# WHAT WOULD WE USE AND HOW WOULD WE USE IT? EXPLORING THE USE OF DIGITAL TECHNOLOGY IN PROMOTING WELLBEING AND ENGAGEMENT WITH SUPPORT FOR HIGHLY VULNERABLE YOUNG PEOPLE.

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#### **ABSTRACT**

Putting therapeutic tools for wellbeing directly into the hands of vulnerable young people, on their phones and devices, seems to make good sense. There are a great number of apps and websites which provide guidance and strategies for enhancing wellbeing, including mental health issues and other life challenges common to young people who are dealing with homelessness and other life crises. What we see, however, is that use of these remains limited amongst highly vulnerable and homeless young people. Given the typically highly transient and crisis-driven nature of young people's engagement with crisis services, digital tools may not only benefit young people's mental health and wellbeing, but enhance their connection with support. This paper shares key learning emerging from youth consultation research into how young people accessing crisis services understand wellbeing and view the potential use of online tools for both therapeutic benefit and to enhance connection to support.

## **INTRODUCTION**

As contemporary culture increasingly operates within and around the digital space, there is an ever greater need to understand the role of online technology in developing better interventions for people who are vulnerable and in need of support (Boydell, Hodgins, Pignatiello, Teshima, & Willis, 2014). Can innovative digital technology be designed to effectively promote wellbeing and therapeutic engagement with highly vulnerable and disadvantaged young people? This question brought Brisbane Youth Service (BYS) and yourtown researchers together in a collaborative consultation aiming to better understand young people's perspectives on the use of online tools to promote their wellbeing and to strengthen worker-young person support relationships.

Young people are early adopters and prolific users of technology and web based systems (Patton et al., 2016). Young Australians typically value the internet as a very important source of information and advice in life (Mission Australia, 2015). An ever-increasing number of general wellbeing and mental health digital resources have been developed to deliver selfhelp, easily accessible information and online guidance to young people (e.g. ReachOut, Goalsie, eheadspace, Mood Meter, Mindshift, Strava etc.). Despite the growth in digital engagement research there remains relatively little documented knowledge about how this applies to highly vulnerable and disadvantaged young people, specifically in relation to mental health, wellbeing and their engagement with support networks (Kurdiji 1.0, 2017; Redmond, Skattebol & Saunders, 2013; Ellis et al., 2014). There is evidence supporting digital technology effectiveness in broader mental health contexts, with smart phone based interventions considered particularly effective for reducing symptoms like depression, general distress, anxiety and social isolation (Forchuk et al, 2016; Granholm, Ben-Zeev, Link, Bradshaw & Holden, 2011; Rizvi, Dimeff, Skutch, Carroll, & Linehan, 2011; Christensen & Hickie, 2010). Despite this, there remain barriers to its use in the youth mental health service delivery sector, partly due to concerns about the potential risks of internet environments for young people (Blanchard, Metcalf, Degney, Herrman & Burns, 2008). Work is needed to increase cross-sector understanding of the role that digital technology plays in young people's lives; as well as to build capacity and utilisation of these technologies in working with vulnerable young people (Blanchard et al., 2008)

## Why did we do this?

Young people accessing youth services like BYS and Kids Helpline are most often experiencing a range of significant life crises and mental health concerns (Brisbane Youth Service, 2016; yourtown, 2017). Their engagement with support is, however, commonly sporadic, unpredictable, highly transient and crisis-driven. This creates continuity of care issues and negatively impacts sustained progress towards positive life changes. Outcomes analysis clearly shows the benefit of more sustained, regular contact with support. We see a clear need to extend and expand therapeutic engagement into the space between and around the times when vulnerable young people are picking up the phone or coming to the door for help. In addition to accessing better information about young people's progress for workers, young people will potentially benefit through stronger connection to support and by capacity to use technology to independently reflect on, and take ownership of, their own goal progress.

The majority of vulnerable young people, even when homeless, have access to smart phones and are pretty savvy about getting internet access (Campbell & Robards, 2013; Ewing, Thomas, & Schiessl, 2008). Increasingly, digital technologies are recognised and evidenced as a viable strategy to engage and make connections with young people to support their wellbeing (Firth, Torous, Nicholas, Carney, Rosenbaum, & Sarris., 2017; Kurdiji 1.0, 2017; Campbell & Robards, 2013; Christensen & Hickie, 2010). The benefits of online engagements include potential for expanded and improved relationships, support networks, health and wellbeing literacy, tracking and monitoring of risks, and creating more youth-responsive health systems (Patton et al., 2016). Nascent evidence suggests that text-messaging between appointments can increase treatment plan adherence and youth accessing online interventions paired with face-to-face interactions formed deeper and more personal interactions to support wellbeing (Patton et al., 2016). Therefore, using digital technology is potentially an effective means of promoting continuum of care and sustained longer term therapeutic relationships in the hands and phones of transient and vulnerable young people.

## Research Questions

Our consultation with young people focussed on four primary areas. To ensure construct validity, and unpack youth perspectives more broadly, we first explored young crisis-service users' conceptualisation of wellbeing in the context of their lives and experiences. Secondly, we wanted to understand the cohort's use of digital technology compared to broader youth research, particularly in relation to promoting wellbeing. Mindful of the aim of enhancing engagement with support, we sought to understand their current worker/service relationships and the potential role online technology would play in those connections. Finally, we wanted to build a picture of what adaptive digital technologies they might want to use and how it might be used in their daily lives and pathways to wellbeing.

## Consultation Approach

External social researchers were contracted to reduce investigator bias, and two service users were recruited as youth consultants to the project. An emergent approach was employed for the consultation to appreciate young people's everydayness. A mixed methods design saw data collected through interactive creative inquiry and art-making workshops, including tablet-based critical play with a range of existing tools relevant to youth wellbeing; focus groups and an online survey. A total of 404 young people who were actual or potential clients of BYS and Kids Helpline contributed their views and insights of wellbeing, digital technologies and service engagement. The analysis and interpretation of the data used an inductive approach to identify emergent descriptive explanations (Franzosi, 2008; Silverman, 2005). Research outcomes illustrated what wellbeing meant to the participants, what was important in accessing support, what they liked and disliked about online resources and tools,

and what they were interested in using in the future. These are comprehensively documented in the technical report (Gwinner, Melrose and Moffatt, 2017).

## The Research Participants

Rather than referring to statistical demographics, composite profiles are used to describe the common characteristics of the young people who participated in the research process. The first profile describes Dana, who is 16-25 years old. Typically, she identifies as Anglo-Australian, but may be Aboriginal and/or Torres Strait Islander, or her family may have migrated from an African nation. She moves in and out of homelessness, is dealing with some drug and alcohol problems and has ongoing mental health issues (most likely episodes of depression). Dana usually uses the internet on her phone, preferring apps that she can use on- or off-line depending on Wi-Fi access. When online she is often using social media; looking up useful information; or just playing for entertainment. While she trusts online information for general help, when in crisis she will most often phone or go see a trusted service. Dana describes wellbeing as being happy, healthy and having material basics like a place to live, food, money. She says that wellbeing "makes life worth living" (Gwinner, et al., 2017 p.36).

Luke, on the other hand, represents the typically younger male participant and is about 14 – 17 years old and probably Anglo-Australian. Luke uses the internet daily on a range of devices, again mostly on his phone and predominantly for gaming and entertainment. He uses social media but a lot less than Dana. He seeks information from websites, seeing apps as more for amusement, but he wants the sites to be interactive and entertaining to hold his interest. When he looks for helpful information online it is most often in the company of his mates, which may inhibit his deeper interrogation or engagement with the information. He takes more risks online than young women, in terms of self-disclosure which is consistent with other research (Notten & Nikken, 2016).

There were no notable gender difference in perceptions of wellbeing, which is consisent with other research (Dex & Hollingworth, 2012). There are, however, well known challenges engaging young men in research, and that affected this study as well (Ellis et al., 2014; Rickwood, 2005). Despite specific strategies to target young men, only 10% of our sample of 404 young people identified as male. This means we can't be sure we really understand young men's use as well as young women's, and the general lack of male engagement in digital technology research and design may perpetuate low uptake and use rates (Burns, Davenport, Ricci, Birrell, Blanchard, & Hickie, 2014).

## What are young people's perspectives of wellbeing?

The results showed a number of interesting themes related to the differences in the ways that young people who are experiencing high levels of vulnerability understanding wellbeing in comparison to assumptions of youth wellbeing. Firstly, it was clear that young people who are in survival mode did not necessarily relate to a multi-dimensional nature of wellbeing, beyond basic health. Further, inconsistencies in ratings of "going ok" versus actually "having what they need in life to live well" indicated that wellbeing was often more about coping day-to-day than about capacity to thrive. Young people's perceptions of wellbeing also challenged the prioritisation of commonly used domains of youth wellbeing (e.g. ARACY, 2013; AlHW, 2015; Sharma, 2017; QDoCS, 2014) in that, while the expected constructs of safety, access to material basics, health and happiness were all generally acknowledged as important to wellbeing, there was a notably and an unexpectedly strong focus on the need to feel that one's rights were respected. It is important to note that for these young people; who were highly likely to have had significant experiences of being disenfranchised, unfairly

disadvantaged and vulnerable to harm; respect, fairness, self-determination and agency in their lives were all pivotal to wellbeing.

There were interesting contradictions also between the way that young people navigated and balanced their focus on the different domains of wellbeing. They generally agreed, for example, that safety, health and happiness were all important. However, the ways that young people achieved happiness were not always consistent with service provider perspectives on health and safety. Youth wellbeing is generally conceptualised as maximising longer term protective factors and minimising risk factors. We don't usually think of the domains of wellbeing conflicting in a way that increases in one area of wellbeing may be associated with decreases in others. What was clear however, was that the aspects of wellbeing that our young people prioritised were frequently short-term and potentially in conflict. Where different wellbeing domains were not overtly compatible, it was critical to young people that they have agency in determining their own immediate wellbeing priorities (Gwinner, et al., 2017).

Unlike many other frameworks that position youth wellbeing as primarily about having enough of certain conditions in our lives (McLeod & Wright, 2016), analysis of wellbeing definitions also highlighted a deeper complexity in how vulnerable young people conceptualise wellbeing (Gwinner, et al., 2017). Wellbeing was described as not simply circumstantial, but a natural or inherent state of being that just requires the right support to be realised. While wellbeing was seen as a right, in that they have a right to the basic necessities required for wellbeing, young people understood wellbeing as not just about what is provided to them by society, but as something self-determined, something that they needed to be responsible for creating in their lives, through their own attitudes, choices and behaviours (Gwinner et al., 2017).

## How do young people use online technology and what do they want from it?

Results showed that a smartphone was the preferred internet access device for just over half of the participants, with most largely dependent on wifi as the more affordable data option. Interestingly, one in four said that they never use a public hotspot to access the internet. The intermittent data access influenced preference towards functionality that is also available offline for 74% of respondents. Young people's use was primarily associated with social connection, with 77% reporting daily social media use. Respondents said that they do use apps (39%) and websites (62%) for assistance with mental health and other life problems. Apps were seen to provide quick responses, and young people expected to be referred to websites for further and more detailed information.

Thematic analysis highlighted the importance of orienting digital mental health around personal interactions. Visions of an ideal app or site focussed on ways of engaging with services, workers and peers, facilities and resources. Young people also wanted interactive information; relevant advice; games or challenges to distract them from problems; and real time updates on when and where to access useful service resources. They said that apps and sites could help with goal setting and monitoring achievements and moods over time; if there was inbuilt accountability to someone they trusted; and a life line in times of crisis. Their interest in mental health tips was dependent on how personally relevant they seemed, and they stipulated that functionality and design should be youth-focussed but not overly simple or childish.

In terms of engagement with support, young people agreed it would be good to be able to check in with workers through technology between occasions of support. In the complexity of survival, young people offered that they often forget what has happened from one day to

the next. What was critical however, was that young people feel in control of how, when and what they communicate digitally. Many (86%) wanted consistent connection to a trusted known worker. In principle, privacy is important (95%) however, almost everyone (90%) said it was important that the person they were connected to knew their story. Young people wanted the option to independently and confidentially use a digital tool for their own therapeutic benefit, and to limit sharing to people they know and trust with their story. It was abundantly clear that digital technology in this context can enhance, but not, replace or substitute personal support relationships. As is supported by other research, young people were clear that their use of an app or site for their wellbeing goals needed be positioned alongside and within personal support and practical assistance (Gibson, Cartwright, Kerrisk, Campbell & Seymour, 2016; Singh, Anderson, Liabo & Ganeshamoorthy, 2016).

Overall key digital technology enablers were focussed on the experience of being simple, fun, personal, social, interactive, and feeling heard by people they trust. Technology design needed to feel safe, non-judgemental, and be actively inclusive of diversity including different genders, sexualities, levels of ability and ages. Cost and stigma were two of the most significant barriers, and young people needed information to be presented in ways that didn't feel like they were being lectured or boxed into expectations of what they *should* do. It was important to young people to feel valued and worthy of professionalism and resource investment. Other barriers were consistent with past research in that tools need to not be too wordy or involve long navigation pathways (Yarosh & Schueller, 2017; Collin & Swist, 2016).

## What did young people suggest?

Workshop and focus group participants unanimously agreed that they were excited by the idea of being able to build their own emoji as a form of personal expression. Emoji are a popularly emergent visual language (Lebduska, 2014; Lu et al., 2016) but, our young people didn't want to be limited to choosing from a pre-determined set of standardised emotion states. They were interested in building their own emoji, as an affirming identity development experience. Not only was emoji building a way that they could creatively and individualistically describe their states of wellbeing at different times, it was considered a therapeutic process in and of itself.

Young people suggested that an emoji building functionality be embedded into a communication tool which would allow them to elect, at their choice, to send it to their worker as a check in. Recognising realistic limitations of worker availability and timeframes, they none-the-less wanted to know that their trusted worker could respond with an acknowledgement, and perhaps provide some contextual advice or support. Thus, the emoji were not just a visual measure of mood and identity, they became a creative and interactive dialogue with support. In many ways this process summed up a lot of the expectations, experiences and needs of young people in the consultation.

#### CONCLUSION

This consultation yielded important learning for the use of innovative digital tools in the context of youth mental health. There is clear potential benefit in technology that facilitates individualised empowerment, self-expression and more flexible opportunities for young people to connect with support in their own emergent languages and modalities. Digital technology is a potential bridge to communication, encouragement, belief, understanding, freedom and the care that they experience in good supported relationships and which is closely aligned with their own sense of wellbeing. Technology must, however, be positioned within real trusted relationships in ways that continue and extend their support relationships into everyday life contexts. Wellbeing priorities inherent in the design should respond to young people's individual and evolving ideas of what helps them to "be well". Young

people's agency and choice in the way that they interact with digital technology is critical, and digital tools for wellbeing should reinforce experiences of respect and self-determination. Young people do want support from people they trust. They need, however, a sense of equal participation in an ongoing support dialogue. Information exchange needs to be opt-in, not automated or worker-directed.

These findings deliver a design challenge however, there is clear positive potential for moving into the digital space to promote wellbeing not just, in early intervention and prevention, but in the treatment and continuing care stages of the spectrum of interventions for mental health with highly vulnerable and disadvantaged young people (Campbell & Robards, 2013). Digital technology must be developed with a focus on individual identity and creative self-expression and not passive or generic self-rating scales or pre-set standardised measures, tips or tasks. We need to be highly cognizant of ensuring digital tools are both flexible and inclusive of diversity, as well as, that we hold respect and trusting relationships at the center of design (Ambresin, Bennett, Patton, Sanci & Sawyer, 2013). Despite the challenges for health professionals, it is essential to meet vulnerable young people in their experiences of technology and its potential to strengthen wellbeing.

#### **REFERENCES**

Australian Institute of Health and Welfare (AIHW), 2015. Australia's welfare 2015—in brief. Retrieved from https://www.aihw.gov.au/reports/australias-welfare/australias-welfare-2015-in-brief/contents/children-youth

Australian Research Alliance for Children and Youth (ARACY). (2013). Report Card: the Wellbeing of Young Australians. Canberra: ARACY. Retrieved from http://www.aracy.org.au/projects/report-card-the-wellbeing-of-young-australians

Ambresin, A.-E., Bennett, K., Patton, G. C., Sanci, L. A., & Sawyer, S. M. (2013). Assessment of youth-friendly health care: a systematic review of indicators drawn from young people's perspectives. *Journal of Adolescent Health*, *52*(6), 670-681

Blanchard, M., Metcalf, A., Degney, J., Herrman, H. & Burns, J. M. (2008). Rethinking the digital divide: Findings from a study of marginalised young people's information communication technology (ICT) use. *Youth Studies. Australia*, *27*(4) 35–42.

Boydell, K. M., Hodgins, M., Pignatiello, A., Teshima, J. & Willis, D. (2014). Using Technology to Deliver Mental Health Services to Children and Youth: A Scoping Review. *Journal of Canadian Academy of Child and Adolescent Psychiatry*, 23(2), 87-99.

Brisbane Youth Service (2016). Brisbane Youth Service Annual Report 2015-16. Brisbane: Author.

Burns, J., Davenport, T., Ricci, C., Birrell, E., Blanchard, M. & Hickie, I. (2014). It's one 'smart' solution: Using new and emerging technologies to support the mental health and wellbeing of young men. *Developing Practice: The Child, Youth and Family Work Journal*, 40, 6-19.

Campbell, A. J. & Robards, F. Using technologies safely and effectively to promote young people's wellbeing: A Better Practice Guide for Services. Young and Well Cooperative Research Centre. Retrieved from http://www.health.nsw.gov.au/kidsfamilies/youth/Documents/better-practice-guide.pdf

- Christensen, H. & Hickie, I. B. (2010). E-mental health: a new era in delivery of mental health services. *The Medical Journal of Australia*, 192, S2–3.
- Collin, P., & Swist, T. (2016). From products to publics? The potential of participatory design for research on youth, safety and well-being. *Journal of Youth Studies*, 19(3), 305-318.
- Dex, S. & Hollingworth, K. (2012). *Children's and young people's voices on their wellbeing. Childhood Well-Being Research Centre*, Working Paper 16. Retrieved from http://www.cwrc.ac.uk/projects/documents/FINAL\_Dex\_\_September\_2012\_\_Report\_on\_childrens\_voices\_on\_wellbeing\_Working\_Paper\_No\_14.pdf
- Ellis, L. A., McCabe, K. L., Rahilly, K. A., Nicholas, M. A., Davenport, T. A., Burns, J. M., & Hickie, I. B. (2014). Encouraging young men's participation in mental health research and treatment: perspectives in our technological age. *Clinical Investigation*, 4(10), 881-888.
- Ewing S., Thomas, J., & Schiessl J. (2008). *CCI Digital Futures Report: The Internet in Australia*. ARC Centre of Excellence for Creative Industries and Innovation, Institute for Social Research, Swinburne University of Technology: Melbourne. Retrieved from http://www.cci.edu.au/sites/default/files/alawrence/Digital%20Futures%202 008.pdf
- Firth, J., Torous, J., Nicholas, J., Carney, R., Rosenbaum, S., & Sarris, J. (2017). Can smartphone mental health interventions reduce symptoms of anxiety? A meta-analysis of randomized controlled trials. *Journal of Affective Disorders, 218*, 15-22. doi:https://doi.org/10.1016/j.jad.2017.04.046
- Franzosi, R. (Ed.). (2008). Content analysis. London: SAGE.
- Forchuk, C. Reiss, J. Eichstedt, J., Singh, D., Collins, K., Rudnick, A., Walsh, J., Ethridge, P., Kutcher, S. & Fisman, S. (2016). The Youth-Mental Health Engagement Network: An Exploratory Pilot Study of a Smartphone and Computer-Based Personal Health Record for Youth Experiencing Depressive Symptoms. *International Journal of Mental Health*, 45, 205–222.
- Gibson, K., Cartwright, C., Kerrisk, K., Campbell, J., & Seymour, F. (2016). What Young People Want: A Qualitative Study of Adolescents' Priorities for Engagement Across Psychological Services. *Journal of Child and Family Studies*, *25*(4), 1057-1065.
- Granholm, E., Ben-Zeev, D., Link, P., Bradshaw, K. R., & Holden, J. L. (2011) Mobile assessment and treatment for schizophrenia (MATS): A pilot trial of an interactive text-messaging intervention for medication adherence, socialization, and auditory hallucinations. *Schizophrenia Bulletin*, 38, 414–425.
- Gwinner K., Melrose P. and Moffatt A. (2017). *Digital Wellbeing, Youth Engagement Consultation Project: Technical Report*. Brisbane, Australia. Kids Helpline, and Brisbane Youth Service. doi: 10.13140/RG.2.2.27148.92805
- Kurdiji 1.0, (2017) -see Indigenous Warlpiri elders want to blend traditions into app to help tackle suicide risk. http://www.abc.net.au/news/2017-04-04/reducing-indigenous-suicide-through-tradition-and-technology/8414248
- Lebduska, L. (2014). Emoji, emoji, what for art thou?. *Harlot: A Revealing Look at the Arts of Persuasion*, 1(12).

Lu, X., Ai, W., Liu, X., Li, Q., Wang, N., Huang, G., & Mei, Q. (2016, September). Learning from the ubiquitous language: an empirical analysis of emoji usage of smartphone users. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing* (pp. 770-780). ACM.

McLeod, J., & Wright, K. (2016). What does wellbeing do? An approach to defamiliarize keywords in youth studies. *Journal of Youth Studies*, 19(6), 776-792.

Mission Australia, in association with Black Dog Institute (2015). Young People's Mental Health over the Years: Youth Survey 2014. Sydney: Mission Australia. Retrieved from https://www.missionaustralia.com.au/publications/research/young-people?limit=20&limitstart=20

Notten, N., & Nikken, P. (2016). Boys and girls taking risks online: A gendered perspective on social context and adolescents' risky online behavior. *New Media & Society*, 18(6), 966-988.

Patton, G. C., Sawyer, S. M., Santelli, J. S., Ross, D. A., Afifi, R., Allen, N. B., . . . Bonell, C. (2016). Our future: a Lancet commission on adolescent health and wellbeing. *The Lancet*, 387(10036), 2423-2478.

Queensland Department of Communities, Child Safety and Disability Services (QDoCS), (2014). Youth Wellbeing Assessment Common Assessment Tool (CAT). Retrieved from https://www.communities.qld.gov.au/resources/communityservices/youth/youth-wellbeing-assessment-cat-guide.pdf

Redmond, G., Skattebol, J., & Saunders, P. (2013). *The Australian child wellbeing project:* overview: Australian Child Wellbeing Project. Retrieved from http://www.australianchildwellbeing.com.au/research-findings

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-journal for the Advancement of Mental Health*, 4(3), 218-251.

Rizvi, S. L., Dimeff, L. A., Skutch, J., Carroll, D., & Linehan, M. M. (2011) A pilot study of the DBT coach: Aninteractive mobile phone application for individuals with borderline personality disorder and substance use disorder. *Behavior Therapy*, 42, 589–600.

Sharma, R. (2017). Global Youth Wellbeing Index. Retrieved from http://www.youthindex.org/sites/default/files/2017-Global-Youth-Wellbeing-Index.pdf

Silverman, D. (2005). *Doing qualitative research* (2<sup>nd</sup> ed.). London: Sage.

Singh, S. P., Anderson, B., Liabo, K., & Ganeshamoorthy, T. (2016). Supporting young people in their transition to adults' services: summary of NICE guidance. BMJ, 353, i2225.

Yarosh, S. & Schueller, S. M. (2017) "Happiness Inventories": Informing Positive Computing Technologies Through Participatory Design With Children. *Journal of Medical Internet Research*; 19(1):e14

yourtown (2017). Kids Helpline Insights 2016: National Statistical Overview. Brisbane: Author.