Rethinking the digital divide

Findings from a study of marginalised young people's information communication technology (ICT) use

This paper presents findings from a study which investigated young people's ICT use and the capacity of service providers to utilise these technologies in their practice. The results suggest that ICT may be an important resource for mental health promotion, particularly in relation to engaging young people. It was found that young people who experience marginalisation access and engage with ICT although the quality of the access available to them is often limited. The findings also suggest that there is a pressing need to provide training for service providers to increase their capacity to use ICT.

by Michelle Blanchard Atari Metcalf Jo Degney Helen Herrman & Jane Burns The mental health of young Australians is of concern as mental disorders account for almost half of the burden of disease and injury among 15- to 24-year-olds (Australian Institute for Health and Welfare (AIHW) 2007). Although suicide rates among young people have declined by 46% since 1997 (Australian Bureau of Statistics (ABS) 2005), levels of psychological distress have increased (Eckersley 2007). Approximately 14% of children and adolescents experience mental health problems, but few seek professional help (Sawyer et al. 2000).

There is growing evidence that some of the major determinants of mental health lie within social and economic domains. Young people who experience social, economic or cultural marginalisation are at increased risk of developing mental health problems (Herrman, Saxena & Moodie 2005). In Australia, this includes young people who are Indigenous (AIHW 2004, 2007), culturally and linguistically diverse (Gorman et al. 2003), same-sex attracted and/or gender diverse (Ministerial Advisory Committee on Gay and Lesbian Health (MACGLH) 2002), socioeconomically disadvantaged (Astbury 2001), carers or those living with a disability (McIntyre, Blacher & Baker 2002).

This paper reports a study that investigated the role that information communication technologies (ICT), specifically the internet, may play in promoting mental health among young people at risk of, or experiencing, marginalisation. By mental health, we do not mean merely the absence of mental illness, but rather "a state of wellbeing in which every individual realises his or her own potential, can cope

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with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community" (World Health Organization 2001). The findings presented are from a mixed-method study that forms the first phase of an action research project titled Bridging the Digital Divide.

ICT usage

In Australia, internet usage is greatest among 15- to 24-year-olds (ABS 2007; Lloyd & Bill 2004). The internet appeals to this age group due to its accessibility and interactivity (Lombardo, Zakus & Skinner 2002). Ninety-four percent of 16- to 28-year-olds own mobile phones and nearly two-thirds of 18- to 29-year-olds use SMS on an average day (Department of Communications, Information Technology and the Arts (DCITA) 2005).

For many young people, ICT connects them to information, support and the community. However, disparities in access reflect existing inequalities (BECTA Evidence Team 2001; Wyn et al. 2005). Home internet use is higher among middle- to high-income earners, the tertiary educated and non-Indigenous Australians (ABS 2007; National Office for the Information Economy 2003). Similar trends are reflected in mobile phone use (DCITA 2005). It is debated whether the digital divide is narrowing or widening. Many researchers highlight its complexity, and argue that there are now multiple divides encompassing access, ownership, type and quality of technologies (BECTA Evidence Team 2001). It is widely assumed, based on anecdotal reports from service providers, that many marginalised young people do not have access to technology at home or the skills to use it.

The influence of the internet on mental health

Frameworks for mental health promotion (Commonwealth Department of Health and Aged Care (CDHAC) 2000; VicHealth 2005) recognise the importance of a comprehensive approach to addressing the factors that influence mental health. Evidence supports programs that promote social inclusion, freedom from discrimination and access to economic resources (VicHealth 2005). Knowledge regarding the

social and economic determinants of mental health is growing (Herrman, Saxena & Moodie 2005), including a focus on the role of meaningful relationships in promoting connectedness and belonging (Glover et al. 2000; Walker et al. 2005).

The internet can be viewed as a "virtual community" that fosters social networks and strengthens existing social ties (Peattie 2007; Hegland & Nelson 2002; Boase et al. 2006) and lends itself to being a health promotion setting. By "setting" we mean an environment in which health promotion programs and policies can be implemented. The settings approach focuses on effecting changes in organisations, systems and the environment, rather than targeting individual behavioural change alone (World Health Organization 1986). Traditional settings for health promotion include schools, workplaces and local government. The internet offers numerous advantages as a health promotion setting, including its cost-effectiveness, reach and capacity to engage geographically and socially isolated or "hard to access" groups (Cline & Haynes 2001, Griffiths et al. 2006, Hillier, Kurdas & Horsley 2001). Assuming access is available, ICT also offers the potential to assist young people to participate in the development, implementation and evaluation of health promotion initiatives (Blanchard, Metcalf & Burns 2007).

Background to project and research aims

Since 1996, the Inspire Foundation has worked with young people to develop and implement three national ICT-based programs – Reach Out (www.reachout.com.au), ActNow (www. actnow.com.au) and Beanbag – to promote help-seeking, resilience and community participation (Burns et al. 2007; Sullivan & Burns 2006; Swanton et al. 2007). Inspire's Beanbag program works specifically with young people experiencing marginalisation while ActNow provides young people with opportunities to take action on the issues they care about.

Bridging the Digital Divide is a threeyear action-based research project funded by VicHealth and the Westpac Foundation that combines elements of ActNow and Beanbag. The research activities have included both formative research, including a mixed-method study at the outset of the project comprising focus groups, surveys and interviews with Victorian young people and service providers, as well as ongoing evaluation of practice. The practice element of the project involves the development and implementation of Youth Action Workshops designed to utilise ICT to promote social participation and civic engagement. The target group for this project was defined as young people experiencing, or at risk of experiencing, social, cultural or economic marginalisation, which placed them at increased risk of experiencing poor mental health. This group included young people who are Indigenous, culturally and linguistically diverse, same-sex attracted, gender diverse, from low socioeconomic backgrounds, carers or living with a disability. The study group was by no means homogenous and reflected diverse cultural backgrounds, identities and life experiences.

This paper presents the findings of the initial research phase of the project, which aimed to address identified evidence gaps (Wyn et al. 2005) and further our understanding of the role of ICT in promoting social inclusion and civic engagement among the target group. Broad themes explored included:

- the role of ICT in young people's identity formation and social relationships
- ICT access and usage by young people experiencing marginalisation
- the capacity of youth-serving agencies to utilise ICT in their practice.

Methods

A brief overview of the research methodology is provided below. A more detailed explanation is described in Blanchard, Metcalf & Burns (2007).

Sixteen focus groups were conducted with 96 young people at 12 locations in rural, regional and metropolitan Victoria. The locations were youth agencies that engage marginalised young people, including local government youth services, Indigenous and culturally specific services. Eight agencies were located in metropolitan Melbourne and four in rural and regional areas. At all locations, the young people who participated in the study were current clients of the youth service or participating

in a group program (for example, a same-sex attracted support group). In-depth interviews were conducted with 22 service providers to explore their perceptions of young people's ICT use and the workers' capacity to utilise ICT in their practice. All but one participating service provider worked in metropolitan Melbourne. All worked directly with young people and worked with at least one group that met this study's definition of a marginalised group.

Project Advisory and Youth Reference Groups, which were recruited from organisations that work with marginalised young people relevant to the study, were involved in developing and refining the study design and research tools. These groups also collaborated with researchers to conduct a thematic analysis of responses to four focus group and interview questions. This collaboration was achieved through a process whereby the data from these questions was transcribed onto slips of paper and researchers and young people spent time grouping and regrouping them according to key themes. Further analysis was conducted using literature from the fields of sociology, health promotion and psychology.

Results

Demographic profile of study participants Participants ranged in age from 13 to 25 years. The majority (58%) were aged between 16 and 19 years of age. Of the participants, a total of 56.3% were male, 61.5% identified as culturally and linguistically diverse and 25% as Indigenous. A large proportion (42.7%) spoke a language other than English.

The employment statuses, educational backgrounds and living circumstances of participants were varied. A majority (54.2%) lived with parents or close family, while 11.5% lived in temporary or supported accommodation. A significant number (14.6%) identified as having a disability or learning difficulty and 29.1% as same-sex attracted.

The service providers who participated represented a range of professions including youth work (45.5%), social work (22.7%), psychology (9.1%), community development and family therapy (4.5%), and nursing and health promotion (4.5%). All worked directly with young people.

Young people's ICT use

Almost all participants had internet access, with 43.8% accessing it at home, 30.2% at a library and 17.7% at school. Comparatively, 61% of Victorian households have internet access (ABS 2007). While the participants' rate of internet access at home was substantially lower than the state average, their rates of internet access are higher than expected given their social, cultural and economic backgrounds and suggest that they are using community settings to obtain access. Almost half (49%) of those with access reported using broadband, compared to the Victorian average of 40%. Frequency of internet use was high, with 37.5% accessing the internet daily and 30.2% a few times a week.

ICT as a tool for help-seeking and social relationships

Participants undertook numerous activities online including email, instant messaging and maintaining a social networking profile. For instance, among those living with a disability, the internet provided an important link to the world around them. Many researched their disability and support services online. For those with speech or hearing difficulties, email was often a preferred communication mechanism. For others experiencing social isolation, the internet allowed them to seek help in a less threatening environment.

I used to use it when I was younger to meet other people because I felt isolated. I found that really helped me through a tough time ... Meeting people online was so much easier. You could talk to them about everything and not have to worry about them judging you.

Same-sex attracted young people's perspectives on the role of ICT echo those detailed in research conducted by Hillier, Kurdas & Horsley (2001), which highlighted the findings that the internet provides them with support and information, the opportunity to rehearse coming out, and new social networks. Young people describe the concept of "rehearsing" coming out by explaining that it was often easier to talk to people online about their sexuality, without fearing their response.

The internet and mobile phones are also important in helping young people communicate with significant adults. They frequently used their

mobile phones to contact service providers, and saved money by texting their workers' mobiles and asking them to make contact. A handful used the internet to make contact with parents and teachers. Cost influenced the ways in which and how often young people could contact friends and family. Many preferred SMS (Short Message Service) or email because these services are inexpensive.

Online interaction tended to supplement face-to-face interaction. Some participants expressed concern that only interacting online could have an adverse effect on "offline" social interactions. Overall, they displayed a relatively sound understanding of online safety issues. Many had their own strategies for reducing risks, such as not meeting online acquaintances in person, unaccompanied. Many refused to provide credit card or similar personal details over the internet and did not trust even legitimate sites.

The impact of ICT on young people's identity formation

Most participants did not feel ICT directly impacted on their identity formation; however, its role in mediating important social relationships was apparent. Young people use social networking websites, instant messaging and email to meet new people, make friends and find partners as well as to communicate with these people.

Similar to trends in the wider youth population, maintaining a social networking profile was an important activity for many participants. However, while MySpace (www.myspace.com) is credited as the most popular social networking site among young Australians, it was less popular than Bebo (www.bebo.com) and Hi5 (www.hi5.com) among participants in this study. Some young people had not even heard of MySpace. Perhaps one of the most salient findings was the high prevalence of Bebo users among Indigenous participants, whereas participants from newly arrived and migrant backgrounds preferred Hi5.

Young woman (of Indigenous

background): "All the Aboriginals are on Bebo. You name 'em, they're there."

Interviewer: "Why do you think that is?"

Young woman: "There are African Americans, Maoris and all that. It's culture. I don't know

whether it's a black thing or what ... but they're all there."

Young people viewed these websites as a mechanism for expression and creativity, and to project their identity to the outside world.

Service providers' perspectives on young people's ICT use

While some service providers believed that communicating online and using mobile phones was of central importance to young people, others commented that their clients were less likely to access and utilise ICT because of the cost, their low levels of literacy and their perceived lack of ICT skills. Service providers reported that for those with home access, it was often dated and of poor quality. Some also noted that not having the same software at home as that which they accessed elsewhere could be disadvantageous. Additionally, there was concern that peer pressure to use technology could lead to anxiety among those who did not have access. The flow-on effect of not having mobile phone or internet access hindered some young people's employment prospects as potential employers experienced difficulties contacting them.

While interviewees explained that they did not monitor young people's internet use (to ensure privacy), they identified that young people used the internet to meet new people or communicate with others. For socially isolated young people, such as carers, the internet is an essential connection to the world around them. One service had established a brokerage fund to provide access, with the aim of addressing young people's educational needs and alleviating isolation.

Some expressed concern over young people's reliance on technology, while others feared for the safety of those who used the internet to meet people, particularly prospective partners.

I get nervous about technology in many senses. The kids are often looking for partners in the same-sex attracted field and they are actually getting into dangerous habits, which could happen without the internet I know that, but they are a very vulnerable bunch of kids and they get themselves into quite dangerous situations.

It was felt that the role of social networking sites – to encourage users to expand and

further develop their social networks to include individuals they may not have met in person – placed young people at risk and raised duty of care concerns.

Service providers felt young people needed to develop computer and internet skills to reduce isolation; however, the workers did not feel they had the skills to facilitate their clients' learning in this area.

Use of ICT by service providers

It was felt there were a number of specific skills required to implement ICT-based programs, including word processing and management of a webmail account. For many service providers, these skills represented a significant challenge and most believed they needed further training in this area. Having adequate policies and procedures regarding young people's internet use was considered crucial. It was suggested that being able to ensure young people's safety online was a prerequisite to implementing ICT-based programs. Few service providers were aware of the strategies young people implemented to ensure their safety online.

Most used email and SMS to communicate with young people, and found it more efficient than traditional strategies such as outreach. SMS was considered a non-invasive way of making contact. For example, young people attending same-sex-attracted support groups are often reluctant to disclose their attendance to others, but SMS allows them to communicate with service providers without fear of disclosure. SMS is also advantageous in communicating with those for whom English is a second language and who find using a telephone or face-to-face contact challenging.

While some interviewees had implemented ICT-based programs, many said they were unlikely to do so. Staff skills were identified as the most significant barrier to being able to conduct ICT-based programs. Very few staff felt confident or skilled enough to conduct such programs. Other barriers included the perception that the internet is a dangerous place or that other activities are more productive for young people, and that ICT-based programs, such as online support groups, digital photography projects or SMS reminder services, were risky, resource intensive and simply beyond the means of a small organisation.

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Interviewees considered ICT-based programs costly and resource intensive to implement, although this view was challenged by those who had undertaken such work. Often agencies would hire external facilitators, if their own staff did not have the necessary skills. Having enough equipment to deliver maximum value for young people was also difficult, especially for those who learn best experientially.

It was felt that demonstrating young people's need for an ICT-based program would be arduous. The need to have a strong evidence base to secure funding was considered a barrier, particularly given the innovation needed to engage marginalised young people.

The transient nature of young people who are experiencing marginalisation was also viewed as a barrier to engaging them in ICT-based programs. These individuals often have priorities, such as finding safe and secure accommodation and employment, which take precedence over participation in such programs. It was felt that for many marginalised young people, the use of internet-based resources to search for employment or accommodation was going to be of greater interest to them than using these resources to investigate concepts such as self-expression.

Discussion

The researchers acknowledged that ICT plays an important role in the daily lives of many young people, but hypothesised that marginalised young people's access to ICT was limited. However, the study found that while disparities in access do still exist, ICT plays a significant role in the lives of young people experiencing marginalisation, and that this role wasn't well understood by service providers.

Marginalised young people utilise ICT in their communication with others and their development of their understanding of the world. For many, mobile phones, email and social networking websites mediate their contact with the world and those who live in it, which potentially impacts on their identity formation.

Young people experiencing social isolation or mental health difficulties also engage with others online, with some using the internet as an outlet for self-expression. Young people with fewer friends in the face-to-face environment use the internet to engage in new relationships, and build their confidence and self-esteem. For those with disabilities, the internet is an important resource in seeking to understand their disability better. Young people's use of ICT to facilitate their social relationships, maintain contact with significant adults and locate information and support suggests that ICT may be a useful tool and setting for mental health promotion.

The study found cultural differences in the social networking sites used, which probably reflect differences in participants' face-to-face social networks. This has implications for use of these sites as a tool in service delivery. For example, in designing a program for Indigenous young people, Bebo would be more useful than other such sites. These differences are also relevant for organisations that use social networking sites to promote their services to young people. The power of peer networking to promote online or mobile phone based mental health resources cannot be underestimated; however, further research is needed to determine how effective these strategies would be in reaching those young people who experience a lack of connection to peers of similar age and background.

Despite finding that young people experiencing marginalisation are accessing these technologies, a number of the professionals interviewed felt that their clients did not access or utilise ICT in the same ways that other young people might. Closing this gap between service providers' understanding of young people's ICT use and the reality of young people's experience represents a considerable opportunity.

There was concern from some of the professionals surveyed that the internet and related technologies still represent an unknown and potentially risky environment for young people. The perceived benefits appeared to far outweigh these risks among professionals who had embarked on ICT-based programs. It was felt that young people stood to benefit in terms

of educational and employment outcomes (by developing skills). It is important for future ICT program evaluation to consider both educational and employment outcomes as well as impact on social participation through civic engagement.

What emerged is that work is needed to increase the sector's understanding of the role that ICT plays in young people's lives, as well as to build the capacity of those who work with young people to utilise these technologies in their work. Professional development is needed to ensure that service providers feel confident in their own ICT use in order for them to engage young people around their technology use. Service providers are often time poor, so an innovative way of providing this capacity building is needed. Because young people are confident with this medium, it could be argued that they are best placed to develop and deliver this training.

Limitations of this study

This study was conducted as an initial phase in a demonstration project. Therefore, the capacity to recruit a representative participant pool and conduct in-depth analysis was limited by the constraints of funding and time. Nevertheless, the findings raise some interesting questions and challenge preconceived ideas. Ideally the study could be replicated in other states and territories to examine regional differences and be extended to include non-metropolitan participants.

The process of conducting focus groups through host organisations posed some challenges. Some service providers found it difficult to convey to their clients the nature of the project, with some young people thinking they were attending a "meeting" or "program," rather than participating in a research project. In addition, in a handful of locations, service providers acted as gatekeepers arguing that this study was not of interest to their clients. Contrary to this, it was found that in all but one location young people were interested and able to engage.

Conclusion

This research adds significantly to the current evidence, and highlights the evolving and complex nature of the digital divide. The results reveal that the young people who participated in this study found the means to access the internet

and related technologies and are not necessarily restricted in this regard by their experience of marginalisation. While disparities in the quality of access are still apparent, given the growing evidence to suggest that ICT may be an important resource in engaging young people in mental health promotion, services should not be deterred from utilising technology in their service delivery, particularly as government policy and technological advances may address access quality in the future.

Finally, many professionals lack confidence in their ability to use ICT to promote social inclusion and civic engagement. Combined, these findings support the further development of ICT-based programs, but also clearly identify the need to provide professional development to service providers to build their capacity to utilise ICT.

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