



Clinical practice in digital technology and youth mental health

The digital age: Does digital technology work in youth mental health settings?

Introduction

Young people are undoubtedly more connected to each other through digital technology than ever before thanks to the emergence of regularly and easily accessible mobile phone and tablet device use. Young people born after 1995 – sometimes called Generation Z and/or digital natives – have never known a world without mobile phones or an internet connection. It's the way in which young people are most used to connecting, so it makes sense for clinicians to link digital technology to the mental health of young people in some way.

In November 2015, the Australian government's response to the National Mental Health Commission's review of mental health programs and services specifically mentioned digital mental health services as a means of achieving reform in mental healthcare¹. There is also considerable research happening in the area, making it really important to consider how we integrate the use of digital devices and platforms into clinical services.

This clinical practice point will review some of the literature available for using digital technology in mental health clinical work – a practice known as e-mental health. It provides some practical tips for clinicians and professionals working with young people struggling with mental ill-health.

Half of all young people use technology daily

Young people are the biggest consumers of technological advances. A 2011 survey found that 95% of people aged from 12–17 use the internet; 81% have a social media account; and, 51% admit to checking their social media daily^{2,3}. Since 2011, young people's technology use has increased. It is used daily as a way to communicate with schools, sports teams, and clubs, which is why it makes sense to use technology with young people in therapy or in mental health settings.

What is digital mental health?

The domains of e-mental health include:

1. Online self-help programs – e.g. the [Centre of Clinical Interventions \(CCI\)](#) or [MoodGym](#), which deliver mental health information and self-help activities.
2. E-therapies – e.g. programs that use the internet or devices to deliver interactive interventions. This type of therapy may use message boards, message services, or video platforms.
3. Blended care – e.g. a combination of face-to-face interactions alongside online or homework tasks using technology.
4. Online information – e.g. internet searches to get information about treatment or diagnosis⁴.



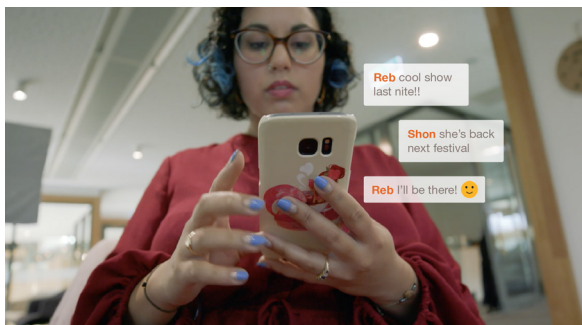
Why should we use digital technology in youth mental health settings?

As we know, therapy can be challenging and homework tasks for young people can be difficult to engage with, especially in paper form. If digital technology supplements therapy, it may be easier to engage with. For example, apps that track activity levels or remind us to get up and move, provide reminders, or diarise mood/anxiety symptoms could be helpful.

In fact, assessment has shown to be successfully completed using technology, with one study showing that young people disclose more when doing an interactive assessment rather than in a face-to-face setting⁵.

Almost 60% of mobile phone users have downloaded at least one health-related mobile app, so we do know that people use their phone to monitor and manage their health⁶. An Australian cross-sectional study of 1,400 young people aged 16-25 years found that nearly all of these young people used the internet both as a source of trusted information and as a means of connecting with their peers and discussing problems⁷.

In the same vein, digital technology may also reduce barriers to care for young people who live in rural or remote areas, or where services are difficult to navigate. This is a great opportunity to provide evidence-based practical support and information to young people who may have limited or no access to in-person support.



How do we know young people want to engage with digital technology?

Young people involved in youth participatory activities at Orygen have been asked their opinion on digital technology, the impact on their mental health and how it is used to enhance therapeutic interventions^{8,9}. Questions in one study focused on:

1. how to better engage young people in mental healthcare using digital technology
2. how digital technology can be used to deliver interventions.

One of the main themes that emerged was that the workshop participants felt technology should only be used as an addition to treatment rather than a replacement, and that the therapeutic relationship was the biggest predictor of successful treatment rather than specific interventions.

The young people consulted hadn't been directed to online resources and had sought them out personally. They felt that a good time for online resources was towards the end of therapy, and at the point of leaving the service⁹.

How can young people use technology to increase their knowledge regarding their mental health?

Here are some areas to explore in your work with young people, in particular, ways in which both you and a young person can use digital technology to support mental health and therapy.

Help seeking

Young people appreciate access to information, peer support, and sites monitored by professionals. They may find it difficult to separate irrelevant information from correct information. They may also worry about how negative comments could exacerbate their condition¹⁰.

We can support people to use evidence-based websites when possible and should look at promoting appropriate websites and help-seeking opportunities throughout our organisations or communities.

Stigma online

Stigma is often defined as a mark, a stain, or a blemish. For young people experiencing mental ill-health, this may involve the feeling of being different or of being treated differently. One study investigated Twitter posts (tweets) to look for stigmatising and trivialising attitudes across a range of mental and physical health conditions. More than a million tweets were collected that mentioned different mental health conditions. Of this sample, 1,300 tweets per mental health condition were randomly selected for analysis. Overall, mental health conditions were found to be more stigmatised and trivialised when compared to physical conditions^{11,12}. This points to stigma regarding mental health conditions being evident and easily accessible to young people.

Young people who have accessed negative or stigmatising reports regarding mental health conditions can be supported to block sites or people when necessary or blocking certain apps at certain times – e.g. bedtime when it may cause worry or negative thoughts before sleeping. We can also support young people to avoid ruminating on online conversations and find coping strategies, such as doing something active offline for a while before responding.

Self-help

Self-help interventions (especially guided self-help) are interventions that enable young people to make use of cognitive-behavioural therapy through computerised and supported online platforms. Many smartphone apps are simplified versions of cognitive-behavioural therapy interventions and can also offer self-help, but there are many to choose from and the quality of evidence-based interventions is often variable. As organisations, first find and validate before recommending quality websites and apps for young people to use safely.

Online conversations about suicide

Young people can safely develop and disseminate suicide prevention messages via social media. Engaging young people in this process may improve the traction that such campaigns have with other young people. It is also suggested that educating young people regarding how to talk safely about suicide online has multiple benefits and is not associated with distress^{12,13}. Orygen's [#chatsafe guidelines](#) have more information on how to support young people to have online conversations regarding suicide prevention.

Which online interventions can young people use?

As young people embrace the rapid advances in technology, there are opportunities and challenges for the youth mental health workforce to keep pace with client priorities and expectations. As yet, there is still relatively little research that looks specifically at the way young people experience mental healthcare using technology, and even less that looks specifically at how interactive mental healthcare delivered by technology might work for young people¹⁴.

Direct-to-user digital interventions

Here are some direct-to-user digital interventions that may be suitable for young people. They offer evidence-based interventions, with some being managed or monitored by organisations that follow clinical guidelines and have clinical governance structures.

- [MoodGym](#) – shown to be a leading example of a free online intervention for depression¹⁵
- [CCI](#)
- [ehedspace](#)
- Big white wall
- [MindSpot](#)
- [My Compass](#) (Black Dog Institute)
- [Bite Back](#) (Black Dog Institute)
- [reachout.com](#)
- [Youth beyondblue](#)
- [eCliPSE online portal](#)

An important shortcoming of direct-to-user interventions is that completion rates may be low if there is no accompanying face-to-face support. Some mental health problems may be more amenable to direct-to-user treatment than others; for example, binge eating disorder and bulimia may respond well to a guided self-help approach. The key aspect to successfully completing treatment appears to be related to how the accompanying support occurs.

“When young people have used their phones to monitor mood and thoughts, they have engaged with in between session tasks much more often.

Clinician

Brian's story

Brian is a 17-year-old man living in rural Victoria. The nearest regional centre is 50kms away. He attends school, but recently has not been feeling like he can continue with school or sports activities in his town. He feels anxious all day and worries that his friends don't really like him. He also worries that he will develop a serious mental health problem, like his older brother.

He looked online for information about diagnosis and help-seeking.

His online search led him to headspace in the nearest regional centre. Brian found the centre's contact details on Facebook. He felt less intimidated being able to contact them online and sent them an email. He was offered an appointment and he knew how to get there because he'd seen the details on the headspace website. Following a face-to-face assessment, he was offered ten sessions of therapy. Based on his location, the clinician offered Brian the chance to extend those sessions by using technology to:

- keep a mood diary
- monitor worrying thoughts
- use thought diaries to look for the evidence behind his thoughts
- monitor his activity levels and routine, and to look at the link between mood and thoughts.

Brian emailed his diary to the clinician on a weekly basis and saw her monthly. Together they worked out baseline scores and progress charts using the generalised anxiety disorder 7-item (GAD-7) scale, which they monitored and repeated.

This blended approach worked for Brian, especially as a young person in a rural setting, because he was able to use his ten sessions alongside online support in a way that optimised his outcomes.

Recommendations for practice

- Become familiar with local and national laws regarding technology use and check if your organisation has specific policies, in particular when considering confidentiality.
- During the first meeting with a young person, have a conversation about communication and technology use and gain informed consent to use it in treatment.
- With so many apps available, it may be helpful for teams to consider what their favourite evidence-based apps and resources are, and to regularly update the list of favourable apps (this is a great project for a student).
- It can be difficult to choose appropriate online help-seeking or psychoeducation sites. Have some youth-friendly resources and sites pre-selected, and pass these on to organisations where young people can easily access them, such as in youth clubs, sport clubs, and schools.
- There is currently little evidence supporting online peer support as beneficial; however, young people could be engaged in developing and evaluating this within your service.
- A central role for clinicians is to determine and vet quality e-mental health interventions and be proactive in guiding young people to use them¹. Reachout.com have a great resource to [help young people find online support](#) suited to what they need.
- Consider how to conduct online assessments safely to aid disclosure (with a face-to-face component to assess risk, where required). This could be particularly helpful in primary care settings where there is a limit to the number of sessions available.
- For private practitioners in primary care, the ten sessions available for rebate could be extended with periods of online intervention in between sessions.

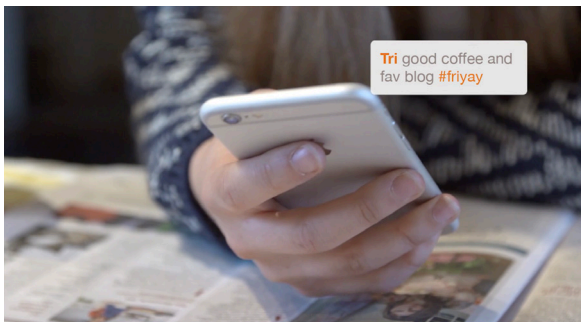
“ I have been able to offer assessments on a laptop and young people reported that they were more honest in their responses.

Clinician

Evaluate

While we are starting to research the use of technology in more detail, it is an ever-changing and growing area of youth mental health. Considering how quickly technology is changing, it is important to recognise the fact that research won't be able to keep up with technology; hence, in this area, practice-based evaluation should be happening alongside the development of digital interventions.

It is crucial to evaluate interventions that use digital technology so we can start to discover what is working and what may not be. It is important that the quality of care for a young person isn't compromised while we are doing this.



“ Young people often have told me that they searched for the answer to their concerns about their mental health online. I find it helpful to look at the websites with them and point them in the direction of evidence-based websites.

Clinician

Summary

Although research is developing in this area, the use of technology in youth mental health when accompanied by face-to-face support appears as effective as solely face-to-face treatments. Using technology to enhance therapy appears to be beneficial. It can support time spent in face-to-face contact, can increase access to services (e.g. for young people in rural and remote areas), and is considered cost effective.

Services can provide support via technology in a number of ways, such as via text, email, teleconference, or video platform (Skype). The blended approach appears to be the most useful in maintaining engagement and assessing risk in real life, as well as enhancing mental health knowledge. How best to do this will depend on the needs of the young people within your service. It is important to engage young people in the planning of digital technology in delivering mental healthcare, as well as evaluating any interventions put in place

Want to know more?

You can find a video, webinar and fact sheet on social media at orygen.org.au

References

1. Fraser S, Randell A, De Silva S, Parker A. E-mental health: the future of youth mental health?; 2016 [cited 8 March 2019]. Available from: <https://www.orygen.org.au/Education-Training/Resources-Training/Resources/Free/Research-Bulletins/E-mental-health-the-future-of-youth-mental-health>
2. Richards D, Caldwell PH, Go H. Impact of social media on the health of children and young people. *Journal of Paediatrics and Child Health*. 2015;51(12):1152-1157.
3. Messina ES, Iwasaki Y. Internet use and self-injurious behaviors among adolescents and young adults: An interdisciplinary literature review and implications for health professionals. *Cyberpsychology, Behavior, and Social Networking*. 2011;14(3):161-168.
4. (UK) MHF. Digital mental health [Internet]. Mental Health Foundation (UK) 2019 [9 March 2019]. Available from: <https://www.mentalhealth.org.uk/a-to-z/d/digital-mental-health>
5. Bradford S, Rickwood D. Acceptability and utility of an electronic psychosocial assessment (myAssessment) to increase self-disclosure in youth mental healthcare: a quasi-experimental study. *BMC Psychiatry*. 2015;15(1):305.
6. Krebs P, Duncan DT. Health app use among US mobile phone owners: a national survey. *JMIR mHealth and uHealth*. 2015;3(4).
7. Burns JM, Birrell E, Bismark M, Pirkis J, Davenport TA, Hickie IB, et al. The role of technology in Australian youth mental health reform. *Australian Health Review*. 2016;40(5):584-590.
8. Orygen Summer Experience Program. In: Social Media Workshop with Young People in the Orygen Summer Experience Program. 2019. Melbourne: Orygen, The National Centre of Excellence in Youth Mental Health.
9. Montague AE, Varcin KJ, Simmons MB, Parker AG. Putting technology into youth mental health practice: young people's perspectives. *SAGE Open*. 2015;5(2):2158244015581019.
10. Lal S, Nguyen V, Theriault J. Seeking mental health information and support online: experiences and perspectives of young people receiving treatment for first-episode psychosis. *Early Intervention in Psychiatry*. 2018;12(3):324-330.
11. Robinson P, Turk D, Jilka S, Cella M. Measuring attitudes towards mental health using social media: investigating stigma and trivialisation. *Social Psychiatry and Psychiatric Epidemiology*. 2018:1-8.
12. Kendal S, Kirk S, Elvey R, Catchpole R, Pryjmachuk S. How a moderated online discussion forum facilitates support for young people with eating disorders. *Health Expectations*. 2017;20(1):98-111.
13. Robinson J, Bailey E, Hetrick S, Paix S, O'Donnell M, Cox G, et al. Developing social media-based suicide prevention messages in partnership with young people: exploratory study. *JMIR Mental Health*. 2017;4(4).
14. Gibson K, Cartwright C. Young people's experiences of mobile phone text counselling: balancing connection and control. *Children and Youth Services Review*. 2014;43:96-104.
15. Christensen H, Griffiths KM, Korten A. Web-based cognitive behavior therapy: analysis of site usage and changes in depression and anxiety scores. *Journal of Medical Internet Research*. 2002;4(1).

Clinical practice point writer

Helen Nicoll

Editor

Jay Carmichael

Disclaimer

This information is provided for general educational and information purposes only. It is current as at the date of publication and is intended to be relevant for all Australian states and territories (unless stated otherwise) and may not be applicable in other jurisdictions. Any diagnosis and/or treatment decisions in respect of an individual patient should be made based on your professional investigations and opinions in the context of the clinical circumstances of the patient. To the extent permitted by law, Orygen, The National Centre of Excellence in Youth Mental Health will not be liable for any loss or damage arising from your use of or reliance on this information. You rely on your own professional skill and judgement in conducting your own health care practice. Orygen, The National Centre of Excellence in Youth Mental Health does not endorse or recommend any products, treatments or services referred to in this information.



The National Centre of Excellence
in Youth Mental Health

Orygen, The National Centre of Excellence in Youth Mental Health is the world's leading research and knowledge translation organisation focusing on mental ill-health in young people.

Copyright © 2019 Orygen,
The National Centre of Excellence in Youth Mental Health.

This work is copyrighted. Apart from any use permitted under the Copyright Act 1968, no part may be reproduced without prior written permission from Orygen.

Orygen, The National Centre of Excellence in Youth Mental Health
1300 679 436

info@orygen.org.au

orygen.org.au