**IMPLEMENTATION AND EVALUATION OF THE BREAKING FREE ONLINE AND PILLARS OF RECOVERY TREATMENT PROGRAMS FOR SUBSTANCE-INVOLVED OFFENDERS**

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**Abstract**

In 2013, Breaking Free Group, a digital healthcare company based in Manchester, developed two accredited substance misuse treatment and recovery programmes for offenders within the criminal justice system. Based on community-setting versions of Breaking Free Online (BFO), a computer-assisted therapy (CAT) programme, and Pillars of Recovery (PoR), a group-work programme, the criminal justice specific versions have subsequently been made available across 10 North-West England ‘Gateways’ prisons, as part of a ‘through the gate’ (TTG) pathfinder to support substance-involved offenders in successfully transitioning back to the community. The BFO programme has been made available to prisoners in the North-West via Virtual Campus (VC), a secure, web-based learning environment available across all English and Welsh prisons, where online education and training programmes are provided to prisoners, meaning prisoners can now continue to access their treatment when transferred to any prison with VC in England and Wales along with the ability to continue their care upon release. Since the pathfinder started both programmes have since achieved full CSAAP (Correctional Services Accreditation and Advice Panel) accreditation. To further strengthen the impact upon desistance the developers of the programme worked with OCR (Oxford Cambridge universities and Royal Society of the Arts) awarding body to have the intervention programmes accredited and regulated, meaning offenders can also achieve a qualification in Life and Living Skills (Entry Level) as a means to acknowledge and reward their efforts in engaging, and completing the programme. By being made available on VC, BFO has become the first accredited healthcare and offending interventions programme to be delivered to prisoners via online, digital technology. Evaluation work, incorporating both quantitative and qualitative methods, has revealed both the barriers to, and facilitators of, the implementation of both BFO and PoR, and demonstrated initial clinical outcomes to be promising. This paper reports on the process of implementation of BFO and PoR, the role of the programmes within the wider Gateways project, and outcomes for offenders from engaging with the programmes. Future work is also described, both in relation to continued research and evaluation work, and the further implementation of BFO and PoR across both the England and Wales prison estate and the new Community Rehabilitation Companies (CRCs).

**Introduction**

A major focus for the government’s Transforming Rehabilitation agenda (TR: Ministry of Justice, 2013) is to find innovative methods of providing effective, evidence-based interventions and treatments for substance-involved offenders (Bonta & Andrews, 2007). Substance misuse and dependence is a major contributory factor to the persistently high rates of reoffending in the UK, evidenced by a reconviction rate of 62% for offenders who report using drugs in the month prior to their imprisonment, compared to 30% for those who do not (Ministry of Justice, 2013). A second central objective of the Government’s TR strategy for reducing reoffending is to strengthen the support provided to offenders as they transition ‘through the prison gate’ from custody to community, with this need for continuity of care being particularly acute in the treatment of alcohol and drug dependency. More recently, the May 2016 Queen’s Speech indicated that legislation is due to be introduced to tackle some of the deepest societal problems, including addiction, and that old and inefficient prisons will be closed, with new ‘reform prisons’ to be built in their place, which will provide better mental health provision for individuals in the criminal justice system.

Alongside these reforms to the rehabilitation of prisoners with substance misuse and mental health issues, a recent report commissioned by Justice Secretary Michael Gove, has indicated the important role of education in the rehabilitation of prisoners. The report, conducted by Dame Sally Coates, concluded that education provision in prisons is currently not meeting the needs of prisoners, with three fifths of prisoners leaving prison without any identified employment, education or training outcome (Coates, 2016). Given that 20 – 30% of prisoners self-identify at initial assessment as having some form of learning difficulty or disability (Prison Reform Trust, 2015), this group would appear to be one which requires significant support in enabling them to achieve their potential and enhance their chances of employment after release.

One of the ways in which the UK Government intends to address the multiple and complex needs of prisoners, including mental health, substance misuse and learning difficulties, is through the introduction of new digital technologies. In particular, the new reform prisons will be built with the intention of providing prisoners with cutting-edge technologies such as in-cell computer tablets to facilitate independent learning and training. Additionally, it is intended that prisoners will have the ability to stay in touch with family and friends via online communication methods such as Skype, to strengthen their links with the support networks they will return to once they are released, which is evidenced as being central to rehabilitation and reintegration to the community (Williams et al., 2012). Previous research has also indicated that access to technologies such as in-cell television can be beneficial to prisoners in enabling them cope with the boredom and frustration often experienced whilst in the restrictive prison environment (Knight, 2015b, 2015a).

As part of this drive to introduce innovative technologies to facilitate the rehabilitation of prisoners, and find ways to introduce these innovative rehabilitation technologies to the prison setting, in 2013 Breaking Free Group, produced a criminal justice-specific version of their widely used community-based substance misuse treatment and recovery program, Breaking Free Online (BFO). The BFO program is delivered as computer-assisted therapy (CAT) and incorporates a range of evidence-based psychosocial interventions such as cognitive-behavioural therapy (CBT: Beck et al., 2001; Beck, 2011) and ‘mindfulness’ approaches (Marlatt et al., 2008; Marlatt et al., 2010), appropriate for individuals with substance misuse difficulties, in addition to those who are ‘dually diagnosed’ (substance misuse and comorbid mental health issues) (e.g. Davies et al., 2015; Elison et al., 2014a; Elison et al., 2015a). The intervention model is designed to respond to the individual needs, severity of use, type of drug(s) used, as well as the diverse ways in which alcohol and other drugs have an impact on the person’s lifestyle and personal situation. The program is intended to reduce the problematic use of alcohol and other drugs as well as to facilitate desistance by strengthening resilience and building ‘recovery capital’ (Best & Laudet, 2010), through the adoption of coping strategies and behaviour change techniques.

The BFO program is appropriate for addressing difficulties with a wide range of substances, including prescribed medications of abuse and new psychoactive substances (NPS), or ‘legal highs’, which are currently causing significant problems in prisons in England and Wales as well as in prison services elsewhere in the world. In particular, synthetic cannabinoids such as ‘Black Mamba’ and ‘Spice’ are posing significant threats to not only the physical and mental health of prisoners, but to the safety and security of the prison estate as a whole (HM Inspectorate of Prisons, 2015). Indeed, the current Chief Inspector of Prisons, Peter Clarke, was recently quoted as saying “NPS is having a devastating impact in some of our prisons, more severe than we have seen with other drugs, their presence in prisons has given rise to debt, bullying and violence. They are destabilising some prisons, making it difficult for normal prison life to continue.”

The BFO program has been available for service users in community-based substance misuse services since 2011 and, since then, been subject to a comprehensive research and evaluation process which has revealed the program to be clinically effective in reducing substance use, misuse and dependence, improving mental health and quality of life, and supporting recovery progression (Elison et al., 2013; Elison et al., 2014a; Elison et al., 2015a, 2015b). The program has also been reported as being a useful clinical tool by practitioners (Dugdale et al., submitted-a; Elison et al., 2014b), and as a welcome addition to the interventions available in substance misuse services by service users and peer mentors (Dugdale et al., submitted-b; Elison et al., 2014b). As a result of the growing evidence-base for BFO in community settings, in 2014 a new version of the program was specifically designed to be appropriate for use in criminal justice settings, which was developed with support from NOMS and MoJ. However, there are challenges with implementing online programs such as BFO in highly secure environments such as prisons. While there have been calls recently to increase prisoner access to the internet (Prison Reform Trust, 2013), as this may confer benefits in terms of prisoner education and training, accessing information and support to facilitate successful reintegration to the community upon release, there are a number of challenges and risks associated with prisoner access to IT that must be acknowledged. These may include the risk of collusion with associates in the community, stalking and harassing of victims and other nefarious activities (Champion & Edgar, 2013). There are also a number of practical considerations when attempting to deliver computer-facilitated services in prisons, including cost of equipment, supporting prisoners to develop digital skills, and appropriate training of staff (Champion & Edgar, 2013).

In order to overcome these issues of security, Virtual Campus (VC), a secure online learning environment through which prisoners can access a range of education, training and employment (ETE) programs, has been made available across the England and Wales prisons estate. There are no links to outside websites via VC, with the amount of content prisoners can access being restricted to only sites and resources that have been subject to stringent security measures by NOMS and MoJ. In order to be provided to prisoners on VC, the BFO program was reviewed by NOMS to ensure it met their stringent quality assurance, information assurance and security assurance processes resulting in the program being 'whitelisted'. In 2015, BFO became the first healthcare and offending program to be delivered via VC. The recent report by Dame Sally Coates indicates however, that although VC has the potential to provide prisoners with access to a wide range of digital resources, the platform is currently under-utilised, is often not available to prisoners for majority of the working day, and regularly does not work properly, largely due to inadequate broadband capacity (Coates, 2016).

In order to overcome some of the technical difficulties some prisons experience, a manualised group work-format program has also been developed, Pillars of Recovery (PoR), which incorporates the same intervention strategies as those included in BFO. The PoR program is a high intensity program that is completed by groups of up to 12 offenders via 12, two-hour long sessions. To minimise attrition, PoR also includes a series of one-to-one keyworking sessions that reinforce and consolidate the content of the group sessions, but also enable offenders who cannot attend a group session to catch up. Like BFO, the PoR program has also been demonstrated as being an effective intervention in community settings (Hogan et al., 2015) and has also been accredited by both CSAAP and OCR. For Gateways, both BFO and PoR were commissioned as an integrated treatment program.

Both the BFO and PoR programs have been reviewed by NOMS clinical staff and approved as an Effective Regime Intervention (PSO4350), and since then, have also achieved full accreditation by the MoJ Correctional Services Advice and Accreditation Panel (CSAAP) as high quality, evidence-based offender programs. By being accredited as an Effective Regime Intervention, both BFO and PoR have been approved by NOMS as being able to address the clinical need of prisoners through addressing their substance use, and through the accreditation by CSAAP, have been demonstrated that to be effective programs to reduce reoffending. The BFO and PoR programs have also been accredited and regulated by the Oxford, Cambridge and RSA (OCR) awarding body, allowing prisoners using the programs to work on their recovery to achieve a qualification in Life and Living Skills (Entry Level), which further contributes to desistance by building recovery capital via educational attainment. By providing an educational focus to the programs an attempt has been made by the program developers to ensure that the programs do not compete with educationproviders but instead strengthen interdepartmental working between Offender Management Units (OMU), substance misuse and education teams.

Since its development, the criminal justice versions of BFO and PoR have been implemented in a number of prisons throughout the North-West of England prisons estate as part of the ‘Gateways’ pathfinder, which is intended to improve continuity of care for prisoners between prison and community settings. As part of Gateways, psychosocial interventions to address substance use are provided to offenders whilst they are in prison, followed by support post-release, including support with accommodation and employment. Providing continuity of care for substance misusers when transitioning between settings has been demonstrated to be cost-effective and reduce relapse and recidivism (Butzin et al., 2005; Butzin et al., 2006; McKay, 2001, 2009; Popovici et al., 2008), so the fact that BFO is delivered as CAT means that the program can contribute to delivering genuine continuity of care, as all users can continue to access BFO regardless of their location. Therefore if prisoners are transferred between prisons, or released to the community, they can continue to access the same interventions within the program.

In order to evaluate the effectiveness of off both BFO and PoR, both in terms of clinical outcomes related to substance use, and in order to understand the process of implementation of the digital, BFO program within the challenging, highly secure prison environment, a comprehensive evaluation has been conducted as part of the wider Gateways project (Elison et al., 2015c; Elison et al., 2016b). The evaluation process has been informed by the Medical Research Council framework for the evaluation of complex, multi-component behaviour-change interventions (Craig et al., 2008). The MRC framework recommends using a mixed-methods approach incorporating both quantitative and qualitative methods, to examine not only clinical effectiveness of such programs, but also the processes of implementation of them in the ‘real world’ - an all too often forgotten but vital aspect of interventions development (NHS, 2011). Therefore, this paper reports on findings from this evaluation, which come from both standardised, quantitative assessments conducted with prisoners to assess clinical outcomes, and qualitative findings from in-depth interviews with prisoners and staff, to explore acceptability of this new technology-enhanced treatment approach to the offenders engaging with it for the first time.

**Methods**

As part of the Gateways project, a formal evaluation was conducted, which is reported elsewhere (Elison et al., 2015d; Elison et al., 2016b). This evaluation included standardised assessments measuring severity of their problematic use of alcohol and other drugs (including dependence), their substance use and quality of life. The assessments included in the formal evaluation were the Severity of Dependence Scale (SDS- Gossop et al., 1995): and the World Health Organisation Quality of Life measure (WHOQOL-BREF; Skevington et al., 2004). An assessment devised by the authors, the ‘recovery progression measure’ (RPM: Elison et al., 2016a) was also used to measure levels of functioning across six aspects of bio-psycho-social functioning associated with both substance use and recovery. The six domains of psychosocial functioning included in the LBM are discussed in detail elsewhere (Davies et al., 2015).

In addition to the quantitative assessments described above, in-depth qualitative interviews were also conducted with 32 prisoners. Feedback was also gained from 10 staff working in the prisons taking part in Gateways, who worked in various capacities to facilitate the BFHJ programs. Staff participating in interviews included one prison Governor, one Head of Reducing Reoffending, one substance misuse Team Leader and seven substance misuse Recovery Workers.

Not all data collected from the evaluation have been formally reported, so this paper will provide updated quantitative outcomes from a larger group of prisoners than those reported in the Elison et al., (2015c) evaluation, with these analyses having been conducted following the end of Gateways on a group comprising 341 prisoners at baseline and 151 at follow-up, compared to 235 prisoners at baseline and 85 at follow-up in the Elison et al., (2015c) study. Additionally, this paper also reports on qualitative findings, including data from staff, which have not yet been reported elsewhere.

**Results**

This section provides quantitative outcomes from the standardised assessments used in the evaluation of Gateways, with outcomes from BFO being reported first, followed by outcomes for PoR.

Quantitative outcomes from the Gateways evaluation: Breaking Free Online

Table 1 shows the substance profile of the 341 offenders who started using the BFO treatment program in Gateways. While alcohol and heroin were the most common main problem substances, the range of substances also included tobacco and several new psychoactive substances and a variety prescribed psychoactive medications.

TABLE 1 HERE

Table 2 shows the ethnic profile of the offenders who started using BFO in Gateways, with the vast majority being White British and a total of 10% being from other ethnic backgrounds.

TABLE 2 HERE

Table 3 provides the quantitative outcomes of the 151 offenders who provided post-intervention assessment data. It demonstrates that using BFO to address their substance misuse difficulties was associated with significant reductions in substance consumption and underlying levels of substance problematic use and dependence, and a highly significant improvement in perceived quality of life. The BFO program also led to significant improvements in the ability of offenders to manage their difficult or high-risk situations, negative thoughts, physical sensations (including cravings and urges to use substances), and emotions (including anxiety and low mood). The improvements in two other aspects of recovery progression, unhelpful behaviours and lifestyle, were not significant. However, this may be attributable to the inherent restrictions of the prison regime and environment, which may have made it difficult for offenders to effect positive change in these areas while still serving their sentence.

TABLE 3 HERE

In terms of continuity of care, 15% of the offenders who used BFO while serving their sentence went on to access the program in the community after they had been released. It is anticipated, however, that this figure will rise over time as more of the offenders complete their sentences.

Table 4 shows the results of an analysis undertaken by the education department at HMP Haverigg of the literacy of the initial cohort of offenders who used BFO at that prison. This indicates that the intervention was accessed by offenders spanning a wide range of literacy levels.

TABLE 4 HERE

Quantitative outcomes from the Gateways evaluation: Pillars of Recovery

In total, 303 offenders undertook the PoR group and keyworking program in Gateways. The quantitative outcomes in Table 5 show the program led to significantly reduced levels of depression but not anxiety. This may be because many of the offenders had recently undergone detoxification and were experiencing the acute anxiety characteristic of early stage recovery, or because they were attempting to recover in an inherently anxiety-provoking environment of the prison. However, the apparent ability of the intervention to improve the mood of the offenders – and prevent the anhedonia that is also strongly associated with the post-detox period – is an important finding. The PoR program also led to highly significant improvements in perceived quality of life and the ability of the offenders to manage difficult or high-risk situations, and significant improvements in their physical sensations (including cravings and urges to use substances), lifestyle and emotional regulation, as well in their overall recovery progression.

TABLE 5 HERE

Qualitative outcomes: prisoner’s feedback on the BFHJ program

In addition to the quantitative outcomes reported above, qualitative feedback from prisoners on both BFO and PoR revealed some interesting findings. This section will provide a brief overview of some of the prisoner feedback, although more detailed feedback can be found elsewhere (Elison et al., 2015c; Elison et al., 2016b). Prisoners interviewed reported that they had some initial trepidation about the digital format of the BFO program:

*“I'm not really good on computers. It was a bit hard to get into at first”*

However, some reported they preferred the digital format over more traditional face-to-face approaches such as groups:

*“I don't think I'd wanna sit in a room with a load of people I don't know, and tell them my deepest, darkest secrets. [The group] expect me to open up and people getting stabbed, sliced and everything else, when you open up.”*

And the potential of the BFO program to provide continuity of care between prison and community settings was also discussed by those interviewed, with some saying they intended to continue using the program following their release:

*“When I get home, I'll go on it from time to time, just to re-boost myself”*

And positive feedback was reported by prisoners on the specific intervention strategies in both the BFO and PoR programs including the ‘recognise-avoid-cope’ strategy, which teaches offenders how to recognise and avoid risky situations by using various coping methods:

*“Like, how to avoid that situation. If you're in that situation, how to deal with it, instead of just accepting it, saying, "Yeah, I'll have it." […] Just how to cope with it, and not let it niggle in your head. If you say, "No."”*

Indeed, the PoR group program was reported by prisoners interviewed to be useful in helping them develop a range of coping skills, that many reported they intended to continue to use following their release:

 *“What I liked about it, I didn't want to just come in here, then go out there with absolutely nothing […] So, yeah, it is a good tool, and I understand why you've done it.”*

And prisoners who had engaged with PoR reported that the concepts covered in the group sessions made sense to them and were very relevant to their recovery:

*“The ideas in it, like recovery capital, I sort of grasped them quick ’cos I could see how they applied to me. It just clicked and it made a lot of sense to me.”*

Qualitative outcomes: staff feedback on the BFHJ program

In addition to gathering feedback from prisoners on the BFO and PoR programs, staff feedback on the program was also collected, which has not yet been reported, so these data will be explored in detail. Generally, feedback from staff concurred with the views of prisoners, and indicated that there was on the whole, a positive response from staff to both the BFO and PoR programs. Although there were some challenges during implementation, especially in relation to the digital BFO program, there were also a number of perceived benefits to this new treatment approach.

One of the challenges staff spoke of, which related specifically to the digital format of BFO, was some trepidation on the part of both staff and prisoners, around using computers, although as with the prisoner feedback, staff reported that once the program was up and running, all stakeholders started to see the benefits of the program. For example, as the Head of Reducing Reoffending that was interviewed reported:

*“I did have - apprehension would be too strong a word, but it was a model that was quite radically different, and I didn't know whether prisoners would buy into that, but they clearly have done”*

Additionally, the benefits of providing interventions on the VC platform were also discussed during staff interviews and, in particular, the impact of this on enabling prisoners to become ‘digitally included’ by providing them with the technology skills so vital in modern society, as one Recovery Worker explained:

*“I think here now […] they're trying to get everybody to do some sort of intro IT level. But, we had a couple who weren't very IT literate, but once we persuaded them to come down, they saw how easy it was to get around [...] the barriers just came down as soon as they used it”*

Once prisoners had been recruited to BFO and had become oriented to the digital format of the program, staff reported that quite quickly, they started to see benefits for participating prisoners for using the strategies contained within the program in terms of their substance use and wider difficulties. For example, the substance misuse Team Leader that participated in the interviews reported one specific incident that had recently happened with one of the prisoners she was working with that also highlights some of the significant difficulties prisoners face when trying to work on their recovery in the highly challenging prison environment:

*“One [prisoner] had been offered drugs through his cell door, and he was using one of the [BFHJ] strategies on helpful behaviours, about how that made him feel when he was offered them, and what he did about it. So, yeah, they are certainly using the strategies”*

Wider benefits for prisoners engaging with the BFO and PoR programs were also reported by staff interviewed, with these wider benefits extending to enhanced self-esteem and engagement with activities that may help them in their on-going recovery and rehabilitation. One Recovery Worker explained the wider benefits for one of the prisoners she was working with on the PoR program:

*“I think with some of them it seems to have improved their self-esteem. Particularly, with [name of prisoner], I’ve noticed he's engaged in other things now. He's got a job in the education department in the kitchen. I can't imagine he would have done that before […] But, it's things like, when you see them doing well in other areas, I think there must be part of it that's down to this [PoR]”*

One of the ways in which prison staff were helping prisoners to most fully benefit from PoR was by encouraging graduates of the program to act as peer mentors following their completion of it, by supporting newer recruits to PoR via their lived experience of not only the program, but also substance use and offending generally. As one Recovery Worker explained:

*“I know that there's one guy who did Pillars [of Recovery] and now he's one who's going to come back and help to facilitate. Talking to him, it's really opened up their [the prisoner’s] eyes”*

A prison Governor who participated in the interviews also spoke about the importance of providing peer support as part of both BFO and PoR, and the way in which this can inspire other prisoners to make significant, positive changes to their lives:

*“It's been life changing, and really positive […] That's really lovely to see. I'm particularly pleased to see [name of peer mentor] facilitate it, you know, which is really positive and […] it’s just really powerful for the rest of the group I think. It's genuinely just a really lovely thing to do, to see people graduate and see them be so positive about it”*

This peer mentor involvement with facilitation of BFO and PoR provided a novel approach to working within the prison setting, but so too did the cross-departmental working that implementation of the program encouraged. There were reports from staff of genuine inter-disciplinary working between substance misuse recovery staff and staff from the education departments of prisons, in terms of co-ordinating access to IT suites, for example. One of the Recovery Workers interviewed reported that in her prison the education team were very supportive in terms of helping to implement the program:

*“I think, as well, it's bringing together the education department and our team [recovery team], I think that has made people more interested […] for us, it's been great, and the education department are really welcoming, you know, they really encourage it, and are really pleased that it's working out as well”*

An additional benefit reported by staff was the continuity of care capabilities of the digital BFO program in particular, with many of the staff interviewed, reporting that they were already encouraging prisoners who were up for release to continue to use the program following their return to the community. For example, during his interview, the Head of Reducing Reoffending spoke about the benefits of being able to access BFO in prison and also in the community:

*“I think prisoners, as anybody, they like some structure […] I think the fact that you've got a consistent platform through which they can start here and finish in the community, clearly has to be an advantage, rather than walking out of the gate, and then trying to get their head around something that might be completely different. I think allied to that though, it's also important to make sure that there are individuals who provide continuity Through the Gate”*

It was this continuity of care element of BFO that was reported as being so important to the Gateways initiative generally, with the main aim of Gateways being to more fully support offenders during their transition from prison to community settings. Although staff interviewed reported that many of the elements that make up Gateways had been available prior to the initiative formally being launched, the extra resources and support for this ‘through the gate’ approach to recovery and rehabilitation, could only help offenders making the transition from prison to community settings. One of the Recovery Workers who was interviewed explained that by prisoners being supported by the same staff both in prison and then in the community when they were released, this could facilitate more successful transition to the community, and support their on-going recovery and rehabilitation:

*“I mean it's always, sort of, been there, but I think just with the extra resources we've got really, it's helping, you know, they [the prisoners] see us in there [prison] and out here [community], and I think that's helping a lot. Then with the extra bits that we've got with support, it's making it easier, smoother”*

**Discussion**

This paper provides an overview of the main findings from the recent evaluation of the Breaking Free Online (BFO) computer-assisted therapy (CAT), and Pillars of Recovery (PoR) group-format programs for substance-involved offenders. The BFO and PoR programs have been provided as part of the North-West England Gateways project, as a means of providing offenders with support for their substance use that can be accessed across prison and community settings, opening up opportunities for genuine continuity of care. Specifically, the BFO program has become the first offending and healthcare program to be provided on Virtual Campus (VC) and is the world’s first accredited digital offending and substance misuse intervention program to be provided in prisons that provides an individualised treatment response tailored to the situation and circumstance of the participant.

The main quantitative outcomes described briefly in this paper and are reported in more detail in Elison et al., 2015c, indicate some promising, significant improvements for prisoners engaging with the BFO and PoR programs, in terms of their drug and alcohol dependence, drug and alcohol use, and quality of life. These findings largely concur with those obtained within community settings when examining effectiveness of the community versions of BFO (Elison et al., 2013; Elison et al., 2014a; Elison et al., 2015a, 2015b) and PoR (Hogan et al., 2015). However, one finding from the community research that was not replicated in the evaluation of the program in prison settings was that which pertained to ‘recovery progression’ as measured by scale devised by the authors, the ‘recovery progression measure’ (RPM: Elison et al., 2016a). The RPM measures levels of functioning across six aspects of bio-psycho-social functioning relevant to both substance use and recovery.

The findings related to the RPM reveal that there were some significant improvements in functioning in four of these six aspects of bio-psycho-social functioning for prisoners using BFO, and these improvements were seen in the domains of ‘difficult situations’, ‘negative thoughts’, ‘physical sensations’ and ‘emotions’. These improvements indicated that when compared to prisoner’s functioning before they started using the BFHJ program, after they had used it they exhibited enhanced abilities to recognise and cope with difficult situations in their lives, were more able to be able to rationalise and cope with any negative thoughts they had, were less likely to be affected by distressing physical sensations such as withdrawal from substances or physical sensations related to anxiety, and were more likely to feel in control of their emotions.

The two aspects of functioning measured by the RPM within which there did not appear to be any significant changes for BFO users were ‘unhelpful behaviours’ and ‘lifestyle’. This could be explained by two things, firstly, the highly challenging environment of the prison may pose significant barriers to recovery, such as the report by one staff member interviewed in this study who reported that drugs had been offered under the cell door of the one of the prisoners they were working with. Additionally, the fact that the two core intervention strategies most likely to be affected by the physical constraints of the prison environment and the restrictions imposed by the prison regime are those related to these domains of functioning measured by the RPM. These intervention strategies relate to expanding the prisoners behavioural repertoire by engaging in specific positive activities at scheduled times (related to the unhelpful behaviours domain of functioning) and taking a series of steps in a structured and systematic way in order to achieve chosen lifestyle goal.

In contrast, the intervention strategies that are associated with the domains of functioning measured by the RPM for which significant improvements were seen are all strategies that could be easily practiced in any environment, even the restrictive environment of a prison. These strategies include mindfulness approaches to cope with cravings and difficult emotional states (associated with the ‘physical sensations’ and ‘emotions’ domains of the RPM), cognitive restructuring (associated with the ‘negative thoughts’ domain) and practising recognition, avoidance and coping skills (associated with the ‘difficult situations’ domain of the RPM). Similar RPM findings were also obtained for prisoners accessing PoR, specifically in relation to ‘unhelpful behaviours’, though overall recovery progression was found to significantly improve for these prisoners.

When findings from the qualitative interviews were examined it appeared that there was a significant degree in overlap in terms of the feedback provided by prisoners and staff. Both groups of participants reported that the online format of BFO at first resulted in some trepidation but that once initial anxieties were overcome, that the benefits of the format of the program were seen. For example, it opened up opportunities for prisoners who may not feel comfortable attending group format treatments to be able to access evidence-based interventions. Additionally, the online format meant that prisoners could work through the content of the program at their own pace, and could revisit aspects of the program time and again if they felt they needed or wanted to.

Once anxieties around the online format were overcome, both prisoners and staff reported that they soon started to see the clinical benefits in terms of impact on substance use, but also wider impacts, such as increasing prisoners’ confidence and equipping them with generic coping skills to enable them to overcome difficulties in multiple areas of life. An additional benefit of both BFO and PoR was that graduates of the program were reported as using their experiences of engaging with the programs for their own recovery to support others accessing the program through acting as peer mentors. This finding is consistent with previous studies suggesting that the initiation and sustainability of recovery requires individuals to engage in relationships based on reciprocity and mutual reliance, whereby people are expected to help each other (Cheung & Cheung, 2003; Cheung, 2009; Weston et al., submitted).

Finally, one of the most promising aspects of BFO specifically was reported as being its potential to offer genuine continuity of care across prison and community settings. As offenders accessing the program can continue to use the same account regardless of their location. Therefore if prisoners are transferred between prisons, or released to the community, they can continue to access the same interventions in a consistent and uninterrupted manner. This continuity between prisons is particularly important given the highly challenging environment it provides to prisoners attempting to engage in recovery. Specifically, the restrictive physical environment and regime, and the current significant problems with the availability of drugs in this setting, particularly new psychoactive substances (NPS) (The Rehabilitation for Addicted Prisoners Trust, 2015), may make achieving recovery in prison particularly challenging.

Taken together, the findings from this evaluation indicate that engaging with BFO and PoR may offer significant benefits for substance-involved prisoners, and that although the online format of the BFO program is novel, it can successfully be integrated into the unique setting and security environment of a prison estate. Indeed, findings from the qualitative interviews with staff revealed that this was most effectively achieved via cross-departmental working, with staff from different functions within the prison, such as substance misuse and education, working together to integrate BFO into the current regime.

Despite these promising outcomes, there are some limitations that require consideration. Firstly, participation in the BFO and PoR interventions was voluntary, so it could be argued that the prisoners engaging with the interventions may have had a baseline level of motivation to change their substance use behaviours that could have influenced clinical outcomes, so only tentative claims can be made about treatment effects. Additionally, when quantitative BFO outcomes were examined, it became apparent that the retention rate from baseline to post-intervention assessment was 44%, meaning that many prisoners were lost to attrition. However, in multiple cases this attrition was largely due to prisoners being transferred to a different prison during their sentence, with many being transferred to prisons that did not have access to VC, or did not have access to BFO, meaning that such prisoners could not provide post-intervention assessment data. Other barriers to completion of the program included practical difficulties with access to the VC including periods of lock-down in prisons due to disruptive incidents and staff shortages within prisons. These and other barriers to retention have provided useful learning around optimal implementation, with many of these learning being reported in the qualitative section of this paper, and now being used to inform broader implementation approaches going forward.

Further development of BFO and PoR is now underway in addition to follow-up work with this initial cohort of prisoners, to explore longer-term outcomes, particularly for those who have since been released back to the community. Of interest, in addition to principal substance use outcomes, is the wider impact of BFO and PoR on education and training, mental and physical health, and ultimately reoffending rates, given the strong links between substance use and offending reported throughout the literature (Andrews et al., 2006; National Treatment Agency for Substance Misuse, 2009).

A number of key lessons have also been learned in relation to the implementation of BFO, given that this was the first online healthcare program to be delivered in prisons in England and Wales. As digital approaches to healthcare become more widely used as standard approaches to treatment, both in community and criminal justice settings, the list of ‘lessons learned’ below may prove to be useful to developers of future healthcare programs to support rehabilitation of the prison population.

**Lessons learned**

1. In order for a digital intervention to be hosted on the VC infrastructure, it is essential to work closely with NOMS to ensure that it meets their quality, information assurance and security standards.
2. For any interventions to resonate with offenders and be as effective as possible, their content needs to be tailored to the prison environment through consultation with prison administrators and other key stakeholders.
3. Although some barriers to digital interventions cannot be anticipated in advance – e.g. the internet at HMP Haverigg being disrupted by rabbits chewing through cabling – a walkthrough from the perspective of those offenders who could benefit from them can identify many of the key obstacles and help to optimise intervention delivery.
4. Leadership on the ground within each prison is crucial to the implementation of any interventions. To ensure successful delivery, service managers need to free up staffing resources and actively assist frontline staff in overcoming any barriers that are identified.
5. It is important to engage education departments to ensure that offenders can gain sufficient access to VC computers to use digital interventions on a regular basis, without this impacting on education targets/KPIs. In the case of Breaking Free (Justice), this was helped by OCR accreditation, which meant it did not have to ‘compete’ with education programs for the time offenders could spend on VC.
6. The implementation of digital interventions can facilitate cross-departmental working – in the case of Breaking Free (Justice), between substance misuse services and education departments – and this creates scope to share staffing resources in a highly cost-effective way.
7. It helps to get ‘buy in’ from all stakeholders if they can appreciate the impact of the interventions they are being asked to invest time and effort in delivering. In the case of Breaking Free (Justice), this is assisted by the online dashboard which allows aggregated and anonymised offender outcomes to be monitored in real time.
8. As well as promoting digital inclusion, digital interventions have the potential to greatly increase the utilisation of VC computers within prisons, thereby maximising the investment that has been made in installing them.
9. If they are hosted on a secure cloud-based server and accessible via the internet, digital interventions can play an important role in providing essential continuity of care for offenders transitioning ‘through the gate’ from custody to community, or moving between prisons.
10. Digital interventions offer an opportunity for consistent and clinically effective treatment to be delivered on an industrial scale in a highly resource-efficient way within the prison estate.

**References**

Andrews, D. A., Bonta, J., & Wormith, J. S. (2006). The recent past and near future of risk and/or need assessment. *Crime and delinquency, 52*(1), 7.

Beck, A. T., Wright, F. D., Newman, C. F., & Liese, B. S. (2001). *Cognitive therapy of substance abuse*: Guilford Press.

Beck, J. S. (2011). *Cognitive behavior therapy: Basics and beyond*: Guilford Press.

Best, D., & Laudet, A. (2010). *The potential of recovery capital*. London: RSA.

Bonta, J., & Andrews, D. (2007). Risk-need-responsivity model for offender assessment and rehabilitation. *Rehabilitation, 6*, 1-22.

Butzin, C. A., Martin, S. S., & Inciardi, J. A. (2005). Treatment during transition from prison to community and subsequent illicit drug use. *Journal of substance abuse treatment, 28*(4), 351-358.

Butzin, C. A., O'Connell, D. J., Martin, S. S., & Inciardi, J. A. (2006). Effect of drug treatment during work release on new arrests and incarcerations. *Journal of Criminal Justice, 34*(5), 557-565.

Champion, E., & Edgar, K. (2013). Through the gateway: How computers can transform rehabilitation. . *The Prison Reform Trust.*

Cheung, Y. (2009). *A brighter side: Protective and risk factors in the rehabilitation of chronic drug abusers in Hong*. Hong Kong: The Chinese University Press.

Cheung, Y. W., & Cheung, N. W. T. (2003). Social Capital and Risk Level of Posttreatment Drug Use: Implications for Harm Reduction among Male Treated Addicts in Hong Kong. *Addiction Research & Theory, 11*(3), 145-162.

Coates, S. (2016). *Unlocking Potential: A review of education in prison*. London: Ministry of Justice Retrieved from <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/524013/education-review-report.pdf>.

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. *British Medical Journal, 337*(sep29\_1), a1655-a1655.

Davies, G., Elison, S., Ward, J., & Laudet, A. (2015). The role of lifestyle in perpetuating substance dependence: A new explanatory model, The Lifestyle Balance Model. *Substance Abuse, Treatment, Prevention and Policy, 10*(2).

Dugdale, S., Elison, S., Davies, G., Ward, J., & Dalton, M. (submitted-a). A qualitative study investigating the continued adoption of Breaking Free Online across a national substance misuse organisation: Theoretical conceptualisation of staff perceptions. *The Journal of Behavioural Health Services and Research*.

Dugdale, S., Elison, S., Davies, G., Ward, J., & Dalton, M. (submitted-b). Using the Transtheoretical Model to conceptualise the impact of peer mentoring on the ability of peer mentors to maintain their own recovery from substance misuse. *Journal of Groups in Addiction & Recovery*.

Elison, S., Davies, G., & Ward, J. (2015a). An outcomes evaluation of computerised treatment for problem drinking using Breaking Free Online *Alcoholism Treatment Quarterly, 33*(2), 185-196.

Elison, S., Davies, G., & Ward, J. (2015b). Sub-group analyses of a heterogeneous sample of service users accessing computer-assisted therapy (CAT) for substance dependence using Breaking Free Online. *Journal of medical Internet research, 2*(2), e13.

Elison, S., Davies, G., & Ward, J. (2016a). Initial development and psychometric properties of a new measure of substance misuse ‘recovery progression’: The Recovery Progression Measure (RPM). *Substance Use and Misuse*.

Elison, S., Humphreys, L., Ward, J., & Davies, G. (2013). A Pilot Outcomes Evaluation for Computer Assisted Therapy for Substance Misuse- An Evaluation of Breaking Free Online. *Journal of Substance Use, 19*(4), 1-6.

Elison, S., Ward, J., Davies, G., Lidbetter, N., Dagley, M., & Hulme, D. (2014a). An outcomes study of eTherapy for dual diagnosis using Breaking Free Online. *Advances in Dual Diagnosis, 7*(2), 52-62.

Elison, S., Ward, J., Davies, G., & Moody, M. (2014b). Implementation of computer-assisted therapy for substance misuse: a qualitative study of Breaking Free Online using Roger's diffusion of innovation theory. *Drugs and Alcohol Today, 14*(4), 207-218.

Elison, S., Weston, S., Davies, G., Dugdale, S., & Ward, J. (2015c). Findings from mixed-methods feasibility and effectiveness evaluations of the “Breaking Free Online” treatment and recovery program for substance misuse in prisons. *Drugs: education, prevention and policy, 23*(2), 1-10.

Elison, S., Weston, S., Davies, G., Dugdale, S., & Ward, J. (2015d). Findings from mixed-methods feasibility and effectiveness evaluations of the “Breaking Free Online” treatment and recovery program for substance misuse in prisons. *Drugs: Education, Prevention and Policy*, 1-10.

Elison, S., Weston, S., Dugdale, S., Ward, J., & Davies, G. (2016b). A Qualitative Exploration of U.K. Prisoners’ Experiences of Substance Misuse and Mental Health Difficulties, and the Breaking Free Health and Justice Interventions. *Journal of Drug Issues, 46*(3), 198-215.

Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W., & Strang, J. (1995). The Severity of Dependence Scale (SDS): psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction, 90*(5), 607-614.

HM Inspectorate of Prisons. (2015). *Changing patterns of substance misuse in adult prisons and service responses: A thematic review* London: HM Inspectorate of Prisons Retrieved from <https://www.justiceinspectorates.gov.uk/hmiprisons/wp-content/uploads/sites/4/2015/12/Substance-misuse-web-2015.pdf>.

Hogan, L., Elison, S., Ward, J., & Davies, G. (2015). Effectiveness of the Pillars of Recovery Group and Key Working Program for Service Users with a Dual Diagnosis of Substance Dependence and Concurrent Mental Health Problems: An Initial Outcomes Evaluation. *Journal of Groups in Addiction & Recovery, 10*(2), 125-140.

Knight, V. (2015a). Some Observations on the Digital Landscape of Prisons Today. *Prison Service Journal, July 2015*(220), 3-9.

Knight, V. (2015b). Television, emotion and prison life: Achieving personal control. *Participations: Journal of Audience and Reception Studies, 12*(1), 19 - 40.

Marlatt, G., Bowen, S., Chawla, N., & Witkiewitz, K. (2010). Mindfulness-based relapse prevention for substance abusers: Therapist training and therapeutic relationships. In Z. Segal, S. Hick, & T. Bien (Eds.), *Mindfulness and the therapeutic relationship*: The Guilford Press.

Marlatt, G. A., Bowen, S., Chawla, N., & Witkiewitz, K. (2008). Mindfulness-based relapse prevention for substance abusers: Therapist training and therapeutic relationships. *Mindfulness and the therapeutic relationship*, 107-121.

McKay, J. R. (2001). Effectiveness of Continuing Care Interventions for Substance Abusers: Implications for the Study of Long-Term Treatment Effects. *Evaluation Review, 25*(2), 211-232.

McKay, J. R. (2009). Continuing care research: What we have learned and where we are going. *Journal of substance abuse treatment, 36*(2), 131-145.

Ministry of Justice. (2013). *Transforming Rehabilitation: A Strategy for Reform*. London: The Stationery Office.

National Treatment Agency for Substance Misuse. (2009). Breaking the link: The role of drug treatment in tackling crime. In NHS (Ed.). London.

NHS. (2011). Innovation, Health and Wealth: Accelerating Adoption and Diffusion in the NHS *Accelerating adoption and diffusion in the NHS*. London: Department of Health.

Popovici, I., French, M. T., & McKay, J. R. (2008). Economic evaluation of continuing care interventions in the treatment of substance abuse recommendations for future research. *Evaluation Review, 32*(6), 547-568.

Prison Reform Trust. (2013). Through the Gateway: How computers can transform rehabilitation. In P. E. Trust (Ed.). London.

Prison Reform Trust. (2015). Prison: The facts - Bromley Briefings Summer 2015. London: Prison Reform Trust.

Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Quality of Life Research, 13*(2), 299-310.

The Rehabilitation for Addicted Prisoners Trust. (2015). Tackling the issue of New Psychoactive Substances in prisons *RAPt Research and Policy Briefing Series: No 4*. London: RAPt.

Weston, S., Honor, S., & Best, D. (submitted). The possibilities and pitfalls of social capital among recovering and active drug users. *International Journal of Drug Policy*.

Williams, K., Papadopoulou, V., & N, B. (2012). *Prisoners’ childhood and family backgrounds: Results from the Surveying Prisoner Crime Reduction (SPCR) longitudinal cohort study of prisoners* London: Ministry of Justice Retrieved from <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/278837/prisoners-childhood-family-backgrounds.pdf>.