Emotions in motion: Short-term group form Dance/Movement Therapy in the treatment of depression: A pilot study

Marko Punkanen, PhD*, Suvi Saarikallio, PhD, Geoff Luck, PhD

Finnish Centre of Excellence in Interdisciplinary Music Research, University of Jyväskylä, PO Box 35 (M), 40014, Finland

**Abstract**

Depression is a highly prevalent mood disorder that impairs a person’s social skills and quality of life. Depressed patients have been shown to have difficulty in identifying, expressing, and regulating emotions, especially negative emotions, such as anger. Here, we present a study that investigates using body- and movement-based therapy intervention in the treatment of depression. Central to this study is the use of a short-term group form of Dance/Movement Therapy (DMT) intervention. The main research question was whether a short-term group form of DMT intervention could decrease the symptoms of depression and anxiety. Depressed participants (N = 21, aged 18–60 years) received 20 sessions of group DMT, and measurements, including psychometric questionnaires, were taken before and after the intervention. The mean score of the primary outcome measure, the BDI, decreased significantly from the pre-(M = 21.67, SD = 5.26) to post-measurement (M = 10.50, SD = 5.50), t(17) = 10.40, p < .001. Thus, the short-term, group form of DMT intervention had a positive effect on patients with depression. However, further research using a control group, follow-up measurements and a larger sample size is needed to acquire more evidence supporting the efficacy of the intervention model described in this pilot study.

© 2014 Elsevier Ltd. All rights reserved.

**Introduction**

Depression is a disabling medical illness characterized by a persistent and all-encompassing feeling of sadness, loss of interest or pleasure in normally enjoyable activities, and low self-esteem (Sobocki, Jönsson, Angst, & Rehnberg, 2006). In 2010, the World Health Organization reported that depression affects approximately 121 million people worldwide and is predicted to become the second most disabling illness in the world after ischemic heart disease within the next ten years (World Health Organization WHO, 2010). In Finland, depression has become a common reason for the inability to work (Lönnqvist, 2009) and is prevalent in 5–6.5% of the population (Tuulari, Aromaa, Herberts, & Wahlbeck, 2007).

Depressed patients have been shown to have difficulty in identifying, expressing, and regulating emotions, especially negative emotions, such as anger (Joormann & Gotlib, 2010).

Medication, sometimes in combination with verbal psychotherapy or counseling, is the predominant method for treating depression. There is, however, some evidence that suggests that movement- and body-based interventions, such as Dance/Movement Therapy (DMT), can improve depressed mood (Jeong, Hong, Lee, & Park, 2005; Koch, Morlinghaus, & Fuchs, 2007; Mala, Karkou, & Meekums, 2012; Stewart, McMullen, & Rubin, 1994).

For example, Stewart et al. (1994) demonstrated that there was a significant reduction in depressed mood on the intervention days in five of the 12 subjects. None of the subjects demonstrated a significant increase in the depressed mood, while seven subjects showed no change in mood. In a study by Jeong et al. (2005), they examined and tracked the changes in the neurohormones linked to depression. A 12-week DMT program ran three times a week and was designed around the four following major themes: awareness; expression and symbolic quality; images and feelings; and the differentiation and integration of feelings. The results showed that there was a significant increase in the plasma serotonin concentration and a decrease in the dopamine concentration. Additionally, the negative psychological symptoms of distress had improved in the treatment group but not in the control group (Jeong et al., 2005).

Body movement is fundamental to the perception and production of emotion, and should be addressed more in the approaches and methods used for treating depression. Despite the studies described above, comparatively little is known about the potential and effects of DMT in treating depression and in developing emotion regulation skills. Furthermore, one motivation for studying...
the possibilities of DMT in treating depression comes from a recent study by Leinonen (2013) that investigated how depression affects the expression of emotions perceived in music through spontaneous movement. Movement data were collected using a motion-capture system, and the results revealed that typical symptoms of depression, such as slowness, passiveness and closed postures, were also reflected in the way the participants moved to music that was expressive of basic emotions (anger, fear, sadness, happiness and tenderness). The depressed participants move slower, with less energy, more passively, and with less overall movement than the non-depressed controls. The depressed and non-depressed groups differed especially in their bodily expressions of anger, happiness and fear (Leinonen, 2013).

Aims

The aim of the present study was to investigate the effects of a short-term group form of DMT intervention in treating depression among working-age people and to advance our understanding of the mechanisms underlying the effects of DMT. The research questions included the following: (1) Can a short-term group form of DMT intervention decrease the symptoms of depression? (2) Are there any correlations between the primary (depression) and secondary outcome measures (anxiety, personality, life satisfaction, alexithymia and adult attachment styles)?

Methods

Selection of participants

This DMT intervention pilot study is part of a larger research project (Emotions in Motion). This study is the second part of the overall research project. In the first part, we investigated the possible effect of depression on an individual’s ability to express the emotions conveyed in music through spontaneous movement by comparing depressed and non-depressed participants. In the second part, which is the focus of this paper, the depressed participants participated in a short-term group form of DMT intervention. In the third part of this research project, we evaluated the depressed participants’ movement expression again after the DMT intervention. Thus, the same group of depressed participants took part in the entire research project, and an additional control group of non-depressed participants were included in the first part of the research project.

This research was approved by the ethical board of the Central Finland Health Care District. Recruitment began in February 2012 and continued until April 2012. Participants were recruited from the Central Finland Health Care District’s psychiatric health centers and the psychiatric polyclinics of Jyväskylä City.Clinicians at these centers identified potential participants among their patients and provided them with information about the study. When these patients contacted us, a principal researcher (S.S.) evaluated them based on the inclusion and exclusion criteria (criteria are described below). Newspaper advertisements were placed to boost recruitment. All participants gave signed informed consent to the study.

Participants

During the study period, 24 people were screened, of whom 21 (88%) were eligible to participate in the study. No eligible participant refused to participate in the study, and thus 21 people (100% of eligible participants) were included. In total, 18 (85.7%) were female, and their ages ranged from 18 to 60 years (M = 40.00, SD = 13.0). The inclusion criteria required that the participants’ primary diagnosis be depression, F32 or F33, according to the ICD-10 classification (WHO, 1992). The Structured Clinical Interview for DSM-III–R (Mini-SCID) (Spitzer, Williams, Gibbon, & First, 1992) was used in the health centers and polyclinics for diagnosing depression. Additionally, the participants’ depression was also assessed by the Beck Depression Inventory (BDI scores 10 or more) before inclusion. Because of the frequent comorbidity of depression and anxiety (Aina & Susman, 2006; Cassidy, Lauderdale, & Sheikh, 2005), patients with anxiety were also included (72% of the patients were diagnosed as suffering from mild, moderate or severe anxiety). Participants were included irrespective of medication status and were allowed to continue their medication regimen during the study. Neither dance/movement or music skills nor any type of dance/movement or music background was a prerequisite or exclusion factor for participation in this study. Forty-three percent of the participants had some type of experience with dance as a hobby.

Participants were excluded if they had a history of repeated suicidal behavior or psychosis, acute and severe substance misuse; if the severity of depression prevented them from participating in the measurements or engaging in verbal conversation; or if they had insufficient knowledge of the Finnish language. All participants were Finnish outpatients, and 13 of the participants were receiving ongoing medication regimens for depression. None of the participants participated in other therapies during the research period.

Outcome measures

The primary outcome measure of the study was the Beck Depression Inventory (BDI). It consists of 21 items, and the total score can vary from 0 to 63. The BDI has high joint reliability, its sensitivity to change has been demonstrated in previous studies, and its predictive validity for major depressive disorder has been demonstrated (Beck, Steer, & Carbin, 1988).

The secondary outcome measures included the anxiety part of the Hospital Anxiety and Depression Scale (HADS-A) (Zigmond & Snith, 1983) and the Ten Item Personality Inventory (TIPI), which is a relatively new personality test with adequate reliability and validity (Gosling, Rentfrow, & Swann, 2003). Because it is relatively short, it is ideal for extensive questionnaires. The TIPI was developed from the 44-item Big Five Inventory (BFI), and each of the 5 personality dimensions (Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience) are measured through two items. Due to our study’s focus on mood disorder, we only used the subscales of Extraversion, reflective of a trait-positive affect, and Neuroticism, reflective of a trait-negative affect (Revelle & Scherer, 2010). It is worth noting that in the TIPI, Neuroticism is labeled according to its antonym and the opposing end of the same concept, “Emotional Stability”. Items are rated on a 7-point Likert scale from disagree strongly to agree strongly. Satisfaction With Life Scale (SWLS) is a five-item scale that is “designed around the idea that one must ask subjects for an overall judgment of their life in order to measure the concept of life satisfaction” (Diener, Emmons, Larsen, & Griffin, 1985). Individuals indicate their degree of agreement or disagreement on a 7-point Likert-type scale. The scale has been shown to have a 2-month test-retest correlation coefficient of .82 and an r coefficient of .87 on a sample of 176 undergraduates (Diener et al., 1985). The Toronto Alexithymia Scale (TAS-20) (Taylor, Ryan, & Bagby, 1985) was used to evaluate alexithymia. Alexithymia was considered in this study because it has been shown to be strongly associated with depression in earlier studies (Honkalampi, Hintikka, Tanskanen, Lehtonen, & Viinamäki, 2000). The Relationship Questionnaire (RQ) is a 4-item questionnaire designed to measure adult attachment styles (Bartholomew & Horowitz, 1991; Scharfe & Bartholomew, 1994). The RQ expands upon the original attachment Three-Category Measure (Hazan & Shaver, 1987) by rewording the descriptions of each
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات