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Positive and negative features of a computer assisted drug treatment program delivered by mentors to homeless drug users living in hostels

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ABSTRACT

This paper explores positive and negative features of computer assisted therapy (CAT) delivered by mentors to homeless drug users (HDUs) living in hostels. Qualitative interviews were conducted with 30 HDUs and 15 mentors (all hostel staff) at the beginning and end of a 12-week CAT program. Findings indicate that successful delivery of the CAT relates to: 'program features' (e.g. its accessibility, flexibility, user-friendly interface); 'delivery context' (e.g. privacy, having appropriate computing equipment), 'client characteristics' (HDUs being recovery-focused and committed to using the program), and 'mentor support' (clients having personalized attention from an encouraging and sympathetic other). It is concluded that CATs can be used with HDUs but are unlikely to replace addiction therapists. Rather, they are more likely to be effective when combined with a strong therapeutic relationship. Services using CATs with HDUs need to provide staff training, support, and time to maximize the potential benefits.

1. Introduction

Computer assisted therapies (CATs) are an emerging and evolving treatment tool that can be used in clinical settings, client services or private residences and, with new developments, often on a tablet or smartphone 'on the go'. They are designed to be used by a client on their own or with therapist guidance in a face-to-face setting (Khanna & Kendall, 2010) or with the aid of another individual (a trained therapist or a lay person) in a virtual way (McAuley, 2012). Thus, CATs are flexible; being accessible anywhere there is a computer and at any time. For the client, this means there are no waiting lists or travel, and the programs can be used out of normal working hours (Copeland & Martin, 2004). The appeal of CATs for service providers includes minimal costs after set up and, potentially, less need for expensive clinicians (Copeland & Martin, 2004).

While the literature on Internet-based substance use interventions is sparse and more research is needed (Laursen, 2010; Tossmann, Jonas, Tensil, Lang, & Strüber, 2011), there is already promising evidence of benefits. Some examples (not exhaustive) include decreases in problem drinking, reductions in the compulsion aspect of alcohol craving, and improvements in psychological wellbeing among alcohol users (Hester, Squires, & Delaney, 2005; Riper et al., 2008; Rupp, Kemmler, Kurz, Hinterhuber, & Fleischhacker, 2012). A meta-analysis of randomized controlled trials also found sufficient evidence of diminished cigarette use among smokers to support Web- and computer-based smoking cessation programs for adult smokers (Myung, McDonnell, Kazinets, Seo, & Moskowitz, 2009). Currently, there is less evidence of the benefits of CATs on illicit drug use, particularly severe drug problems (Tossmann et al., 2011). Nonetheless, a study that examined the use of an online cognitive behavioral therapy (CBT) program found declines in drug use among cocaine and opiate users (Carroll et al., 2009). Additionally, Kay-Lambkin, Baker, Lewin, and Carr (2009) reported reductions in depression, alcohol use and cannabis use in their study of a computer-based psychological treatment for comorbid depression and problematic alcohol and/or cannabis use.

Providing computer-based therapy *in conjunction with* face-to-face therapist support has shown promise across a number of population groups and health conditions. For example, a meta-analysis of Internet-based treatment identified reductions in symptoms of depression when there was personal support during completion of online treatment (Andersson & Cuijpers, 2009). Consistent with this finding, a later study also found that therapist-assisted online treatment was more successful than self-help online programs in the management of clinical levels of depression (Newman, Szkodny, Llera, & Przeworski, 2011). Additionally, there is evidence that the use of CATs by therapists can induce client honesty (Gerbert et al., 1999; Turner et al., 1998) and help to build rapport when working with young people and children (Calam, Cox, Glasgow, Jimmieson, & Groth Larsen, 2000; Nelson & Nelson, 2010; Turner et al., 1998).

Recently, Becker and Jensen-Doss (2013) have explored therapists' attitudes towards computer-based trainings and concluded that the successful use of CAT requires therapists to have both the means to

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use CAT (that is, the availability of appropriate equipment and the ability to use it) as well as willingness (that is, a positive attitude towards the therapy). Should one or both of these ingredients be missing, then success seems unlikely. In addition, there is evidence that the success of CAT is linked to the attitudes of clients using the program. Specifically, CAT is more likely to be effective where clients have made a concrete decision to change their behavior; see Rooke, Copeland, Norberg, Hine, and McCambridge (2013) for evidence in relation to cannabis use and Riper et al. (2008) for findings on problematic drinking.

The importance of the relationship between clients and staff (commonly referred to as the 'therapeutic alliance' or 'therapeutic relationship') is well-documented in substance use treatment (c.f. Orford et al., 2006; Urbanoski, Kelly, Hoeppner, & Slaymaker, 2012). Indeed, levels of engagement and retention in treatment services are higher where the alliance is stronger (Meier, Barrowclough, & Donmall, 2005). Both Lange et al. (2003) and Knaevelsrud and Maercker (2007) have reported a strong therapeutic alliance in post-traumatic stress disorder patients using CAT. However, searches of the literature have not revealed any studies considering the therapeutic alliance among substance users using CAT. To what extent the therapeutic relationship maintains or loses its significance when therapists work with drug-using clients using computer-based support seems important to explore.

In this paper, we investigate the use of a mentor-led CAT with homeless drug users (HDUs) living in hostels and night shelters. HDUs are one of the most marginalized and vulnerable groups in society (Coumans & Spreen, 2003; Neale, 2001; Pleace, 2008). Substance misuse is a risk factor for homelessness and homelessness is a risk factor for substance misuse. Moreover, when these two problems co-occur, they tend to reinforce each other and cause or exacerbate other problems (Fitzpatrick, Kemp, & Klinker, 2000; Neale, 2001, 2012). Compared even with other drug users, HDUs have elevated levels of risky injection and drug consumption practices, overdoses and hepatitis C infection (Hickman et al., 2007; Klee & Morris, 1995; Neale, 2008; Rhodes et al., 2006, 2007). They also frequently experience histories of abuse, poor physical and mental health, family problems, distrust of authorities, and limited social support (Craig & Hodson, 2000; Kemp, Neale, & Robertson, 2006; Neale, 2001; Reid & Klee, 1999; Zerger, 2002).

Despite their high support needs, HDUs can encounter multiple barriers to accessing and engaging with treatment, and this poses a substantial challenge to substance misuse service providers (Neale, 2012; Zerger, 2002). Short stay detoxification programs and abstinence-based services have tended to be relatively ineffective with HDUs, whereas harm reduction or harm minimization approaches and services that address HDUs' multiple needs together—rather than only one element of need such as substance misuse *or* mental health *or* housing—have been more successful (Pleace, 2008). That said, the research evidence is limited and there is no certainty that HDUs who do make progress in treatment sustain this over time (Pleace, 2008). In so far as any conclusions can be drawn, the literature indicates the need for a flexible mixture of services and long-term support that is likely to be costly and possibly not deliverable in areas where the number of HDUs is low (Pleace, 2008).

Although there are no existing published studies exploring the potential of CATs with HDUs, we felt that this emergent accessible and adaptable treatment approach might be effective with this population, potentially increasing the reach of clinicians, engaging and retaining HDUs in treatment, improving recovery outcomes and also saving staff time and costs. Importantly, though, our research was also driven by a more 'rights-based' social inclusion approach to service delivery—that is, we believed that HDUs should be given access to innovative new treatments and technologies just like other patient populations, unless there was some compelling reason why they would not work. Accordingly, we set out to explore client and service provider views on the positive and negative aspects of a new CAT program for HDUs, including its impact on the therapeutic relationship, in order to identify components that might underpin its future success or failure.

2. Materials and methods

The CAT used within our research was an online drug treatment program called Breaking Free Online (BFO). This program has been developed by a team of clinical psychologists and experts in substance misuse and integrates 20 evidence-based psychosocial intervention strategies with the aim of enabling those who use it to identify, understand and actively address the underlying psychological and lifestyle factors that are maintaining their dependence on alcohol or drugs. The 20 evidence-based strategies are compliant with the UK National Institute for Health and Care Excellence guidelines and include: 'understanding your use of alcohol and drugs', 'lifestyle balance model', 'understanding your difficult situations', 'managing your risky situations' and 'understanding your negative thoughts' (see http://www.breakingfreeonline.com/pdf/BFO-ContentandEvidenceBase.pdf for a list of all 20 strategies).

Individuals following the BFO program are given a code that permits unlimited access to treatment for 90 days, allowing them to engage with it as much and as often as they want during that period. It also gives individuals freedom to choose which issues they want to tackle, at what pace and in what order. Although BFO is not specifically aimed at HDUs, it can be tailored to meet the needs of more vulnerable substance users by the addition of support from a mentor. For the purposes of our research, HDUs were given open access to the program for 12 weeks, during which period they were able to log on independently. In addition, each HDU was allocated a mentor to provide one-to-one assistance and encouragement to work through and complete all the strategies. Mentors were advised to dedicate 1 hour a week to working on the program with each client.

The research took place during 2012 and 2013 in 17 homeless hostels located in two cities in England. Hostels ranged in size from large services catering for up to 57 residents to smaller services that had a maximum of 5 residents. Some of the hostels were mixed sex and some were single sex. Ethical approval was received from a university ethics committee and all participants were given an information sheet that was also discussed with them verbally before they were consented into the study. Data collection involved semi-structured interviews conducted with both clients and mentors on the day of the first BFO session and the day of the last BFO session 12 weeks later (or approximately 12 weeks after the first BFO session if clients did not complete the program). All initial and follow-up interviews were conducted by one of the authors (CS) in private rooms in the hostels.

Mentors were not present at client interviews and vice versa. Interviews were designed to elicit, in as much detail as possible, the participants' views and experiences of using the BFO program. To this end they were conducted informally, but followed topic guides as follows:

- Interview 1a, immediately prior to the first BFO session
  - Client guide: demographic information; drug use history; client's hopes, concerns and expectations regarding BFO (30–60 minutes).
  - Mentor guide: demographic information; mentor's views of BFO and their hopes, concerns and expectations for the client they were about to work with (35–45 minutes).
- Interview 1b, immediately after the first BFO session
  - Client guide: client's thoughts and feelings about the BFO program, how the initial session had gone and how they anticipated using the program in the future (10–40 minutes).
  - Mentor guide: mentor's thoughts and feelings about the BFO program, how the initial session had gone and how