

## **Using technology and digitally enabled approaches to support desistance**

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### **Introduction**

This chapter provides an overview of rehabilitation and desistance-orientated uses of digital tools and approaches in prison and probation settings. Considerable attention is often given to 'what' established and emerging technologies can do in criminal justice. Yet 'how' and 'why' such technologies are used and advanced, by whom and for whom remain indispensably important. 'Digital justice' and digitally enabled supports for rehabilitation are explored here, reflecting on their potential, alongside considerations of purposes and practicalities of implementing them. Monitoring and reporting technologies can be differentiated from technologies which are more therapeutic and rehabilitation-orientated in their uses; this chapter concentrates on the latter. International literature and practices are incorporated throughout, however, the chapter purposely focuses on applied examples from England and Wales.

This chapter has been co-produced from two complementary perspectives: the first author works as a psychologist involved in practice development in prison and probation service settings <sup>A</sup> in England and Wales, with expertise in developing digitally enabled tools and frameworks with different groups of people with convictions (see Morris & Knight, 2018;

Morris & Bans, 2018; Morris et al., forthcoming). The second author is a criminologist based in Scotland and working internationally to research rehabilitation and criminal justice work, practices and policies, and uses of technology in criminal justice (see Graham, 2016; Graham & White, 2015; Hucklesby et al., 2016; Graham, 2018a, 2018b). Language differs across the interdisciplinary literatures and areas in which we work, and co-writing this chapter offers an occasion to reflect and grapple with some of the nuances in terms. ‘Service users’, ‘participants’, ‘residents’ and ‘people with convictions’ are used here to describe people in prison and probation services. Terms such as ‘therapeutic’, ‘forensic’ and ‘offending behaviour programmes’ (OBPs) regularly feature in interdisciplinary literature and practice. Where we use them, it is done with reflexive acknowledgment of their clinical origins and implicit emphasis on professional intervention, while recognising that rehabilitation and desistance processes are simultaneously influenced by people, interpersonal and social-structural factors beyond the scope of professional practices and institutions. The ethos underpinning the main case examples featured in this chapter is that of co-production, where professionals work together with participants in egalitarian ways, in the recognition that rehabilitation and desistance can be co-produced with individuals and groups (see Weaver, 2013) and digital tools and approaches, where used ethically, can support such processes. This chapter concludes by raising a few key considerations for advancing rehabilitative uses of technology in criminal justice in the future.

### **Digital justice and using technology in desistance-orientated work**

Digital service design and efforts to digitalise existing approaches are increasingly featuring in criminal justice institutions and work, with such reforms often referred to under the remit of ‘digital justice.’ Increased interconnection or integration between services and systems usually

features in digital justice agendas. Van de Steene and Knight (2017: 256) contend that ‘the inevitability of digital transformation is set to shape the way justice is done and experienced.’

Among criminal justice practitioners and service users, increasing digitalisation can induce different responses (for discussions relating to probation work, see Phillips, 2017, and rehabilitation and resettlement, see Champion and Edgar, 2013). For some, the prospect of technology increasingly featuring in how a justice system is run has a longstanding relationship with the notion of dystopia, with surveillance, dehumanised and distant practices set in Orwellian visions of the future (see Nellis, 2018; McNeill, 2018). For others, increasing uses of technology and digitalisation may evoke the notion of retrotopia (Bauman, 2017), a retrospective nostalgic yearning for (perceivably) less complicated and more human, benevolent rehabilitative practices past. It is helpful to temper ideas about digital innovation in criminal justice with the recognition that such innovation is not morally or politically neutral – just because something is new does not necessarily mean it is ethical or effective (Graham & White, 2016, Graham, 2017).

A growing number of technologies and digital approaches are being used in criminal justice systems internationally. In prison and probation service contexts, particularly in Europe, Australasia and North America, examples include: electronic monitoring technologies (e.g., tags); apps for mobiles and other digital devices; kiosks; in-cell technologies; animation, digital storytelling, digital toolkits and information communication technologies; virtual reality; Skype and video conferencing; gaming; artificial intelligence and machine learning; social media, websites and online portals. A positive example is the award-winning ‘Changing Lives’ mobile phone app, developed by the Probation Board for Northern Ireland. This free app includes a contacts and diary function for appointments, a journal section where text and emojis can be used (and later discussed in conversation with a probation officer, if the individual wants to), detailed information about probation supervision and the victim information scheme, and

addictions and mental health information and referral options (McGreevy, 2017).

These technologies and digital approaches may be designed and used for diverse purposes and goals in criminal justice, which can span personal, professional, systemic and public or societal domains. Are digital justice agendas within prisons, probation and community corrections services clearly oriented towards goals of supporting rehabilitation and desistance? They can be, but are not necessarily or intrinsically so. Technology can be used proportionately and responsively, or punitively and disproportionately in criminal justice, underscoring the need to discern purposes and goals of use. According to Graham (2018a, 2018b), purposes and goals for using technology in criminal justice include:

- Punishment: retribution, restriction of liberty and/or privacy.
- Decarceration and diversion: reducing the use of custody by using technology as/within a community sanction or measure.
- Surveillance and monitoring.
- Motivating compliance.
- Crime control and reducing reoffending.
- Risk management, victim protection, community safety and public protection.
- Digital innovation and staff ‘intrapreneurship’ in their work.
- Responsivity and personalisation to the individual and their circumstances, respecting a person’s agency and self-efficacy.
- Supporting (or being less harmful to and inhibitive of) desistance, recovery and re/integration processes.

- Involving service user voices and expertise in coproduction of digital approaches and tools, peer relationships and input.
- Instrumental and systemic purposes: trying to reduce time, money, workload and resource inefficiencies; information sharing and communication; digitising or digitally enabling traditional interventions or services; efforts to overcome inertia in large risk-averse organisations and public services.

Sources: Graham (2018a, 2018b)

Are digital justice agendas within prisons, probation and community corrections services clearly oriented towards goals of supporting rehabilitation and desistance? They can be, but are not necessarily or intrinsically so. Technology can be used proportionately and responsively, or punitively and disproportionately in criminal justice. Uses are influenced by context, cultures and implementation, raising a variety of questions – how and why are digital justice ‘transformations’ and activities being pursued? What else is happening concurrently to this? To what extent should ‘digital rehabilitation’ (Reisdorf & Rikard, 2018) be a focus for prisons, parole and resettlement support services, within or alongside other forms of rehabilitation (see McNeill, 2012; Burke, Collett & McNeill, 2018)? Nellis (2006, 2018) has called for those involved in advancing uses of digital technology to make a ‘conscious educative effort’ to ensure this does not reinforce punitive values in such processes.

### **Desistance-orientated uses of technology in criminal justice**

While the type and range of available technologies to meet the needs of people with convictions continues to grow internationally, empirical evidence about their effectiveness is nascent but modest. Some research has evaluated uses of technology for rehabilitative purposes from the perspectives of “e-health” and the forensic psy-disciplines. Kip, Bouman, Kelders and van

Gemert-Pijnen (2018) conducted a systematic review of 50 studies of e-health services delivered to people with convictions who (for the most part) experienced mental health or substance misuse. The technologies featured in these studies were diverse, including: communication technologies (e.g., video conferencing), interactive language-based digital interventions (e.g., online courses accessible through various devices), virtual reality and visual simulation of offence-related realistic situations, gaming, user-generated platforms and social media. Many of these studies featured psychosocial approaches commonly used in rehabilitative work in criminal justice, including psycho-education, cognitive behavioural therapy, motivational interviewing, mindfulness, relapse prevention, violence reduction, and approaches focused on developing recovery capital, social capital, positive change and self-efficacy, including self-help and peer support approaches.

Kip and colleagues (2018) identified that digital approaches falling into the “Interactive, Predominantly Language-Based Interventions” category are often based on existing evidence-informed rehabilitative approaches. Like offending behaviour programmes (OBPs), these digital services aim to change offence-related thinking and/or behaviour, using psycho-educational presentations, assignments, or exercises. More than one modality tends to be used in this type of approach, for example, written text, videos and audio. One example of this approach is the Breaking Free Online health and justice digital interventions (see Elison et al., 2016; Elison-Davies et al., 2018).

Kip and colleagues’ (2018) systematic review identified strengths and advantages, as well as disadvantages and complexities of these digitally enabled tools and approaches, taking into account the perspectives of service users, professionals and service providers. In some (but not all) cases, the advantages of using these technologies included:

- Increasing access and engagement;

- Personalisation and responsivity to individuals;
- Positive opinions of service users (e.g., finding it helpful, or fun to use);
- Enhancing rapport and relationships with professional staff;
- Helping in eliciting or communicating sensitive information;
- Receiving care in highly secure settings;
- Consistency and standardisation of service delivery;
- Reductions in time and costs of interventions.

It is noteworthy that parallels exist between the “active ingredients” of e-health approaches (as identified by Kip et al, 2018) and the literature on desistance-orientated approaches, which are often strengths-based in nature (e.g., McNeill, 2012). These approaches are designed to be educative and responsive to participant learning preferences (Champion & Edgar, 2013) and tend to emphasise the importance of participants forming meaningful relationships with practitioners (see Ross, Polaschek & Ward, 2008), positive peer relationships, and developing useful skills that enable them to lead a better life (Looman & Abracen, 2013).

Notwithstanding, in the review by Kip and colleagues (2018), as well as in discussions raised by Yardley and colleagues (2018), Ross (2018) and Graham (2018), a series of coherent themes emerge which show the potential disadvantages and challenges of using technology with people with convictions, even where these uses seek to be rehabilitative. These themes are synthesised and summarised here, with the caveat that this is an illustrative, not exhaustive list. Firstly, it is widely acknowledged that the empirical evidence of effectiveness is limited or still emerging for some technologies and for uses in certain contexts or with certain groups in criminal justice.

Secondly, a point well made by Ross (2018) is to note that a large proportion of what is known about existing technologies such as mobile apps for people with convictions comes from a health perspective, and important differences may be apparent in how they are applied by authorities and used by participants in statutory or mandated services in criminal justice. Furthermore, several practical challenges of using technology and digital approaches persist, including issues like battery life, lack of or slow/lost connection or signal, faulty technology and safeguarding against misuses/unintended uses of technology. Where technologies can increasingly be integrated in their use in criminal justice (e.g., apps, devices and tags), privacy and data protection considerations remain paramount. Also, Hollis and colleagues (2018) highlight the need to do further research on the safety and efficacy of digital technology interventions compared to face-to-face interventions.

### **Co-producing digital content to promote desistance**

The second part of this chapter explores an applied case example of a recent innovation, Complementary Digital Media (CDM). It is one of a range of digitally enabled approaches being used in England and Wales, where Her Majesty's Prison and Probation Service (HMPPS) Digital Studio leads the development of an eco-system of interconnected technologies which operate in accordance with the Government Digital Service (GDS) design principles, first and foremost of which is the principle of "user needs, not government needs" (see Bracken, 2015).

Complementary Digital Media (CDM) is a technology-based approach that harnesses the stories and voices of people with convictions and lived experiences of criminal justice within engaging media clips to enhance desistance-orientated services (see Morris & Knight, 2018). CDM combines pictures, audio, text and meaningful stories which service providers can use in coaching and supporting participants to help them develop skills and make positive choices in



processes of desistance from crime.

Practitioners are encouraged to use CDM clips interactively (e.g., by pausing, rewinding and replaying clips) during sessions. The clips explicitly complement existing OBP session learning outcomes by prompting participants to discuss the personal relevance of these messages during one-to-one or group discussions. Structured therapeutic discussions that CDM clips instigate are intended to lead into further exercises, skills practices and coaching to help participants to integrate skills into their day-to-day lives. CDM focuses on explaining and building *skills* (e.g., for managing thoughts, emotions and behaviours), reflecting a key therapeutic ingredient of OBPs emphasised by Clarke, Simmonds and Wydall (2004).

Yardley and colleagues (2018) and Hodge and colleagues (2015) emphasise the iterative nature of co-producing digital content and approaches, where service design and provision is intentionally user-centred. Morris and Knight (2018) describe the CDM co-production process where people from a prospective target group in prison or probation services are recruited to a Service User Reference Group (SURG) that meets regularly to develop therapeutic digital content, in collaboration with and facilitated by staff. SURG volunteers draw on their lived experiences of issues likely to be experienced by the target group. Morris and Knight (2018) describe how members of one peer support group (self-titled: “The Innovators”) co-produced CDM to assist their peers in managing challenges of prison life that can lead to violence. This involved co-creating scenarios for CDM clips and providing voiceovers in a style that was relatable for their peers who would access the service. For example, the Innovators co-produced one CDM clip that modelled different styles of self-talk used by a character to self-manage his aggressive thinking about his medication being confiscated.

Service user reference groups create a forum in which they can explore the nature of situations where they are likely to encounter challenges in desistance processes, incorporating discussions

of risks that are relevant to specific cohorts or groups. To date, CDM projects have co-developed digital content focused on self-management and violence reduction in prisons, Intimate Partner Violence (IPV) and group-affiliated offending.

Morris and colleagues (forthcoming) describe the co-production process undertaken with men with intimate partner violence (IPV) or domestic abuse convictions. This project yielded two series of CDM clips: one for men with male partners and one for men with female partners. Each series (or variant) of clips was based around the experiences of a central character, who - across the course of the series – adopts skills to self-manage a range of challenges associated with his IPV risk. For each variant, volunteers co-created semi-autobiographical scripts and delivered voiceovers to produce clips (usually around 3 minutes in length). The SURG process enabled us to tap into lived experiences that have largely been neglected in offending behavior programmes. This led to the development of digital content such as the “Change, Accept, Let Go” clip where the central character uses a self-talk skill to resolve rumination linked to his behaviour of checking his ex-partner’s social media posts.

As illustrated in the focus group extract below, initial indications are that SURG participants can become highly invested in the SURG process and find it to be rewarding (described in Morris & Knight, 2018; Morris et al, forthcoming).

Facilitator: “What is the best way to put content across to people on probation?”

Participant 1: “Make it real life.”

Participant 2: “... with these [clips], the images and the words flashing up. It gets your appeal straight away. That’s why I’ve taken so much interest in this. .... you can hear it in his voice when he is talking about a scenario, you can hear that this is real.... It’s coming from a real person, with real experience.”

Facilitator: “It sounds like the visuals and having the words incorporated into....”

Participant 2: “Seeing the pictorial cartoon characters did a lot more for me than seeing real people....and the fact of having the voiceovers you can hear the story, you can hear the true voices. It’s coming from someone who has actually done it.”

Participant 1: “It is coming from someone who has either actually done it, or been through it themselves. It is real life. It’s not like East Enders or Coronation Street. It’s not written for you. What we are both saying is coming from our head, our heart and our voice, so it is real, it is true. ... it’s the realness.”

### **Implementing digitally-enabled desistance-orientated approaches**

Ross (2018) argues that a key benefit of explicitly therapeutic digital services in criminal justice is that they have the potential to provide a cost-effective means to extend periods of service engagement and provide service to participants who may be outwith the scope of mainstream OBPs. Whilst complementary digital media was originally conceived as a method to complement conventional OBP sessions, it soon became apparent that the discrete micro-learning experiences created by CDM can also lend themselves to more flexible delivery models for people who may be unsuitable for conventional OBPs. For example, the two variants of digital content about intimate partner violence highlighted in this chapter are now being piloted in a variety of delivery contexts in England and Wales: within OBP sessions; as a short programme; and as a toolkit delivered flexibly by Offender Managers during one-to-one supervision sessions.

Another example of CDM in England and Wales is the ‘Timewise Channel’ (see Morris & Bans 2018), which provides a useful prototype to exemplify a flexible digital toolkit approach.

This service is available to all residents at a “digital prison” and exists as a series of clips in a digital content store (developed by the HMPPS Digital Studio) accessed via in-cell computers. Launched in February 2017, the Timewise Channel has been iterated in conjunction with The Innovators (who also peer-supported Timewise participants, with the coordination of the prison’s psychology department). In the 12 month period between 1<sup>st</sup> September 2017 and 31<sup>st</sup> August 2018, they assisted 163 participants to complete a comprehensive workbook that evidenced participant goals, understanding and use of skills depicted on the Timewise Channel. One of the Innovators (a SURG volunteer) produced an article for the prison newspaper, which describes this digital service as follows:

**Why is Timewise so popular?**

*Because of two things: Simplicity and Flexibility*

*Timewise is a simplified OBP that breaks down all psychological jargon in simple, user friendly terms. While Timewise is a simplified OBP, it is not accredited and it does not replace any other programme.*

*Timewise is so flexible that users can do it anytime by watching the 20+ video clips on their laptop and answering the booklet. There is no time limit to complete the booklet. It is a self-directed programme, that means no assessment, no group sessions and no individual interviews. Anyone can do Timewise any time.*

**If it is not accredited, then why bother?**

*Well, Timewise surely is designed to help develop new strengths and skills to do our time wisely, but most of all, when our time for Cat D progression comes up, if the question “what have you done off your own back?” is asked, we can say “I have done Timewise”.*

Source: Berwyn Times (June 2018)

As well as having the capacity to host CDM, a range of devices (e.g., interactive televisions, in-room computers and tablet-based software solutions) also have the technical potential to change the way that therapeutic services like Timewise are coordinated and delivered by enabling remote communication between prison residents and practitioners. In the case of the Timewise Channel, the “Unilink” system (evaluated by McDougall, Pearson, Torgerson & Garcia-Reyes, 2017) has a messaging feature that enables the psychology staff to provide specific instructions to peer mentors about who they should support, how and when. This has significantly increased the capability of the prison to integrate Timewise as a fluid component of an overarching care framework.

Following its original inception, the CDM content comprising the Timewise Channel was subsequently re-purposed as the “Timewise Toolkit” (and deployed via DVD players, laptops or paper storyboards) at 14 further pilot sites in England and Wales. Preliminary reactions of staff and participants to the Timewise Toolkit provide promising indications that it shares some of the active ingredients of desistance-orientated approaches described earlier. A key strength according to practitioners is its potential to let them tailor their approach to the needs and preferences of participants, in keeping with the responsivity principle of rehabilitation (see Andrews & Bonta, 2010):

*“the use of animation clips is supportive and I like the flexibility of the Timewise conversations and how they can be tailored to individual’s needs”*

*“it is tailor made/ one to one and the onus is on candidate to complete the work.  
.... the process gives more ownership to the individual and more gratification to himself”*

The Timewise Toolkit has facilitated meaningful engagement opportunities for people in some of the most restrictive personal circumstances in criminal justice. For example, one participant with complex needs at a High Security prison used his engagement with Timewise as part of a successful (albeit temporary) attempt to progress from the segregation unit: *“I was really believing – appreciating, and understanding the course. I was gradually feeling much better about myself, and I was beginning to feel really hopeful”*. Participant feedback indicates that Timewise appears to have helped them form more meaningful relationships with practitioners and other staff: *“by the end of the Timewise toolkit he was regularly engaging in discussions with staff on his unit as well evidencing good communication skills with his key worker”*. Timewise can also provide a context in which peer supporters can develop important working alliances with residents who are in crisis:

*“When I go into the cell and there is someone there who is ringing wet and they’ve caused chaos. It works. It 100% works. Some of them will say “hang on, you’re a screw boy”. I’ll say “whoa, don’t ever call me that, I’m here to try and help you”. And once you break that ice, it really does work. Peer led work is the way forward” [Timewise Peer Support]*

With regard to implementation, Timewise Toolkit pilot sites have encountered some difficulties embedding this new digitally-enabled one-to-one service within existing violence reduction efforts. While staff with OBP facilitation experience have successfully engaged highly challenging participants, pressure on resources has restricted wider rollout to staff who do not have OBP experience. This has prevented the Timewise Toolkit being delivered at scale when compared to the Timewise Channel available at a digital prison. While this underlines the potential of digital platforms to create reach for digitally enabled courses, questions remain around the extent to which this reach creates workload pressures for

supporters and may compromise quality of learning experiences.

One challenge for digitally-enabled desistance-orientated approaches is navigating the tension that exists between the reach and the quality of delivery of these new services. This challenge can be met through the expedient use of existing expertise and infrastructure. CDM delivered as part of a blended learning approach within high volume OBPs, accredited by the Correctional Services Advisory & Accreditation Panel (CSAAP), offers some assurance that it will be used as intended. The same complementary digital media can also then be used as an auxiliary “wrap around” service that involves frontline staff and peer supporters in the process of extending the engagement period for OBPs, with pre-and post-OBP support outside of the group that both prepares participants to learn and supports skills generalisation in the day-to-day lives of participants.

### **Emerging horizons**

More technologically sophisticated and inventive digital approaches are emerging and being trialed in some forensic settings, and we wish to briefly acknowledge them here. The level of immersion and automaticity provided by new e-health technologies and applications represent two important dimensions in advancing reach and effectiveness in supporting recovery, change and desistance processes. For example, Van Rijn, Cooper, Jackson & Wild (2017) describe an avatar-based therapy system that uses simulated environments to enable participants to develop insight into interpersonal dynamics, take perspective and practice pro-social skills. Services like this have the potential to offer qualitatively distinct, immersive experiences that can either be self-directed, guided by in-person support or guided via two-way telephony with a trained supporter in a remote location. There is also the potential to integrate with artificially intelligent therapeutic approaches to help service users reframe negative thinking and track mood states,

which can be raised, if they want to, in conversation with staff. Economic, ethical, safeguarding and regulatory issues remain, and these will temper whether more innovative uses of technology are “the right thing to do”? First, key questions need to be addressed around the purposes of their use, and how such services map onto existing care and management frameworks in criminal justice service settings.

## **Conclusion**

The empirical literature and reflective practice summarised within this chapter indicates the value in championing digital services that: explicitly draw on desistance theories, research and principles; focus on the development of participants’ strengths, knowledge and skills; and are co-produced, placing service users as close to the centre of their design and implementation as possible. Extending rehabilitative and therapeutic service engagement beyond the scope of mainstream OBPs is an opportunity for using digitally-enabled tools and services. Such services can be tailored to different criminogenic needs, delivered flexibly within routine contacts between practitioners and services users, and accessed by service users outside of face-to-face contacts.

Digitally-enabled content accessed via approved digital platforms has the potential to change the way change-orientated interventions and desistance-orientated conversations take place in criminal justice services. The complex blend of flexibility and fidelity of delivery offered by some digital services means they can be delivered consistently across a range of settings. Platforms offered by providers (such as Core Systems, Breaking Free Online, Virtual Campus/Meganexus and Socrates Software) have the potential to ensure the dependable continuity required for providing through-the-gate services for people leaving prison and re/integrating within communities, where they can continue to use the same digital tools and



approaches.

Some of digitally-enabled desistance orientated approaches have evolved directly out of traditional OBP frameworks. Digital services, such as Breaking Free Online and Complementary Digital Media toolkits, are aligned to existing commissioning and sentencing approaches and, as such, fit with existing prisons and probation service structures in England and Wales. While more sophisticated digital approaches are on the horizon (see Kip et al, 2018), simple digital services offer the potential to create immediate reach across a range of platforms and, importantly, capitalise on the existing expertise of current practitioners.

Designing digitally-enabled services with service users - ensuring that their voices are at the heart of designing digital content – represents an important advancement on existing OBP content, which has typically been professionally led. Co-producing innovative digital tools and approaches has the potential to give service users more of “a voice” and a role in ensuring that digital services meet the needs of their peers and, importantly, do no harm (Morris & Knight, 2018). Their involvement matters if new uses of technology are to be innovative and ethical:

Innovation is a multi-faceted topic that has the capacity to be researched and celebrated in inclusive and emancipatory ways, making the knowledge base more epistemologically open and co-produced by hearing voices, experiences and expertise that may not have been included or valued as much in the past. (Graham, 2017: 206)

We believe that some rehabilitative uses of technology can add capacity within desistance-orientated approaches, for mainstream and for marginalised groups in criminal justice. Opportunities exist to use readily accessible platforms to extend the reach of existing rehabilitative approaches and content, while building in and bearing witness to the voices and lived experiences of service users. It may help in processes of delivering through-the-gate

services using digital tools that work across prison and probation service settings to support rehabilitation and desistance processes (Champion & Edgar, 2013; HMIP, 2017). In essence, this chapter emphasises the importance of purposes, ethics and the ‘how’ and ‘why’ behind ‘what’ technology can do, while keeping a firm eye on the real-world challenges that exist in technologically innovating in this area.

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