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Internet Mediated Research: A Critical Reflection upon the Practice of Using Instant Messenger for Higher Educational Research Interviewing

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This paper presents a guide to, and critical reflection upon, using synchronous online interviewing for Higher Educational research. A description of the practical aspects of carrying out synchronous online interviews using Instant Messenger (hereafter IM) as the communication platform, including ethical issues, is provided. Respondent and researcher reflections upon the quality and utility of IM set out here indicate that IM was an effective communication platform for higher educational research interviewing.

THE PRACTICE OF USING INSTANT MESSENGER FOR INTERNET MEDIATED RESEARCH

The British Psychological Society (2007: p.1) describe IMR and its use for quantitative data collection:

“The term Internet Mediated Research (IMR) covers a wide range of activities. It can range from purely observational studies (e.g. analysis of behaviour of people in chat rooms), to surveys and in vivo quantitative studies (e.g. a comparison of the personality profiles of job applicants and employees) to highly structured and well-controlled experiments (e.g. a psycholinguistic lexical decision task)”.

Boulos & Wheelert (2007) claim advances in sociable interactive technologies, such as ‘the social Web’, have provided beneficial opportunities for people to connect and communicate in a text-based environment through online platforms, in real time. Through the Internet, connections can be made with a broad range of people otherwise difficult to access. It cuts across time and space barriers to interaction, meaning that communication is no longer geographically bound; the Internet can reduce social isolation and engender connectedness with society. Ruch (2005) suggests contemporary research should assume an approach that embraces and combines technology and the ‘social’.

Similarly, Berg (2007: p.112) argues that the opportunity for qualitative research practice to take advantage of technological advancements should be exploited:

“As technology advances, methods used in qualitative research must strive to keep up - or at least seek ways to take advantage of these technological advancements because such environments provide the researcher and respondent an experience

similar to face-to-face interaction insofar as they provide a mechanism for a back-and-forth exchange of questions and answers in what is almost real time”.

For these reasons, IMR was used qualitatively through the undertaking of individual online interviewing, mediated through the communication platform IM. IM is an electronic online communication system that combines the facilities of a telephone - synchronous conversations, and “turbo charged” email, producing a textual record of the conversation; rapid “real-time chat...at lightning speed” (Flynn, 2004: p.8).

There has been relatively little research undertaken using IM in relation to research interviews, but that which exists highlights the following benefits. IM is a faster, more conversational way of communicating than email, and has archiving capabilities that save and store conversations (Flynn, 2004). IM is inexpensive (free to download in most cases), convenient and attractive for those who dislike or find opinion expression difficult during face-to-face interviews (Gunter, 2002) and discussions (Ho & McLeod, 2008). IM can reduce respondent apprehension, there is no need for time consuming transcription, there is flexibility in time and location of the interview, which can be organised to suit respondents (Davis, 2004) and IM can generate reflective and descriptive data (James, 2006). Clarke (2000) claims that the Internet increases perceived anonymity, which can engender enhanced confidence, facilitate active participation, engagement, reflection and honesty because “there are no nods, frowns, or yawns to discourage or distract, and misread non-verbal cues that result in second-guessing the expectation of the other” (no page number). Areas of uncertainty can be identified and explored further in subsequent questions, generating richer data (Morgan & Symon, 2004). IM enables easy entry into a computer assisted qualitative data analysis program (Bryman, 2004) and in some cases:

“...vid-cams (computer linked video cameras) can be used to allow the researcher and respondent to actually see one another” (Berg, 2007: p.112).

Using synchronous online interviewing mediated through IM as the communication platform may enable more accurate data and access to fuller exploration of respondent experience. In contemporary society, technology has become embedded in most aspects of human life (Parton, 2006) yet the extent to which this may prove a positive experience for participants and researchers in higher educational research remains equivocal. This paper seeks to address this point.

METHOD

Initial Contact with Respondents

The sample was purposive rather than representative (see Silverman, 2005) and met the following criteria: computer literate, final year undergraduates with on/off campus access to the Internet. Ten respondents were recruited via final year tutors, comprising 5 females, 5 males, with an age range of 21-45 years, of

mixed academic ability and from a variety of racial, ethnic and social class backgrounds. Respondents contacted the researcher (first author throughout) via a dedicated university email address to arrange a meeting prior to the online interviews. These in-person meetings sought to verify identities (see ethics section below), establish rapport and provide a briefing comprising the aims of the research and where necessary, training in accessing and using the online interview IMVironment. The opportunity was also taken to gain respondent's informed, written consent, negotiate a mutually convenient time, and date for each online interview. Username and unique passwords into the IMVironment were also provided at this time.

Materials and Procedures

The use of IM for online interviewing is demonstrated below, using both visual and textual description of two separate accounts set up with Yahoo messenger client, one for the researcher and one for respondents^a.

Researcher's IMVironment

Figure 1 shows the IMVironment used by the researcher during the individual online interviews.

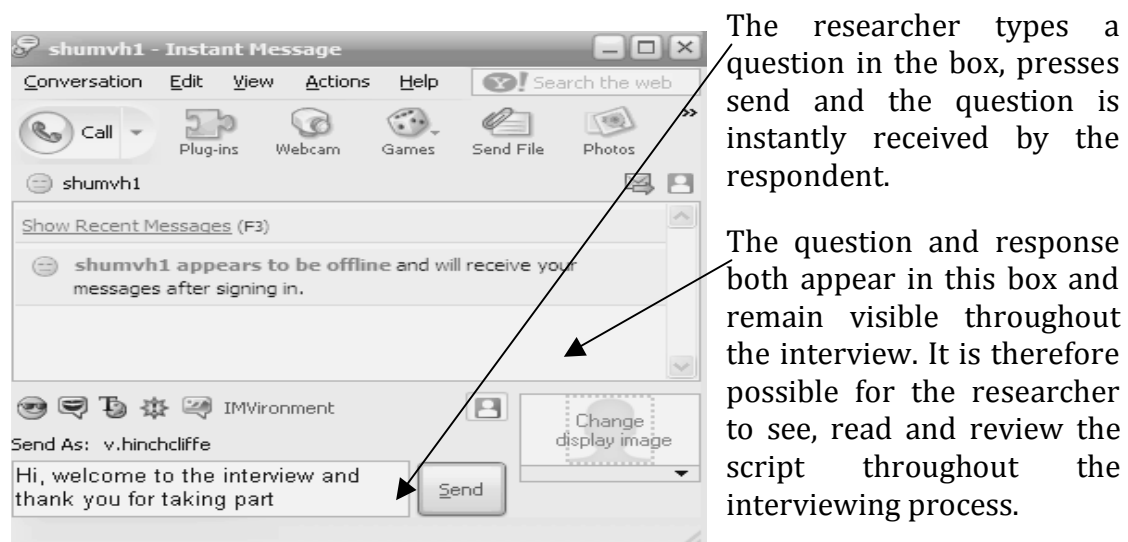


Figure 1: Screen shot of the researcher's IMVironment used for the online interviews

The researcher's IM account was accessed directly through Yahoo and password protected to allow accessibility only by the researcher, enabling the researcher to have full control over privacy and archiving settings during the interviews (see Figures 2 & 3, respectively).

^a Technical advice was sought from the University regarding Internet security, usernames, passwords, suitable IM client and development of an IM 'user friendly' accessibility manual.

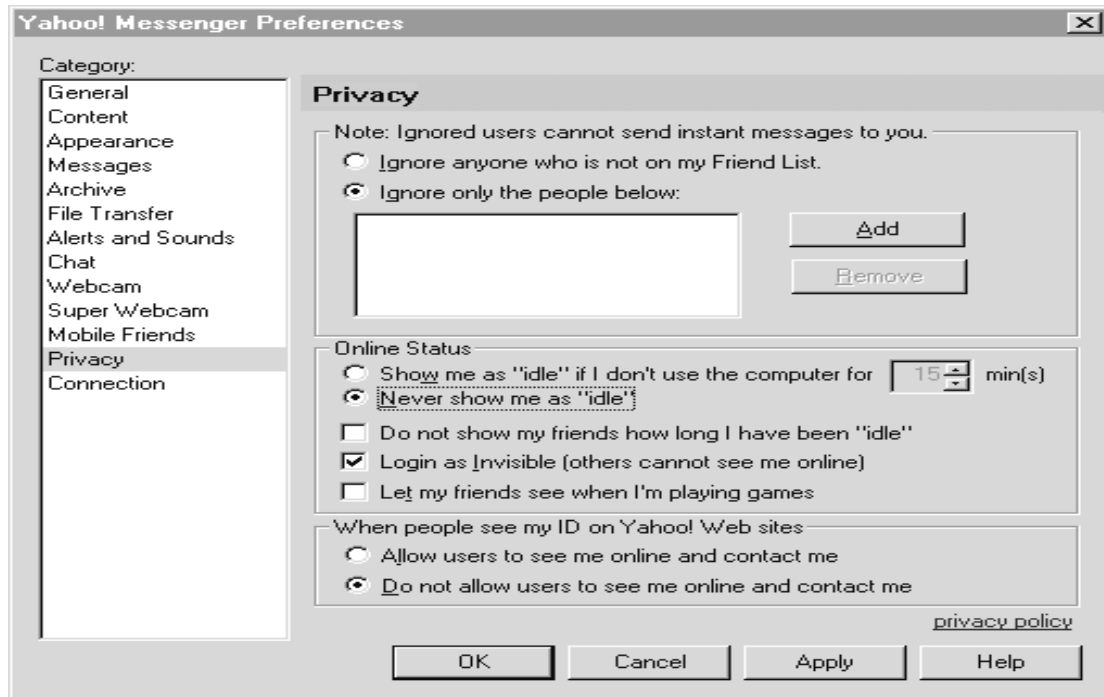


Figure 2: Screen shot of researcher's privacy settings for the IMVironment

Both respondent and researcher security can be taken into account, because the IMVironment remains invisible to outsiders, greatly reducing the likelihood of entry by an impostor.

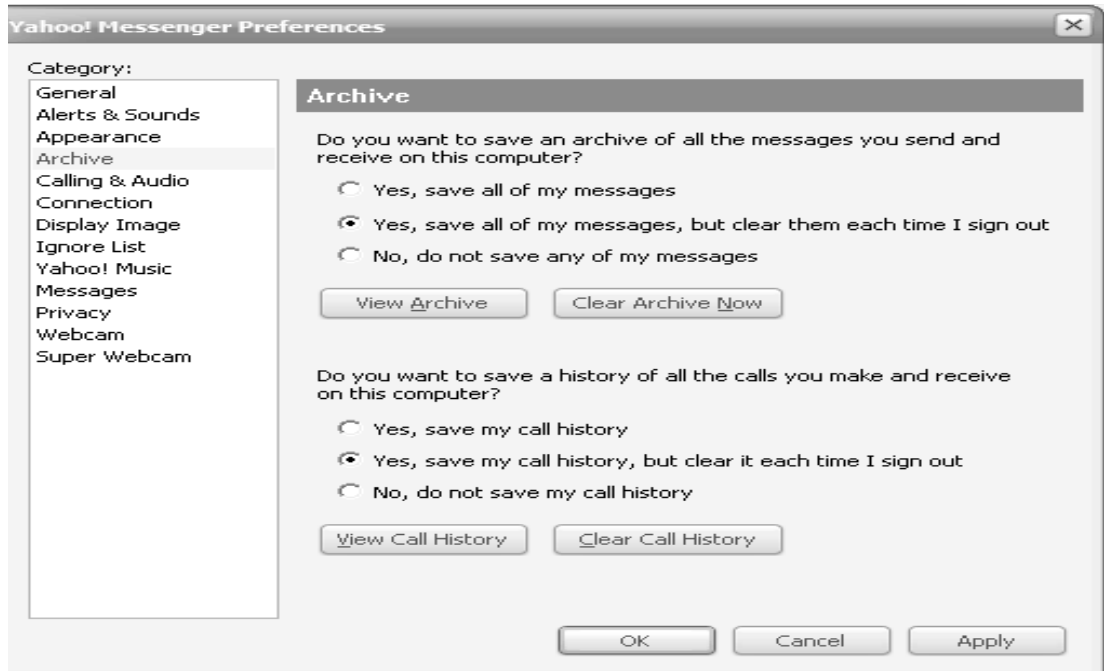
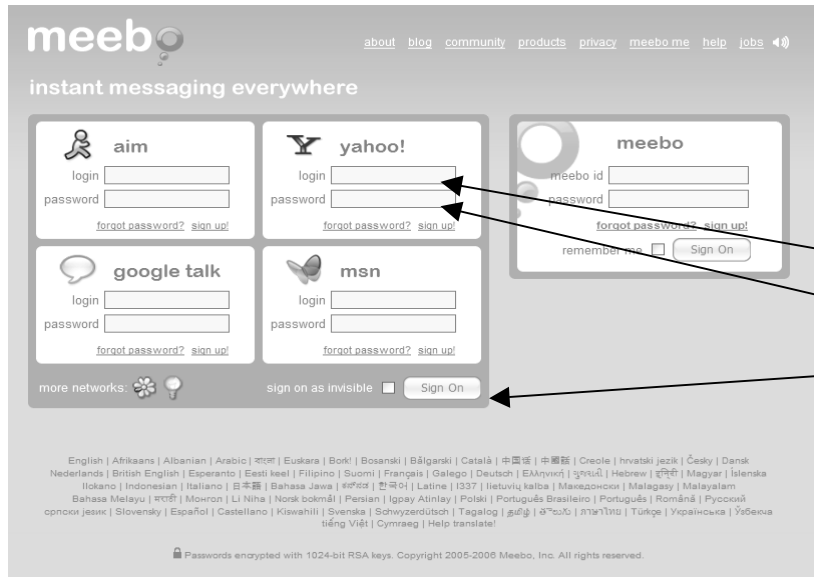


Figure 3: Screen shot of researcher's archive settings for the IMVironment

Respondent's IMVironment

The separate respondent account was accessed through the 'free' server Meebo.com (see Figure 4), to avoid respondents having to download and install

Yahoo IM and importantly, because this account has no archiving facilities. To enhance security, access to the respondent IMVironment was only available via the username and unique password and once activated the IM account was 'invisible' to other Internet users. A 'user friendly' IM accessibility manual, provided to respondents at the in-person meetings, included visual screen shots at each of the relevant stages of using IM for online interviewing (see Figures 4 and 5).



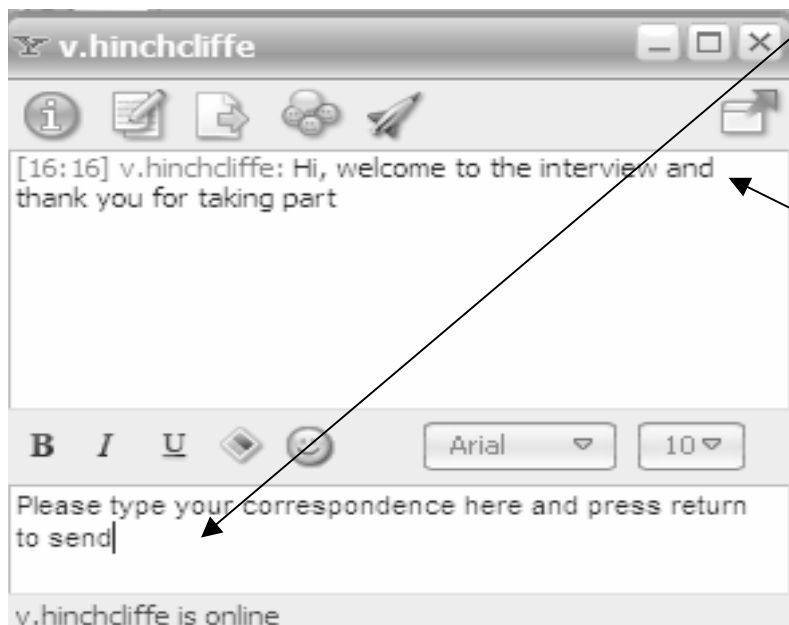
Respondents type in the following details to logon to Yahoo messenger client:

Username and unique password

And then click here to enter the IMVironment

Figure 4: Respondent access through the 'free' server Meebo.com

Figure 5 below shows the IMVironment used by respondents.



Respondents type a response here, press send and the response is instantly received by the researcher.

The response and question both appear in this box and remain visible throughout the interview, ensuring both parties can read, reflect on the content and review the script (if necessary).

Figure 5: Screen shot of the respondent's IMVironment used for the online interviews

Ethical procedure

The British Psychological Society (2007) has recently derived supplementary guidelines to their 2006 generic ethical principles to address IMR. These go beyond the guidance from the Economic and Social Research Council (2006) and the British Sociological Association (2002: sect.41, pp.5-6) who express a need for caution, whilst outlining key issues to consider when carrying out IMR:

“Ethical standards for Internet research are not well developed as yet. Eliciting informed consent, negotiating access agreements, assessing the boundaries between the public and the private, and ensuring the security of data transmissions are all problematic in Internet research. Members who carry out research online should ensure that they are familiar with ongoing debates on the ethics of Internet research, and might wish to consider erring on the side of caution in making judgements affecting the well-being of online research participants”

After due consideration of all the available guidance, the following strategy was employed:

- Fully informed, written consent was obtained from all respondents through face-to-face briefing sessions
- As part of obtaining informed consent, respondents were offered verbal and written guidance regarding confidentiality. This could not be guaranteed in the IMVironment as there remained the possibility, however slight, of intrusion by eavesdroppers employing spy ware, or hackers. In particular, respondents were asked not to identify themselves and advised how to guard their own privacy and that of significant others by not revealing sensitive information unrelated to the interview. Any potentially identifying information was deleted from the transcripts. Identification letters were used for analysis purposes and all data was retained in separate, secure storage and deleted upon completion of the study
- Respondents were assured, verbally and in writing, of their right to withdraw from the research process at any time and to not respond to any questions with which they may feel uncomfortable
- To ensure the researcher’s personal safety, all face-to-face briefing and training sessions were undertaken on university premises, in rooms booked for that purpose, with the time and locations noted in advance with a supervisor
- Pre-arranged usernames and unique passwords were used to verify identities during the online interviews
- Online debriefing addressed any emergent questions raised by respondents. Should respondents feel they have outstanding issues requiring to be addressed, they were advised to contact University counselling service, who had previously agreed to undertake this supportive role
- When respondents exited the respondent account, all data in this account were deleted automatically as part of the central programming. On completion of each individual interview the researcher immediately changed the password of the respondent account. This prevented respondents re-entering the

respondent account and provided a secure setting for subsequent interviews through the provision of previously unused unique passwords

- Declarations of conflict of interest (personal, academic or commercial) in the proposed work was made clear and the relation between the sources of funding and ownership, publication and subsequent use of research data was made explicit

The ethical strategy outlined above was reviewed and approved by the University Research Ethics Panel prior to the initiation of any research activity.

REFLECTIONS UPON USING IM TO FACILITATE SYNCHRONOUS ONLINE INTERVIEWS

To allow respondents to reflect upon their experience of being interviewed online using IM, each respondent was asked questions regarding the positives and negatives of their experience of using IM for synchronous online interviewing.

It is important to note here that although the sample comprised undergraduate students, all had undertaken three years of study in research methods and undertaken their own empirical research. As such, all were familiar with the theory and practice of interviewing and being interviewed. The reflections of the respondents are set out below.

The Positive Experience of Respondents Taking Part in Synchronous Online Interviewing

Crichton & Kinash (2003, no page number) note that their experience of online interviewing was that respondents were:

"...able to sustain conversations beyond the scope of many traditional face-to-face interview sessions, noting that participants enjoyed the process...hence our position is that even though the technology is still emerging and improving, the potential is clearly rich, inviting and worth continued study"

Respondents in this study gave some indication of why this may be the case. All respondents, (with the elaboration of responses set out below) felt comfortable and confident whilst engaged in the IMVironment, confirming that they enjoyed the experience. All respondents confirmed that they would be willing to use IM again. Further, all respondents identified one or more specific advantages of using IM to facilitate synchronous online interviewing. These can be related to convenience, ease of use, perceived anonymity and quality of their own responses.

IM was considered a convenient way for respondents to undertake an interview. The absence of the need to travel or be interviewed in an unfamiliar setting was noted:

"...it is more time effective than travelling to meet face-to-face" (Resp: A)

Perhaps more surprising was the apparent ease of use of IM. Although this may in part be explained by the 'user friendly' guide provided to respondents. For the majority of respondents in this study, the use of IM and similar internet mediated communication platforms was an 'everyday' occurrence:

"...a lot of people are familiar with IM, using it on a daily basis" (Resp: E)

and:

"I have used IM for a while now so I am very familiar with it and find it so very easy to use" (Resp: G)

Those not familiar with its use quickly learned to do so. When asked whether she felt confident in using IM, one inexperienced user replied:

"Not at first, but I gained confidence and now I wouldn't hesitate to do an interview by this method. Given the choice I would pick IM" (Resp: D)

The IMVironment itself was also praised for providing:

"...a more relaxed environment in the comfort of my own room, so I don't have to worry about my personal appearance so obviously you are not as nervous as you would be face-to-face..." (Resp: E)

Other respondents expressed similar feelings, for example:

"Well it's more anonymous, I don't feel rushed either, more relaxed..." (Resp: F)

One very significant potential advantage was the recognition by respondents that the data they provided was qualitatively different as a consequence of using IM. These can be summarised into three groups, giving thoughtful responses, veracity and openness. The seemingly relaxed environment engendered by IM was reported to have an effect on the way respondents engaged with questions posed to them:

"...it [IM] enables a person to think a bit more about what they want to say" (Resp: B)

In terms of veracity, some respondents felt:

"...more comfortable typing things that I would not necessarily say...and giving more honest answers..." (Resp: E)

Another felt IM encouraged her to be more open in her responses:

"...it [IM] was better in that I felt I could say anything, whereas when you are in front of the person it seems more difficult" (Resp: D)

Taken together, these reflections would support the view that the experience of respondents was one of convenience, ease and more significantly perhaps, a research environment in which they could relax and feel more able to 'speak freely' about matters that arose during interviews. However, respondents also noted some disadvantages of IM and these are set out below.

The Negative Experience of Respondents Taking Part in Synchronous Online Interviewing

It is important to note that using IM to facilitate synchronous online interviews also engendered some criticisms from respondents. These can be broadly categorised into two key areas; issues concerning the IMVironment itself and issues external to it. These are set out below.

For one respondent, issues concerning the IMVironment began before they had even entered it. These included an instance of internet connection failure which resulted in an anxious moment as they attempted to enter the IMVironment. In such instances, any benefits in terms of convenience and comfort are somewhat negated until a connection is established:

"...some Internet connections tend to go down a lot" (Resp: A)

Despite measures in place to protect confidentiality, Respondent A, a new user, also had concerns about the security of the IMVironment. Respondent F felt their slow typing and need to constantly check their own spelling hindered the communication process:

"I'm not a great typist...I was nervous about my spelling" (Resp: F)

Some distractions were also noted, one respondent when asked to explain a delay in responding, stated she had *"just popped out to put the washing in the machine!"* (Resp: D). This respondent clearly experienced degradation in the convenience and their confidence in using the IMVironment, with potential and unknown consequences for the data collected.

However, one respondent raised a crucial point echoed by others - feeling unsure that the words they typed conveyed their intended meaning, instead respondents felt that:

"...information doesn't always come across as clearly as it possibly could, as for example in a verbal interview! Expressions can be made when talking to someone, so you can get the gist of which way they mean something to be understood. Whereas with messenger you can't see a person's emotions or feelings" (Resp: G)

This may represent a serious threat to the veracity of data and subsequent analysis and as such, addressing this concern currently presents a serious challenge to those seeking to use IM to facilitate synchronous online interviews.

The Positive Experiences of the Researcher Undertaking Synchronous Online Interviewing

What appears below is drawn from a daily reflective research diary maintained by the first author. For the researcher, using IM provided the following positive experiences both during and after the interview:

"I am happy with the quality and utility of IM for online interviewing purposes... communication is immediate...the transcripts are visibly different from previous face-to-face interviews I have conducted in that there is less 'waffle', more succinct and pertinent answers"

During the interview, the researcher also found she could:

"...copy and paste most questions into IM, freeing up time to think about the previous answers, write notes concerning points of interest and follow up questions"

The researcher shared the concerns of respondents regarding lack of non-verbal cues and found herself acting:

"...to compensate for the absence of non-verbal signals...I am using more probes to confirm the emotional context of responses and I feel that is improving the respondent's confidence in their responses"

In effect, the emotional context gained was thus inscribed within the interview transcript and was readily available at analysis. After the interviews were completed, the researcher had no need to transcribe, as data was already in textual form and easily transferred to word processing software, making a considerable saving in terms of time and potential transcription errors:

"...immediately formatting the transcripts and reading through for deletions to ensure anonymity took around thirty minutes for a one and a half hour interview and provided the benefit of continuous immersion in the data, which I felt helped contextualise subsequent interviews and inform analysis"

Overall then, the researcher recorded a number of positive and valuable experiences of using IM to facilitate research interviewing. However, the researcher also recorded some negative experiences and these are set out below.

The Negative Experiences of the Researcher Undertaking Synchronous Online Interviewing

Often, as noted above regarding the IMVironment and non-verbal cues, the researcher and respondents shared similar concerns. On one occasion:

"...my normally reliable internet connection failed at the first attempt. This sent me into a massive panic...but it connected at the second attempt to a great big sigh of relief!"

In a subsequent interview:

"I waited anxiously for almost an hour for one respondent to enter the IMVironment...he said he had simply been distracted and forgotten the time"

Initial unfamiliarity with the IMVironment was disconcerting and potentially problematic:

"The whole thing felt unusually quiet with no verbal activity and I got the sense of being distanced from the respondents"

Taken together, such negative experiences may have an unknown and potentially detrimental affect on the data collection process. Clearly, the experience of the interviewer is not always a comfortable one.

DISCUSSION

For both respondents and researcher in this project, the gains of online interviewing mediated through IM outweighed the losses. In general terms, both respondents and researcher considered IM to be a productive communication platform to facilitate synchronous online interviewing. Respondents reported a number of positive experiences identified in previous literature, including increased confidence, thoughtful reflection (Clarke, 2000), openness and veracity in opinion expression (Ho & McLeod, 2008). Research interviewing using IM was further considered by respondents and the researcher to be convenient, easy, and comfortable and very enjoyable experience.

IM was considered by respondents and researcher alike as more than just a novelty research tool, it is a communication platform used frequently by undergraduates in this project as part of everyday 'university' life. Although by no means replacing face-to-face or verbal communication, respondents also noted the increasingly commonplace use of IM and similar technologies to enhance their communication with others – it is fast becoming part of everyday communication practices, which can increase the ecological validity of studies using such technologies (see Gavin, 2008).

IM was also perceived as an environment that lessened interview apprehension, primarily due to perceived increases in anonymity. Respondents here felt this meant they gave more open and honest answers and as noted previously by Clarke (2000), this can lead to more reflective, descriptive and accurate data.

At first glance, these would appear well worth pursuing further as potential advancements in the practice of qualitative research. It is, however, important to note that ethical concerns regarding the impact of using this technique require further consideration and these dilemmas are heightened because as yet, the benefits noted above are not clearly established and widely accepted, making it difficult to assess whether, ethically, the benefits of IM outweigh its potential costs.

Although the 'disconnectedness' of IMVironments may be disconcerting for many, those for example, who have concerns regarding their physical appearance, who find it difficult to communicate verbally or those who would not wish to sit in a face-to-face situation, this disembodiment may be seen as a prerequisite to taking part in research. Using IM has already proven beneficial when communicating with people who experience interview apprehension (Gunter, 2002) and shyness (Davis 2004). Although this holds forth promise, further exploration is needed to establish *how* inclusive online interviewing using IM as the communication platform may be for those individuals who face barriers to social interaction through perceived psychological, physical, emotional and sensory difficulties.

It has been noted that visual cues in face-to-face communication can evoke discouragement, interruptions, distractions and misreading of non-verbal cues (for example see Clarke, 2000) however, the absence of visual cues was found in this study to be the primary concern of those using IM for synchronous online interviewing. This is potentially a serious limitation in research of this kind and although clarification of the emotional context of respondent answers can be recorded in the interview transcript, it is difficult to see how they could entirely satisfactorily replace non-verbal signs.

This paper was based on a small purposive sample of computer literate undergraduates, with the majority reporting frequent personal use of IM. Therefore, caution needs to be taken when considering this communication platform as a straight replacement for face-to-face interviews. This communication platform for IMR is still in its infancy and questions remain regarding its efficacy for different samples in different contexts outside of higher education^b (see Hine, 2008).

Moreover, with regard to respondent answers being succinct, IM may be less suitable for analyses that rely on narrative or contradictory data, such as discursive approaches that seek to understand how individuals construct contrasting and often contradicting stories/versions of events (see Potter and Wetherell, 1987).

It is clear from all the above that, when using IM to facilitate synchronous online interviewing, the interviewer (and indeed the respondent) are dependent upon technology over which they have little control. To retain the benefits of IM is both a challenge to the practice of those who use IM, but is also dependent on new technological advances that may, deliberately or otherwise, help to assuage some of the negative experiences outlined above.

^b Subsequent interviews have been successfully conducted by the first author with higher educational disability support workers, recruited via written correspondence with all necessary ethical procedures i.e., briefing, obtaining informed consent and debriefing conducted via email using official university addresses. Although this sample were computer literate, unlike the undergraduate sample they had little or no prior experience of IM; the IM 'user friendly' accessibility manual proved invaluable here.

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