

Musical intervention for subjective drug aversion

***Corresponding Author: Bin Tian**

Jiangsu Fangqiang Compulsory Isolation Drug Rehabilitation Center, China.

Email: Violet080711@gmail.com

Abstract

Substance Use Disorders (SUDs) pose a significant challenge to individual health and societal well-being worldwide. This study examines the effects of a music intervention programme on drug craving among 60 participants in a compulsory drug rehabilitation centre. The intervention lasted 60 days and included three phases aimed at cultivating subjective aversion to drugs. The results showed a significant reduction in drug craving scores in the experimental group compared to the control group ($t=9.937$, $p<0.001$). These findings suggest that music therapy can effectively enhance emotional regulation and motivation, which are crucial factors in the recovery process.

Keywords: Musical intervention; Subjective drug aversion; China.

Introduction

Substance Use Disorders (SUD) are a growing problem worldwide. They affect people's health, social well-being and the economy [1]. Music therapy is a type of treatment for substance use disorders. It is used alongside other treatments because it helps people to regulate their emotions and stay motivated [2]. Music therapy helps people feel better in many ways through making and listening to music [3]. Music activates brain regions associated with reward and emotion regulation, which may influence addictive behaviours [4]. Also, music therapy is a low-threshold intervention that is good for people with SUD who find it hard to express themselves [5]. However until now, there is still not enough evidence that music therapy works for drug craving, especially in Asia [6]. Therefore, this study will design a music programme to investigate the effect of the programme on drug craving.

Methods

Participants: The study involved 60 participants from a compulsory drug rehabilitation center, randomly divided into two groups: an experimental group and a control group, with 30 participants in each. The average age of participants was 32.6 years (range: 18-55 years). Educational backgrounds varied, with 5 illiterate, 10 with primary education, 36 with secondary education, 6 with high school diplomas, and 3 with

college degrees. Participants had varying experiences with substance abuse, including 42 first-time users and 2 individuals with three prior rehabilitation attempts. The majority (54) reported using methamphetamine.

Withdrawal assessment scale: The scale is developed by Shanghai Youdi company, this scale measures cravings and dependency, with higher scores indicating stronger cravings.

Procedure: The intervention spanned 60 days, incorporating various phases to cultivate subjective aversion to drugs. The first phase (Days 1-14) focused on overcoming initial resistance, employing motivational strategies such as daily affirmations and simple recording exercises to enhance confidence. The second phase (Days 15-42) addressed instability and potential dropout by standardizing activities and reinforcing group support through mutual aid initiatives. The final phase (Days 43-60) aimed to combat fatigue by re-engaging participants through themed activities and familial interactions, fostering a sense of responsibility and community support.

Data analysis: Statistical analyses were conducted using SPSS 16.0.

Table 1: Comparison of Drug Craving Scores between the Control and Experimental Groups.

	Control group	Experimental group	t-value
Drug craving score	22.56 ± 6.83	7.81 ± 4.72	9.937

Results

As shown in Table 1, after intervention, the drug craving levels of participants in the experimental group were significantly lower than those in the control group.

Discussion

The results of this study provide compelling evidence that a music intervention programme can effectively reduce drug craving in individuals undergoing rehabilitation for substance use disorders.

The significant reduction in craving scores in the experimental group suggests that music therapy may play a crucial role in enhancing emotional regulation and motivation, which are essential components of the recovery process. This study fills an important gap in the existing literature on the efficacy of music therapy for drug craving, particularly in the Asian context. Given the diverse educational backgrounds and substance abuse experiences of the participants, the findings may also suggest that music therapy can be adapted to different populations within rehabilitation settings. Future research should explore the long-term effects of music interventions on drug craving and overall recovery. In addition, investigating the neurobiological mechanisms underlying the observed changes may provide deeper insights into how music therapy can be optimised as a treatment modality for substance use disorders.

References

1. Crime UNOODA. International standards for the treatment of drug use disorders. 2016. https://www.unodc.org/documents/scientific/International_Standards_for_the_Treatment_of_Drug_Use_Disorders.pdf
2. Silverman M. Music therapy and clients who are chemically dependent: A review of literature and pilot study. *Arts in Psychotherapy - Art Psychother.* 2003; 30: 273-281. <https://doi.org/10.1016/j.aip.2003.08.004>
3. Ghetti C, Chen XJ, Brenner AK, Hakvoort LG, Lien L, et al. Music therapy for people with substance use disorders. *Cochrane Database of Systematic Reviews.* 2020; 5. <https://doi.org/10.1002/14651858.CD012576.pub3>
4. Koelsch S. Music-evoked emotions: Principles, brain correlates, and implications for therapy. *Ann N Y Acad Sci.* 2015; 1337: 193-201. <https://doi.org/10.1111/nyas.12684>
5. Gold C, Voracek M, Wigram T. Effects of music therapy for children and adolescents with psychopathology: a meta-analysis. *J Child Psychol Psychiatry.* 2004; 45(6): 1054-1063. <https://doi.org/10.1111/j.1469-7610.2004.t01-1-00298.x>
6. Carter TE, Panisch LS. A Systematic Review of Music Therapy for Psychosocial Outcomes of Substance Use Clients. *International Journal of Mental Health and Addiction.* 2021; 19(5): 1551-1568. <https://doi.org/10.1007/s11469-020-00246-8>

Manuscript Information: Received: November 02, 2024; Accepted: December 02, 2024; Published: December 16, 2024

Authors Information: Bin Tian*

Jiangsu Fangqiang Compulsory Isolation Drug Rehabilitation Center, China.

Citation: Tian B. Musical intervention for subjective drug aversion. *Open J Clin Med Case Rep.* 2024; 2305.

Copy right statement: Content published in the journal follows Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>). © **Tian B (2024)**

About the Journal: Open Journal of Clinical and Medical Case Reports is an international, open access, peer reviewed Journal focusing exclusively on case reports covering all areas of clinical & medical sciences.

Visit the journal website at www.jclinmedcasereports.com

For reprints and other information, contact info@jclinmedcasereports.com