide new insights to why screenagers choose not to use VRS and what would make them try VRS. The study identifies ways to increase the visibility and use of VRS, and to improve service, which could help secure funding allocations, and the growth and improvement of services. These results can influence the development of academic library services and systems for the Millennial Generation.

Introduction
There has been much discussion in the literature about the generation born between the years of 1979 and 2000. Sweeney refers to the years between 1979 and 1994, while Hallam and Partridge refer to the years between 1980 and 2000.¹ This age group has been referred to as Millennial Generation, Next Gen, Net Generation, Generation Y, C Generation, Neters, Nintendo Generation, Digital Generation, or Echo Boomers.² Regardless of the name, Sweeney believes this generation will outnumber the Baby Boomers, who were born between 1946 and 1964, by 2010.³ The Millennials’ information-seeking behaviors are very different from older groups, especially the Baby Boomers. Millennials prefer more information choices and more selectivity, personalization and customization of information, and convenience.⁴ Sweeney characterizes the Millennials as impatient, practical, results oriented, multi-taskers, with non-linear communication patterns.⁵
Rushkoff coined the term, “screenagers,” to refer to the twelve to eighteen year-old members of the Millennial Generation because of their preference for communicating electronically via screens, (i.e., telephones, computers, etc.). Millennials first access information sources via television, telephone, and computer.\(^7\) Print sources and library visits are their last preferences for finding information and often will make use of less relevant information to avoid visiting a library for print sources or assistance.

In order to meet the needs of diverse users and to attract the new generation of academics, libraries offer web-based services and sources. Web-based reference services are provided as alternatives for face-to-face (FtF) reference services in the physical library. Both synchronous (chat reference or “Ask-a-Librarian”) and asynchronous (email) virtual reference sources (VRS) are prevalently available on academic library home pages and are increasing with the growth of digital libraries and remote access to library sources.

In order to investigate factors that influence screenagers’ selection and use of synchronous VRS, an international study, “Seeking Synchronicity: Evaluating Virtual Reference Services from User, Non-User, and Librarian Perspectives,” was funded by the Institute of Museum and Library Services (IMLS), Rutgers University, and OCLC, Online Computer Library Center, Inc.\(^8\) Transcript analysis, focus group interviews, online surveys, and interviews with users, non-users, and librarians provide data to identify why users select and use VRS, why non-users prefer other means to get their information, and how interpersonal dimensions of VRS determine perceptions of satisfaction and success.

Three focus group interviews with screenagers, who are non-users of VRS, were included in Phase I of the research. Since this is one of the first large-scale VRS studies to include screenagers’ perceptions, the findings from these focus group interviews can be used in the development of VRS services and systems. The identification of screenagers’ perceptions of VRS and information-seeking can be used to attract and meet the needs of these future college and university students.

**Focus Group Interviews**

**Method**

Even though focus group interview data cannot be generalized to an entire population, the focus group interview technique has been used extensively in library and information science research and practice.\(^9\) The methodology is frequently used to identify perceptions and attitudes of a target population, which was the purpose of the focus group interviews in this study.\(^10\)

### Data Collection and Analysis

During Phase I of the study, eight focus group interviews were conducted with librarians, users, and non-users of VRS. Three of these focus group interviews were with screenagers from three different Northeastern states. One group was from a rural environment, one group was from a suburban neighborhood, and one group was from an urban area. None of the screenagers had used VRS.

The focus group interview participants were recruited with the help of two librarians at public libraries and one public school librarian. The rural and urban public library focus group interviews were held at public libraries and the suburban high school focus group interview was conducted at a public high school. The suburban high school participants were members of a history class, recruited through librarian–teacher cooperation. The urban public library participants were recruited by the young adult librarian from a group of teenagers who are regular library users. The rural public library group was recruited by the public librarian and was a combination of teens who use their public or school libraries on a regular basis.

Thirty-three teenage, non-users of VRS participated in the three focus group interviews. Eighteen (55%) of the participants were female and fifteen (45%) were male. There were twenty-one Caucasians, six (18%) African Americans, and six (18%) Latinos. Thirty-one (94%) of the focus group interview participants were in high school and two (6%) were in junior high school.\(^11\) Their ages ranged from twelve to eighteen years old. All participants signed informed consent forms and parental signatures were also obtained for those participants who were under the age of eighteen.

An experienced moderator led the focus group interviews, which were documented by two recorders as well as audio tape recorded. The focus group interview transcripts and notes were transcribed verbatim. All participants’ names and identifying information were removed from the transcriptions to ensure confidentiality.

The moderator posed the following five questions to all three focus groups:

1. When you are stuck in a homework assignment and need information, what do you do when you need help?
2. When you need help with homework and decide to get help from a librarian, what do you do?
[PROBES: do you usually go to the library, email a librarian, or call the library on the phone? How do you decide what kind of help to try?]

3. Do you know that you can ask librarians questions or for help using email or IM (instant messaging)? If yes, why haven't you tried them?

4. Would you like to try “IM”ing or chatting with a librarian for help? What would make you interested in trying email or IM to get help from librarians?

5. What have you heard about getting librarian help or getting library resources on the Web from your friends or teachers?

The focus group interview transcripts were qualitatively analyzed and common themes were identified for each of the questions. The similarities and differences among the group responses were clearly identified.

Results and Discussions
There were a number of common themes that emerged across all three groups. These include a preference for independent information-seeking. The screenagers were not aware of the existence of VRS; therefore they did not use the service. They also were concerned that the VRS librarians would not understand their information needs and that the sessions would not be safe because the VRS librarians were anonymous and the screenagers did not know them or have an interpersonal relationship with them. The screenagers who participated in the focus group interviews preferred to use Google or other search engines, browse the web, or ask their friends for help instead of asking a librarian. These results support the findings reported by Connaway and Prabha; Prabha, Connaway, Olszewski, and Jenkins; and Agosto and Hughes-Hassel.12

Preference for Independent Information-seeking
There was consensus in the urban and rural groups that they trusted the results they got on Google above those they got from librarians.13 A rural teen voiced the majority opinion for that group: “I wouldn’t really trust my librarian. I trust Google.” Another rural teen said: “I find something on Google and there’s enough information on it and it seems logical, I’ll just go with it.” Another agreed that usually Google results are accepted without verification, but noted that she would check sources for a research paper: “Especially if it’s something like you’re doing a paper in class and you already know the subject pretty well and all you’re looking for are sources to validate what you, you’re putting like your argument on paper. You validate your argument. I really don’t double check it. I’m like well ‘this is what I’m trying to say. This is the source I’m going to use.’ But if it’s like a research paper, I’ll double check my sources a couple of times just to make sure it’s the right information.”

The suburban teens were the only ones who trusted results from journal article or subject databases (such as SIRS or Galenet) above Google or web surfing. They said that they had been taught to use these quality resources in English class and they have easy access to them through the school library’s website. This group of teens also had been taught to evaluate content of web pages found through Google. One urban student also said he/she was careful in judging web page content: “What I’ve seen lately is that you can have a page that’s perfectly structured and everything, but yet it can be inaccurate with, um, information… Some pages like that are biased like towards one thing. So you have to make sure you look at everything on the page.” Across all three groups, many of the teens trusted their ability to evaluate web-based resources above that of the librarian, although others understood that librarians know where to find the best information. Other researchers have noted that adolescents have an “apparent lack of concern for their ability to discern the quality of their sources…students spend little time evaluating what they have on the screen, apparently not able to distinguish wheat from chaff.”14 In addition, studies have indicated that people stop searching at “good enough” and often satisfice or settle for ease and convenience.15

Google was seen as very convenient and easy to use when compared to the more difficult searching interface of library subscription-based, highly authoritative databases. They did agree, however, that Google was easier to use and that they would use it to gather background information in the initial stage of a research project. Using Google because it is convenient and for familiarization of a topic is supported by focus group and structured interview responses of college and university students reported by Connaway and Prabha; and Prabha, Connaway, Olszewski, and Jenkins.16

Preference for Face-to-Face Interaction
When the screenagers choose to ask a librarian for help, the majority prefer F2F interactions with the librarian to any other form of communication. Both the urban and suburban group had established strong interpersonal relationships with their public and school librarians and highly value the interpersonal interaction they have with these librarians. One suburban screenager noted: “Yeah. I think it’s easier to have her right there because
you can get her feedback on the articles. Like she’ll pull up a few and then she’ll tell you like what she thinks; it’s scholarly or like what she thinks. Then if you’re ‘This isn’t right for me,’ she can help you find what you actually need.” Another suburban teen agreed: “As long as you’re having conversation with someone else at least you can build a relationship. That’s just something that you can’t get through a computer typing in stuff.”

Screenagers in both the rural and urban groups reported that they were more likely to ask their public librarians for reader’s advisory help in locating good books to read than for homework or school related information. Most of the urban focus group interview participants were avid readers, one stating that they choose to read books because they are frequently “bored.”

Although the majority of the teens across all three groups carried cell phones, a large majority had never used their phones to call a librarian for homework help. Most screenagers were unaware that the public library had a phone reference service and one urban female was unaware that the library had a web page. There was also consensus across the groups that none would ever email a librarian.

**Librarian Stereotypes**

Although they valued the interpersonal relationships they have cultivated with their young adult librarians, the urban and rural groups reflected negative stereotypes of librarians in general. This longer excerpt from the urban focus group interview reveals that the regular reference librarians were not seen as helpful to the teens.

Lisa: Yeah, like if they’re not helpful, they’ll point me in the direction and say “Oh…(talk-over)

Interviewer: Have other people had that kind of experience with librarians?

Joe: Yeah. Sometimes, sometimes I’ve asked them like where’s a certain book and they’ll be like, they’ll just point at a random shelf… And then, and then I look and there’s like three shelves next to each other and I’m like “Which one is it?” So, it’s like you have to go and look at every book to see if the book is there.

Sarah: And you get embarrassed; you don’t want to ask them again once you’ve already asked them...(talk-over)

Joe: …It’s like they close their eyes and they’re like that “That one right there.” (laughs)

Multiple Participants: (laughter)

Sarah: And then cause you’ve already asked them, you don’t want to feel like you’re pestering them too much so you don’t go and ask them again. It’s like, it’s like, you don’t want to go “So which shelf are you pointing at?” Because, I mean, once they do their famous point, it’s just like… (laughs)

**Multiple Participants:** (laughter)

Sarah: …you don’t want to go near them again. That’s it. So, you’d rather try your luck in searching it out yourself or going on the computer.

Ed: I have actually, uh, left the library and came back another day for the book. Because they would do the point and then,...(talk-over).17

It is interesting that Ed left the library only to come back another day for the book rather than interact with the librarian a second time to clarify the directions he was given. Sarah, above, refers to “their famous point” evoking one of the standard components of the librarian stereotype.18 It is obvious that the screenagers chose to avoid possible embarrassing situations and perceive these interactions as face threatening in Goffman’s terms.19

A rural screenager expressed a similar concern about approaching a school librarian for follow-up questions after the traditional library orientation session: “they spend like the first forty-five minutes of that first day explaining everything that you’ve heard for like four years and you know how to do it and you’re just like ‘Can I go and do this? I know what I’m doing.’ And I’m like, if you go ahead they’ll yell at you and it’s just like, uh, it drives you crazy.” An urban screenager revealed the stereotypical view that the librarians: “go and use books and just do more traditional librarian kind of thing.” The association of librarians with books is also evident above when one participant noted that she goes to the librarian mostly for reader’s advisory (connected to books), not for other information needs. One rural focus group interview participant described his/her school librarian as stereotypically mean and the school library atmosphere as unwelcoming: “Aaaah, if it’s necessary, I’ll go. But if not, I’d rather stay away from it.”

**Reasons for Not Using VRS**

There were several reasons why the participants of all three focus group interviews had not yet tried VRS chat reference services although nearly all of the participants were devoted IM users. The majority of urban students were using email rather than IM, which supports Agosto’s and Hughes-Hassell’s finding that there is a delay in urban teen’s adoption of current technology.20 Most
participants viewed IM as a venue for socializing but not for academic situations such as homework help. The screenagers were not aware that VRS existed, yet two of the three locations had nationally acclaimed 24/7 statewide chat services offered free to state residents. Some feared that the chat librarians would not understand their information needs, would ignore them, or would not care about them as individuals because of the anonymity of chat. One rural participant said: “Plus I think the IMing kind of gives it a cold feeling to it like, you know. They really don’t care. They’re just doing their job. When you can actually sit and talk to someone face-to-face you kind of can see if they care or not, you know. If they don’t care, you’re like ‘Well, you’re not going to help me very much anyway’ and you can move on. But the IM, you can keep trying to ask the same person the same question like over and over. And if they don’t care, they’re just going to keep ignoring you.”

In addition, the participants did not seem to have much confidence in the multi-tasking or technical abilities of the librarians for managing a chat situation. One rural screenager stated: “A librarian’s trying to do like 15 of those conversations at once they’re going to mix up replies, mix up the …what and it it, I just don’t think it’d be a very applicable…” A suburban focus group interview participant thought that chat reference would take too much time: “I don’t really want to take the time actually to type out, like explaining what I’m doing, what I need it for, what type of sources I need,” supporting the impatience of the Millennials. Others felt that typing limits too much and that asking difficult questions (like those for homework in high level math or science subjects) would prove too complex for librarians to answer.

Privacy Concerns
These screenagers had serious privacy and security concerns, expressing apprehension about using VRS because they worry that chat situations may be unsafe since they do not know the librarians staffing the services. They said that because they did not know who would be providing the live chat VRS, there was a possibility that the staff might be dangerous individuals or cyber stalkers. This may not be surprising since young people are instructed to avoid giving personal information in open chat rooms and are made aware of the risks of possible interactions with internet predators and pedophiles. One urban teen said; “I don’t usually like to talk to like people I don’t know on the internet.” A rural participant said: “I’m not going to go get tutored on the Internet by somebody who I personally don’t know who might be some psycho serial killer out there when I could get personal help from my home and people in my community.”

Factors Influencing Future Use
When pressed on the question of what would encourage the screenagers to use VRS, some said they might try it if it was recommended by the librarians, teachers, or friends they trusted. One rural student said they would try VRS only in desperation: “I don’t think [I would use VRS] because I like going to people I know. I would probably try it as a last desperate resort…’I’d feel a little creeped out talking to some random person about it but okay, I’d give it a shot.” Participants felt that they also might give it a try if there was better marketing and publicity by librarians so that they would be reassured that the librarians want them to use the service. Others felt that VRS would be an option if they could choose a trusted librarian or one who would want to develop a positive interpersonal relationship with them.

Conclusion and Implications for Academic Libraries
Urban youth in focus group interviews had similar responses to the rural and suburban groups to almost all questions on their communication choices with the exception of a delayed adoption of chat instant messaging. Many of the teens had traditional and stereotypical views of libraries and librarians which influence their decision-making process for choosing VRS. They worry about chat conversations with strangers since they have been told to avoid potentially dangerous situations online; therefore, they need to be reassured by trusted adults or friends before they will try VRS.

Valenza notes that a blend of FtF and electronic services may be best: “For today’s learners, libraries can be exciting hybrid experiences of face-to-face lessons learned, reinforced with effective online supports”. According to Hallam and Partridge, to effectively meet the needs of Millennial youth, library educators must teach librarians to develop a range of services that is customizable and flexible, incorporates regular feedback, provides trusted guidance, includes the opportunity for social and interactive learning, is visual and kinesthetic, and includes communication that is real, raw, relevant and relational.

Walter and Mediavilla recommend involving teen-agers in the development and evaluation of VRS services. “It would be interesting to see what would happen if the designers of such online reference services fol-
lowed the principles of good young adult library practice and involved the teens as active participants in both the planning and the delivery of the services. At the moment, teens are from Neptune, librarians are from Pluto. Better services would result if they could meet somewhere closer together in cyberspace.  

This research project is an attempt to learn more about screenagers’ communication and information-seeking behaviors in order to ensure that virtual and FtF library services are responsive to their needs. One of the first steps that librarians can take is the promotion and marketing of VRS to this non-user group. Screenagers need to be reassured that the VRS librarians are available, qualified, and willing to answer their questions and to assist with their information needs in a convenient and non-threatening environment. Future relevance and sustainability of academic library services may require the integration of Google’s ease and convenience of discovery with the library’s authoritative sources and bibliographic descriptions.

There are many implications for these results for academic libraries in addition to results surrounding VRS. Millennials crave a variety of services so chat, IM, phone, email, as well as FtF reference should be offered, if possible. Their preference for independent information seeking must be respected, although library use instruction should be tailored to help them develop sound skills for searching Google (and other search engines) as well as providing strong guidance on when to use proprietary databases. Emphasis could be put on saving their time as a way to engage Millennials, who do not like to waste time. In addition, active learning techniques should be liberally employed when giving instruction to Millennials, who will quickly tune out of boring or overwhelming lectures (and will start texting friends or surf the web to relieve their boredom). Academic libraries will attract Millennials if many group study rooms are available to accommodate their preference for collaborative learning. Coffee bars with televisions or music playing are also attractive since Millennials merge social networking with studying and engage in collaborative learning in these settings as well and are comfortable with background music or visual displays. As we learn more about this group, academic libraries will have additional information available as to how to best meet their needs and understand their preferences which may seem odd to members of older generations, including the baby boomers.

Future Research

These focus group interview findings are preliminary results from Phase I of a four-phase study. Additional data from transcript analysis of a total of 1,000 chat sessions, 600 online surveys (200 with each participant group of users, non-users, and librarians), and 300 telephone interviews (100 with each participant group) will be analyzed to create a more complete and generalizable portrait of why screenagers choose to use or not to use VRS and how they prefer to get their information. After all data are analyzed, recommendations for the future development of virtual reference systems and services will be identified and disseminated.

Notes


11. Percentages are rounded to the nearest whole number for demographic data.


15. Prabha, Connaway, Olszewski and Jenkins, “What is Enough?”; Valenza, “They Might be Gurus.”


17. Participants’ names have been changed to protect anonymity. Participant comments appear verbatim. Interviewer comments to call upon next speaker have been removed to heighten readability.


21. See also Agosto and Hughes-Hassell, “People, Places, and Questions.”


23. Hallam and Partridge, “Evidence Based Library.”