

# Issues in Online Focus Groups: Lessons Learned from an Empirical Study of Peer-to-Peer Filesharing System Users

Jerald Hughes and Karl R. Lang

Zicklin School of Business, Baruch College, City University of New York (CUNY), New York, USA

[gerald\\_hughes@baruch.cuny.edu](mailto:gerald_hughes@baruch.cuny.edu)

[karl\\_lang@baruch.cuny.edu](mailto:karl_lang@baruch.cuny.edu)

**Abstract:** The development of easy-to-use Internet tools for synchronous communications has made a new research method possible: online focus groups. Attempts to apply them to questions formerly addressed by face-to-face focus groups have resulted not only in promising avenues for research, but also in substantive criticism. We have chosen to adopt online focus groups as a research methodology for a qualitative study of user beliefs and attitudes concerning peer-to-peer filesharing systems. This project is still in its early stages, so herein we describe not confirmatory findings of rigorous research, but the issues raised by our exploratory study, and indications of important issues to address in the use of online focus groups. This paper also demonstrates a novel analysis method which visually maps one of the unique characteristics of such groups, multi-threaded simultaneous conversations, and uses such maps to identify some notable tendencies and behaviors. We also identify some typical participant strategies we have observed, describe some skills and techniques for use in moderating such sessions, identify some powerful advantages provided by the instant and automatic transcript generation capabilities of chat session software, and characterize some important research questions to be addressed in future research.

**Keywords:** online focus groups, qualitative, focus group methodology, file-sharing, digital music, digital media

## 1. Introduction

The Internet is a rich source of data for many questions of interest to researchers in such fields as the Social Sciences, Information Systems, Computer Science, Marketing and Management Science, to name just a few, and Internet studies have employed both qualitative and quantitative methods. Widely available Internet applications, particularly for communications, have matured to the point at which the Internet can now be exploited not only as a data source, but also a platform for conducting research, such as studies utilizing online surveys (Sheehan and Hoy, 1999; Couper 2000). One qualitative method taking advantage of the new technology which seemed rich with promise was the use of Internet-based synchronous communication tools such as Chat to conduct online focus groups. While face-to-face focus groups to conduct qualitative research are widely used and accepted (Millward, 2000; Fern, 2001), online focus groups, particularly those done for the purposes of market research, did not always produce the desired results. As a result, some researchers have concluded that online focus groups cannot substitute for the traditional face-to-face focus group

methods. Among the difficulties and limitations they encountered in their studies were the following: diminished role of the moderator, limited online group dynamics, lack of non-verbal inputs, limitations regarding observer involvement and monitoring, participant anonymity, limitations in exposing participants to external stimuli, and limitations caused by technical difficulties.

We are conducting a qualitative study of the attitudes and behaviors of users and innovators in the digital music world, particularly in regard to the use of peer-to-peer filesharing systems. Since these are behaviors and attitudes inherently derived from and occurring on Internet applications, we felt it was appropriate to explore the possibility of conducting the research itself on the Internet, through online focus groups. Our preliminary results indicate that it may be useful to re-examine the skeptical views of online focus group methods in light of specific technologies, research questions, sample groups, and other factors. Our study uses Blackboard® electronic learning software and its built-in virtual classroom feature to conduct online sessions, during which participants discuss their experiences with downloading and trading digital music, in

response both to questions from the moderator and to comments from each other.

It is not necessary to conclude that online focus groups are uniformly unsatisfactory. Instead, we propose that their usefulness and appropriateness is related to the specific research context. For example, while online focus groups may fall short in attempts to evaluate new tangible products or other marketing-oriented research, we believe that they can be beneficial for exploratory research, experiential research (particularly of online experiences), and theoretical research, including both theory development and theory-supporting studies.

Based on the experience from our own study, we will outline issues which point towards a new online focus group methodology as an extension of the traditional methodology. We identify research contexts as appropriate if the studied phenomenon occurs in an online environment, and if the studied actors perform mostly online as well. We use file-sharing among members as an example of a research context that is suitable for online focus group research. We discuss how to address previously identified problem areas in online research. We discuss the benefits of online research in terms of cost of running sessions, the possibility of using participants in different locations, the nature of the data thus generated, and automatically generated transcripts. We also discuss the limitations and technical requirements of this new research approach, and address the specific objections to online focus groups which have appeared in the literature.

## **2. Online qualitative research**

The Internet is a rich potential source of data for qualitative analysis. Researchers have begun to take advantage of several of the communication modes available on the Internet, such as private email, email lists, public posting forums, instant messaging, and multi-user chat areas. These communication modes, and user familiarity and comfort with them, have matured to the point where qualitative methods can be applied not only to research about the Internet, but to using the Internet itself as a component of one's research tools. While there have been

many studies about user behavior in online environments, and analyzing data collected from the Internet, relatively few have actually been conducted online.

Clarke (2000) has identified issues of importance in conducting research online, including the potential impacts of text-only interfaces, asynchronous communications, sampling issues, and ethical considerations. In another paper by Clarke (1998), email was used to conduct one-on-one interviews for a case study, in part to obviate the difficulties presented by participants who were widely dispersed geographically. Sharf (1999) used newsgroup postings as raw data for a study of online discourse, and found it prudent to take extra steps to insure that the material was both collected and used in a clearly ethical manner. Gaiser (1997) used email distribution lists created specifically for conducting asynchronous online focus groups to study social forms in cyberspace. Gaiser decided that since the research questions being pursued dealt with online phenomena, online focus groups provided the correct natural context. Waskul, Douglass and Edgley (2000) conducted a study which recruited participants from chat rooms, and collected data from one-on-one realtime interviews conducted online. They concluded that this plan was appropriate for their particular research context, which dealt with online behaviors, while at the same time recognizing limitations specific to the method. Ruhleder (2000) observed the texts produced by students in an online master's degree program as they participated in chat forums provided as 'virtual classrooms', and concluded that the distributed teaching environments "created new opportunities for capturing and analyzing interaction in the hybrid spaces that are becoming integral parts of how people, institutions, and communities organize their work and their lives." Notice that all of these studies have in common the fact that the data collected is in the form of text. While it is conceivable that in a broadband-enabled future, Internet telephony and video (teleconferencing) communications will become universally available and employed, at present the communication technologies most available and familiar to users are text-oriented. Facility with online text, particularly in real-time environments such as chat rooms, is thus by necessity the

norm for users of Internet communications. As we shall see later on, this focus on text has both advantages and drawbacks.

Largely because of the cost and convenience benefits provided by online communication tools, Internet-based realtime online focus groups have been exploited in the private sector by companies hoping to collect meaningful marketing data. In this context, they have attracted considerable criticism. Sinickas (2001), Edmunds (1999), and Greenbaum (1997) have pointed out what they consider the shortcomings of focus group research carried out online. Among their criticisms are the following:

- Lack of non-verbal inputs
- Loss of face-to-face group dynamics
- Difficulty of insuring attention to topic
- Limited role of the moderator
- Slower interactions -
- Participants have time to consider and edit their remarks while typing
- Participants, typing more slowly than they speak, contribute fewer words
- Difficulty of encouraging equal participation
- Screening - no way to insure the identity of the person participating
- Difficulty in fully exposing subjects to the desired stimuli (seeing, handling products)

Despite these caveats, Sinickas does recommend using online communications for persons who are difficult to reach because of travel distances or work schedules, rather than discarding them from the study altogether. Bryman and Bell (2003, pp. 502-505) also give this reason for using online focus groups, and further suggest that they may be useful for particular research topics. In our case, the research question of interest is participants' ideas and beliefs about a specific type of online activity, the use of peer-to-peer filesharing systems. This approach is supported by Sweet (2001), who suggests that Internet use is a topic for which conducting the research online is appropriate.

### 3. Research context

The research program we are pursuing looks at the impact of file-sharing programs and digital media in general on the music industry, particularly as information technologies change both the behavior of users and the conditions of doing business for music content providers. This study is conceived as theory development research, as a follow-on to Hughes and Lang (2003), an analytical paper which identified, among other developments, shifts in power among the interested parties of the music industry, and shifts from centralized, hierarchical, rational processes to distributed, networked, emergent processes.

The project described below is a qualitative study, using data collected from online focus groups drawn from three targeted populations. The first consists of technologically sophisticated users of MP3's, the second of industry experts and innovators recruited from a screened and monitored list server, and the third from an online forum of parents discussing issues raised by MP3's as used by their children. The study thus depends upon theoretical sampling, as discussed by Miles and Huberman (1984) and Charmaz (2000). Further, the sampling method aims to maximize the validity of the data by using key informants as subjects (Green 2001).

Online focus group members are first identified as potential candidates from public postings, then contacted by email to request their help with the project. For this particular project, we have not had to resort to any additional incentives to get people to participate. Once a time for the session has been settled, participants are given dummy ID's and passwords to an Internet site created on Blackboard<sup>®</sup> specifically for the purpose of supporting this research project. The ID's and passwords give them sufficient access to Blackboard<sup>®</sup> to reach the 'Virtual Classroom', which is a common chat area. The session begins when all the group members have logged in, and ends when all of the questions have been discussed or when the participants need to leave for other commitments. A typical session lasts between 60 and 90 minutes. Since members are logging on with dummy ID's created by the system administrator

(Digimusic Participant1, Digimusic Participant2, etc.) they are essentially anonymous to each other. The moderator's screen name in this case is the actual name of one of the authors (a convention of Blackboard<sup>®</sup>, which is nominally set up for teacher-student interactions). In order to handle the monitoring and technical task load, which tends to be high, we have conducted sessions with both authors present at a single workstation, and only one moderator name in the chat area.

Our practice has been to approach each session with a prepared (but evolving) list of questions, each of which is used to kick off a round of discussion. Once the members have begun to contribute, the moderators ask focusing or follow-up questions, comment upon members' responses, or, when the progress of the members' chat postings is particularly swift and productive, passively observe. We have found that our list for this particular project requires no less than two and as many as eight minutes for each question, depending to some extent on the number of participants. Since our targeted sample is drawn from relatively fast-typing users who are highly familiar with online communications technology, the pace of postings on the screen is such that five members in a given focus group is likely the maximum that can be reasonably monitored, even with two moderators present at the workstation. This number is just below the 8±2 range recommended by Fern (2001), although Fern does note that the trend in the focus group industry is toward smaller groups. Once the session is over, the Blackboard<sup>®</sup> system automatically creates a dated transcript of the session, which can be reviewed online or exported to word processing and analytical software.

#### 4. Using online focus groups

Edmunds (1999) and Stewart & Shamdasani (1990) both point out that focus groups are appropriate for exploratory research, in which qualitative rather than quantitative analyses are to be produced, in order "to provide an understanding of perceptions, feelings, attitudes and motivations" (Edmunds, 1999). The study described herein is such an exploratory study, intended to elicit the attitudes and perceptions of both industry

experts and users towards digital music media, with an eye toward the possibility of facilitating the design of a quantitative study (Edmunds, 1999) later on. Greenbaum (1993), in his list of appropriate uses for focus groups, includes a category called "Attitude Studies", a collective term for several related purposes, one of which is "to determine consumer attitudes toward specific issues." In this case, it is attitudes which concern us, and we already have indications of some unexpected results which indicate that the music industry may be trying to address issues, by making major and costly technological changes, which are viewed by users as relatively unimportant. For example, one response of the music industry to the relatively low-quality MP3 music file format has been to introduce products with higher audio quality which the consumer cannot readily reproduce or redistribute, such as the Super Audio CD and the DVD-A (surround sound audio) formats. So far, all of our session participants have indicated, contra the industry view, that the lower quality of MP3 files is not important to them at all. There is already some quantitative research to support this notion (Bhattacharjee et al, 2003). If this response remains consistent as we continue to collect data, it would constitute an important finding with strategic implications for producers of digital media.

It is certainly true that online focus groups as conducted in text-only chat areas lack the media richness and social presence of face-to-face focus group sessions (Schneider et al 2002). However, in the few years that Internet communications have become widely accessible, substitute cues have been developed which are already to some extent standardized and familiar to experienced online users. We have found that emoticons [ :-), :((( ], typographical cues [!!!, ????, – See Figure 1 under participant D4], standard acronyms [IMO-In My Opinion], all-uppercase text [ 'NOT' – (See Figure 2 under participant D3), and interjections [ "whoa!"] are spontaneously introduced by group members to enrich the text-only experience. We do not assert that such workarounds make text-based chat the equivalent of face-to-face meetings; rather, realtime chat provides an experience and generates data which is

different from face-to-face, but nevertheless rich in its own way.

Greenbaum (1997) mentions 'group dynamics' as a factor which is problematic for online focus groups. While it is true that interactions among members in a text-based chat room are not identical to those of face-to-face groups, group interactions do take place online. Furthermore, at least one well-known dynamic, the domination of the discussion by one or a few members, is simply not possible online. Krueger (1994) and Fern (2001) dedicate portions of their texts on focus groups specifically to dealing with the dominant talker, who wastes limited session time by monopolizing the discussion. The chat room interface is, by virtue of its technology and interface alone, inherently democratic; every participant's 'voice' is guaranteed a hearing, without the necessity of waiting for an opportunity to jump in. Thus, persons who are for any reason slower to speak up in a face-to-face situation are at no disadvantage whatsoever in the online focus group. Krueger includes instructions for how moderators can handle "The Expert, the Dominant Talker, the Shy Participant, and the Rambler." The nature of the chat interface has given rise in our study to a different list of participant behaviors, which might be labeled:

- Monologuing - typing a series of posts on a solitary thread, without responding to others, and without their responding to him/her;
- Dittoing - contributing, but mostly by agreeing with others' opinions;
- One-Liners - statements with relatively brief content; the nature of the interface in Blackboard<sup>®</sup>, as well as in many other chat systems, encourages this type of participation, since the input section displays only one line of text several dozen characters long; Schneider et al (2002) found that comments of online focus groups were shorter on the average than those produced in face-to-face groups; however, this behavior is not universal, since we also have
- Essays - composing comments as complete paragraphs, consisting of multiple, orderly and grammatical complete sentences; the time it takes to conceive and type in these paragraphs means that the Essayist contributes fewer posts, but perhaps with deeper content than the One-Liner;
- Challenging - monitoring others' contributions closely, and disputing points of disagreement

Some of these tendencies can be observed in the analysis of parallel and multi-threaded chat conversation which appears in Figure 1. Note and compare the similarities and differences between this session, which included five participants and a moderator, and Figure 2, which charts the transcript of a session with three participants and a moderator.

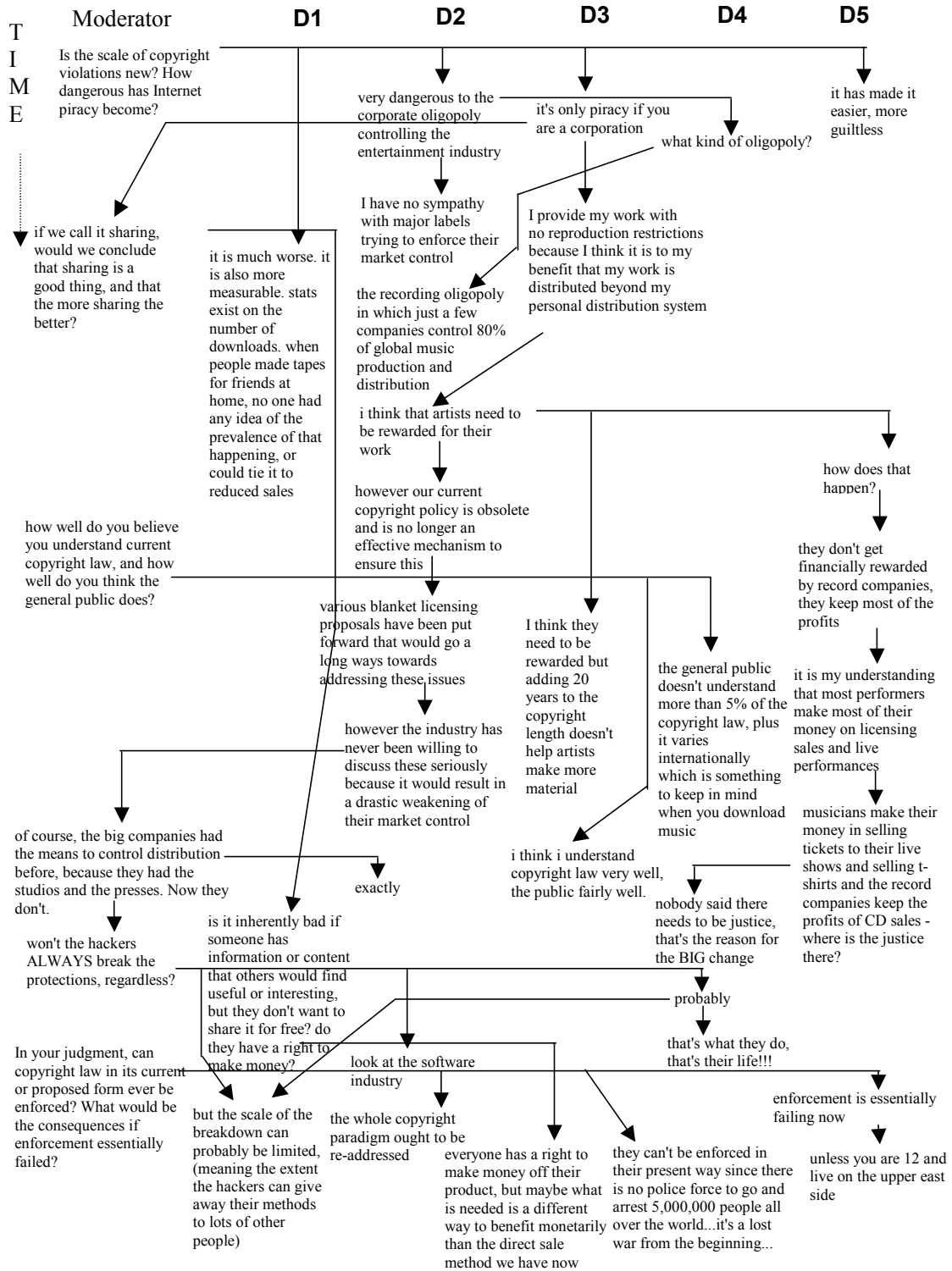
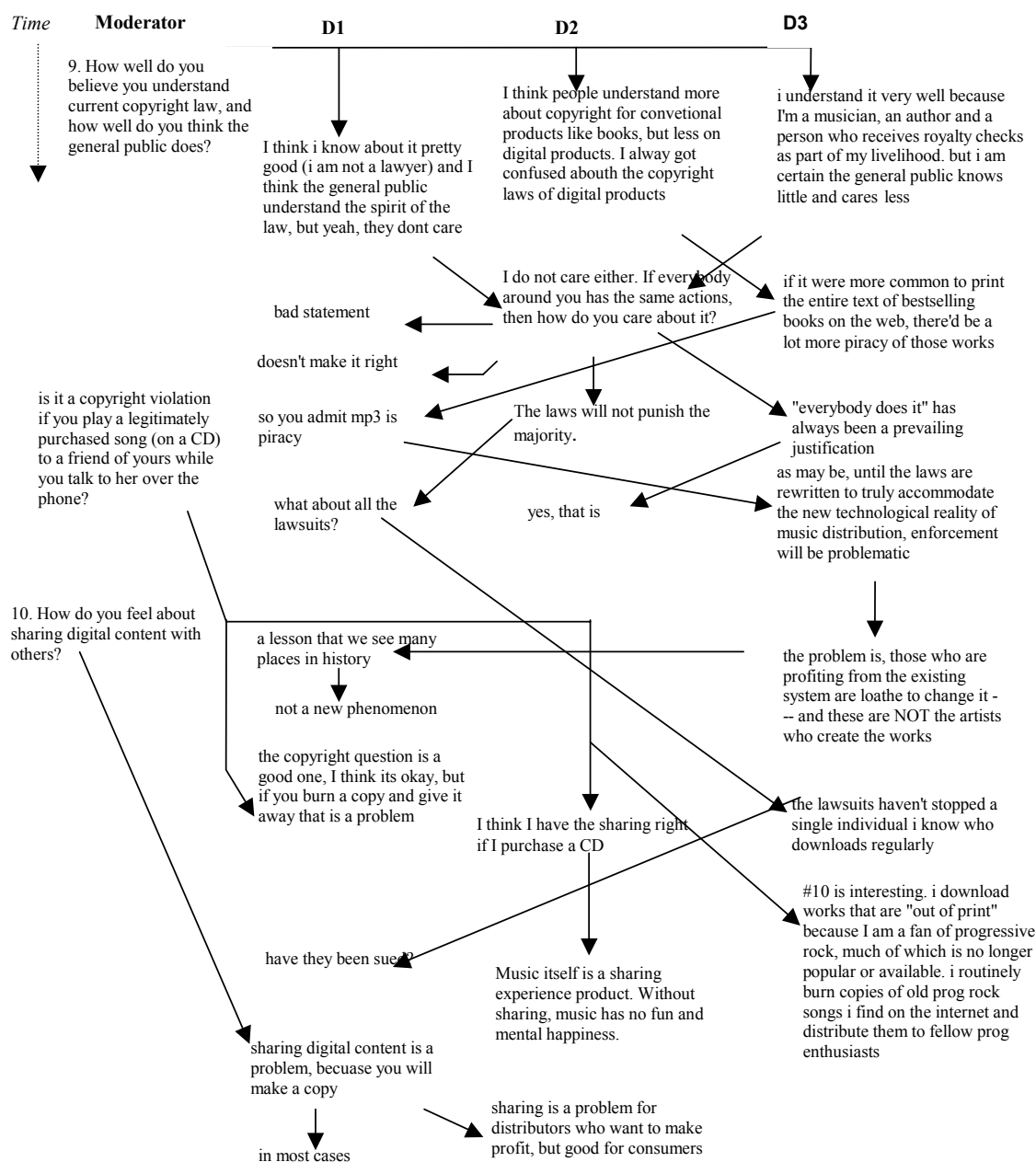


Figure 1: Multi-thread conversation



**Figure 2:** Transcript of session, 3 participants and moderator

A critical and obvious difference between these charts and the transcript of a face-to-face focus group is the lack of linearity in the online focus groups. Conversations in text chat rooms can take place in parallel, with simultaneous threads initiated, diverged, converged, and terminated at the discretion of the participants. Thus no one need wait for their turn to speak and make an appropriate comment. In a face-to-face group, an apposite comment may occur to one of the members, yet never make it into the transcript of the session, because the flow of the conversation moved on to other areas before the participant had a chance

to speak up. In this sense, contributions to an online focus group session are less time-dependent than they must be in the face-to-face environment: (1) Any thought can be posted immediately, with no need to take turns; (2) No comment need follow directly upon the immediately preceding one; participants can and do refer back and respond to earlier comments preserved in the system by the chat interface. For example, look in Figure 2 at D1's eighth comment ("the copyright question is a good one..."). There are seven other comments intervening between this post and the moderator question to which D1 here responds. By

the time D1's comment appeared, the original question was no longer on the visible portion of the chat record. Likewise, the monitor has this same powerful resource at his or her disposal, the 'instant transcript' nature of the chat system. Moderators can make note of important and fruitful topics and ideas as they appear, then refocus the session with follow-up questions at any time, with word-for-word or even simple cut-and-paste references to earlier comments.

The multi-linear nature of chat text enhances the completeness of the session, in that no potential contribution need be lost. It also poses challenges for the moderator who is trying to follow the session in real time. Keeping up with simultaneous parallel exchanges requires fast reading and close attention; we have found that two moderators can stay busy for the major portions of a session, even with just five participants, depending on how fast the participants type, and the nature of their contributions. The 'One-Liner' in particular can cause the screen to scroll at a fast pace.

Notice in Figure 2 that the 'Challenging' participant, D1, is also the 'One-Liner'. It may be that these two behaviors are highly correlated, while 'Monologuing' could be significantly correlated with 'Essay' contributions. A finding on this observable pattern in the transcript charts would depend upon the collection and analysis of more data from a variety of focus group sizes and focus group participants. Persons with considerable experience in chat rooms will already have noted informally that different participants often have their own preferred styles of contributing (including 'lurking'—in the room but not posting). These styles will have implications for the kinds of data that online focus groups collect, and for the skills that moderators of such groups must cultivate.

In Figure 1 you will see that none of the Moderator's comments are numbered, while in Figure 2 the first and last Moderator's posts are number 9 and 10, respectively. We introduced this change in order to allow participants to distinguish between moderator posts which are primary questions intended to initiate discussion on a specific point, and those which are follow-ups to an ongoing topic.

Numbering also allows participants to refer easily to the point they wish to address—notice that this capability was utilized by participant D3 in Figure 2. By this time, we were also keeping a separate document window open with our list of primary questions ready to use. We are currently using copy-and-paste directly from this document to the chat interface to introduce new questions as appropriate, so that the time saved typing can be re-allocated to the construction of follow-ups and other tasks, such as logging the precise time of the posting of new primary questions. We are also considering implementing a Screen Motion Capture tool for the duration of a session, in order to preserve an even more complete record of the sessions, particularly with regard to timing.

Also apparent in the side-by-side comparison of Figures 1 and 2 is the differing proportions of vertical threads (following up one's own comments) and lateral threads (responding to others). This difference may lie partly in the inherent tendencies of those participating (a Monologist generates vertical threads, a Challenger generates lateral ones), but it may also be in part a factor of group size, since it is easier for a small number of participants to keep track of everyone else. As our study progresses it will be interesting to see if this emerges as a statistically significant effect.

The fundamental difference between these categories (One-Liner, Challenger, etc.) and those identified in Krueger is that the online types above do not necessarily constitute problems which must be solved by nuanced moderator techniques, because of the ability of the online system to handle multiple simultaneous threads of input. While the online moderator will indeed want to elicit more thoughtful contributions from the Dittohead, and perhaps address follow-on questions directly to the Monologist to draw him/her into the general discussion, the other three types, especially the Challenger, employ different communication styles which in our sessions have contributed positively to the data produced, each in their own way.

Realtime chat has the potential to be more conceptually "pure", in that the participants' opinions of each other can be based only on their contributions to the discussion. Thus, it is not possible for one



participant to unduly influence the others by virtue of his/her appearance, tone and volume of speaking, body language, or other cues which are always present in the face-to-face method. The group dynamics of chat rooms are, of necessity, based only on the participants' substantive contributions via the medium of text alone. So while lack of non-verbal cues can be disadvantageous because the moderators have less information by which to judge responses, it may also in this sense be beneficial.

Critics of online focus groups point out that it is not possible for moderators of online focus groups to be certain that the contributors are not simultaneously engaging in other activities unrelated to the topic. For marketers hoping to gather data on, say, consumers' emotional reactions to a new car design, attention to topic could indeed be a real problem requiring intervention by the moderators. But a person in a chat room might, without fear of discovery, also eat lunch, search for MP3's, and check email. Indeed, it is in the very nature of multi-tasking computer systems for experienced users to engage in this kind of behavior. The argument could be made that a multi-tasking environment, far from being a negative characteristic, is the only natural setting for studies such as this one, whose topic of interest is some aspect of online behavior. And of course, it is not possible for a moderator, even in a face-to-face focus group, to know whether a given member is giving all his/her attention to the topic, or is also thinking about how tasty the provided refreshments are, considering what to do after the session finishes, or silently critiquing the haircuts of the other members. The question is not whether or not members are giving absolutely all their attention, but whether they are giving enough attention to provide sufficiently rich data to adequately address the issues of interest to the researchers.

The chat interface automatically provides an aid to keeping attention focused on the topic, since the text is captured and kept on the screen in front of each participant's eyes. Thus, it is not necessary for members to try to keep in mind what someone else has said 30 seconds, 3 minutes, or even 45 minutes ago; the entire record of the session is available at any time through scrolling. It is not

possible to miss or misunderstand what someone else has said, because of poor hearing, or because more than one member was speaking at the same time, since each contribution can be read at leisure. The communication system itself thus acts as a perfect memory store of the entire discussion, which can only help in focusing members' attention.

Greenbaum (1997) is concerned that the moderator of an online focus group has more limited means at his/her disposal to "draw out quiet or shy participants, energize a slow group, and use innovative techniques that will delve a little deeper into the minds of participants." We have already discussed above the advantage of the chat interface in providing equal access for all participants to a non-monopolizable space. For a slow group, or one which has not provided sufficiently deep insights, face-to-face moderator techniques may not apply, but this does not mean that we are totally at a loss. Rather, the moderator simply needs an alternative set of skills, based on the possibilities and conventions of chat room communications. The experienced chat room moderator can employ the means at his/her disposal, including non-standard uses of text such as emoticons, in order to bring the session activity to the desired level.

Furthermore, text-based realtime chat communications may provide special advantages over face-to-face meetings for some types of topics. It has been noted that users of online communications systems are in some cases likely to be more rather than less forthcoming online (Walston and Lissitz 2000; Murray and Sixsmith 1998). It is possible that this effect derives in part from the shield of anonymity afforded by the technology. In his study of the practices of criminal drug dealers, Coomber (1997) went to online methods specifically for this reason. In our case, the topic of file-sharing systems and MP3 files raises issues of unethical and possibly illegal behavior, issues which our subjects may be more comfortable discussing in the familiar environment of their own room/office and personal workstation (the same environment, by the way, in which the questions of ethics and illegality are encountered, and decisions about them made) and behind the anonymizing chat interface, than they

would in the 'interrogation room' of a face-to-face focus group session.

Research on Group Support Systems have in the past made a distinction between anonymous and non-anonymous systems, and between co-located and spatially distributed systems (Nunamaker et al, 1997), but not between, let us call them, 'Host-located' and 'Participant-located' systems. A participant-located system would be one in which a focus group member could take part from within a space he identifies as his own—a space and a machine which he or she is familiar with, controls, and perhaps owns (O'Connor and Madge, 2002). As sophisticated digital communications tools migrate from specialty hardware and software to common user platforms, it is likely that this distinction will be one worth making. Notice that face-to-face focus groups are universally, of logical necessity, Host-located. It is not possible to conduct a face-to-face group in which each member is comfortably situated in their own home. If the space in which the focus group interaction makes a difference, and we believe that it can, then the online focus group has the greater flexibility. One could conduct such a group by inviting members to use the host's machines in some sort of laboratory setting, or have them participate from their own computers at home. In fact, a direct comparison of these two online interview modes would constitute a basis for isolating the 'Participant-located' effect, if it does indeed exist.

It is certainly true that even fast typers will contribute fewer words online than they would if they were able to speak. However, it is not safe to assume that more always means better. Nor is it necessarily the case that instant, spoken reactions are always better than thoughtful, typewritten and possibly pre-edited replies. The style of the One-Liner, by the way, approaches Sinickas' (2001) ideal of an instant response. For a marketing company gathering data on consumers' emotional connection to a brand-new product, no doubt the instant, unedited responses are required. Our study, however, does not introduce anything that is new to the participants; our goal is to discover what issues are important to the stakeholders in the digital music world, and in what way. For

research of this type, carefully considered replies on complex issues also provide useful data. One of the cues we have used to make a decision about moving on to the next question was when the posts in response to the previous question began to repeat content, or slow down substantially, indicating that the members had already had their say on that particular question. Finally, the reduction of content due to the requirement of typing replies is offset to a considerable extent by the fact that online, all members can be typing and posting at once. Five medium-speed typers can easily equal or even surpass the word rate of a single (face-to-face) speaker. At times when the give-and-take in our online focus group sessions was most lively, it was all we could do to speed-read the posts as they scrolled by on the screen. The total output from five different simultaneous contributors, all brainstorming the same question, and all captured in an instant, error-free transcript, has the potential to be even more useful than the same volume of data from only a few dominant speakers.

There is no way to utterly insure that the persons on the other end of the chat connection are who they say they are. For studies in which individual identity is crucial, face-to-face sessions are definitely a necessity. However, not all research projects have this requirement. In our study, we do not have any requirement for confirming personal identity; in fact, just the opposite—we have deliberately employed anonymity as a feature of the communication medium, in order to encourage members to be as forthcoming as possible. Even face-to-face sessions are not totally immune to this problem; extensive and time-consuming background checks would be necessary to confirm all of the demographic data which participants provide. Markham (2004) makes the subtler point that meaning and identity are socially constructed in any context, not just the Internet. The difference is that Internet communication isolates and focuses this process of negotiation in the single medium of text. Non-verbal cues may have a downside as well. Markham further points out that "we use physically embodied features and behaviors to make categorical assessments of conversational partners" and that "a priori assessment based on typical/traditional gendered, ethnic and

socioeconomic categories remains a problematic feature of social research."

It is hard to imagine how high-quality marketing research on physical products could be ever be collected via online communications, even if we assumed very high quality images, video and audio. The gestalt of sensory impact of a new product is simply not digitally transferable. The use of online focus groups should thus be reserved for research interests which deal with intangibles, such as questions of

policy or culture, studying attitudes, beliefs, and values, or with the digital world itself.

The following table lists some of the features of online focus group communications which have come to our attention during the progress of the study, as they relate to the criticisms of Sinickas, Edmunds, and Greenbaum mentioned earlier:

**Table 1:** Features of Synchronous Internet-based Group Communications

<b>Criticism</b>	<b>Response</b>
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 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 (quick One-Liner); 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 question; Multimedia objects can be presented to group

## 5. Benefits

Clarke's excellent review of the Internet as a medium for qualitative research (2000) discusses the practical and economic benefits of carrying out research online, which are considerable. This was one of the motivating factors behind our decision to conduct online focus groups, particularly given the nature of our theoretical sample. The populations we wish to use as subjects are already online, where participation in virtual communities is independent of geographic location. Assembling industry experts for focus groups, for example, would have involved enormous expense compared to online meetings, were it possible to get them physically together at all. When costs of travel, meeting room space, technical equipment and support for recording, and transcript preparation are factored in, the difference between face-to-face and online focus groups can involve orders of magnitude. Sinickas (2001), even while arguing generally against online focus

groups, cites cost and convenience as reasons to use them.

One major task inherent in face-to-face focus group research is the preparation of transcripts. Audio recordings can vary enormously in quality, depending on whether analog or digital media are used, on the microphone types and setup, and whether the participants speak loudly enough in the direction of the microphones to be captured. Even given adequate audio gear (which is expensive), the transcription step itself has the potential to lose or distort content from the face-to-face session. Mergenthaler and Stinson (1992) discuss the procedures necessary to insure that the transcriptions are as accurate as possible. The principles they set forth are:

- *Preserve the morphologic naturalness of transcription.* Keep word forms, the form of commentaries, and the use of punctuation as close as possible to speech presentation and consistent

with what is typically acceptable in written text.

- *Preserve the naturalness of the transcript structure.* Keep text clearly structure by speech markers (i.e., like printed versions of plays or movie scripts).
- *The transcript should be an exact reproduction.* Generate a verbatim account. Do not prematurely reduce text.
- *The transcription rules should be universal.* Make transcripts suitable for both human/researcher and computer use.
- *The transcription rules should be complete.* Transcribers should require only these rules to prepare transcripts. Everyday language competence rather than specific knowledge (e.g., linguistic theories) should be required.
- *The transcription rules should be independent.* Transcription standards should be independent of transcribers as well as understandable and applicable by researchers or third parties.
- *The transcription rules should be intellectually elegant.* Keep rules limited in number, simple and easy to learn.

Notice that for online focus groups all of these principles are either automatically handled (first three from the list above), or simply do not apply (last four). The only caveat is that researchers should take care to use software which captures automatic transcripts. Most packages we examined for possible use had this capability.

McLellan, MacQueen and Neidig (2003) discuss at some length the central problem of transcription for qualitative research, which is the imperfect link between the session itself and the transcript. A great number of decisions, extending all the way from technical procedures to semiotics, must be faced for researchers making transcriptions from audio tapes, with the result that, "despite all best intentions, the textual data will never fully encompass all that takes place during an interview." They cite Ashmore and Reed (2000) to make the point that the audiotape is a "realist" object, while the transcript itself is a "constructivist" one.

For online focus groups, these categories do not exist separately. The substance of the online focus group session as it is being conducted is itself text, and constitutes the transcript of the same, whose usefulness begins instantly, as the members read and review the text on the screen while considering and making their online replies. For studies such as the one described here, in which the participants are highly experienced and comfortable with online chat, and thus confident in their ability to express their ideas in realtime text, the automatic transcription feature is a valuable and greatly simplifying aid to the research process.

Briefly put, the transcript of a face-to-face focus group is never 100% accurate; the transcript of an online focus group always is.

## 6. Limitations

An online focus group session is totally dependent on the information technology employed. Unless everyone can get logged in and functioning reliably, you don't have a session. One attraction of the Blackboard<sup>®</sup> system we have used is the maturity of the software--this is not a new and possibly buggy release. Given the wide variety of user platforms on the Internet, it is likely wise to be highly conservative in the technological requirements you impose on your subjects. One reason that we have experienced minimal technological problems so far may be that our theoretical sampling method deliberately targets highly experienced and technologically savvy subjects, who can be expected to be reasonably up to date in their choice of hardware, software, and Internet connection. Our sample population choice may also be responsible for the fact that though the Blackboard<sup>®</sup> login process involves several clicks and is not necessarily obvious, none of our participants has had any trouble going straight to the correct chat area.

One cue which is handled automatically and intuitively in face-to-face situations, but not online, is the timing of comments. In some trials which involved one-on-one interviews, we experimented with typographical cues which would let us distinguish between times when we were waiting for subjects to finish typing a

response and times when they were simply waiting for the next question. This sort of thing is obvious when the medium is actual speech, but not when text is used. For sessions with four or five members, significant "dead air" time was generally not a problem, as the posts simply continued to flow in for the duration of the session. It is not inconceivable that future versions of chat software will provide visual cues to make this distinction automatically.

Without making any specific quantitative claims, we have noticed that some sort of "chat room fatigue" can set in after about an hour. This may be due to the workload of continuous reading and typing in a fast-moving chat session, or more generically the mental exhaustion of exploring a single topic in concentrated detail--after awhile, people may simply be ready to do something else. As Greenbaum (1997) points out, the moderator of the face-to-face session has more options to revivify the session than does the online moderator.

To summarize limitations mentioned earlier in the paper:

- i. Online focus groups are likely to be more appropriate for research topics involving online issues, ideas, and behaviors, and less appropriate for studies requiring non-computer related stimuli, such as marketing research on new physical products;
- ii. Online focus groups do not allow the production of notes logging non-verbal behaviors such as nodding, yawning, frowning, etc., which may be of interest to the researchers;
- iii. Moderators cannot enforce full participation of all members of an online focus group; to some extent we must rely upon the goodwill and good faith of the participants, as well as, in our case, their engagement and interest in the topic;
- iv. A well-monitored online focus group likely cannot be as large as a face-to-face group, which can include as many as 10 persons; even with 5 members, some things may be missed when all participants are continuously posting at once in parallel and the chat screen is scrolling swiftly;
- v. Online focus groups are likely to be more appropriate for studies in which the subjects are themselves comfortable with the technology, so that typing speed, logon navigation, and other procedural issues do not interfere with the flow of ideas;

## 7. Future directions

At this early stage in the development of Internet research tools, many open questions remain for the conduct of online focus groups:

- **Optimal Group Size** – Mann and Stewart (2000) suggest that the maximum number lies in the area of six to eight participants; for the fast typing, highly experienced Internet users who seem to be prominent in our sample group, even this number may be too high;
- **Optimal Group Composition** – for our study, we have so far found it productive and stimulating to the session to include members on different sides of the sensitive issue of music filesharing; other strategies may also have benefits;
- **Optimal Session Length** – this will likely vary with the size of the group, the particular topic(s) under discussion, and the interest of specific participants;
- **Optimal Time Allocation Per Question** – at some points in our sessions to date, we have had to make choices about pursuing promising follow-up questions, or moving on to new areas in the interest of obtaining sufficient coverage in the time remaining;
- **Best Strategies and Guidelines for Facilitating and Moderating a Session** – for a hot issue like music filesharing, we have often found the discussions to be largely self-sustaining, particularly in the larger groups, once a question is put forward; one concern is how to introduce all the research questions we feel need to be covered without appearing to be constantly interrupting or cutting off discussion;
- **Place Effects** – would participants' contributions to the online focus group differ significantly if the session took place using workstations in a laboratory setting,

instead of on the users' own computers, and if so, how;

- **Single/Multiple Moderators** – so far, we have consistently used two researchers sharing a single online presence; other combinations might improve the sessions, such as having a separate online ID for each of two moderators;
- **Data Collection** – what quantitative data might be of interest, and how could it be captured; we are exploring ways of recording question and response timing, and volumes of participant output per unit time, for the possibility of comparison to face-to-face sessions;
- **Time Effects** – need all participants be in the same or close to the same time zones? – what happens when time zones are widely separated;
- **Member Interaction** – in our sessions, as is evident from Figures 1 and 2, these are plentiful and vigorous; how might these intra-participant exchanges be encouraged or managed in order to facilitate the most productive sessions;

We expect to gain some insight into many of these areas as the number of completed sessions increases. In order to generate some revealing and rigorous findings, one possibility is to collect data for quantitative comparisons between online and face-to-face sessions. Pertinent questions raised by critics of online focus groups include the volume of output, the numbers of issues raised and quality of comments, and the equality of participation (or lack thereof) between different participants.

We have included in this paper sample analyses from only two sessions, so it is far too early to draw any definitive conclusions. The significance of this exploratory research for us at present is the questions raised by the actual practice of online focus group communications, and the identification of fruitful areas for further exploration. Are online focus groups an effective method for qualitative research studies? We believe that for the right research questions and contexts, and with the right application of available online communications technologies, indeed they can be.

## References

- Ashmore, M. and Reed, D. (2000), "Innocence and Nostalgia in Conversation Analysis: The Dynamic Relations of Tape and Transcript", *Forum: Qualitative Social Research*, Vol 1, No. 3. Available at: <http://qualitative-research.net/fqs/fqs-eng.htm>.
- Bhattacharjee, S., Gopal, R. & Sanders, G. (2003), "Digital Music and Online Sharing: Software Piracy 2.0?" *Communications of the ACM*. July, vol. 46, #7, pp. 107-111.
- Bryman, A. & Bell, E. (2003), *Business Research Methods*. Oxford University Press: New York.
- Charmaz, K. (2000), "Grounded Theory: Objectivist and Constructivist Methods", in *Handbook of Qualitative Research*, N.K. Denzin, (ed), Sage Publications, London.
- Clarke, P.A. (1998), "Telematic teaching of adults via the World Wide Web: A university case study.", available online at <http://www.und.ac.za/users/clarke/thesis/index.html>.
- Clarke, P. A. (2000), "The Internet as a medium for qualitative research", presented at Web 2000 Conference, Rand Afrikaans University, Johannesburg, South Africa.
- Coomber, R. (1997), "Using the Internet for Survey Research", *Sociological Research Online*, Vol 2, No. 2, available at <http://www.socresonline.org.uk/socresonline/1/1/4.html>.
- Couper, M.P. (2000), "Web Surveys: A Review of Issues and Approaches", *Public Opinion Quarterly*, Vol. 64, pp. 464-494.
- Edmunds, H. (1999), *The Focus Group Research Handbook*, NTC Business Books, Chicago.
- Fern, Edward F. (2001) *Advanced Focus Group Research*, Sage Publications, London.
- Gaiser, T.J. (1997), "Conducting On-Line Focus Groups: A Methodological Discussion", *Social Science Computer Review*, Vol 15, No. 2.
- Green, E.C. (2001) "Can Qualitative Research Produce Reliable

- Quantitative Findings?", *Field Methods*, Vol 13, No. 1, pp. 3-19.
- Greenbaum, T.L. (1993), *The Handbook for Focus Group Research*, Revised and Expanded Edition, Lexington Books, New York.
- Greenbaum, T. L. (1998), "Internet Focus Groups Are Not Focus Groups - So Don't Call Them That", *Quirk's Marketing Research Review*, July, pp. 62-63.
- Hughes, J. and Lang, K. R. (2003), "If I Had a Song: The Culture of Digital Community Networks and Its Impact on the Music Industry", *The International Journal On Media Management*, Vol 5, No. 3.
- Krueger, R.A. (1994), *Focus Groups: A Practical Guide for Applied Research*, 2nd ed., Sage Publications, London.
- Mann, C. & Stewart, F. (2000), *Internet Communication and Qualitative Research: A Handbook for Researching Online*. Sage Publications, Ltd.: London.
- Markham, A. (2004), "Internet Communication as a Tool for Qualitative Research", in *Qualitative Research: Theory, Methods and Practice*, David Silverman, ed. London: Sage.
- McLellan, E., MacQueen, K.M., and Neidig, J.L. (2003), "Beyond the Qualitative Interview: Data Preparation and Transcription", *Field Methods*, Vol 15, No. 1, pp. 63-84.
- Mergenthaler, E. and Stinson, C. (1992), "Psychotherapy Transcription Standards", *Psychotherapy Research*, Vol 2, No. 2, pp. 125-142.
- Miles, M.B., Huberman, A.M. (1984), *Qualitative Data Analysis*. Sage Publications, Beverly Hills, California.
- Millward, L. (1995), "Focus Groups", in *Research Methods in Psychology*, G.M. Breakwell, S. Hammond, S. and C. Fife-Scha, (eds), Sage Publications, London, pp. 304-324.
- Murray, C.D. and Sixsmith, J. (1998), "Email: a qualitative research medium for interviewing?", *International Journal of Social Research Methodology*, Vol 1, No. 2, pp. 102-121.
- Nunamaker, J., Briggs, R., Mittleman, D., Vogel, D. & Balthazard, P. (1997), "Lessons from a Dozen Years of Group Support Systems Research: A Discussion of Lab and Field Findings." Vol 13, No. 3, pp. 163-207.
- O'Connor, H. & Madge, C. (2002), "Focus Groups in Cyberspace: Using the Internet for Qualitative Research", *Qualitative Market Research: An International Journal*, Vol 6, No. 2, pp. 133-143.
- Ruhleder, K. (2000), "The Virtual Ethnographer: Fieldwork in Distributed Electronic Environments", *Field Methods*, Vol 12, No. 1, pp. 3-17.
- Sheehan, K. and Hoy, M.G. (1999), "Using E-Mail to Survey Internet Users in the United States: Methodology and Assessment", *Journal of Computer-Mediated Communication*, Vol. 4(3).
- Schneider, S.J., Kerwin, J., Frechtling, J., and Vivari, B.A. (2002), "Characteristics of the Discussion in Online and Face-to-Face Focus Groups", *Social Science Computer Review*, Vol 20, No. 1, pp. 31-42.
- Sharf, B.F. (1999), "Beyond netiquette: The ethics of doing naturalistic discourse research on the Internet", in *Doing Internet Research*, S.G. Jones, Sage Publications, London.
- Sinickas, A. (2001), "Offline Research: Still A Good Idea", *Best Practice Measurement Strategies*, Vol 1, Issue 5, pp. 4-5.
- Stewart, D.W. & Shamdasani, P.N. (1990), *Focus Groups: Theory and Practice*, Applied Social Research Methods Series, vol. 20, Sage Publications, London.
- Sweet, C. (2001), "Designing and Conducting Virtual Focus Groups", *Qualitative Market Research: An International Journal*, Vol 4, No. 3, pp. 130-135.
- Walston, J.T., and Lissitz, R.W. (2000) "Computer-mediated focus groups", *Evaluation Review*, 24, pp. 457-483.
- Waskul, D., Douglass, M., and Edgley, C. (2000) "Cybersex: Outercourse and the Enselfment of the Body", *Symbolic Interaction*, Vol 23, No. 4, pp. 375-397

