Exploring the Internet as a medium for research: web-based questionnaires and online synchronous interviews

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It is widely acknowledged that information and communication technologies (ICT) open up new possibilities for research in terms of both adapting existing methodologies to a new medium and in creating new methodological possibilities. A reflexive discussion of the usefulness of online research is important, for although it has been used as a methodological tool for some years, Hewson *et al.* (2003, 1) recently argue that `...many issues are just starting to be addressed' and Mann and Stewart (2000, 4) observe that `...it is perhaps surprising that the suitability of the Internet for conducting research remains relatively unexplored.'

This paper will contribute to the emerging debate about the value of on-line research. Drawing the experience of an Internet based Cyberparents project on (http://www.geog.le.ac.uk/baby/), it will explore the possibilities and limitations of webbased questionnaire surveys and on-line synchronous interviews. It will discuss some of the implications of conducting research in the virtual arena, with particular emphasis on access issues, sampling and identity verification for web-based surveys and engagement, online interactions and computer mediated communications for synchronous group interviews. Some key points to note are:

- Accessing respondents is a key concern in web-based surveys. It is significant to note in our project that without the agreement and co-operation of the website providers to place strategic hypertext links between our webpage and the case study website, the survey would most certainly not have been successful since it would have been impossible to recruit these specific online community members in any other way. Thus the issue of access to online communities and website providers is crucial when conducting online research. This access issue is liable to become increasingly important. As the use of the Internet increases in the general population, and the novelty of responding to online surveys wears off, getting online users to complete online questionnaires is liable to become more problematic.
- A further issue of concern when using web-based surveys is that they present serious **sampling** problems for a study based on the quantitative tradition. There is no access to a central registry, or master database, from which to create an accurate sampling frame nor is there any way of discerning how many users are logging on from a particular computer or how many accounts/memberships a particular individual might have. This means random sampling or gaining a representative sample is not possible. Internet surveys on the whole, therefore, attempt to select a sub-set of users to participate in the survey. This may be through attempts at non-probability sampling, or through self-selection.
- A final issue relating to web-based surveys involves verifying the identity of the participants and the reliability of their responses. Online research does not enable the researcher to verify the identity of the participants or to assess the reliability of responses. While being an irresolvable sampling issue of online research at present, again this is not unique to virtual methods: incorrectly completed questionnaires,

unreliable responses and non-verifiable identities may also be a feature of conventional surveys. Moreover, in conducting online community research, how necessary is it to `prove' the offline identity of the participants anyway? Additionally, recent research suggests that the anonymity of participants can play a positive role in the research process, reducing researcher bias and being particularly useful for embarrassing and sensitive topics (Hewson *et al.*, 2003).

- Selwyn and Robson (1998) have noted that in moving the traditional interview to an electronic arena, the interviewer requires a very different set of skills. Regarding **engagement**, we found the degree of self-disclosure was similar to that which we would have invested in a FTF interview, and we felt it did build up trust and aided candid and honest exchanges in our online interactions. Overall we did not need to develop radically new ways of building up rapport with the women we interviewed, rather the engagement process was characterised by continuity of methods with `real world' techniques.
- It was during the **interactions** involved in the interview process, however, that some interesting differences emerged. The online interview is a process that removes the tangible presence of the researcher, so bodily presence (age, gender, ethnicity, hairstyle, clothes, accent) become invisible. According to Chen and Hinton (1999, 13.2) this results in the potential of the virtual interview to become the `great equaliser' with the interviewer having less control over the interview process and the researcher potentially becoming a `participant researcher' (Seymour, 2001). In our case we feel this is a rather utopian vision, precisely because we do not leave the body, and all its material inequalities, behind when we enter cyberspace. Additionally, the `equaliser argument' glosses over the structural power hierarchies that enable researchers to set the agenda, ask the questions and benefit from the results of the interview process.
- Issues of communication were also significant in online interviews. Michaelson (1996, 58) notes that: `The relative anonymity that IT provides also changes the rules of discourse.' In virtual interviews it removes the ability of the interviewer to use and interpret unspoken communication and is dependent on written rather than spoken language (Chen and Hinton, 1999, 12.1). Certainly in this case the degree of abstraction that the virtual interview involved had impacts on the nature of the interview `conversation.' The lack of visual and tactile communication for example, was replaced by specific Internet language. Paralinguistic expressions such as lol (laugh out loud) and emoticons (emotional icons used to express feelings, for example ;-) which represents a wink) were used by the interviewees a lot to replace facial expressions and voice quality. We concluded that the virtual interview bridged the oral/written divide. Although clearly in written format, the type of interventions were very oral in nature. The researchers and participants paid little attention to issues such as spelling and grammar, as the nature and meaning of the conversation took precedence over the correctly written word. As such, the transcript very much resembles a `written conversation'.

Based on indepth exploration of these issues, the paper will conclude that although on-line research holds promise, its potential should not be exaggerated: many of the issues and problems of conventional research still apply in the virtual venue.