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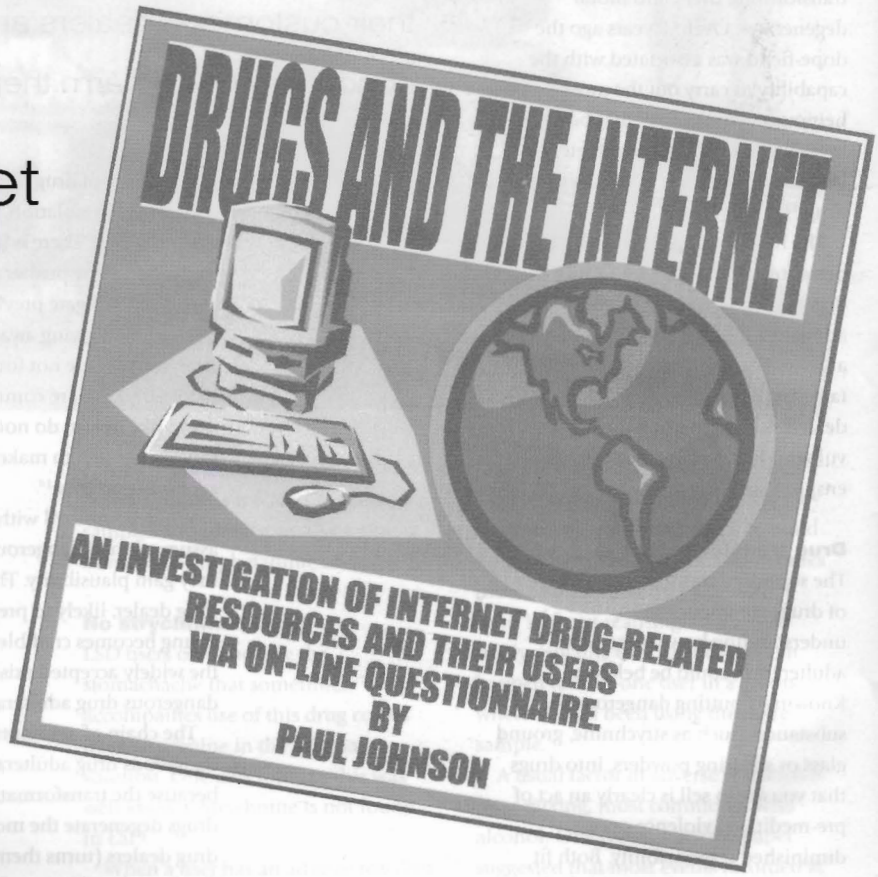
Using the Internet for research



Discussion groups and websites on drug use are established features of the Internet. Now fully automated questionnaires can collect and collate information from drug users with Internet access.

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The computer is to the brain what the lever is to the arm. Often the computer can bring otherwise barely achievable ideas to reality and deal with repetitive and complicated calculations at the same time.

Aside from the reference information that is accessible through the Internet it is an astounding communication and research tool. It can connect you to literally millions of people very quickly.

In early 1995 I started research into controlled drug users and their relationship with the Internet.

It soon became apparent that to access drug users an online questionnaire was required. Hypertext markup language (HTML) and common gateway interface scripts (CGI) were used to create the questionnaire and write a script . An Internet service provider was found and, after some difficulties, the script and questionnaire were uploaded on to their server.

The questionnaire script was designed to collate the answers and despatch them to my computer as e-mail. A database-coding sheet allowed subsequent analysis of returned data.

As with most research, this

attempted to answer questions about the whole population by selecting a subset to participate in the research. The Internet cannot give access to all drug users, but it can reach a statistically significant number of them. It is a biased sampling methodology – bias that will decrease with increased usage.

The questionnaire was advertised in some 26 drug and related newsgroups, with a link inserted in the message to allow swift transfer to the questionnaire site. In ten days data was received from over 160 people. The questionnaire was taken down after about one month. The visits counter showed that 251 people had visited the questionnaire, though not all had answered it.

Due to time constraints, the analysis included only the first 100 responses. These were put into a Statistical Package for the Social Services (SPSS) database and analysed.

The infinite responses

This research established that most questionnaires could be converted into online versions, fairly simply with a reasonable understanding of HTML and the various Windows operating environments (there are now HTML editors that simplify this). One of the most important benefits discovered in the programming was the infinite number of responses that could be linked to drop-down or scroll style selection lists incorporated in the questionnaire and its ability to return and process text.

The online questionnaire demonstrated that the Internet can be employed to gather useful data while retaining relative anonymity for the respondent. It would appear that this method of data gathering allows access to, and is able to elicit responses from, people who may not otherwise discuss such sensitive topics.

It is also clear that drug users do use computers. They actively seek information about drugs on the Internet and obtain what they consider to be more useful information than is available to them from traditional sources.

Investment in the Internet is worthwhile for many drug-related organisations: it is a useful way of accessing many individuals at little cost.

Internet survey findings

83 per cent of respondents were males
74 per cent admitted using controlled drugs, predominantly cannabis
2 per cent stated that they used opiates
70 per cent of all respondents accessed the Internet mostly from home
15 per cent gained access through a combination of home and work
50 per cent of respondents were in the 16 to 24 year-old age group
56 per cent of respondents lived in North America, 34 per cent in Europe
34 per cent have had access to the Internet for 1-2 years
33 per cent have had access for less than one year
28 per cent have had access for 3-5 years

Electronic data gathering is capable of processing very large data sets accurately in seconds

The ISIS Project

In a natural progression from the questionnaire on the Internet, a small group formed of academics with interests in Internet methodologies in psychological and social research. We came to the conclusion that as the data was being transmitted on the Internet in digital form, we could route it to a computer where it could be stored and allowed to amass.

It was clear from early on that this would involve working with our own Internet server. Especially after the difficulties experienced in the questionnaire. John Moores University allowed us our own web space, and in a short time we put together a program and a script that would hold on to data in a downloadable format. The data file was designed to be compatible with Microsoft Excel databases, as most analysis packages seem to allow files to be imported from Excel.

We then turned to the questionnaires. It was important that questionnaires could be constructed using as many as possible of the HTML editors becoming available. Ideally a researcher would be sent responses in an e-mail automatically with the compiled data. This would allow them to see the response rates and print off a hard copy if they wished.

Through a combination of programming at the server and the introduction of a single line of HTML code installed into the source code of the questionnaire, we achieved our goal. When the respondent finishes answering the questionnaire they automatically receive a response web page which can be used for numerous purposes – we use it as a thank-you page. The researchers get their responses via e-mail.

To make sure it all worked we ran a trial. No discrepancies were found.

This method of gathering survey information has many benefits and endless possible uses, including use on company intranets for in-house research. It can swiftly gauge change, as a questionnaire can be uploaded, completed, processed and the results available in a matter of hours. It can offer anonymity, which as a consequence is likely to elicit more honest responses.

Electronic data gathering is capable of processing very large data sets accurately in seconds. When combined with automated data processing applications it can make light work of certain types of research. We are close to the time when the first time we see research results is as they appear from the printer, ready processed and analysed.

Why use the Internet to gather information? It taps into populations that are often difficult to get to or are simply not accessible by other means. Hence its value in being able to access non-problem users.

The whole system is being presented at the BPS conference at Lancaster University on 14-15 September 1999 ■

Net Gain for Drug Services

More information on the benefits of information and communication technology are contained in a report *Net Gain for Drug Services*. This final report of the Net Gain for Drug Services Project outlines the ways information and communication technology can be used to help voluntary sector drug services. It looks at current practice and makes recommendations for the future.

Published jointly by ISDD and SCODA, *Net Gain for Drug Services* is £10 (£7.50 for SCODA and SDF members) plus £1.50 p&p for orders up to £15, £3.00 for orders £16-£50, free for orders over £50. Cheques to SCODA Ltd at Publication Sales, SCODA, 32 Loman Street, London SE1 0EE, phone 0207 928 9500