I

T is necessary for qualitative researchers to be creative in the work that they engage in. Such freedom can lead to the creation of well designed projects that work constructively with the messiness of the naturalistic environment and manage to capture the essence of the phenomenon being scrutinised. In doing so, they manage to avoid dogmatic experimental conditions that, at times, nullify their usefulness by being so distanced from real life. The researcher, therefore, becomes a competent bricoleur (Denzin & Lincoln, 2000) weaving his or her way through the tangled web of theoretical jargon and methodological choices to produce an approach that can be practically applied in the setting of interest. However, the flipside of such freedom proves to be the need to have at least some grasp of the philosophy that underlies the decisions that we make: ‘Paradigm issues are crucial; no inquirer, we maintain, ought to go about the business of inquiry without being clear about just what paradigm informs and guides his or her approach’ (Guba & Lincoln, 1994, p.116). Thus, although the above researcher may have utilised techniques and methods that were practically useful, these must have been used with sound foundation. ‘Can she truly justify the decisions that she has made?’ and ‘Is there a workable rationale for the work she has conducted?’ Interestingly, even researchers who advocate developing an understanding of the epistemological underpinnings to research, see the justification of the choice of method as a secondary factor when designing a research project. For instance, Crotty (1998) notes that those designing a project should answer the following questions.

‘First, what methodologies and methods will we be employing in the research we propose to do? Second, how do we justify this choice and use of methodologies and methods?’ (Crotty, 1998, p.2).

Methodological Paper

Virtual Data Generation: Qualitative research, computers and counselling psychology

Terry Hanley

Content and Focus: When designing a qualitative research project the researcher is automatically faced with numerous decisions about methodological choice. The selection of any method needs to be made with adequate foundation and sound ethical consideration. This paper hopes to illustrate some of the challenges that researchers face when transforming methods that are traditionally implemented ‘face-to-face’ or by ‘pen and paper’ into electronic formats. In doing so it aims to introduce the reader to some of the key debates that exist in this field and act as a resource for those interested in delving deeper into the subject matter. Four online methods are described (Questionnaires, Focus Groups, Interviews, and Journaling/Blogging) and examples from completed and ongoing research projects are presented. Following this, the practical and ethical challenges that are faced in justifying the use of online methods are discussed and the need to consider more than just the issue of convenience is raised.

Conclusions: Online qualitative research poses new opportunities and challenges for counselling psychologists. There is, however, a growing body of literature related to online methods which should be used to inform methodological and ethical decisions.

Keywords: Online Research; Questionnaires; Interviewing; Focus Groups, Blogging.
Such a pragmatic stance seems to be an appropriate place to start from for people working within the untidy and disorderly scenarios that exist in the real world.

This brings me to consider one strand of my own research, notably examining the development of online counselling services for young people in the UK. In beginning to work in this area I made the automatic assumption that a substantial amount the work would be conducted online. I became fascinated in how methods that would be usually viewed as ‘pen and paper’ or ‘face-to-face’ activities could be translated into virtual means. This led me to begin to experiment and transplant methods that I was already familiar with in traditional forms online.

In the sections below, I begin to unravel some of my understandings of utilising qualitative data collection methods online. In following the order that Crotty (1998) presents, I initially describe the methods of generating data online that I have been using – these are distributing questionnaires, running focus groups, conducting interviews and writing a personal journal (see Fielding, Lee & Blank [2008] for a wider spread of online research methods). Each of these methods refers to the use of solely text-based techniques as these are presently modes of communication that are readily available to the general computer user. I do not refer to the use of videoconferencing, avatars or other new and developing technologies (see the likes of Zsiray, Smith & West [2001] and Williams [2007] respectively for discussions of these methods). I then, in line with Crotty’s second question, move on to discuss the rationale that I attributed to using these methods online and the challenges that I faced in justifying my decisions. It is also worth noting that, although I do raise some of the positive and negative aspects of using these methods, the purpose is not to evaluate their usefulness but to raise awareness to the key issues that may be faced when working online.

**Online methods**

This section outlines four online methods. In each subsection I attempt to provide an overview of the method before linking it to the literature that exists about conducting this type of research - both online and using more traditional means. To provide a concrete example of how each method can be used, I then briefly describe studies in which I have adopted online methods to collect data.

1. **Questionnaires**

If you surf the web for any significant time it is likely that you will be asked to complete a questionnaire of some kind. Software has been designed to transfer questionnaires from paper formats to online formats that are incredibly easy to complete. Those completing questionnaires can tick boxes and scroll through options all at the click of a mouse. As with paper questionnaires, gathering more detailed responses from participants takes considerably more investment in time on their behalf – after all, a comments box on an online questionnaire still needs someone to take the time to type comments.

Designing an online questionnaire follows much the same rules as designing a paper questionnaire. There are essential do’s and don’ts that should be followed for both the ease of completion and data analysis (for examples, see Robson [2002, pp.245–246]). The computer packages that have been designed to aid the creation of computer-mediated questionnaires generally support the researcher through this process and also provide summaries of the findings once the questionnaires have been completed. Needless to say, this automated process of data analysis works much more effectively for quantitative data, nonetheless not having to monotonously type in all of the hand written qualitative answers can still save hours of work. Benefits such as these lead researchers to conclude that online questionnaires can be convenient for participants, cost effective and can aid researchers with data analysis (Kaye & Johnson, 1999).
In an attempt to create specific guidance for working in this way, researchers have begun to create good practice guidelines for working solely online (e.g. Lumsden & Morgan, 2005).

In trialling the use of questionnaires to gather qualitative data, it was decided that both an online questionnaire and a paper questionnaire would be devised and distributed to evaluate a student led counselling research group at the University of Manchester (Lennie & Hanley, 2007). This evaluation combined simple tick box descriptive data with a number of open ended discursive questions. The questionnaire had two distinct pathways, notably gathering the views of those who had and those who had not attended the group. An automatic advantage of the online questionnaire was that it could direct the respondent past any questions that did not prove to be relevant. This process worked incredibly well, with respondents choosing to complete the questionnaires in whatever format they found most convenient. The data generated in both formats appeared to be of a similar quality, except the online responses tended to be longer in length and a significant number of them had been completed by those people who found it difficult to attend the group. These differences may have been due to the easily extendable boxes that were provided within the online questionnaire and the fact that the online version proved much more convenient for those who found it difficult to access the resources at the university.

2. Focus Groups

Focus groups can be run online in real time (often referred to as synchronous chat) or at the participant’s convenience by using forum spaces which are hosted for longer periods of time and allow people to dip in and out of them (described as asynchronous focus groups). Synchronous groups can be run using commonplace chat facilities but do run the risk of information overload. In particular, if more than one person decides to comment at once it can get very confusing trying to keep up with the conversation. In contrast asynchronous focus groups can be created using online forums and message boards. These programmes enable individuals to set up different strands of conversation and can work well for large groups of people. A major downfall in creating such a group is that you may need to be more patient for conversations to develop – for example, you may host a group for several weeks.

Online focus groups echo their face-to-face counterparts. Traditionally they consist of a relatively small number of people and are facilitated by a moderator with the aim of discussing specific topics (Wilson, 1997). Throughout the process the facilitator of the group aims to create a comfortable, familiar and unthreatening environment in which people can talk freely about the subject matter being investigated (Kitzinger, 1994). In examining how such a process can be conducted online there have been a number of papers/chapters that specifically focus upon the challenge of running groups in this way (e.g. Gaiser, 2008; O’Connor & Madge, 2003; Bloor et al., 2002; Mann & Stewart, 2000; and Rezabek, 2000). These outline the different ways that focus groups can be facilitated online and again reiterate the convenience of using such an approach. With regard to asynchronous groups, they also consistently note the possibility of working with larger groups of people relatively easily.

With the aim of pooling together views about the development of youth friendly online counselling services, an online asynchronous focus group was set up. A forum was created to host the group and a number of counsellors already working online with young people were invited to take part. The group lasted a month period and participants were encouraged to discuss topics related to the development of such services. Initially a number of conversation topics (known as forum threads) were posted but group members could also add to and create topics.
of their own. In total nine people took part in the group and 41 postings were made. Although it was felt that the forum could have generated much more data, the discussions proved to be rich in content with a useful amount of data being generated. This proved to be of a sufficient quality to be written up as a paper highlighting some of the challenges of regulating online counselling services for young people (Hanley, 2006b).

3. Interviews
There are numerous ways of conducting online interviews. As with running an online focus group, a major decision here is whether to conduct the interview synchronously or asynchronously. The synchronous interview can be conducted using real time chat facilities that enable two people to communicate by exchanging text messages. These have the advantage of collecting all of the data in one sitting. In contrast the asynchronous interview may be conducted over a much longer period. The interviewer and the interviewee engage in creating a dialogue about the subject matter of interest. This could involve exchanging emails in a style that echoes the chronological nature of face-to-face and synchronous interviews, or it could involve developing thematic strands of conversations in which both parties embed their recent comments into dialogues that have already occurred.

As with online focus group methods, e-interviewing has a developed body of literature devoted to it (e.g. Connor et al., 2008; Kivits, 2005; Bampton & Cowton, 2002; Mann & Stewart, 2000). Although it is possible to adopt similar interview strategies as within face-to-face and synchronous interviews (fully structured, semi-structured or unstructured [Robson, 2002]), the researcher needs to account for the nuances that exist within different online environments. For instance, although meeting someone on the internet may prove convenient due to their location in another country, it poses numerous challenges. These include working without traditional visual cues available in face-to-face interviewing (O’Connor & Madge, 2003) and working creatively within relationships that have noticeably different power dynamics (Robinson, 2001). Generally it is considered vigilant to at least exercise caution when working with relatively new data sources such as this (Suzuki et al., 2007) and it should not be assumed that face-to-face interviews have an automatic parity to online interviews.

In a recent project I conducted synchronous interviews with young people who had been accessing a free at the point of access online counselling service. These interviews were being conducted using the same real time chat facilities that young people used to access the online therapeutic service and typically lasted 30 to 45 minutes. The purpose of each interview was to gain a better understanding of the young person’s experience of accessing and receiving online therapy. In particular, I was keen to ask questions about the quality of the therapeutic relationship they had with their counsellor. In summary, interviewing in this medium proved a great challenge for me. Although I see myself as a competent computer user, who is familiar with communicating using chat room technology, I struggled to focus my early interviews in the way I would have ideally liked them to go. In part, I put this down to the semi-structured interviewing approach I had adopted and the nature of the subject matter I was examining. However, I cannot escape the steep learning curve regarding online interviewing that I went through. During the later interviews I conducted, I found myself becoming increasingly focused and directive, and given the time limitations of the interview, this proved very fruitful (see Hanley, [2009, 2011], for a summary of the findings I generated). Interestingly, on reflecting upon these processes, I find the parallels between interviewing online and creating a successful online therapeutic alliance fascinating – without a doubt there are elements that each field can learn from one another.
4. Journaling/Blogging
Since the turn of the century online journals have become commonplace. Predominantly these now take the form of blogs; a blog is ‘a web page that serves as a publicly accessible personal journal for an individual’ (Webopedia, 2011). In these journals individuals can use web space to create an environment in which people can update entries in much the same way that people keep a diary. A major difference between a paper journal and a blog would be the amount of people who have access to the work. Although blogs can be set up to limit the amount of people who can access them, they are predominantly freely available to the public. The public nature of the blog has led to some people’s work becoming headline news, for instance, Salam Pax’s blog ‘Where is Raed?’ gained much attention by providing a frank insider’s view of the invasion of Iraq in 2003 (Haas, 2005). Such ‘insider’ led content leads readers to evaluate blogs as being more credible sources than traditional media (Johnson & Kaye, 2004) and suggests that they can be utilised as a reflexive research tool that is ripe for the picking (e.g. Hookway, 2008; Wakeford & Cohen, 2008; Mortenson & Walker, 2002).

Within qualitative research it is not uncommon for researchers to keep a reflexive journal (Etherington, 2004). In fact whole research traditions such as autoethnography have brought to light the richness and importance of such forms of data gathering (Ellis & Bochner, 2000). It could even be said that all blogging does is take these traditional approaches and add a multimedia dimension to them – a factor that some embrace with open arms and others choose is not for them. However, without a doubt, the potentially public nature of the blog can change the writing style of a journal. Comments from others may facilitate reflexivity on behalf of the author or make her edit views that would have been expressed more graphically in a private piece of writing (e.g. Mortenson & Walker, 2002).

As a way of chronicling and capturing my ongoing thoughts about my own research I decided to set up a research blog. This was a messy web-space in which I wrote intermittent entries about my thoughts about research projects and my life in general. It acted as a meditative space, almost a therapeutic space, in which to have a rant and record some miscellaneous thoughts that I could not naturally place elsewhere at that time. To begin with the blog remained relatively private, with one or two colleagues passing by to read it or comment on what I had written. I then made the mistake of going public about the blog in a short piece within a journal which I had edited (Hanley, 2006a). Although I am under no illusion that many read my article, knowing that a small number of people might stumble across my rather random entries led me to censor my words. Although, I am sure that more focused blogging could prove useful for some, the potential public nature of my blog saw its demise.

Why counselling psychologists might conduct research online
Personally, I almost haplessly stumbled into using online research methods due to the nature of the environments I was researching. However, in beginning to justify their usage, and to work them into research designs that were ethically sensitive, a great deal of forethought was required. In this section I discuss my motivations for continuing with my initial ideas and provide examples from my own work to highlight some of the pitfalls and challenges that I have faced. Hopefully the discussions will provide practical and ethical food for thought for other qualitative researchers contemplating utilising online methods.

1. Considering what is Practical
There are only a limited number of hours in each day and, therefore, using technology, such as the internet, to make our lives easier seems like an attractive prospect. It can enable researchers to contact participants
who would otherwise prove difficult to reach. For instance, the internet transcends physical geography and it can be possible to collaborate with people on the other side of the world with a click of a mouse. However, despite the advantages of utilising technology there are many pitfalls that researchers can fall into and trying to use technology without prior competence can lead to the failure of research projects (e.g. West & Hanley, 2006).

In considering the pros and cons of such work numerous people have attempted to produce lists of considerations for researchers to think about when planning to work online (e.g. Granello & Wheaton, 2004; Kraut et al., 2004). One of the most useful guides, particularly for qualitative researchers in the UK, is that produced by Mann and Stewart (2000). Table 1 summarises the key advantages and challenges that they note for the online researcher.

As Mann and Stewart highlight, using technology to facilitate qualitative research can help to bring together participants and researchers, it can also aid the processes of data generation and data analysis. However, in developing a ‘doable’ project the researcher must be competent in the nuances of computer-mediated communication. Dependent upon how much of the project is conducted online, these skills could spread from developing an initial contact, to managing the online interaction with those taking part, and finally to handling the data that has been generated.

In practice it has been very easy to make assumptions that things will unfold as planned only to have an oft too frequent ‘I didn’t consider that’ moment. In accounting for this, using online methods has proven incredibly convenient and enabled me to collect data that I would not have otherwise been able to gather. However, this has come at a cost. I have summarised some of the issues I have encountered within my work with young users of an online counselling service in Table 2.

These examples have proven to be only part of the steep technological learning curve. They also display how problems can be encountered at any point during the research process and that it may be the participant, researcher or technology that proves to be the stumbling block to the success of the work. In an ideal world I would be recommending that researchers learn to anticipate the unexpected, but within the real world it is not possible to keep abreast of

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Challenges</th>
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<tbody>
<tr>
<td>Extending access to participants</td>
<td>The researcher must be computer literate.</td>
</tr>
<tr>
<td>Cost and time savings</td>
<td>The researcher must have good computer mediated communication skills.</td>
</tr>
<tr>
<td>Eliminating transcription bias</td>
<td>The researcher must be confident in online methods (e.g. focus groups/interviewing).</td>
</tr>
<tr>
<td>Easier handling of data</td>
<td>Making contact and recruitment, for example, finding contacts of potential participants.</td>
</tr>
<tr>
<td>The participants may prefer the medium</td>
<td>Ensuring co-operation from participants. Losing access to participants – it is very easy for people to drop-out.</td>
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</table>

Edited summary of those described by Mann and Stewart (2000).
2. Considering what is Ethical

The practical problems that can be encountered in using technology to generate data are further complicated by the ethical considerations that come into play with any research project. Within the UK we can refer to the Health Professions Council’s (HPC) Standards of Conduct, Performance and Ethics (HPC, 2008) which note that registrants should ‘act in the best interest’ (p.3) of those people we work with. Accompanying these are the British Psychological Society’s (BPS) Code of Ethics and Conduct which states that psychologists should ‘Avoid harming clients’ (BPS, 2006, p.17), and the same organisation’s accompanying statement on research with human participants (BPS, 2011). Researchers, therefore, have a responsibility to avoid putting participants at undue risk, a factor that becomes more complicated but not insurmountable when introducing new technologies into the equation.

In reviewing the literature about conducting research online a number of papers/chapters/reports have begun to address the distinct ethical challenges of working in this medium (e.g. Eynon, Fry & Schroeder, 2008; Gaiser & Schreiner, 2008; BPS, 2007; Markham, 2005; Kraut et al., 2004; Ess & AoIR, 2002; Nosek, Banaji & Greenwald, 2002; Mann & Stewart, 2000; Suler, 2000; Childress & Asamen, 1998; and Boehlefeld, 1996). Each of these develops upon existing statements that apply to more traditional means of research and give the reader a sense of how they can be translated to online methods. In attempting to summarise the key points that these papers raise Table 3 poses a number of questions that should be considered throughout the different chronological components of a research project.

In working online with potentially vulnerable young people, ensuring that the research design was ethically watertight was always at the forefront of my mind. In contemplating the issues that could have arisen, I found myself pushing at some of the boundaries of what is generally viewed as good practice. For instance, many statements about online ethical procedures state that young people should not be worked with without gaining parental/carer consent first (e.g. Mann & Stewart, 2000), a view that also complies with the norms within face-to-face research (e.g. BPS, 2011; Dent et al., 1997). However, obtaining such consent for

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**Table 2: Technological challenges encountered whilst researching online youth counselling.**

<table>
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<tr>
<th>Research Task</th>
<th>Challenge</th>
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<tbody>
<tr>
<td>Recruitment</td>
<td><strong>Participant Silence:</strong> Despite users agreeing to take part in follow-up interviews on a questionnaire, once invitations were sent to arrange a meeting I received no response.</td>
</tr>
<tr>
<td>Data Generation</td>
<td><strong>Technology Failure:</strong> During several interviews the chat room that I have been using has frozen. This has led to the premature ending of a number of meetings and has had to be apologised for through instant messages.</td>
</tr>
<tr>
<td>Data Handling</td>
<td><strong>Researcher Error:</strong> To keep a record of the interviews I would always copy the complete transcript into a Word document. On one occasion I complacently clicked once too many times and found that an hour-long interview had disappeared into the ether.</td>
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</table>
this project would have proven untenable. For instance, gaining parental consent would:
(a) prove impossible as the organisation has a policy of only asking for identifying personal information when risk becomes evident; and,
(b) inadvertently put young people in a vulnerable position by highlighting their request(s) for support to those potentially causing or adding to their stress.

One response would be to avoid contact with the young people altogether. However, as online therapeutic services are presently under-researched, and there is already evidence of individuals exploiting young people by masquerading as online counselors (The Guardian, 2006), this in itself would pose an ethical quandary. Fortunately, it did not prove an impossible challenge to overcome and it was face-to-face precedents for working with young people without parental consent that helped to develop an appropriate rationale (e.g. Allen, 2002; Hanley, Sefi & Lennie, 2011).

The above example is presented to highlight the type of ethical dilemmas that might emerge in online research. It would be possible to continue discussing more specific ethical issues related to such practice however this would provide enough fodder for numerous other papers in their own right. This, therefore, presents a taster of the ethical decision making process that I have been involved in. It also highlights that researchers should not automatically be disabled by the presence of technology and that they should not neglect face-to-face solutions to problems encountered online.

<table>
<thead>
<tr>
<th>Key Issues</th>
<th>Recruiting Participants</th>
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<tr>
<td></td>
<td>When working with people from other countries are there legal differences that should be considered? Can you be sensitive to the different cultures of the participants you meet online? Are you putting participants at undue risk by asking them to meet with you online? Are the participants who you think they are?</td>
</tr>
<tr>
<td></td>
<td>Contracting the research</td>
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<td></td>
<td>Are participants appropriately informed about the study?</td>
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<tr>
<td></td>
<td>● How did you provide this information (e.g. within an attached document, during the first meeting)?</td>
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<td></td>
<td>● How did you record their consent (e.g. returned email, posted signed letter)?</td>
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<tr>
<td></td>
<td>Is the data collected in a secure environment? Or is it openly accessible to the public/other participants?</td>
</tr>
<tr>
<td></td>
<td>Data Generation</td>
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<tr>
<td></td>
<td>Do you feel competent at computer-mediated communication?</td>
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<td></td>
<td>● Does this include knowledge of general netiquette?</td>
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<tr>
<td></td>
<td>● Does this extend to the research methods employed?</td>
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<tr>
<td></td>
<td>(e.g. interviewing, moderating groups, gathering questionnaires)</td>
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<tr>
<td></td>
<td>● Are you aware of the different power dynamics that can exist online?</td>
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<tr>
<td></td>
<td>Data Storage</td>
</tr>
<tr>
<td></td>
<td>How do you store data safely? Do you change any names mentioned or password protect/encrypt the files?</td>
</tr>
<tr>
<td></td>
<td>How do you delete electronic data?</td>
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<tr>
<td></td>
<td>How do you dispose of any hardware that once had data on it?</td>
</tr>
</tbody>
</table>

Table 3: Questions to consider throughout online qualitative research projects.
Summing up
In re-reading this paper I realise that I have covered a great deal of territory. In doing so I have not intended to provide a comprehensive set of guidelines but instead hope to introduce the reader to the broad area of qualitative online research. Furthermore, I hope to have brought to life some of the issues by providing examples from my own work. With this in mind, I hope that this paper can act as a resource that individuals can use as a point of development by signposting people to appropriate texts.

In continuing with this aim I would also direct people to Azy Barak’s website (http://construct.haifa.ac.il/~azy/refmetho.htm) which includes an ever increasing list of references about online research. Dynamic resources such as these prove invaluable in a field that can change so quickly. However, with the fear that if I redraft this paper once more then I will have to include a whole raft of new papers, I stop and wish those who do decide to enter virtual environments as researchers the best of luck.

Acknowledgements
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