



# Young students' use of the Internet for mental health information and support

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## Accessible summary

- Young people experience difficulties in accessing mainstream mental health services, yet are experiencing increasing rates of mental health problems.
- There is a growth in the use of the Internet for health information and support.
- This study aimed to elicit the views of 922 students on using the Internet for health information and support.
- The findings of this study can help inform website design and web-based interventions for young people with mental health problems.

## Abstract

It is recognized that young people experience difficulties in accessing mainstream mental health services particularly because of the stigma that remains associated with mental health problems. One potential solution is to use the many websites available offering information and support for mental health problems, such support and information could be offered by Psychiatric Nurses. However, young peoples' usage and views on using the Internet for this purpose has yet to be examined. This quantitative descriptive study aimed to elicit the views of 922 University students, aged between 18 and 24 years, on using the Internet for mental health information and support. Data were collected using a 30-item self-designed questionnaire and analysed using descriptive statistics. The findings indicated that 72.4% of participants used the Internet several times a day. In addition, 30.8% had previously searched for mental health information online, predominantly on depression. While it was found that 68% of participants indicated that they would use the Internet for mental health support if they needed to, 79.4% would still prefer face to face support. It is concluded that young people are willing to use the Internet for mental health information and that it represents a viable source of support for this age group.

## Introduction and background

Using the Internet for health information has become a popular choice among the general population in recent times. The Central Statistics Office (2008) in Ireland reported that 62% of Irish people have access to the Internet in their own homes. This is similar to international trends, for example, a Parisian study found that 70% of people had Internet access (Renahy *et al.* 2008). The

Health Service Executive (2007) reported that 18% of Irish people have used the Internet for health information, a much lower figure than that reported by Renahy *et al.* (2008) who found that 49% had used the Internet previously for health information. Gallagher *et al.* (2008) reported that those seeking health information online in Ireland were most likely to be female and in employment, those least likely were males of older age and the unemployed. A high percentage reported willingness to use the

Internet for health information, this however, decreased with age possibly because of access to the Internet. Rice (2006) analysed the results of seven American databases, two in detail, to determine what influences people to search for health information online. Similar to Gallagher's *et al.* (2008) results, it was found that the most likely people to search for health information online were female and in employment, those who have received a new diagnosis and those who want to help others cope with health-related problems.

With the growth in health-related websites, numerous studies have been conducted in the USA, Europe and Canada, on how people use the Internet for general health information (Health on the Net Foundation 2001, Skinner *et al.* 2003, eUSER 2005), however, few have focussed on young people. Their findings indicated that large numbers of people use the Internet for information on illnesses, treatment and support. Indeed, the use of the Internet for support is well documented, particularly in the area of cancer care (Lieberman *et al.* 2003, Hoybye *et al.* 2005, Klemm 2005, Lieberman 2005).

Concerns have been raised as to the quality of health information available online and as such it has been quite extensively studied. Eysenbach *et al.* (2002) conducted a systematic review of 79 research studies that evaluated the quality of health information online. While no conclusive evidence was found because of the quality of the studies, it was reported that 70% of the studies concluded that the quality of health information online was a problem.

The use of the Internet for mental health information is less certain. It is estimated that one-fifth of young adults have used the Internet as a source of mental health information (Gould *et al.* 2002). In the UK, a study by Powell & Clarke (2006) reported that 24% of their total sample identified the Internet as one of the top three sources of information on mental health. Additionally, Powell *et al.* (2003) identified that 49% of people who use the Internet for mental health information had not sought formal support from the health services. Indeed, Gallagher *et al.* (2008) reported that there is an increase in the number of people searching for mental health information online. A survey in the UK found that more than one in four people would rather use the Internet for advice and counselling about depression than visit their family doctor (Graham *et al.* 2000). Indeed, Ybarra & Eaton (2005) suggested that people with depressive symptoms and suicidal ideation prefer computer-based assessments and interventions. The reasons for this are multifaceted but include an ability to remain anonymous and explore and share feelings on a more intimate level (Shaw *et al.* 2000) while feeling less stigmatized for gaining mental health information and support (Johnsen *et al.* 2002).

There is a high prevalence of mental health problems among 18- to 24-year-olds (Andrews *et al.* 1999). This is problematic given that, some research suggests that young people demonstrate low levels of help seeking behaviour in relation to their mental health (Sullivan *et al.* 2004, Rickwood *et al.* 2007). Reasons for this are complex. For example, Donald *et al.* (2000) reported that in young adults aged 15–24 years, 39% of males and 22% of females would not seek help from formal services for personal, emotional or distressing problems. There is further support for this perspective since Berger *et al.* (2005) found that help seeking for mental health problems is often delayed because of stigma and that the Internet is a means of encouraging people to seek help. It is also argued that engaging in help for mental health problems at a young age is regarded as a protective factor and early treatment during adolescence and young adulthood are essential to aid long-term prognosis (Rickwood *et al.* 2007).

Gallagher *et al.* (2008) findings also reported that a significant number of people who seek health information online have experienced mental health problems; they argue that this raises questions as to whether the Internet should be used for mental healthcare delivery. Moreover, Gallagher *et al.* (2008) contend that further research is needed to ensure the needs of people who seek health information online are met.

Many websites exist offering information and support for mental health problems for young people, for example, <http://www.spunout.ie>; however, studies of young peoples' usage and views on these services are not readily available. In summary, the fact that young people demonstrate low levels of help seeking behaviour for mental health problems, while being active users of the Internet where services exist to offer them mental health information, suggests that it is a potentially viable alternative to face-to-face support. Nevertheless, little is known about what types of mental health information young people search for and how young people view using the Internet for mental health support.

## Methodology

This study aimed to determine how young people use the Internet for mental health information and support using a quantitative descriptive approach as a prelude to a more in-depth study. As this study was explorative and aimed to gain descriptive information on how young people use the Internet without addressing causality, this was deemed an appropriate approach.

## Data collection and analysis

Data were collected through the use of an online questionnaire. This questionnaire was designed by the researcher

based on themes identified from the literature. An extensive review of the literature was undertaken, this information allowed for the formation of the questions used in this study. Measures taken to enhance the validity of the questionnaire included the review of the questionnaire by a statistician to determine if any questions needed to be rephrased to help with statistical analysis following data collection, by two nurse researchers and three young people in the target age group.

The questionnaire consisted of 30 items. The first four questions elicited demographic details of age, gender, subject of academic study and type of accommodation. These questions were deemed important as the University where the study was undertaken has four colleges, it was deemed important to ascertain in which college the students were studying as if the majority of students were studying in the College of Medicine and Health it may have skewed the findings. It was also deemed important to ascertain the living accommodation of the participants to provide insight into where the participants used the Internet. The next 13 questions focused on how they used the Internet, including frequency, use of search engines, use of social networking sites and information on how they use the Internet to search for general health information. The remaining questions focussed on how often they used the Internet for mental health information, what types of mental health information they searched for and their views on using the Internet for mental health support. The questionnaire contained a variety of different types of questions from multiple choice questions to Likert scales, with a number of questions allowing for qualitative data to be entered.

The questionnaire was emailed to all students in one University in Ireland. The email contained information about the study and a link to the survey for those interested in participating. Once the participant clicked on the link they were first asked if they met the inclusion criteria, which were, being between the ages of 18 and 24 years and not a nursing or midwifery student. Nursing and Midwifery students were excluded from the study as the researcher was directly involved in their education. An

online consent form was posted and the potential participants were asked to consent to participate in the study by ticking a 'yes' or 'no' button. Only those who ticked 'yes' were able to access the questionnaire. The questionnaire was designed in electronic format using Survey Monkey (<http://www.surveymonkey.com>, Oregon) and was left open for a period of 1 week. This software also provided descriptive statistics. Given the number of respondents, the qualitative comments were analysed using content analysis (Burns & Grove 2001), whereby phrases and words that were repeated were counted to provide a numerical value for each statement made.

### Ethical issues

Ethical approval to conduct this study was granted by the University's Social Research Ethics Committee. The participants were informed that participation was voluntary, that data would be kept confidential to the researcher and that their anonymity would be protected. An online consent form was posted and only those who gave consent were able to complete the questionnaire, participants were not required to provide their name. Computer IP addresses were not stored by the researcher to protect their anonymity.

## Results

### The sample

The sample consisted of University students from one University in Ireland. One thousand two hundred and five people commenced the survey; 51 people who did not meet the inclusion criteria were excluded from the study. Of the eligible respondents a number of people failed to complete the survey, resulting in the final sample being 922 people. However, there were fewer numbers in the data producing sample as not all participants answered every question; the number who answered each question is provided in the description of the findings. Details of the participant's age, gender, area of study and accommodation are provided in Table 1.

**Table 1**  
Participant characteristics

Age	18 years (16.8%, <i>n</i> = 149)	19 years (25.5%, <i>n</i> = 226)	20 years (20.2%, <i>n</i> = 179)	21 years (17%, <i>n</i> = 151)	22 years (10.3%, <i>n</i> = 91)	23 years (6.4%, <i>n</i> = 57)	24 years (3.7%, <i>n</i> = 33)
Gender	Male (37.6%, <i>n</i> = 333)				Female (62.4%, <i>n</i> = 552)		
Area of study	Arts, Celtic studies, social sciences (33.6%, <i>n</i> = 298)		Science, engineering, food science (31.7%, <i>n</i> = 281)		Business and law (19.4%, <i>n</i> = 172)	Medicine and health (15.2%, <i>n</i> = 135)	
Accommodation	Private rental (41.8%, <i>n</i> = 367)		Parents/family home (40.2%, <i>n</i> = 353)	College housing (16%, <i>n</i> = 141)	Social housing (0.8%, <i>n</i> = 7)	Own home (1.3%, <i>n</i> = 11)	

**Table 2**  
Reasons for using the Internet for mental health information

Depression	<i>n</i> = 81, 36.8%	Stress	<i>n</i> = 11, 5%
Information relating to college work	<i>n</i> = 42, 19.1%	Coping strategies	<i>n</i> = 9, 4.1%
General information on mental health problems and illnesses	<i>n</i> = 35, 15.9%	Alternative therapies	<i>n</i> = 6, 2.7%
Medication management	<i>n</i> = 16, 7.3%	Symptoms	<i>n</i> = 5, 2.3%
Illness of family and friends	<i>n</i> = 15, 6.8%	Support groups	<i>n</i> = 5, 2.3%
Bipolar disorder	<i>n</i> = 13, 5.9%	Dementia	<i>n</i> = 4, 1.8%
Anxiety problems such as obsessive compulsive disorder, social anxiety and panic attacks	<i>n</i> = 12, 5.5%	Personality disorders	<i>n</i> = 3, 1.4%
Eating disorders	<i>n</i> = 12, 5.5%	Post-natal depression	<i>n</i> = 3, 1.4%
Suicide	<i>n</i> = 11, 5%	Causes of illness	<i>n</i> = 3, 1.4%
Schizophrenia	<i>n</i> = 11, 5%		

### Use of the Internet

Of the 883 participants who completed this question, the findings indicated that 72.4% (*n* = 639) of participants used the Internet several times a day, 16.2% (143) once a day and the remainder several times a week (11.1%, *n* = 98), once a week (0.2%, *n* = 2) or less than once a week (0.1%, *n* = 1). The participants (*n* = 884) reported that the majority of them accessed the Internet at college (94.9%, *n* = 839) or at home (91.7%, *n* = 811). They also accessed the Internet at work (8.9%, *n* = 79), at friends and family's houses (24.7%, *n* = 218), on their phone (*n* = 4) and in Internet cafes (*n* = 4).

### Use of the Internet for mental health information and support

Of the 867 participants who responded to this question, the findings indicated that 30.8% (*n* = 267) of participants used the Internet for mental health information. Out of those who responded, 8.2% (*n* = 22) used it once a week or more, 15.4% (*n* = 41) once a month, 36.7% (*n* = 98) a few times a year and 39.7% (106) less than a few times a year.

Reasons for using the Internet for mental health information were provided by 220 participants; these are reported in Table 2.

Reasons for not using the Internet for mental health information were provided by 472 participants. The majority (*n* = 316, 66.9%) reported that they did not use the Internet for information on mental health as they had no need. In addition, 6.1% (*n* = 29) participants believed the information would be unreliable, 4% (*n* = 19) never thought about it, 8.3% (*n* = 39) had no interest, 1.9% (*n* = 9) would prefer to discuss mental health issues with a qualified person such as a doctor and 1.3% (*n* = 6) reported that they would use other resources.

The majority of the 872 respondents (68%, *n* = 593) indicated that they would use the Internet for mental health support if they needed to. Reasons for this are provided in Table 3.

**Table 3**  
Reasons for using the Internet for mental health support

Anonymous, private and confidential	<i>n</i> = 132, 22.3%
Vast amount of valuable information available	<i>n</i> = 129, 21.8%
Easily accessible 24 h a day	<i>n</i> = 60, 10.1%
Easy to find information	<i>n</i> = 65, 11%
Fast	<i>n</i> = 49, 8.3%
Cheap	<i>n</i> = 16, 2.7%
Convenient	<i>n</i> = 10, 1.7%
Easy to communicate with other young people in the same situation	<i>n</i> = 22, 3.7%
A good place to start and to find out where to go for further assistance	<i>n</i> = 28, 4.7%
Less embarrassing than talking to a professional, friend or family member	<i>n</i> = 17, 2.9%

Those who reported they would not use the Internet for mental health support (*n* = 279) predominantly cited that they would prefer to interact with a person, whether that be a professional, a friend or a family member (*n* = 79, 28.3%). A number of participants also reported that they believed it would be unreliable (*n* = 42, 15.1%), untrustworthy (*n* = 14, 5%), it lacks privacy (*n* = 7, 2.5%), is too impersonal (*n* = 21, 7.5%) and that insufficient support would be found (*n* = 11, 3.9%).

### Face-to-face vs. Internet support

Of the 868 respondents, the majority (79.4%, *n* = 689) reported that they would prefer face-to-face support rather than Internet support for a mental health problem.

Those who reported they would prefer face-to-face support for mental health problems (*n* = 689) suggested it was because it is more personal (*n* = 145, 21%) and that it is easier to relate, engage and communicate with a person face to face, particularly because body language can be observed (*n* = 67, 9.7%). They also reported that this approach allows for greater development of trust (*n* = 25, 3.6%) and is more reliable (*n* = 28, 4.1%). They also felt that they could verify the qualifications of the person (*n* = 22, 3.2%) and that it would be easier to judge the feedback given to them (*n* = 4, 0.6%). Further participants believed

that the support offered to them would be tailored to their specific needs ( $n = 27$ , 3.9%), they could ask specific questions ( $n = 15$ , 2.2%), that better support would be provided ( $n = 18$ , 2.6%), that it would be more reassuring ( $n = 13$ , 1.9%), real ( $n = 11$ , 1.6%), comforting ( $n = 9$ , 1.3%), safe ( $n = 5$ , 0.7%) and direct ( $n = 4$ , 0.6%).

Those participants ( $n = 179$ ) who indicated a preference for Internet support gave a variety of reasons. One theme centred on anonymity ( $n = 18$ , 10.1%), privacy ( $n = 14$ , 7.8%) and confidentiality ( $n = 9$ , 5%). A second theme centred on accessibility ( $n = 10$ , 5.6%), speed ( $n = 4$ , 2.2%) and cost ( $n = 4$ , 2.2%). A third focussed on integrity, 7.3% ( $n = 13$ ) believed that they would not be judged, and 3.4% ( $n = 6$ ) believed it would be a good place to get initial information. In addition, they also reported that they would be more inclined to open up on the Internet ( $n = 3$ , 1.7%) and that it would be easier to express themselves ( $n = 2$ , 1.1%), that they could communicate with others in similar situations to find out how they are coping ( $n = 3$ , 1.7%), they are less likely to lie ( $n = 3$ , 1.7%) and it is less intimidating ( $n = 3$ , 1.7%).

### Website design and content for mental health problems

The participants reported what they deemed to be important in terms of website design and content, if they were to use the Internet for mental health support. Most issues were identified as being at minimum somewhat important. The most important issues identified were confidentiality, anonymity, being able to ask questions, usability and knowing who produced the information. Those deemed least important were animation, colour and chat room functions. A small number of participants provided individual comments. It was suggested that a basic layout with access to chat rooms and a good search facility would be very important. That links to self-help groups should be provided and that the website should not be for profit.

### Discussion

The findings suggest that young people aged between 18 and 24 years are frequent users of the Internet, with 72.4% of the participants using it several times a day. This is slightly lower than the findings of Rogers (2008) study with 21- to 30-year-olds in the USA, where it was found that 92% access the Internet several times a day.

It was also found that 91.7% of participants accessed the computer at home indicating that most households have a computer. According to the last figures available the Central Statistics office in Ireland (2008) reported that 70% of all households have computers, 62% have Internet

access, while 43% have broadband connection. In a recent Irish study it was reported that 58.3% of participants had used the Internet, this figure rose to 88.9% among the 16–29 years age group (Gallagher *et al.* 2008). While the results of this study indicate slightly higher usage of the Internet, this study focussed on University students only and thus is not representative of the entire population. Additionally, 94.9% of participants accessed the Internet at college indicating a high usage on campus. Over the past number of years communication within this University has changed from paper-based communication to electronic communication. Each student is provided with an email account, and lecture notes and timetables are posted online through Blackboard, this could explain the high usage on campus.

Little information is currently available on how young people use the Internet for mental health information and support. The findings indicated that 30.8% of participants had used the Internet for mental health information. This is higher than studies by Gould *et al.* (2002), who found that 18.2% of 13- to 19-year-olds used the Internet as a source of mental health information and by Powell & Clarke (2006), who found that 18% of the general population used the Internet for this purpose. This could indicate that 18- to 24-year-olds are more likely to use the Internet or that there has been an increase in its use over the past few years. The main information searched for was information on depression, information for course work, general information on mental health problems and information on specific problems they themselves or family or friends experienced. Indeed, in addition to depression being the most frequently searched topic, many related topics were also searched, such as suicide, self-harm, stress, confidence and self-esteem building. Depression is one of the most common mental health problems in young people (WHO 2003) and thus these findings are unsurprising. They do, however, highlight that young people are willing to source information and support for depression on the Internet. Indeed, Kessler & Walters (1998) reported that while 25% of young people will experience depression before the age of 24, only 20% of those will receive good quality care. Various reasons were provided as to why they do not use the Internet for mental health information, it predominantly related to lack of perceived need. In addition, a number of participants were concerned with the reliability of the information, highlighting that young people may be experiencing difficulty in determining the quality of information online. It was found that 68% of participants would use the Internet for mental health support if they needed to. Similar to findings of other studies (Shaw *et al.* 2000), the reasons for this related to the vast amount of information available, anonymity, confidentiality, privacy,



easy access and speed. It is recognized that young people are reluctant to access main stream mental health services because of fear of judgement and because of the stigma that still exists in relation to mental health problems. This study highlights that the majority of young people are willing to look for support from the Internet which has implications for future service delivery for this age group.

The majority of participants reported that they would prefer face to face support over Internet support for mental health problems. It was found that they believed they could relate better to people when they were in front of them. Those who reported they would prefer Internet support suggested that this was due to anonymity and fear of being judged by a person when face to face. Similar findings were reported by Rogers (2008) where it was found that 80% of 21- to 30-year-olds in the study would prefer face-to-face therapy. In a study by Oh *et al.* (2008), it was reported that certain mental health information websites have improved mental health literacy and reduced symptoms. This study explored young people's preference for a website with self-help books and face-to-face services (counselling and mental health services). A telephone survey was conducted with 3746 young people (12–25 years) and 2005 parents, each participant was read a vignette based on depression, depression with alcohol use, social phobia or psychosis, they were then asked their views on their beliefs and attitudes about help seeking and interventions. It was found that 71% believed the website would be helpful, 65% believed face to face visits with mental health professionals would be helpful and 92% believed counselling would be the most helpful. This again highlights that young people are willing to use a variety of resources for support with mental health problems.

It is important to highlight that while the majority of participants reported they would prefer face-to-face approaches, 20.6% reported that they would prefer Internet interventions; this represents a considerable number and suggests that there is a need to develop interventions via the Internet for young people experiencing mental health difficulties.

The findings indicated that in the development of web-based interventions for mental health problems, confidentiality, anonymity, usability, being able to ask questions and knowing who produced the information are important to young people. This information could help in the development of web-based interventions.

## Limitations

This study was conducted with University students and thus may not be representative of all young peoples' views. It is possible that young people in continuing education are

more likely to use the Internet and possess their own computer because of necessity. In addition, as the questionnaire was posted online, all participants had to use the Internet to complete it. Therefore, the sample consists of a computer literate population only. While this may be considered a sampling bias, it is necessary to acknowledge that all students at this particular University are required to use the Internet to keep updated on course work and timetables.

While the questionnaire used in this study was self designed and its validity not tested, the large sample size increases the reliability of the findings. In addition measures were taken, as discussed in the methodology section to enhance the validity of the questionnaire. Finally, the questionnaire did not ask participants to distinguish between whether they searched for mental health information for themselves or friends and family and as such the findings in this area are unclear.

## Conclusion

This study has clearly indicated that young people attending University are active users of the Internet and are willing to use the Internet for mental health information and support. It also indicated that they would prefer to use face-to-face support instead of Internet support. This study can help inform the design of mental health information websites as it demonstrates what topics are frequently searched for, the difficulties they have with using the Internet and the issues they deem to be important in terms of website design and content. In addition, it can help inform psychiatric nurses on the types of information and support young people are looking for. Support via the World Wide Web is being offered to young people, particularly in the developing world and thus this information can help inform practice, it can also help in further developing this aspect of psychiatric nursing care. Further studies in this area are needed, particularly on young people's views of mental health information and support websites, their search strategies and filtering strategies when looking for mental health information, their assessment of the quality of information online and their needs in relation to Internet support. In addition, there is a need to develop and evaluate web-based interventions for this population and psychiatric nurses need to develop their knowledge of the services currently available so that they can provide accurate and reliable information on web resources for young people.

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