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**Contact, Connection and Community:  
Music Therapy, Technology and the Global Pandemic**

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# **CONTACT, CONNECTION AND COMMUNITY: MUSIC THERAPY, TECHNOLOGY AND THE GLOBAL PANDEMIC**

## **Introduction**

Music therapy is an evidence-based profession where the planned and creative use of music-qualified music therapists supports people to improve, restore or maintain health, functioning and well-being (IACAT online). In my work as a music therapist with people with developmental disabilities, music technology has come to be an integral part of my practice to support tacit musicality and spontaneous expression, develop and sustain relationships and facilitate connection and community in a variety of arenas. This essay gives an overview of how we use music technology together, particularly in response to the challenges in the lives of people with disabilities in Ireland brought about by the global pandemic.

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## Background

For the last fifteen years or so I have facilitated a music therapy programme for Enable Ireland, a voluntary organization that provides services for people with developmental disabilities. The service is person-centred and run in accordance with the social model of disability. The social model of disability “focuses attention on the person not the impairment. Access, inclusion and equality are considered for people with physical disabilities as for people without” (Enable Ireland 2005, 33). The role of technology in enhancing the quality of life of people with disabilities is a core strategy of Enable Ireland’s service provision (Enable Ireland 2009). Enable is active in developing and providing assistive devices to service owners to facilitate access to life experiences and to enhance independence.

Music therapy in this context is thus concerned with promoting empowerment, creativity and capacity development as well as offering psychosocial support. The programme draws from Community Music Therapy or CMT (Stige 2004) in its focus on promoting relationships through music that people with disabilities might otherwise find difficult (Pavlicevic 2003). A central tenet of the programme that links it to the person-centred ethos of Enable Ireland is the idea that *musicing* (Small 1998) is a valuable activity that can engender personal development, develop meaningful relationships and foster positive life changes (Noone 2008).

A variety of therapeutic methods are offered and employed, but clinical improvisation (Boxill 1985) plays a large part in supporting non-verbal expression and interaction by supporting the intrinsic or *communicative musicality* present in people of all levels of functioning (Trevathan & Malloch 2000). Music therapy sessions incorporate music technology resources – both mainstream and specialized – to facilitate access to musicing for people attending. This allows musical experiences and interactions to be individualized to a person’s movement profile, aesthetic preferences and cognitive functioning. As such, the role of music technology is to support musicality as a therapeutic goal *per se* as well as supporting musicality to enhance the therapeutic process and achieve functional goals.

The music technology resources we use in music therapy at Enable Ireland consist of input devices like MIDI controllers, electric guitars and microphones. These offer distinctive options for gestural transduction (Crowe & Rio 2004) and the optimising of feedback. These inputs are integrated through the digital audio software Ableton Live where MIDI and audio effects can augment or remap the incoming messages (audio or MIDI) in a way that optimises the intentionality of the musician. These can be combined with a service owner’s own assistive tech-

nology resources like switches, or their own smart devices and associated apps. In collaboration with the service owners attending music therapy it has thus been possible to develop unique digital musical interfaces or DMI's (Samuels 2014), combinations of input, processing and output resources that provide enhanced accessibility and expression according to the user's needs and preferences.

One example of this is a man I work with, E. E., who has quadriplegic cerebral palsy which means he has almost no control of his limbs except for his right leg. In music therapy, he uses his right knee to hit a single switch plugged into a Korg PadKontrol. This would typically allow him to play a single note, or trigger a single sample. Together, we developed a MIDI effect chain that allowed E. to play multiple drum patterns in an aleatoric fashion with his switch.

The controller is mapped to a 64-sample drum rack. An arpeggiator MIDI effect converts the single note input into a steady beat. An intervallic setting on the arpeggiator cycles through the available samples in increments of 7 semitones, creating a simple beat. The addition of a randomiser MIDI effect transposes the first note randomly, which creates a different pattern of samples when the arpeggiator cycles up. A velocity MIDI effect standardises the intensity of each note regardless how hard E. hits the switch. In this way E. has access to up to 24 different drum patterns each time he hits his switch. His agency and intentionality are maintained in that he has to use his timing to initiate drum patterns, hold the switch to keep his chosen pattern going, and can retrigger the switch if he wants to find a more fitting pattern. This combination of chance and intentionality make for interesting musical interactions that would not be possible for E. with traditional acoustic instruments.

Participatory action research with service owners at Enable Ireland found that the modular, real-time affordances of music hardware and software, particularly when integrated through Ableton Live, facilitated the mobilisation of multiple knowings – experiential, artistic, verbal and practical (Noone 2020; Reason & Bradbury 2001). This was because of music technology's capacity to deterritorialize musicing itself (Deleuze & Guattari 1989), to be reterritorialized in a manner that facilitates *becoming-musician* of functionally diverse people. This in turn supports relationships through group improvisations with individualised digital musical instruments (Noone 2018).

## Response to COVID

At the beginning of the first COVID lockdown in Ireland in March 2020, Enable Ireland's day facilities were closed and service owners, who were considered vulnerable to infection, were required to *cocoon* at home. For some, this meant staying with their families, for others it meant staying home in independent liv-

ing apartments with limited contact from support staff. In either case, this was a severe disruption to their lives, their sense of community and their routines.

Enable Ireland worked quickly to adapt to these new circumstances in order to maintain service provision and the community's sense of connection. One response was the setting up of a *virtual service* using Microsoft Teams and other online resources. The music therapy programme was maintained throughout this lockdown in a virtual format also, using YouTube, FaceTime and Teams to connect with service owners. Music therapy has been conducted as a form of *telehealth* for some time (for example, Baker & Krout 2009), but it was a new area of practice for me and required some upskilling and rethinking of certain aspects of my work. The music technology resources described above were crucial in creating a new arena for musical contact to manifest and to bring a sense of community during a difficult and uncertain time.

Initially I set up a YouTube channel and began livestreaming music sessions for service owners to access on a daily basis. This consisted of a relaxation session with improvised guitar instrumentals and a song session, where service owners and the people supporting them would request songs and comment in the live chat. There were also individual therapy sessions scheduled over Zoom and FaceTime.

While the individual sessions were relatively easy to facilitate remotely, the YouTube livestreams brought technical and therapeutic challenges as well as interesting new possibilities not previously present in our work. This was due at first to difficulties in routing audio from Ableton into conferencing and streaming software. While it would have been possible to use guitar and microphone directly through an audio interface into these programmes, I was keen to use Ableton's audio effects, MIDI capabilities and sampling/looping functionality to enhance the musical content. The most successful solution was to use the virtual audio routing software ASIO Link Pro to create an integrated audio environment.

Clinical improvisation typically involves developing a musical dialogue by reflecting through music the here-and-now person in terms of their movements, vocalisations and presenting mood (Boxill 1985). While this kind of musical interaction was not possible with people watching from home, I felt there needed to be an element of spontaneity and of a shared musical experience to distinguish the improvisation session from a conventional performance.

The looping functions of Ableton were useful in ensuring that the improvisation sessions were fresh and that a sense of moment-to-moment musical expression was shared between everyone involved. Audio and MIDI percussion loops were sourced, with a focus on world percussion styles. I tried to listen to them as little as possible before using them in the session. I also used recordings of wild-life soundscapes from around the world as backgrounds for improvisations and

the concept of “mindful travel” evolved from reactions in the live chat. Using the *warp* function of Ableton allowed the slowing down of these recordings without affecting the pitch to create a more relaxing effect. Using delay effects and sends on the guitar and loops created a similar mellow, dreamlike effect.

The song sessions on YouTube were very similar to a standard *song recreation* music therapy session (Bruscia 1998). Working on YouTube made the sessions highly accessible to service owners and the people supporting them, but the public nature of the platform meant that there was no possibility of confidentiality and thus the therapeutic aspect of the sessions was limited in favour of a more community-based function. It took some time to get used to interacting with people through the live chat, but this turned out to have interesting possibilities. People with speech articulation difficulties or hearing impairments were often more comfortable interacting through text and supplementing their communication through images and emojis brought new elements to our relating.

In August 2020, Enable Ireland reopened their day facilities in a restricted capacity and remained open as essential services during subsequent lockdowns. I was able to return to in-person therapy work, though the virtual service continued to be provided for people who were still unable to attend their day facilities. The new applications of digital audio and multimedia technologies that allowed the music therapy service to operate online are now being used by service owners themselves. With some minor facilitation from me, service owners have come together to run podcast/webcast shows on the virtual service themselves, sharing their opinions and talents in a project they have called Harmony FM.

## **Conclusion**

Music technology has helped to facilitate access to musicking in in-person therapy through the development of individualised digital musical instruments in a flexible, intuitive and person-centred manner. These resources have also supported my musicality as a practitioner and supported the reframing of my practice into a telehealth context while maintaining a shared sense of community. I am grateful to learn new ways to deepen my practice and connect with the people who attend my programme, especially during these difficult times.

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