

Author's Commentary on "Conducting Research in Online Communities"

Commentary On
Conducting Research in Online Communities

This case study highlights several unique challenges posed by conducting social science research on the Internet. Human subjects research generally is governed by those rules contained in 45 C.F.R. § 46 as well as the Belmont Report. In addition, the Office for Human Research Protections of the U.S. Department of Health and Human Services provides a set of flow charts to help principal investigators and IRB administrators determine which regulations apply to a particular research project. Researchers should examine the potential consequences of alternative research designs in terms of their duty to uphold the values of respect, beneficence and justice endorsed in the federal standards.

However, these general principles may not always provide sufficient guidance for researchers who explore the emerging and important area of human behavior in online venues. Some commentators suggest that traditional ethical interpretations may no longer be relevant for Internet research due to technological progress. Others contend instead that existing rules simply need to be updated and augmented by context-specific guidelines. In fact, research in different virtual environments may present different ethical implications, which then require different ethical analyses. As a result, each of the following examples of computer-mediated communication may invoke different fact-specific ethical outcomes:

- Blogs
- Chatrooms
- Computer-supported collaborative workspaces
- E-mail
- Instant messaging
- Listservs
- Massively multiplayer gaming environments
- Newsgroups

- Online communities
- Podcasts
- Webcams and video chat
- Web sites

In 2002 the Ethics Working Committee of the Association of Internet Researchers (AOIR) prepared a set of recommendations to help inform the ethical study of online human interactions. The AOIR code of ethics constitutes a set of professional norms that Internet researchers can consult in conjunction with other ethical guidelines adopted by specific academic disciplines. Since emerging technologies will continue to produce unanticipated ethical challenges, Internet researchers are encouraged to develop an enhanced sense of good judgment to resolve new ethical dilemmas encountered online. Often this means identifying specific points of conflict involved in a particular situation, and then choosing among two or more legitimate yet competing value systems to craft a workable ethical solution.

For example, in Part 1 of this case study Dr. McIntosh views the NFF community as a public arena, while Roger regards it as a private space. Dr. McIntosh initially suggests lurking in the online forum to gather research data. Such behavior presumably would not involve interaction or intervention with living individuals to obtain individually identifiable information. Therefore this version of the project might not be considered human subjects research under 45 C.F.R. § 46 and informed consent might not be needed. Alternatively, even if this project does constitute human subjects research, it may simply involve observing public behavior or collecting existing data. Those activities may qualify for a federal exemption under 45 C.F.R. § 46.101(b)(2) or (b)(4).

Roger nonetheless could argue that some sensitive posted messages might include individually identifiable information. However, gathering individually identifiable information is not considered human subjects research if that material already is public. Thus any ethical analysis must assess whether such messages were considered private when initially posted. In this case it is not stated whether the NFF community web site provides an explicit announcement to members and guests regarding whether it constitutes a private or public space.

Federal regulations indicate that individual participants, rather than researchers, should establish the relevant public/private distinction on a personal basis. According to 45 C.F.R. § 46.102(f)(2):

Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record).

However, several commentators have noted that the Internet realm problematizes the traditional division between public and private spaces since an online environment arguably can perform both functions simultaneously. It therefore may be difficult to apply the C.F.R. standards in this complex situation. For example, qualifying for an exemption under 45 C.F.R. § 46.101(b)(4) requires that pre-existing data sources be publicly available, which may not be easy to determine with respect to archived discussion group postings.

A survey of participants' attitudes in the NFF forum may reveal that it functions as a public sphere. Accordingly, Dr. McIntosh and Roger's project may be exempt from federal regulation. However, the researchers might apply for IRB approval anyway. For instance, some academic institutions require IRB clearance for all university-affiliated research, even if a project technically does not meet the federal threshold for human subjects research. Moreover, IRBs increasingly are developing expertise in working with Internet researchers. IRB administrators can provide guidance based on past experience with other online projects, such as identifying potential ethical issues implicated by particular research designs. Conversely, researchers may help educate IRB members regarding the complexities of Internet-based research.

As an example, the Belmont Report addresses whether vulnerable populations can comprehend research risks in order to provide voluntary informed consent. In the absence of the face-to-face contact associated with traditional research activities, Dr. McIntosh and Roger's efforts to screen NFF forum members in order to exclude vulnerable participants might benefit from IRB suggestions based on prior virtual research projects. Alternatively, Dr. McIntosh and Roger could help IRB members develop standards for online informed consent that could apply to future Internet research studies as well.

In Part 2 of the case study, Dr. McIntosh and Roger must evaluate several potential research designs in terms of their obligations to protect the interests of NFF forum participants. According to the federal guidelines, researchers must weigh the risks of

each approach against the benefits it offers for participants as well as the general welfare. Online researchers recognize, however, that research methods such as discourse analysis, participant observation, and social network analysis may increase the risk of disclosing identifiable participant information due to the rich descriptions contained in their narrative reports.

The AOIR guidelines suggest a conservative approach that respects forum participants' assumptions regarding online privacy even though such perspectives may be mistaken or unrealistic. Variables such as the size of the online community involved, as well as the potentially sensitive nature of conversational topics, also may affect participants' privacy expectations and thus influence the ethical analysis. As a result, IRB feedback could be valuable during this assessment, or perhaps might help generate alternative scenarios that may be more ethically advantageous. However, some commentators contend that IRB members sometimes do not fully understand the complex nature of online research. In fact, in some cases IRBs may seek to impose unreasonable constraints upon Internet researchers.

Since the Internet increasingly is a global environment, online research also may involve cross-cultural perspectives. For example, individual online participants may possess different cultural attitudes regarding the nature and scope of personal privacy. In such cases the question arises as to whose views should govern the analysis.

U.S. regulations such as the Belmont Report and 45 C.F.R. § 46 apply a utilitarian cost/benefit calculus. In contrast, other cultural traditions adopt a more deontological position which asserts that fundamental human rights, including the right to privacy, simply cannot be violated. Furthermore, international regulatory standards such as the European Commission's Directive on Data Protection potentially may conflict with U.S. mechanisms for protecting the privacy of research participants. As a result, Dr. McIntosh and Roger must address the status of any non-U.S. participants in the NFF online community when considering their responsibilities as researchers.

In Part 3 of the case study, Dr. McIntosh and Roger propose a participatory research design that empowers NFF forum participants as stakeholders in the research process. At the same time, they must decide whether to engage in overt research as opposed to (1) deceptive research with a debriefing component; (2) complete nondisclosure of research activities; or (3) incomplete disclosure of the true nature

of their research. In many ways an online environment can facilitate covert research options due to the lack of face-to-face communication. This approach may be advantageous for certain research goals, but must be justified on an ethical basis under the federal guidelines.

The case study indicates that messages posted in the NFF virtual forum are publicly available and searchable. However, forum moderator Wayne confirms that most participants view such messages as private despite their actual public nature. If Dr. McIntosh and Roger offer guarantees of confidentiality, they must then protect the digital data they collect against unauthorized access. For example, they might encrypt data while in transit and also restrict access via a system of passwords. They may choose to store raw data files on a non-networked computer and safeguard individual identifiers on a different machine. In addition, they could develop trustworthy data retention and destruction policies and explain them to participants.

If Dr. McIntosh and Roger include detailed quotes from forum participants in any published materials, they should recognize that readers might be able to use current or future search engine technologies to identify the NFF forum as the source of such information. Thus it may be important not only to shield individual identities by using pseudonyms, but also to mask the online community's true identity as well. One alternative is to provide an additional layer of anonymity by creating "double pseudonyms" rather than merely relying upon participants' own online pseudonyms.

Another option is to modify the specific language of quoted material in a manner that reduces the likelihood that it could be traced back to the NFF forum through online search techniques. Of course, this risk must be balanced against the goal of presenting participants' statements accurately and respectfully through direct quotes. In addition, some participants may view their posted messages as published works subject to copyright protection, which might limit the researchers' ability to alter or redistribute such original communications in scholarly publications unless they obtain the explicit permission of those authors.

Finally, negotiating consent at the group level to conduct research in the NFF online community may raise the issue of whether basic concerns for individual respect, beneficence and justice have been fully addressed. A simple majority vote limited to current members might not represent the interests of all participants in an inclusive manner. For example, some participants may not fully understand the risk of public

exposure of sensitive online discussions, particularly since there could be no opportunity for face-to-face conversations to resolve potential ambiguities in the informed consent process. Moreover, Dr. McIntosh and Roger must decide how best to treat the posted messages of NFF participants who choose not to join the research project or do not complete an informed consent form. Consulting IRB administrators could produce a better strategy for developing a shared dialogue regarding informed consent that is sufficiently efficient yet protects individual rights. Prior IRB experience with documenting or waiving informed consent in online environments also may influence whether the board will accept digital signatures in lieu of handwritten versions.

Internet research challenges principal investigators and IRB members to apply current ethical rules within an online environment that continues to be transformed by socio-technical developments. Dr. McIntosh and Roger may decide to review the AOIR recommendations for guidance in conducting ethical research in virtual communities, and to consult the professional norms established by sociologists within their community of practice as well. Since no guidelines can keep pace with emerging technologies, however, Dr. McIntosh and Roger should interpret 45 C.F.R. § 46 and the Belmont Report in an adaptive manner that upholds the essential principles of both documents. In addition, they should leverage the expertise of IRB administrators to translate federal regulatory requirements in a meaningful way to reflect the ethical realities of the contemporary networked world.

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