

Running head: INTERNET MEDIATED METHODS FOR ONLINE QUALITATIVE

Lorraine, you offer a thorough review of the research methods that are being used in online environments. You also present a fairly balanced view of these methods, focusing on the positives and the negatives. Of course, the point about using conservative program that do not require a high level of computer knowledge is good as we saw in our chat group. I know this is an area of interest for you, so I want to push you to use a more critical lens when reviewing such articles and think about some of the issues raised by critical theorists about online research. Online research can automatically exclude participants who do not have access to computers. Also, the role of the researcher can shift in ways that are mediated by the technology.

Grade: A

Internet Mediated Methods for Online Qualitative Research

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According to Internet World Stats, there are 1,076,203,987 internet users worldwide representing a 198.1% growth from 2001 to 2006 (<http://www.internetworldstats.com/>). This explosion has resulted in the creation of online communities and global opportunities for generating and collecting data on social interaction. The internet has numerous communication modes that many researchers have utilized as means of collecting data for qualitative research. Private email, email lists, posting forums, instant messaging and multi-user chat areas are examples of the types of communication modes that have matured to the point where qualitative methods can be applied (Hughes & Lang, 2004). The intent of this paper is to demonstrate how researchers can employ internet based qualitative methods, such as e-interviewing, e-focus groups and netnography to collect rich, contextually-situated data and their potential benefits and limitations.

When comparing the face to face interview with an e-interview, the two blatant differences are in terms of time and space. E-interviewing is likely to be asynchronous and involve multiple e-mail exchanges between the interviewer and participant over an extended period of time and in terms of space, the relationship takes place “at a distance through the medium of electronic, screen-based text” (Bampton & Cowton, 2002, ¶6). The utilization of e-interviewing is a relatively new method for conducting qualitative research but is rapidly increasing (Meho, 2006). Meho states that “nearly all of the studies conducted before 2003 were methodological in nature, aiming simply to test the suitability of email for qualitative interviewing” and “studies conducted since 2003 have not addressed methodological issues,

which suggests that email interviewing has become a viable tool for qualitative research” (2006, p.1285). Table 1 outlines Meho’s compilation of advantages and disadvantages for e-interviewing (2000, p.1292).

The e-interview process is freed from the constraints of time and place giving the participants the freedom to choose when and how to answer questions. The technique may involve sending questions with the invitation to participate, emailing introductory questions and responding to replies with further questions, asking questions in set intervals and sending all the questions at once (Meho, 2006). Face to face interviews provide the researcher with the ability to ask follow up, probing type questions. While probing can be used in an email format, there is a risk that respondents may choose to disappear. According to Meho, there is no set standard for conducting e-interviewing research, however, the following elements should be evident: invitations, subject line, self-disclosure, interview request, explanation of research, incentives (if any) , research consent and ethics, interview questions, instructions, deadlines and reminders, follow up questions, quality of participants/data and survey methodology” (2006, p.1293).

E-focus groups are usually synchronous in nature but can be asynchronous or both and involve one or more moderators with predetermined participants and online venue (Mann & Stewart, 2000). Commonly, the moderator(s) has a pre-prepared list of questions to initiate discussion and asks focusing or follow up questions during discourse (Hughes, 2004). Communication platforms (i.e. Blackboard, Web CT...) provide the framework for this method and create a dated transcript which can be reviewed or exported to word processing or analytical software for further analysis. One benefit to this methodology is the ability to access past

dialogue from other participants through the use of threads and it negates the possibility of misunderstanding because of poor hearing or talking over one another as in a face to face scenario (Hughes 2004). When employing any type of technology, there is always a risk of malfunction and e-focus groups are no exception. To conduct this type of research it is necessary for all participants to be logged in and functioning reliably or the session cannot commence. To combat this potential dilemma, Hughes recommends “user platforms that are conservative with respect to imposed technological requirements” (2004, p.97). E-focus groups are suited for research in which the participants are comfortable with technology, so that “typing speed, logon navigation, and other procedural issues do not interfere with the flow of ideas (2004, p.107). Another concern of researchers is the possibility of the participants’ multi-tasking (i.e. checking email, attending to children, talking on the telephone...) and not devoting enough attention to the forum (Mann & Stewart, 2000). Hughes and Lang outline the features of synchronous internet-based group communications in Table 2 (2004, p. 105).

Netnography is a term coined by Robert Kozinets and refers to ethnography on the internet (Dholakia & Zhang, 2004). Kozinets defines netnography as a “new qualitative research methodology that adapts ethnographic research techniques to the study of cultures and communities emerging through computer mediated communications” (2002, p.62). Virtual communities offer researchers access to “people who share specific interests, attitudes, beliefs, and values regarding an issues, problem, or activity” – otherwise known as virtual communities (Wright, 2005, ¶6). Members of virtual communities meet online in chat rooms, blogs, MUDS/MOOs... and are usually synchronous. Participation by community members range from active to inactive and are often not registered users, thus making it difficult for researchers to

establish a sampling frame. Widely used to conduct consumer market research, netnography provides the researcher with rich textual, objective discourse that can be easily captured without regard to distance and time.

Compared to e-interviews and e-focus groups, netnography is broader in scope, not as narrow analytically and tends to be less interpretive. Derived from “naturally occurring, communal, cross-consumer interaction that is not found in focus groups or personal interview, netnography reveals interesting consumer insights, impressions, linguistic conventions, motivations, consumption web linkages and symbols” (Kozinets, 2002, p.71). This method of research produces unsolicited feedback – eliminating labor intensive, obtrusive methods of traditional ethnographic inquiry.

As with any methodological approach, there are benefits and disadvantages to internet mediated methods. One obvious benefit is the inclusion of people with disabilities or limitations. According to Seymour, “people with disabilities have the potential to be among the major beneficiaries of the technological revolution” as it bypasses “aspects of bodily function enabling participation in previously inaccessible domains” (2001, p.149). Computer mediated communication is a more egalitarian method of research as it provides access to unique population that would otherwise be difficult to involve in a face to face interview. The internet enables contributions from those individuals who are unable to express themselves verbally (i.e. stuttering, shyness, second language barriers...) and those with physical disabilities to participate without leaving their home (Seymour, 159). Technology has provided the researcher with the means to readily target or include populations using a variety of products, such as: 1) multimedia

(i.e. low literacy population); 2) multiple language software (i.e. other cultures); and 3) software for the visually and hearing impaired.

Online communities are of particular benefit to disabled individuals. People with diseases or conditions, such as HIV, eating disorders, and physical disabilities are often stigmatized in the non-virtual society. Communication among people who are unable or hesitant to meet face to face can be facilitated online, thus providing a venue to readily express feelings, views and opinions. Seymour cites “giving a voice” to the researched is more than providing them with the opportunity to speak – it also involves the platform from which individuals are able to participate (Seymour, 159).

Recruitment of participants in conducting qualitative research can be accomplished in a variety of ways. E-interviewing and e-focus groups can solicit potential participants via email, snowballing (users recommending others) or invitations through listservs, message boards, discussion groups or personal blogs or websites (Meho, 1288). Recruitment online can be daunting for many researchers and very easily negotiated by others. Meho cites unread (likely caused by information overload) and undeliverable emails (change in job, change in ISP...) as a problem when recruiting by email (2006). Recruitment from online communities can be met with controversy. Many online community members consider posting research invitations as offensive and can create a backlash of irate emails directed at the researcher. Before posting to an invitation, it is beneficial to have a diplomatic dialogue with the web administrator as it may help gain access and lend perceived legitimacy to the research. The benefit of utilizing online recruitment is the ability to invite participation of large, geographically dispersed samples of

people versus the traditional labor intensive and costly means of snail mail, long distance calls, or travel.

Informed consent and confidentiality is critical to qualitative research and online research has components similar and distinct from traditional research. Consent form should outline the nature of the interview and include participant's acknowledgement of their willingness to be interviewed. Consent can be given by fax, snail mail, email with acknowledgment form as an attachment or affirmatively expressed in the body of the email that consent form was read and agreed to. Issues of confidentiality are always a critical element when conducting research – especially when transferring data online. Utilizing limited access venues (intranets) and imposing security (user/passwords) is advisable, however, online security still remains contentious and should be addressed when soliciting consent. Researchers should be aware of viruses, hackers, cyberstalkers and other intruders that penetrate the research field and obtain or taint personal information of the participants.

The rapidly changing field of technology makes it incumbent upon researchers to keep abreast of the legal climate and the risks that are associated with utilizing the internet for qualitative research. An example is Mann and Stewart's reference to a participant consent form regarding online research and the absence a privacy policy – making this form obsolete (2000). On December 7, 2005, New York State enacted a State Technology Law that defines and addresses private information as well as the obligations of the recipients of personal data - such as implementing a privacy policy (<http://www.cscic.state.ny.us/lib/laws/documents>). Due to the evolving issues of online qualitative research, researchers are vulnerable to lawsuits and should take precautions to protect their personal assets. According to Nick Economidis, Vice President

of product manager for technology, media and network security for AIG's National Union Fire Insurance Co. of Pittsburgh, Pa, claims of misappropriation of data tend to be "very significant," with the potential "cost of defending such claims exceeding \$100,0000" (Neal, 2006). This merely represents the cost of defense in the event the researcher is sued – not judgments that can result in even higher dollar amounts. To curtail the researcher's exposure to risk, it is important to ensure that proper controls are in place to protect not only the participants but the researcher as well. Liability for identity theft or privacy issues can be reduced through privacy policies and hold harmless addendums to the consent form as well as cyber-liability insurance for third party claims.

Visual or non- verbal cues and status differences are elements in face to face interviewing that are less evident or non-existent in conducting virtual qualitative research. Race, gender, age, voice tones, dress, ethnicity, shyness, gestures and disabilities are reduced or eliminated in the context of internet mediated research methods. This method may also provide safeguards against individuals whose inhibition of discussing sensitive issues in face to face processes, would result in rich data derived online. Emotional graphics or emoticons 😊 have gained popularity and are used as textual cues to replace body language and voice inflections 😡. Acronyms, such as "LOL" (laugh out loud) or "ROFL" (rolling on the floor laughing) as well as underlining and capitalizing text have the ability to transmit emotion digitally and should be encouraged by researchers to increase the depth of the data (Seymour, 162). Wright's concern with self reported data is valid as there is "no guarantee that participants provide accurate demographic or characteristic information" (2005, ¶14).

Time and cost certainly contribute to the allure of online qualitative research. The ability to reach multiple individuals for research participation or multiple participants simultaneously is a strong argument for utilizing internet mediated methods. The elimination of travel, postage, printing, organizing face to face meetings, long distance phone calls and data entry, coupled with analytical software programs, offers an inexpensive alternative to the cost of traditional research. Bypassing the time consuming and labor intensive task of recording and transcribing interviews can impact the budget constraints inherent in most research projects. Seymour cites that by eliminating the costs involved with practical tasks, a more expansive data collection would develop (2001).

As previously mentioned, the use of software in collecting data is popular in the online research field. Service features may include email response notification, real time response tracking, required answer fields to prevent incomplete data, ability to share data with other researchers, assistance with recruitment, unsubscribing respondents to eliminate multiple responses, as well as merging with traditional methods – i.e. telephone capabilities where participants enter their response with the touch tone keypad (Wright, 2005). According to Mann and Stewart, analytical software is crucial to online researchers who tend to use a combination of qualitative and quantitative methods – “forms of self-reporting (interviews, diaries) may readily access perceptions of media use, while electronic data gathering may be better for measuring actual use” (2000, p.960). Wright provides an analysis of software programs that are utilized in online qualitative research, which is reflected in Table 3.

In order to truly exploit the available technology, researchers must have the necessary skill set to successfully implement internet mediated methods in their research. There are unprecedented opportunities for qualitative research to be conducted online as well as access to millions of potential participants who would otherwise not be accessible. The internet mediated methods outlined can be employed quickly and inexpensively compared to traditional methods and can generate high quality data if conducted properly. As online qualitative research is relatively new, Meho calls for further research investigation relevant of methodological issues and the factors that “influence its reliability, how the implementation of some techniques may improve rate and quality of data, and how respondents react to internet based interviews” (2000, p.1293).

In conclusion, conducting qualitative research using internet mediated methods is an exciting and emerging field. Having proper controls in place can result in quality research and protect participants as well as researchers. Convenient, quick and inexpensive, conducting qualitative research online offers unprecedented opportunities for researchers and the community. Although challenging, the use of online methods will become more prevalent as use is expanded and the need to explore effectiveness, reliability and implementation gains momentum.

Table 1

	Advantages	Disadvantages/Challenges
Interviewers and participants	<p>Allows access to individuals often difficult or impossible to reach or interview face-to-face or via telephone</p> <p>Allows access to diverse research subjects</p> <p>Allows access to individuals regardless of their geographic location</p> <p>Allows interviewing of individuals who do not or cannot express themselves as well in talking as they do in writing</p> <p>Allows interviewing of individuals who prefer online interaction over face-to-face or telephone conversation</p>	<p>Limited to individuals with access to the Internet</p> <p>Requires skills in online communication from both interviewer and interviewees</p> <p>Requires expertise in technology from both interviewer and interviewees</p>
Cost	<p>Eliminates expenses of calling and traveling</p> <p>Eliminates expenses of transcribing</p> <p>Decreases cost of recruiting large/geographically dispersed samples</p>	<p>Can be high for participants</p>
Time	<p>Eliminates time required for transcribing</p> <p>Eliminates the need to schedule appointments</p> <p>Allows interviewing more than 1 participant at a time</p>	<p>May take several days or weeks before an interview is complete</p>
Recruitment	<p>Done via e-mail, listservs, message boards, discussion groups, and/or Web pages</p>	<p>Invitations for participation may be deleted before they are read</p>
Participation	<p>Done by e-mail</p>	<p>High undeliverable rates (e.g., due to inactive e-mail addresses)</p> <p>Some participants may drop out before interview is complete</p>
Medium effects	<p>Allows participants to take part in the interviews in a familiar environment (e.g., home or office)</p> <p>Allows participants to take their time in answering questions</p> <p>Allows participants to express their opinions and feelings more honestly (because of sense of anonymity)</p> <p>Encourages self-disclosure</p> <p>Eliminates interruption that takes place in face-to-face/telephone interviews</p> <p>Eliminates transcription errors</p> <p>Eliminates interviewer/interviewee effect resulting from visual and nonverbal cues or status difference between the two (e.g., race, gender, age, voice tones, dress, gestures, disabilities)</p> <p>Cues and emotions can be conveyed through use of certain symbols or text</p>	<p>Empowers participants, essentially allowing them to be in control of the flow of the interview</p> <p>Does not allow direct probing</p> <p>Requires that questions be more self-explanatory than those posed face-to-face or by telephone, to avoid miscommunication and misinterpretation</p> <p>Loses visual and nonverbal cues due to inability to read facial expressions or body languages or hear the voice tones of each other</p> <p>May narrow participants' interpretations and, thereby, constrain their responses</p> <p>Requires meticulous attention to detail</p> <p>Participants may lose focus</p>
Data quality	<p>Allows participants to construct their own experiences with their own dialogue and interaction with the researcher</p> <p>Facilitates a closer connection with interviewee's personal feelings, beliefs, and values</p> <p>Data are more focused on the interview questions asked</p> <p>Responses are more thought out before they are sent</p>	<p>One-dimensional (based on text only)</p> <p>In-depth information is not always easily obtainable</p>

Advantages/Disadvantages of Email Interviewing

Table 2

Features of Synchronous Internet-based Group Communications

Criticism	Response
Lack of non-verbal inputs	Substitute Cues: emoticons, typography, acronyms, case, interjections; Non-verbal judgments have pros and cons
Loss of face to face dynamics	Elimination or reduction of dominant talker, shy participant, and rambler problems.
Difficulty of insuring attention to topic	Multi-tasking is a natural mode of online activity; may be appropriate for research into online behaviors
Slower interactions	Users may contribute freely at any point without waiting; Chat interface provides perfect session memory
Participants contribute less	Parallel, simultaneous threads increase total output
Participants can edit their remarks while typing	But don't necessarily do so; May be desirable for some research questions
Limited role of moderator	Different skill set, modified role; Chat interface provides perfect session memory for follow-ups
Difficulty of encouraging equal participation	Moderator uses alternate means of stimulating discussion; Chat system encourages more participation – no need to take turns.
Difficulty of insuring the identity of participants	Depends on how participants are recruited; Authenticity is always negotiated and situated
Difficulty in exposing subjects to external stimuli	Impact varies depending on research questions; Multimedia objects can be presented to group

Table 3

Wright's Comparison of Online Survey Software and Services

Company Name/Product	Features	Pricing	Service Limitations
Active Websurvey http://www.activewebssoftwares.com/	Unlimited surveys; software automatically generates HTML codes for survey forms	Information unavailable on website	Customer required to purchase software; limited to 9 question formats
Apian Software http://www.apian.net/	Full service web design and hosting available	\$1195 up to \$5995 depending on number of software users; customer charged for technical support	Customer required to purchase software
CreateSurvey www.createsurvey.com	Standard features; educational discount	\$99 a month for unlimited surveys and responses; free email support	Survey housed on company server for a set amount of time
EZSurvey www.raosoft.com	Unlimited surveys; mobile survey technology available; educational discount	\$399 for basic software; additional software is extra; telephone training is \$150 an hour	Customer required to purchase software
FormSite www.formsite.com	Weekly survey traffic report; multiple language support	\$9.95 up to \$99.95 per month depending on desired number of response	Survey housed on company server for only a set amount of time; limited number of response per month
HostedSurvey www.hostedsurvey.com	Standard features; educational discount	Charge is per number of responses; first 250 response are free, then around \$20 every 50 responses.	Survey housed on company server for only a set amount of time
InfoPoll www.infopoll.net/	Standard features; Software can be downloaded for free	Information unavailable on website; limited customer support; training available for a fee	Software can be downloaded free, but works best on InfoPoll server; customers appear to be charged for using InfoPoll server
InstantSurvey www.netreflector.com	Standard features; supports multimedia	Information unavailable on website; free 30 day trial	Survey housed on company server for only a set amount of time
KeySurvey www.keysurvey.com	Online focus group feature; unlimited surveys	\$670 per year for a basic subscription; free 30 day trial	Survey housed on company server for only a set amount of time; limited to 2000 responses
Perseus www.perseus.com	Educational discount; mobile survey technology available	Information unavailable on website; free 30 day trial	Survey housed on company server for only a set amount of time

PollPro www.pollpro.com	Standard features; unlimited surveys	\$249 for single user; access to PollPro server is an additional fee	Customer required to purchase software
Quask www.quask.com	Supports multimedia	\$199 for basic software; access to Quask server for an additional fee	Customer required to purchase software; more advanced features only come with higher priced software
Ridgecrest www.ridgecrestsurveys.com	Standard features; educational discount	\$54.95 for 30 days	Survey housed on company server for only a set amount of time; limited to 1000 responses for basic package
SumQuest www.sumquest.com/	Standard features; user guidebook for creating questionnaire available	\$495 to purchase software; free unlimited telephone support	Customer required to purchase software
SuperSurvey www.supersurvey.com	Standard features	\$149 per week for basic package.	Survey housed on company server for only a set amount of time; 2000 response per week limit
SurveyCrafter www.surveycrafter.com	Standard features; educational discount	\$495 for basic software package; free and unlimited technical support	Customer required to purchase software
SurveyMonkey www.surveymonkey.com	Standard features; unlimited surveys	\$20 a month for a basic subscription; free email support	Survey housed on company server for a set amount of time; limited to 1000 initial responses
SurveySite www.surveysite.com	Company helps with all aspects of survey design, data collection and analysis; online focus group feature	Information unavailable on website	Company staff rather than customer create and conduct survey
WebSurveyor www.websurveyor.com	Standard features; unlimited surveys	\$1,495 per year for software license	Customer required to purchase software
Zoomerang www.zoomerang.com	Standard features; educational discount	\$599 for software	Customer required to purchase software

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