Melodies of Change: Efficacy of a Music-Based Intervention in Enhancing Desire For Help Among Patients in Selected Rehabilitation Centers in Kenya

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Abstract

Some substance use disorder (SUD) clients get into the treatment edifice without much insight into their problems which often manifests as low desire for help (DH). This influences the treatment process negatively since they may enter treatment but fail to participate and complete it. To assist such clients, there is need for interventions to augment their desire for help. Music-based interventions (MBI) have shown to be effective in enhancing the desire for help among clients with SUD. However, very few studies have been conducted to establish the effectiveness of MBI in enhancing DH and moreover, the few existing studies were carried out in the Western world. Therefore, this creates a need for more studies. The current study sought to establish the effectiveness of MBI in enhancing desire for help among clients with SUDs in selected treatment centers in Kenya. Multi-stage sampling approach was used to obtain 40 participants in a residential SUD treatment center with two branches. One branch served as the experimental group while the other was the control group, each with 20 participants. The research used a quasi-experimental pretest post-test design where the MBI was administered to the treatment group while the control group received treatment as usual (TAU). The Texas Christian University DH subscale was used to measure desire for help pre and post the intervention and the scores compared. ANCOVA was used to analyze the data. The analysis established that there were significant differences between the experimental and the control group (F (1, 33) =32.91, p=.00, n_p^2 = .50) with the experimental group having significantly higher post-test means on DH compared to the control group after controlling for covariates. The results suggest that MBI is potentially an experiential intervention that can enhance DH among clients with SUDs in Kenya. Therefore, counselors, psychologists and stakeholder in SUD treatment may adopt MBI to enhance DH.

Key Words: Music-based intervention, Music therapy, Desire for help, Substance use disorder.

Introduction and Background

Drug use is a menace in the current world. There has been a spike in the use of drugs, there being about 300 million people using drugs between ages 15-64 (United Nations Office on Drugs and Crime (UNODC), 2024). This reflects an increase in the use of drugs compared to the year 2021, where about 275 million people were using drugs (UNODC, 2021). The world drug report (UNODC, 2023) found that globally, the number of people suffering from drug use had increased to 39.5 million, which was a 45% increase over 10 years. In the United States of America, 84.5 million adults (18 years and above) either have a substance use disorder or another mental illness (National Center for Drug Abuse Statisitics, 2023). Most of the common disorders in this population include alcohol, marijuana and prescription pain relievers disorders. This indicates that there is a steady increase in the number of people who may need substance use disorder treatment. Likewise, in the United Kingdom, there has been an increase in substance dependence (Preston, 2024) while in Asia about 5.38 million people suffer from substance use disorders (Zhang, et al., 2021). This indicates that substance use disorder is steadily developing into a public health challenge in different parts of the world

The situation is similar in Africa. The World Health Organization (WHO) and the UNODC have reported an increase of alcohol consumption and the cultivation of marijuana in Africa (UNODC, 2006; WHO, 2004). Charlson et al. (2014) further suggested that by 2050, there will be increased life expectancy and with a rapidly increasing population there is a possibility of about 130% augmentation in the burden of SUD, among other mental disorders, to about 45 million years lived with disability in Sub-Saharan Africa. This situation is reflected in countries like Nigeria (UNODC, 2018), South Africa (Myers et al., 2022), Ethiopia (Kassew et al., 2023) where there is an increase in the use of drugs and other substance which are likely to increase SUDs in the continent. In Kenya, 4% of women and 15% of men suffer from alcohol use disorders while 2% of women and 12% of men struggle with drug use disorders in Mombasa, Kwale and Nairobi Counties (Mwangala et al., 2025). Another study found that about 45 % of youth aged 10-24 years were current users of at least one drug in Kajiado County (Chege & Kathungu, 2015). The National Authority for the Campaign against Alcohol and Drug Abuse (NACADA) (2024) highlights that there is an increase in drug and substance use in Kenya. If the drug use situation persists in Africa and specifically in Kenya, the users are likely to suffer from various consequences such as development of substance use disorders, various types of cancer, damages in the brain (National Institute of Drug Abuse (NIDA), 2024) among other physical and psychosocial challenges.

With time, people using drugs may need substance use disorder treatment particularly if they do not stop the use of drugs before it develops into a disorder. Entry into the treatment ecosystem is dependent on whether the person acknowledges the problems drug use causes in their lives and is desirous of seeking help. Desire for help refers to the awareness of the intrinsic need for change and interest in attaining support (Knight et al., 1994). According to the transtheoretical model of change, which this study is anchored in, an individual who has a desire to seek help is contemplating and making preparations for change. They mentally prepare to enter and participate in treatment (Holcom et al., 1994).

However, in some cases clients enter treatment with little desire for help which is reflected in their unwillingness to change. Such clients enter but stay for a short while then drop out (Ehliasson et al., 2025; Mancheño-Velasco et al., 2024). Others, enter treatment, stay but do not participate (Nyashanu & Visser, 2022). This makes it difficult for both the client and their support system as they are forced to deal with the frustration resulting from unwillingness to change. Therefore, enhancing the clients desire for help is key in promoting change. Some treatment programs are not keen on desire for help as an aspect of motivation to treatment (Knight et al., 1994) despite dealing with clients who are sometimes admitted involuntarily. Consequently, they experience low participation in the treatment program as well as high relapse rates.

Empirical evidence indicates that clients who show the need for help positively engage with clinical staff and actively participate in treatment programs (Joe et al., 2014). This increased therapeutic engagement is associated with greater treatment retention and completion rates (Joe et al., 2014; Myers et al., 2010). The desire for help forms a cognitive and emotional foundation for the client's engagement in treatment and maintenance of the gains made from the treatment process. This therefore indicates the need to enhance the client's desire for help in the journey of change, which is what this study intended to achieve.

Various strategies have been used to address clients desire for help, most of the interventions being mainstream and focus on verbal therapy. These strategies have been useful, but here has been advocacy for alternative therapies. For instance, complementary and alternative medical (CAM) interventions such as mind-body and somatic therapies, movement and experiential therapies among others, have been used to complement treatment modalities in enhancing desire for help among clients with substance use disorders. Music-based interventions are among the CAM interventions that have been used. Music-based interventions are clinical and

evidence-based interventions that use music to accomplish clients' individualized goals within a therapeutic relationship (Hohmann et al., 2017). Music-based interventions have been used, in the addiction treatment ecosystem, to achieve different goals. For instance, they have been used to create positive emotions, exploration of hidden feelings, to enhance self-awareness (Damore, 2022), treat stress and anxiety (Chatterjee, 2024) among other benefits. However, there has been a dearth of studies on its effectiveness to enhance the desire for help.

The few studies that have been done on the effectiveness of music-based intervention in enhancing desire for help among clients with SUDs have shown inconsistent results. For example, Silverman (2011) conducted a study on the effects of music therapy on change readiness using the rockumentary music therapy intervention using the single session post-test only design. The researcher found that after the intervention, the groups that received music therapy had higher means compared to the ones that received talk therapy in the contemplation and action sub-scales. In the transtheoretical model of change by Prochaska et al. (1993), people in the contemplation stage tend to show a higher desire for help. Therefore, the participants that received music therapy possibly had significantly higher levels of desire for help compared to the ones that received talk therapy. It is important to note that in the rockumentary intervention, apart from the music, Silverman used the drug use related history of the band and how members overcame drug use. This could be a confounding factor that contributed to the findings of this study. Therefore, there was need to find out whether music as an intervention would be effective in enhancing desire for help without adding other aspects in the intervention.

The results were affirmed by another study by Silverman (2015) among clients with substance use disorder in a detoxification center. He used the lyric analysis technique as part of the music therapy intervention. In this study, the researcher established that music therapy was effective in augmenting desire for help among these clients. There was need to find out whether similar results would be achieved among clients in a long-term substance use treatment center considering that Silverman's study was conducted in a detoxification center which is generally a short-term facility.

Notably, there have been very few studies conducted on music-based intervention and the desire for help among clients with substance used disorders. Further, these studies have been conducted in Western, Educated, Industrialized, Rich, and Democratic (WEIRD) countries which have a different socio-cultural environment from Kenya. Thus, there was need to

conduct a study on the effectiveness of music-based interventions in enhancing desire for help among clients with substance use disorders in non-WEIRD countries. In this case, the current study was done in Kenya which is one of the non-WEIRD countries. In addition, one of the studies (Silverman, 2011) had the history of the band in relation to drug use as part of the intervention which may have intervened in the findings. Therefore, there was need to find out whether music-based interventions were effective in enhancing desire for help without coupling the MBI with other aspects. The purpose of this study was to establish whether there would be a statistically significant difference in desire for help between clients exposed to music-based intervention and the control group, that received Treatment As Usual (TAU).

Methodology

This study used the nonequivalent control group pretest-posttest quasi experimental design. There were two groups, experimental and control selected from substance use disorder treatment residential facilities that are accredited by the National Authority for the Campaign against Alcohol and Drug Abuse (NACADA). Random assignment of the participant to the experimental and control groups within the same physical setting was not feasible as there would be a risk of the participants from the two groups interacting which would lead to the study obtaining contaminated results. In addition, the researcher ensured that both groups were as similar as possible in terms of their characteristics and Treatment as Usual (TAU). This was achieved by sampling participants from the same facility with two branches owned and managed by the same people. In addition, the two facilities used one treatment model which ensured similar treatment model in TAU. The same management and treatment model ensured that the clients experienced similar conditions and treatment modality during the study. This made it possible to assign the two groups in different locations to be either the experimental or control group. One branch of the facility was randomly assigned to be the experimental group while the other the control group. The participants from both groups were purposively sampled based on the inclusion-exclusion criteria. Importantly, they were all blinded on the specific group (experimental or control) they belonged.

For one to be admitted to the study, they had to be: aged 18 years and above, ability to give informed consent, conversant with English, had been in the treatment facility for not more than eight weeks, had to remain in treatment for the next four weeks, and never had MBI before.
The study excluded clients who: were younger than 18 years, could not give informed consent, were not conversant with basic English (because some of the songs used were written and

performed in English), had been in the treatment center for more than eight weeks, would not be present in the subsequent four weeks or had had MBI before.

In terms of the sample size, Roscoe (1975) as cited by Sekaran (2003) recommended that a sample of 30 is sufficient for research studies. The researcher obtained a total of 40 participants who met the inclusion criteria. The extra 10 participants were included in the study to cushion for those who may drop out of the study. It would not be feasible to obtain participants from other facilities as the treatment modality they were receiving would be different and thus, contaminate the finding of the study.

Questionnaires were used to collect data. The questionnaire was divided into two sections. The first section was on demographic information of the participants while the second section was the desire for help scale, adopted from the Texas Christian University Self-Rating Form (TCU/SRF) (Simpson, 1992). The instrument was chosen as it is easy to read and understand for people with low literacy levels (Knight et al., 1994). The desire for help scale is a 7-item scale that was developed to measure whether the clients have desire to receive help from the substance use problems. The items are scored on a five-point Likert scale, from strongly disagree to strongly agree. A high score indicates high level of desire to get help.

The instrument, TCU/SRF Desire for Help scale has been found to be valid as a measurement for desire to get help among clients with SUDs (De Weer-Van Oene et al., 2002). In terms of reliability, it had a reliability coefficient of .87 on the Drug Abuse Treatment for AIDS-Risks Reduction 2 (DATAR 2) sample and .90 for the Substance Abuse Treatment Facility (SATF) sample (Knight et al., 1994). The test- retest reliability of the Desire for Help scale was conducted using the pre and post-test data of the 20 participants in the control group (they did not receive the MBI). The researcher found that the Desire for Help (DH) scale had a reliability coefficient of .93. The test-retest reliability coefficients of the DH scale was considered excellent (>.70) as indicated by Wheelan (2014).

Before conducting the study, the researcher obtained ethical clearance from the Kenyatta University Ethical Review Board. At the beginning of the study, the participants gave informed consent to be part of the research. The researcher conducted a pre-test on Desire for Help on both the experimental and control groups. The experimental group thereafter, received the MBI in four weekly 60-minute sessions in addition to TAU while the control group only received TAU. TAU entailed conventional treatment methods like individual and group counseling,

psychoeducation, pastoral activities and pharmacotherapy. The researcher was only involved in the music-based intervention and not any other treatment procedure. After the four week-intervention, a post-test was conducted by research assistants on both groups using the TCU/SRF Desire for Help scale (Simpson, 1992). The research assistants were blinded to which group received the intervention and the one that didn't. One-way Analysis of Covariance (ANCOVA) was used to analyze the data, to determine the effectiveness of MBI in enhancing desire for help. ANCOVA was chosen as it allowed the researcher to control for some of the possible confounding factors that would influence the results since randomization was not feasible in this research.

The intervention (MBI) was researcher constructed. The MBI involved live presentation of songs and structured lyric analysis sessions that focused on enhancing DH. The songs used were selected prior to the study. These songs were; 'the more I drink' by Blake Shelton, 'Mac Muga' by Ali Kiba, 'Desperado' by Eagles and 'Roar' by Katty Perry. The preselection was done based on the themes from the Transtheoretical model of change by Prochaska and Diclementi (1984). The themes used were consciousness raising, self-evaluation and discrepancies in life, decisional balance and self-efficacy. The Iso principle that indicates the need to match the music to behavior of the clients (Michel & Pinson, 2005) guided the selection of the songs to be used in the intervention.

The four weekly-sessions were similar in structure but distinct on the themes tackled and the songs used. The sessions were conducted on Tuesdays at noon over a period of four weeks within the facility. The researcher developed a treatment protocol that indicated the themes for each session based on the themes of the transtheoretical model of change, chosen songs and activities for each session to ensure fidelity to the intervention. In addition, there were specific questions that were developed to guide the lyric analysis and discussions in the sessions. The questions were rooted in the lyrics of the respective songs used in the intervention and respective themes of the sessions.

Results

The researcher engaged 40 participants with substance use disorders that met the inclusion criteria. There were more males (92.5%) than females (7.5%) in the sample. Majority of the participants were between the ages of 33-37 years, with a university degree (75%) while the rest had attained secondary school education as their highest qualification. Interestingly, 63%

of the participants were in salaried employment who were voluntarily admitted to the facility. The majority of the participants, at 80%, were first time entrants to the SUD treatment ecosystem.

To determine the effectiveness of MBI in enhancing desire for help among SUD clients in selected treatment centers in Kenya, ANCOVA was computed. Tests on the assumptions of normality of distribution, homogeneity of variance across the groups and a linear relationship between the covariates and the dependent variable were conducted. To test for normality of distribution, the Shapiro-Wilk test was used. The findings are as presented on Figure 1.

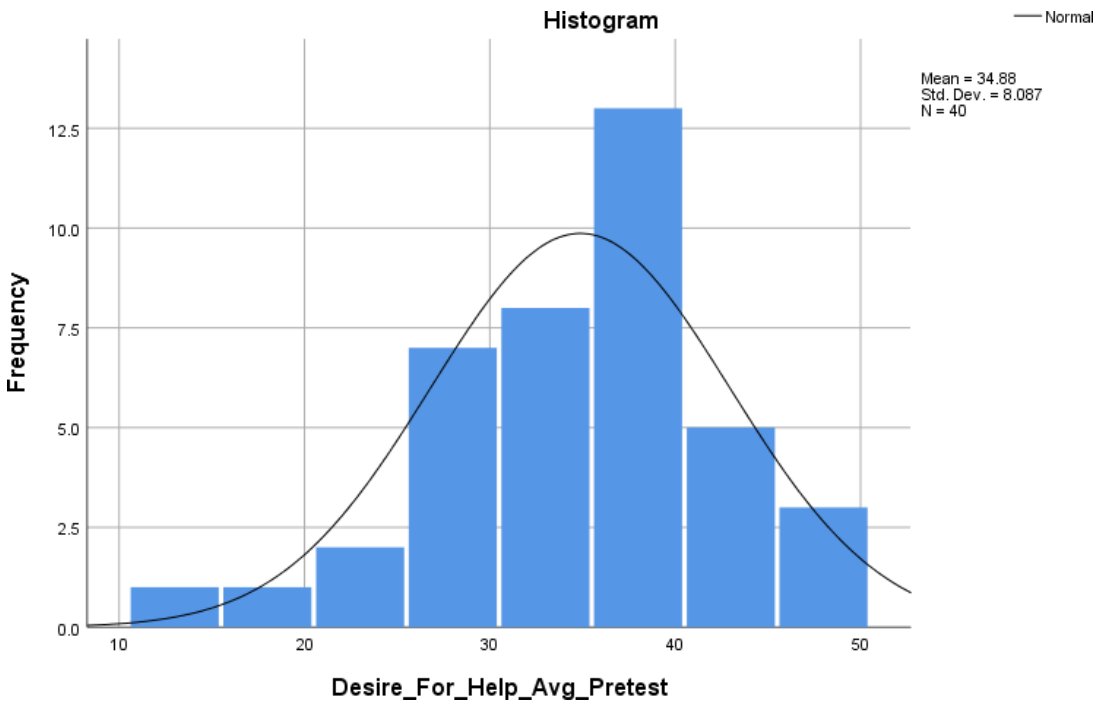

Figure 1: Desire for help Normality Scatter Plot

Figure 1 indicates that there was a normal distribution on desire for help levels at pre-test. The p value was greater than .05, at W (40) = .97 p=.34, and therefore the assumption of normal distribution was met. This means that the distribution of the desire for help (DH) mean scores were normal across experimental and control groups.

The second assumption on homogeneity of variance across the groups was tested using the Levene's test. Table 1 presents the results.

Table 1:Levene's Test of Equality of Error Variances

Leven's test findings indicate that the variance between the experimental and control group

Dependent variable: Desire for help post-test

F	df1	df2	Sig.
2.41	1	38	.13

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Design: Intercept + Desire for help Pre-test + Age of respondent + Level of education + Nature of admission + Number of admissions + Group membership

was not significant (F (1,38) = 2.41, *p*=.13) reported at the value p<.05 as presented on table 1. This depicts that the data met the assumption of equal variance.

Lastly, the researcher proceeded to test the assumption on a linear relationship between the DH pre-test (covariate) and post-test scores (dependent variable), Pearson's product moment was used. The results are as presented on table 2.

Table 2: Pearson Product-Moment Linear Relationship Test

		Desire for help pre-test	Desire for help post-test
Desire for help pre-test	Pearson correlation	1	.703**
	Sig. (2-tailed)		.000
	N	40	40
Desire for help post-test	Pearson correlation	.703**	1
	Sig. (2-tailed)	.000	
	N	40	40

**. Correlation is significant at the 0.01 level (2-tailed).

The results, as depicted on table 2, indicate that there was a strong positive relationship between the covariate (DH pre-test) and the dependent variable (DH post-test). The relationship was

significant at r= .70, n=40, p=.00. Therefore, the assumption on the linear relationship between the covariate and the dependent variable was met in this study.

The results presented show that the assumptions were met and therefore the researcher proceeded to test the null hypothesis that there are no significant difference in desire for help (DH) between participants exposed to music-based intervention in addition to TAU and the control group only exposed to TAU. The results are presented in the next section

MBI and Desire for Help One-Way ANCOVA Analysis.

At the onset of the study, a pre-test was conducted on both the experimental and control groups. After the administration of the MBI intervention in addition to TAU on the experimental group, a post-test was carried out on both groups (experimental and control exposed to TAU only)). To establish whether there were differences between the pre-test and post-test scores ANCOVA was computed. Table 3 presents the findings.

Table 3: Descriptive Desire for Help (DH) Pre-Test and Post-Test Means Comparison between the Experimental and the Control Group

	N =	DH Pre-test means	Standard Deviation	DH Post-test means	Standard deviation	DH Post-test adjusted means	Std. errors
Experimental group	20	33.90	8.67	42.40	6.49	43.14[a]	0.86
Control group	20	35.85	7.56	36.85	6.89	36.11[a]	0.86
Total	40	34.88	8.09	39.62	7.18		

a. Covariates appearing in the model are evaluated at the following values: Desire for help pre- test = 34.88, Age of the respondent = 4.28, Level of education = 2.75, Nature of admission = 1.25, Number of admissions = 1.30.

Pre-test results indicated that the experimental group had a DH mean score of M = 33.90 (SD = 8.67), whereas the control group recorded a mean score of M = 35.85 (SD = 7.56), as shown on table 3. Following the administration of MBI to the experimental group in addition to TAU, while the control group received only the TAU, a post-test was conducted. The findings revealed a higher DH mean score in the experimental group (M = 42.40, SD = 6.49) compared

to the control group which showed a marginal increase (M = 36.85, SD = 6.89). Notably, both the experimental and control groups demonstrated reduced standard deviations at post-test (6.49 and 6.89, respectively), which suggests greater homogeneity in scores around their respective means.

Furthermore, after adjusting for several covariates, namely, DH pretest scores, age, education level, nature of admission, and number of admissions, the experimental group had a higher DH mean score at M = 43.14, SE = 0.86 compared to the control group (M = 36.11, SE = 0.86). this shows that after removing the effects of the covariates, the experimental group had higher scores relative to the control group.

Additionally, the researcher sought to test the null hypothesis that there were no significant differences in desire for help (DH) between clients exposed to music-based intervention (MBI) and the control group in selected treatment centres in Kenya. One-way ANCOVA was used to test this hypothesis while controlling for DH pre-test mean, age of participants, level of education, nature of admission and number of admissions. The results are shown in Table 4.

Table 4: One-way ANCOVA Desire for Help Post-test Means Comparison between Experimental and Control Group

Tests of Between-Subjects Effects

Dependent variable: Desire for help post-test

Source	Type III sum of squares	Df	Mean square	F	Sig.	Partial eta squared
Corrected model	1533.613[a]	6	255.602	17.655	.000	.762
Intercept	210.579	1	210.579	14.545	.001	.306
Desire for help pre-test	691.389	1	691.389	47.756	.000	.591
Age of respondent	.107	1	.107	.007	.932	
Level of education	24.287	1	24.287	1.678	.204	.048
Nature of admission	48.604	1	48.604	3.357	.076	
Number of admissions	.004	1	.004	.000	.986	.000
Group membership	476.385	1	476.385	32.905	.000	
Error	477.762	33	14.478			
Total	64817.000	40				
Corrected total	2011.375	39				

a. R squared = .762 (Adjusted R squared = .719)

The findings established that there was a significant difference in desire for help (DH) mean scores F (1, 33) =32.91, p=.00, n_p^2 = .50 between the experimental and the control groups as shown on table 4. Since the p value was less than .05, the null hypothesis was rejected in favor of the alternative hypothesis that there are significant differences in desire for help (DH) between clients exposed to music-based intervention (MBI) and the control group in selected treatment centres in Kenya. This suggests that MBI in addition to TAU is associated with significantly higher outcomes in DH compared to TAU only. The results suggest that the four-week MBI was effective in enhancing desire for help in clients diagnosed with substance use disorders. Furthermore, the findings show that after controlling other variables, the MBI

accounted for 50% of the variance of DH based on group membership (experimental or control group). Following Cohen's guidelines, the effect size ranges from 0 (no effect) to 1 (large effect), which shows that the MBI's effect size on DH variance was moderate in magnitude.

Discussion

According to the findings, the experimental (exposed to MBI and TAU) group had significantly higher DH scores compared to the control group (only received TAU) after statistically controlling for the covariates. For this reason, the null hypothesis was rejected in favor of the alternative hypothesis that there are significant differences in DH between clients exposed to MBI and the control group in selected treatment centers in Kenya.

The findings of this study were consistent with those of Silverman (2011), in a study conducted among clients in a detoxification unit in the United States of America. He found that clients who were exposed to MBIs (rockumentary and recreational music) had higher means than the ones who had been exposed to talk therapy in contemplation and action subscales. According to the motivation model, the contemplation stage is characterized by desire for help (Prochaska et al., 1992;1993). Therefore, Silverman's research demonstrates that there was an increase in the client's desire for help considering the rise in the contemplation subscale. In the same study (Silverman, 2011), it was established that the clients who received rockumentary music therapy, characterized by the history of the artists in relation to drug abuse coupled with lyric analysis scored higher means than the recreational music and talk therapy groups. Notably, Silverman's study used the history of the artists in relation to drug use, which could be a confounding factor that may have an influence on the results. The current study did not use the history of the artists in the intervention and controlled for covariates and still found that MBI was effective in increasing desire for help. Additionally, it was conducted in an in-patient treatment facility which is different from a detoxification unit, yet the MBI was effective.

The study also found similar results as Silverman's (2015) study that found significant difference between the mean scores of the treatment and control group in the desire for help scale. Silverman's study was done in a detoxification center, using the single session two-group wait-list design. The similarity in findings could be because, like the current study, his research focused on enhancing desire for help, which is an aspect of treatment motivation.

On the other hand, the findings of this study varied from those of Silverman (2009b). In this study, Silverman compared the effectiveness of verbal therapy and music therapy in a detoxification unit in a single session. He found no significant differences between the treatment (that received music therapy) and control groups (that received verbal therapy) in desire for help. This could be because Silverman's intervention focused on relapse prevention and not treatment of substance use disorders. The inconsistency could also arise from the researcher including all participants in the detoxification unit since the study did not have an inclusion-exclusion criterion and also engaged a different sample population from the current study.

According to the findings of the current study, the experimental group had significantly higher DH means compared to the control group. These findings could be explained by the use of the reflective approach (after the performance of the song) in the MBI where the clients had to reflect on their lives based on the lyrics of the songs and experiences of the songwriters that were prosocial. Research shows that listening to prosocial songs leads to more prosocial thinking and behavior (Greitmeyer, 2009).

Further, analysis revealed that the mean difference was significant with the difference lying in the experimental group that was exposed to MBI. This indicates that the MBI can be used to augment DH among clients who are at the contemplation and preparation stages in the stages of change as posited by Prochaska and DiClemente (1974). At these stages, the clients are aware of the advantages and disadvantages of change. However, the balance between the merits and demerits may cause ambivalence and therefore, there may be need to enhance their desire for help to magnify the benefits of change and cross to the action stage. As reflected in the findings, the MBI could enhance their motivation to seek help through the creation of a positive decisional balance, encouraging motion to the action stage.

The results of this study seem to suggest that MBI augments the clients' affinity to seek help. This could be because the intervention was crafted to raise awareness of drug use problems and the behavioral changes that accompany addiction. As a result of this awareness, the clients saw the need to make changes though seeking help. It is also possible that the clients resonated with the experiences manifested in the lyrics written by a stranger from a different part of the world. This probably led them to the realization that they were not isolated in their struggle with substance use disorder, and thus, seeking help does not guarantee shame or diminish one's dignity.

In addition, the findings of this study showed that treatment as usual (TAU) had minimal influence on desire for help which may be an indication that clients could be in treatment but are actually not ready to get help. Therefore, they may stay in treatment to the end and end up relapsing immediately after they leave the facility. This is because, in as much as they received help that was necessary, their desire to receive it was low. Since the MBI has shown effectiveness in enhancing desire for help, it could be incorporated into the current treatment regimen used in substance use disorder facilities. It is important to note that this study employed a limited sample size and was conducted within a single treatment facility with two branches. Consequently, the findings should be cautiously generalized.

Conclusion

The findings suggest that the music-based intervention coupled with TAU is effective in enhancing desire for help among clients with substance use disorders since the experimental group had higher DH means post intervention than the control group that only received TAU even after controlling for the confounding variables. This is evidence that MBI may be used as a complementary treatment approach in increasing the desire for help that SUD clients need to seek help, especially among the clients who were involuntarily admitted in the facilities, and the ones who are in the contemplation stage. Further, it can also be used among clients who are experiencing ambivalence on whether to seek SUD treatment.

From these results, SUD facilities, counselors, psychologists, and social workers working with substance use disorder clients may adopt MBI as a complementary modality in their programs to augment their desire to seek help. This may be specifically beneficial to the clients who are hesitant to seek help even in light of the merits and demerits of substance use behavior change. Further, because of the potential of the MBI as a treatment modality based on the growing evidence of its effectiveness, the ministry of health and the National Authority for the Campaign Against Alcohol and Drug Abuse (NACADA) may incorporate MBI as an alternative and/or complementary treatment approach recommended in the National Protocol for treatment of SUDs. In addition, to build capacity on the use of experiential treatment modalities like the MBIs, institutions of higher learning offering courses on mental health disciplines, including addiction treatment, should include music-based intervention and music therapy modules in their training programs.

In terms of research to bolster the current knowledge in the field, researchers may consider carrying out studies on effectiveness of music-based interventions in enhancing desire for help using a randomized clinical trial among clients with SUDs. Additionally, they may conduct a longitudinal study to evaluate the effectiveness of the MBI on treatment help seeking behaviors among the clients with SUD in Kenya.

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