

# Cognitive Behavioural Therapy-Based Music (CBT-Music) Group for Symptoms of Anxiety and Depression

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## ABSTRACT

Cognitive behavioural therapy-based music (CBT-Music) group is a nine-week guided self-help group for individuals with mild-to-moderate symptoms of anxiety and/or depression. This is a novel treatment developed for use in a community-based mental health setting. A feasibility study (a randomized control trial) has shown promising results for the CBT-Music group.

**Keywords:** CBT, music, depression, anxiety

## RÉSUMÉ

Groupe de Cognitive Behavioural Therapy basé sur la musique (CBT-Musique), est un groupe d'aide auto guidée d'une durée de neuf semaines pour des individus qui présentent des symptômes légers à mo-

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dérés de l'anxiété et / ou dépression. Ceci, c'est un nouveau traitement développé pour l'utilisation pour lui mettre en place dans un établissement de santé mentale communautaire. Une étude de faisabilité (un essai contrôlé randomisé) a montré des résultats prometteurs pour le groupe CBT-Musique.

**Mots clés :** CBT, musique, dépression, anxiété

Cognitive behavioural therapy (CBT) has been well-established as an effective treatment of depression and anxiety (Butler et al., 2006). It has been provided in a variety of formats, including, but not limited to: individual, group, brief, guided self-help, self-help, and online. Delivery of CBT in a group format is common in North America. The two primary advantages of CBT group therapy is the connection among group members to facilitate symptom reduction and insight, and to increase the efficiency of service delivery. There are increasingly greater demands for guided self-help CBT interventions in an individual format. The effectiveness and popularity of low-intensity guided self-help CBT has been well documented, especially in the UK, where it is delivered through Improving Access to Psychological Therapies (IAPT; [www.iapt.nhs.uk](http://www.iapt.nhs.uk)). Guided self-help CBT uses therapeutic principles from an evidence-based intervention perspective and involves facilitation by a health professional, or lay person, with minimum direct contact (Naeem et al., 2015). For clients with mild-to-moderate symptoms of mental illness, these alternate formats of CBT can promote diversion from long-term, and costly, community and hospital mental health services, or offer options when wait lists are long or resources are scarce. Despite these modifications to CBT, if the material is difficult to connect with or understand, there remain overall issues of client engagement and potential future relapse. What if the same low-intensity CBT material could be creatively adapted and delivered in an engaging and enjoyable manner, using a framing metaphor that is personally relevant to participants? Music, as a collective activity, is conducive to the resource-saving group therapy format as it can introduce clients to CBT therapy concepts by adding non-verbal facilitation, and as such, it may be able to sustain therapeutic engagement beyond the talking form of CBT.

Music is a universal activity, enriching every culture, and it is the rare person who does not possess a connection to music, or a fundamental music-making ability (be it by use of melody, harmony, rhythm or other common components of music such as intonation or phrasing). In the context of the present intervention, music is not the therapy itself, but rather a delivery medium. As a therapeutic metaphor, music can facilitate the understanding of psycho-therapeutic materials, promote discussion of difficult topics, and be harnessed to promote a connection between facilitators and group members—thus placing a positive light on therapy for the client.

A systematic review by the Cochrane collaboration to find out whether the therapeutic use of music is effective in reducing the symptoms of depression reported that only five studies met the inclusion criteria for the review. Marked variations in the interventions offered, the populations studied, and the outcome measures used, led to the conclusion that quantitative data synthesis and meta-analysis are not appropriate. Four studies reported greater reductions in symptoms of depression among those randomized to music therapy. The fifth study reported no change in the mental state among those receiving music therapy compared to those randomized to standard care alone. Findings from individual studies suggest that music therapy

for people with depression, and serious mental illness in general, is feasible, and indicate a need for further research (Maratos et al., 2008).

Numerous researchers have identified the unique potential for combining CBT and music interventions. Hakvoort et al. (2013, p. 195) proposed the use of cognitive behavioural music therapy in forensic psychiatry settings, citing that the use of music "...could become a motivator, inspirer, reinforcement, or even 'seducer' to psychotherapy." Dingle et al. (2008) used music therapy as an adjunct to group CBT (in separate sessions) and found increased attendance and engagement for CBT. The present study aims to build upon these findings through the development and research of a CBT-based music group (CBT-Music) to identify the potential effects of low-intensity, brief CBT that is delivered through musical activity. This is a novel treatment strategy. CBT-Music group therapy brings individuals with mild-to-moderate symptoms of depression and anxiety together in a therapy group that "musicalizes" traditional aspects of CBT.

The CBT-Music group is a nine week guided self-help group derived from a guided self-help approach that has been adapted from an established protocol (Naeem et al., 2016). The program was delivered by two facilitators (CT & RT), with basic training in CBT, in a community mental health-care setting and supervised by an experienced CBT therapist (FN). The aim is to infuse music into nearly every aspect of CBT group therapy as a means for further comprehension and engagement with the material by participants. This includes the use of critical listening to the musical material, songwriting, playing various musical instruments and using music as a point of reference in group discussion and homework assignments. All music playing is geared towards the non-musician through the use of easily playable instruments (e.g., shakers and bells) that integrate well together (i.e., all pitched instruments are played in the key of C). The group adheres to a traditional CBT group structure, including theme weeks (e.g., thinking, behaviour and emotions), and the use of CBT tools such as behavioural experiments, thought records, and homework at the conclusion of each session. Every week culminates in the performance and discussion of a CBT-related distinct song. Songs chosen for each week are pre-written and adapted from recognizable classic rock songs with the original lyrics replaced with lyrics pertaining to CBT (please see Box 1 for an example, which addresses behavioural activation); genres of music other than classic rock, such as classical music, can be used too, depending on the participating individuals and their musical background and interests.

To date, three groups of CBT-Music have been conducted at our centre. We were pleasantly surprised when participants used music as a metaphor to add additional aspects to the group therapy experience. For example, attendees developed music-based group guidelines (e.g., "Only one solo at a time" to address speaking in turn, and "everyone shows up on time for band practice" to address punctual attendance). A secondary goal of the facilitators was to promote a feeling of coherence similar to attending "band practice." With this in mind, the group was held in a community space—a performance space—outside of mental health services.

A feasibility study of CBT-Music group, in the form of a randomized controlled trial (RCT), has been completed. The study was approved by the ethics committee of Queen's University Ethics Review Board. Informed consent of participants was obtained in advance of the RCT. Twenty-eight participants from community mental health services were randomly assigned to either the intervention group ( $n = 14$ ) receiving the CBT-Music group and Treatment As Usual (TAU), or a control group ( $n = 14$ ) receiving TAU. Treatment As Usual consisted of regular follow-up with a case manager and regular psychiatric appoint-

## Box 1

*The Less You Do.* A song about behavioural activation (to the tune of Bob Dylan's *Like a Rolling Stone*)

*The less you do,  
The worse you'll feel  
The worse you feel,  
The less you're bound to do*

*It's a vicious cycle,  
Let's get out  
Start to do things,  
That are relaxing to you*

*Increase activities that inspire you,  
And enhance your point of view  
Start small,  
Get up and go,  
Break it down into attainable goals*

*Make a list of activities,  
And build on them day to day  
It feels good  
To be journaling thoughts,  
And to go for a walk  
Sit-down and talk  
It feels good*

ments. All participants were identified as having mild-to-moderate symptoms of depression and/or anxiety using the Hospital Anxiety and Depression Scale (HADS) and World Health Organization Disability Assessment Schedule (WHODAS 2.0). The mean age of participants was 42.9 years old and there were fifteen females (53.6%) and thirteen males (46.4%). Participants self-identified ethnicity as: White (78.6%), Asian (10.7%), "Other" (7.1%), and Black (3.6%). Assessments were carried out at baseline and end of therapy (at 10 weeks). Initial results identified a significant increase in functioning for participants who participated in the music group, with no difference between the intervention and control groups in severity of symptoms of depression and anxiety. Limitations of the study include a small sample size, and lack of an appropriate control for the effect of music and long-term follow-up. Also, previous exposure to CBT was not queried at baseline.

There is great promise in the development of therapies such as the CBT-Music group that use client-centred interventions with metaphorical potential within mental health-care systems and beyond. These therapies can increase engagement, adhere to low cost and efficient models of delivery while also meeting clients at their cognitive and emotional level. In the present example, music can be thought of as a gateway to psychoeducation and self-help, thus broadening the idea of therapeutic delivery. The present intervention is intended to be delivered by front-line workers, after a short period of CBT training, with a moderate degree of musical expertise and under special supervision. The principles of the present intervention mirror the IAPT model from the United Kingdom, where the use of non-specialists is preferred in the delivery of user-friendly therapy solutions.

Future directions include testing the CBT-Music groups for depression and anxiety in a larger, possibly multi-site, RCT. In addition, our research group is currently working on adapting the CBT-Music group for people with symptoms of psychosis, as CBT as well as music therapy have been shown to be effective for this population. We intend to develop the CBT-Music groups and adaptations into a manual-based therapy to be shared with other service providers and researchers.

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