Online ethnography and vulnerable populations: A pilot test of data collection via a popular Instant Messaging service

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The internet is rapidly becoming a vibrant topic of study, source of data, and tool for qualitative inquiry in social work (Rybas & Gajjala, 2007). Variously termed *virtual, cyber,* or *online ethnography* (Beaulieu, 2004; Markham, 2005; Rybas & Gajjala, 2007), internet-based methods of data collection include observations of online communities (e.g., internet chat rooms), analysis of online narratives (e.g., internet web-logs or digital video), interviews via email or instant messaging (IM), and others. While holding great promise for advancing knowledge development and advancing practice, caution has been recommended in using computer-mediated methods to solicit information from vulnerable populations on sensitive topics (Grinyer, 2007). The principle goal of this pilot test was to critically examine the process, benefits, and challenges of collecting potentially sensitive qualitative information from research participants over the Internet.

Positive associations between technological connectedness and enhanced quality of life, as well as lack of technological connectedness and psychiatric illness (e.g., major depressive disorder, post traumatic stress disorder, complicated grief), have been demonstrated in the general population (Vanderwerker & Prigerson, 2003). Computer-mediated self-interviews have also been well received by vulnerable populations including alcohol and other substance abusers, postpartum women, victims of intimate partner violence, persons with HIV/AIDS, persons at risk for suicide, adolescents with high-risk health behaviors, and individuals with disabilities (Garb, 2007; Paperny, Aono, Lehman, Hammar & Risser, 1993; Renker & Tonkin, 2007; Rhodes, Lauderdale, He, Howes, & Levinson, 2002;Turner & Ku, 1998, Oschwald et al., 2009).

Among individuals with disabilities, computer-mediated interviewing may serve to minimize the consequences of impaired physical or sensory functioning or lack of mobility (Collie, Cubranic, & Long, 2002). Many vulnerable populations, including persons with disabilities and other chronic health conditions, may also be reaching a saturation point in terms of being recruited to participate in traditional research (Kroll, Barbour, & Harris, 2007), making new methods of data collection appealing from a participant perspective and leading to improved participation rates. From a research standpoint, computer-mediated interviewing may also be cost effective in terms of researcher time and expenses related to travel.

A small number of authors have written about the benefits of interviewing participants via IM services and other internet-based mediums. Opendenakker (2006) notes the value of this method for accessing geographically difficult to reach individuals; the anonymity it provides for both interviewer and interviewee; and its potential for resulting in richer interview responses that are less subject to social desirability on the part of participants. Lewis (2006) describes how computer-mediated interviewing methods allow participants to "feel at ease in discussing their health disorders in a perceived setting of privacy" (Lewis, 2006, p. 4). The present study sought to answer two research questions:

1) What are the benefits and challenges of interviewing participants via an IM service?
2) Are web-based methods appropriate and effective for interviewing participants around potentially sensitive topics?

A related goal of this project was to explore the topical area of the impact of stroke on younger adults and their families. The American Heart Association (AHA, 2008) reports that, in 2005, an estimated 261,000 U.S. stroke survivors were between the ages of 20 and 60 years old. Unfortunately, relatively few empirical studies have been conducted with this unique population. Existing literature describes the specialized needs of this population, including instrumental support and social role fulfillment, and their developmentally-specific goals such as returning to active parenting and gainful employment (Kersten, Low, Ashburn, George, & McLellan, 2002; Low, Kersten, Ashburn, George, & McLellan, 2003; Roding, Lindstrom, Malm, and Ohman, 2003). In order to gain insight into the first-hand experiences of younger survivors, the author conducted several interviews with community members and experts in the field via telephone and face-to-face interviews. From a topical standpoint, the pilot test described in this article represented another effort to validate and augment the author's current understanding of this field.

Methods

Google's *Google Chat*® IM service was used for this pilot test. An individual whose older sibling experienced a stroke approximately one year before data collection was recruited

through personal contacts to participate in this study. This person will be referred to here as *Jim*. Jim was initially approached via email and, after having the opportunity to review the interview questions, was consented via telephone as well as at the beginning of the IM interview. Although the interview schedule was structured around topics gleaned from the literature, efforts were made to keep the interview loose enough for Jim to raise unanticipated issues.

The interview for this project lasted approximately 90 minutes and, because of the nature of interviewing via IM, 3 pages of time-coded, written transcripts were automatically generated by the Google software. Content analysis of the transcript was conducted and illustrative data directly addressing the research questions, as well as some unanticipated methodological issues discussed below, were extracted. A handheld digital recording device was used by the interviewer to *memo* (Birks, Chapman, & Francis, 2008) throughout the interview with thoughts and observations related to the research questions. The digital recording was reviewed throughout data analysis to assist in understanding and clarifying interpretations of the written transcript.

To further ensure authenticity of the data, all communications about the project were confined to IM services and email, accept for one telephone call immediately in advance of the interview and one afterwards by way of a follow-up debriefing. A brief interview schedule was created in order to provide for fidelity between this pilot test and future interviews around this same topic. Jim was also given the opportunity to review and offer suggestions for the improvement of the present report prior to submitting it for review.

<div align="center">Results and Discussion</div>

This pilot test was educational both topically and methodologically as the interviewer became more comfortable with the technical and interpersonal aspects of computer-mediated interviewing. From a research standpoint this method was extremely convenient in terms of travel and resources necessary for conducting the interview. Another practical benefit was the time-coded, written interview transcript the Google Chat software automatically generates. The solitude of the interviewer's work space as he conducted the interview also allowed for intense focus on the content and process of the interview, especially when the topics became more sensitive.

Many of these same benefits might be observed from a participant's standpoint. Jim did not comment on the convenience of the method but it may be that he perceived interviewing via IM as more convenient than visiting the interviewer's office or meeting in the community and less intrusive than the interviewer visiting his home in person for this interview. Jim reported that the technical aspects of the process (e.g., logging on, interfacing with the system, typing) were "fine" and validated the usefulness of providing interviewees with questions in advance. When asked to compare this method with face-to-face interviews in terms of comfort level, Jim reported that this method was "[p]robably a little more comfortable" and that he would likely participate in an interview of this sort again.

Aside from issues related to participants downloading and installing necessary software for IM communication, the principle challenge imposed by technology in this case related to the communication time lag between questions, responses, and subsequent follow-up questions. The interview lasted almost 90 minutes but only generated 3 pages of single-spaced, printed text for analysis. By comparison, one hour of interview or focus group audio recording can generate up to twenty pages of written transcripts. In addition to yielding less data, this time lag challenged the interviewer to stay engaged in the interview for the duration and avoid becoming distracted

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by other tasks (e.g., work tasks, email). This may also have been an issue from the standpoint of obtaining thoughtful, accurate information from Jim if he was also subject to similar distractions.

The time lag Jim and the interviewer experienced in this pilot test could have been a function of the specific IM service used for this project, firewall or server delays, the speed of the internet connections, or factors related to the individual machines being used (e.g. hard disk space, processor speed, open applications). It would be worth exploring other IM services under different conditions to determine whether time lags are consistent between providers. If long time lags are typical of all communication via IM service, they may be a significant barrier to using this data collection method. Regardless, one should be thoughtful and sparing with questions posed in an IM interview in order to minimize participant burden and make the process as efficient as possible.

A more fundamental challenge of this method related to the difficulty of assessing Jim's reaction to questions without the benefit of being able to express or observe nonverbal communication. Similarly, this method limited the interviewer's ability to offer Jim human comfort when the subject matter became difficult. For example, the interviewer struggled to find a suitable text-based response when Jim described how his brother's stroke "was extremely difficult for [him] and [his] family" and how "[he] and everybody in [his] family went through a lot of sadness and anger" when his brother died from related complications.

This example illustrates the potential for emotional leveling that exists with computer-mediated communication. It may be possible to convey emotions via the keyboard with emoticons or other symbols but, generally, it is difficult to effectively modulate one's tone of voice or affect to facilitate deep intrapersonal reflection among participants. When converted to text, the strategic pauses and simple affirmations of understanding common in face-to-face interviews may take on different meanings.

In reference to the goal of gaining a better understanding of the experiences younger survivors and their family members, this pilot test confirmed much of what has been reported in the literature. Most notably, the perceived inadequacy of rehabilitation services in general and, for younger survivors, in particular. Jim related how "once [his brother] was involved with the recovery end of the health care system [his] family became quite upset and disillusioned with the entire recovery process." He went on to describe how the care facility to which his brother was discharged "was basically a rest home / hospice for elders and the staff basically could not cope with a young stroke victim" and how, had it not been for his "[m]other's strong will and persistence, [his brother] would probably have stayed bed ridden there." The other themes that emerged during the interview included the importance of survivors maintaining their independence in spite of the effects of stroke, the experience of grief among survivors and family members, and the importance of social support for survivors and their families.

Conclusion

Interviewing individuals around potentially sensitive topics via IM has both benefits and challenges. The method has potential, however, especially for certain populations who may have access to web technology but have limited functioning or mobility. The importance of allowing our method of inquiry to be driven by our research questions, as opposed to structuring our questions around an innovative data collection method, was reinforced through this pilot test. The idea of pairing this method with other more traditional methods of qualitative data collection in social work such as face-to-face or focus group interviews should also be considered.

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