# Tuning Into Recovery: A Quasi-Experimental Study on Music-Based Intervention and Treatment Readiness among Substance Use Disorder Clients in Kenya

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## ABSTRACT

**Background:** Low treatment readiness often impacts on treatment outcomes among clients with Substance Use Disorders (SUD) in Kenya. This implies a need to focus on ways to improve the clients' treatment readiness. Evidence suggests that music-based interventions (MBI) could be effective as complementary therapy in enhancing treatment readiness among clients with SUD. However, such evidence was inconclusive suggesting a need for more studies. Therefore, this study seeks to establish the efficacy of MBI in enhancing treatment readiness among clients with SUDs in selected residential treatment centers in Kenya.

**Methods:** The subjects of the study were 40 clients in a residential treatment facility for substance use disorders in Kenya with two branches. 20 clients in branch A served as the treatment group while another 20 in branch B as the control. A quasi-experimental pretest post-test design was used. The MBI was administered to the treatment group in addition to treatment as usual (TAU), while the control group only received TAU. The Texas Christian University treatment readiness subscale was administered to measure treatment readiness (TR) before and after the intervention and the scores were compared.

**Results:** ANCOVA revealed significant differences between the treatment and control groups, with the treatment group having significantly higher means in TR after controlling for covariates.

**Conclusion**: The findings suggest that MBI in addition to TAU may have potential to improve TR among clients with SUD in Kenya and could be an area of focus for more interrogation in future.

**Key words:** Music-based intervention, Treatment readiness, Low treatment readiness, Substance use disorders, Music therapy

## INTRODUCTION

According to the United Nations Office on Drug and Crime (UNODC, 2020) about 35million people using substances suffer from substance use disorders. The report further notes that a significant number of problem users are found in Africa. Despite the efforts by the African Union to control use of illicit drugs (African Union, 2019), it is projected that the problem of substance use disorders (SUD) is likely to increase by 130% by 2050 in Sub-Saharan Africa (Charlson et al., 2014).

The challenge of substance use has equally affected Kenya. About 10 % of people who use alcohol between ages 15 and 65 suffer from alcohol use disorder, a majority of who have the severe form (National Authority for the Campaign Against alcohol and Drug Abuse (NACADA), 2017). According to the world health organization, Kenya is among countries with the highest total Disability Adjusted Life years (DALYs) in Africa at about 54, 000 as a result of alcohol use disorders (World Health Organization, 2017). There is a possibility of the situation getting worse considering that more young people are engaging in the use of alcohol as suggested by NACADA, (2016) and supported by Kurui and Ogocho (2019).Further, the age of onset of use is getting lower as

demonstrated by a study by NACADA and Kenya Institute for Public Policy Research and Analysis (KIPPRA), (2019).

This implies that there may be increased need for substance use disorders treatment. If this need is not met the situation is likely to affect the persons with SUDs in numerous ways including suffering the risks that arise from substance use such as various types of cancers, mental health disorders among others (**Njati, 2017; UNODC, 1998**). Furthermore, with SUDs being the second leading cause of disability of all mental disorders globally (GBD, 2019), Kenya risks losing a significant proportion of its productive population. Studies show that this loss comes with a social cost of $ 800 per person disabled by mental health condition related to substance use (Rehm et al., 2009). This results from loss of productivity, health costs and crime ( International Narcotics Control Board, 2013).

One way to address this challenge is to ensure that treatment programs are available and accessible to persons with SUDs. Residential rehabilitation treatment for substance use disorders is well established in Kenya with about 98 of them registered by NACADA (2022). Such treatment programs would only be useful if clients have the commitment to join and participate in the programs. However, there is evidence to suggest that some clients lack the motivation to join treatment, remain in treatment or even to participate in the treatment programs due to low treatment readiness. Treatment readiness is conceptualized as the level of commitment to effectively reduce substance use through involvement in treatment (De Leon et al., 1997). Treatment readiness depicts a willingness to accept the help needed and to actively participate in the treatment process. Treatment readiness implies that the individual is willing to engage in treatment which shows a stronger commitment to change and therefore a higher likelihood of sustaining change after treatment (Garnick, et al., 2012).

Globally, studies show that treatment readiness is vital for recovery from SUD. People that have low treatment readiness typically end up dropping out of treatment and consequently relapsing to substance use. Those with high treatment readiness demonstrate successful treatment (Carbonari & DiClemente, 2000). Studies in Africa have found that high treatment readiness increases the chances of completing treatment (Myers et al., 2010). This shows that the client's readiness to treatment is a major prerequisite to the success of treatment. There is therefore a need to focus on enhancing treatment readiness among clients with SUD in treatment centers in Kenya.

While efforts to address treatment readiness have traditionally focused on use of conventional interventions such as counseling and psychotherapy, there has been increased shift towards use of complementary and alternative medical (CAM) interventions to enhance treatment readiness among clients with substance use disorders (Fan, 2005). Among the CAM are music-based interventions (MBIs). According to Hohmann et al. (2017), MBI is a clinical and evidence-based use of music interventions to accomplish individual goals within a therapeutic relationship by a therapist. It has been noted to help clients tap into emotions and needs that might be hard to express through conventional forms of communication hence motivating clients to receive treatment (Aletraris et al., 2014).

The use of music has been a part of the culture of the Kenyan community for many years. It has been used in various settings such as the traditional and religious healing whereby traditionalists and the religious people have used music in their healing practices (Mbiti, 2002). In addition, there has been little evidence of musicians using music in hospitals to elevate the mood of the patients and in most cases these practitioners have little understanding of the therapeutic power of music (Kigunda, 2007). Therefore there was a need to harness its therapeutic value in a structured way within the SUD treatment edifice, through the MBI.

Use of MBI goes beyond identification of emotions to include their critical evaluation, as well as addressing motivations and hurdles to recovery through lyrics (words to the song), rhythm and melody (American Music Therapy Association, 2014). This reflects the tackling of both cognitive and behavioral aspects in the treatment process. MBI has been used to treat several mental health conditions such as depression and anxiety (Burns & Woolrich, 2008). It has also demonstrated some positive effect on stress (Pelletier, 2004); self-esteem (Sharma & Jadgev, 2012) and social cohesion (Goodling, 2011).These variables are some of the challenges experienced by clients with SUDs that often influence their readiness to treatment.

Various techniques of music-based intervention have been used in the therapeutic edifice. One of these techniques is lyric analysis. Lyric analysis entails a meaningful deconstruction and discussion of lyrics (words) of a pre-existing song in a group or individual therapy session (Ellis, 2016). In such a session, the analysis and discussion of the lyrics is meant to evoke thoughts and feelings of the clients (Jurgensmeier, 2012) and precipitate self-expression which often leads to catharsis, a process of discharging of emotions to relieve stress, anger, fear or anxiety. The therapist therefore accesses the client's cognitive and emotional world through music.

There is some evidence in support of use of MBI in SUD treatment though it is limited and largely based on work in developed countries. For instance, Silverman (2011) found significant differences in treatment readiness between clients who received music therapy and those that received verbal therapy in a detoxification unit. The study found that respondents exposed to music therapy intervention had significantly higher scores compared to those who received verbal therapy, for both contemplation and action, which are indicators of change process according to the transtheoretical model of change by Prochaska and DiClemente (1984). Patients with higher scores in contemplation and action scales are usually ready for treatment and may actually pursue it. In another study conducted in a detoxification unit in the United States of America (USA) by Silverman (2015) similar findings were established. The study found that there were significant differences between the two groups measured on treatment readiness, with participants in the experimental group having higher treatment readiness compared to the ones in the control group. These findings point to a possibility that music therapy may have had potential to improve treatment readiness among clients with SUD in the USA. It is not clear whether similar findings would be obtained in other geographical contexts and in developing countries such as Kenya. It is in this context that this study sought to find out whether music-based interventions would enhance treatment readiness among clients with SUD in residential treatment in Kenya particularly considering that music was already embraced as a cultural part of the Kenyan society.

### Objective

This study sought to determine the efficacy of music-based intervention in enhancement of treatment readiness among clients in residential treatment in Kenya. The specific objective was:

i. To find out whether there were significant differences in treatment readiness (TR) between clients exposed to music-based intervention (MBI) in addition to TAU and the group exposed to TAU only.

## METHODOLOGY

This was a quasi-experimental study specifically, of the nonequivalent control group pre-test-post-test design among clients in residential treatment for substance use disorders in treatment facilities accredited by the National Authority for the Campaign against Alcohol and Drug Abuse (NACADA) in Kenya. For purposes of the study, there was need for both a treatment and control group. However it was not feasible to randomly assign participants to either treatment or control group within the same facility, as it would be difficult to have a control group in the same physical setting as the treatment group without the risk of contamination resulting from interaction of the two groups. At the same time it was important to ensure that the treatment group and the control group were as similar as possible in characteristics as well as in the treatment as usual (TAU), hence the need to have both the groups coming from the same facility. The study was therefore conducted in a treatment facility purposively selected as it had two branches run under the same management and similar in operations as well as receiving clients with similar characteristics. This offered an opportunity to have both the treatment and control group in one treatment center but in two physically separate settings. Equal numbers of participants were purposively sampled from both branches based on meeting the inclusion criteria as described hereafter. Through random assignment the group in one branch was designated as the treatment group while the one in the second branch became the control group.

### Inclusion criteria

The following inclusion criteria were applied: participants had to be 18 years and above because they were able to provide informed consent; had to be conversant with English; should have been in the treatment center

for not more than eight weeks and was to be in the facility for at least the next four weeks. In addition, the participants should not have had music-based intervention sessions previously.

**Exclusion criteria**

The following participants were excluded: younger than 18 years, not conversant with English, had been in the treatment center for more than eight weeks, were not to be present in the subsequent four weeks or had had music-based intervention sessions before.

Miot's (2011) formula was used to calculate the study's minimum sample size. Accordingly, each group had to have 15.3664 participants and therefore a total of 30. In order to cushion for participants who may not have responded or may have decided to drop out of the study the researcher sampled 40 participants, 20 in each group (treatment and control groups). The participants in each group were blinded on whether they were on the experimental or control group. This was meant to reduce the participants' bias.

To measure Treatment Readiness (TR), the Texas Christian University (TCU) Treatment Readiness subscale was adopted from the TCU Self Rating Form (TCU/SRF) (Simpson, 1992). The scale has sound psychometric properties according to De Weert-Van Oene et al., (2002) with a reliability coefficient alpha of .73 (Knight et al., 1994). In the current study, the test-retest reliability of the treatment readiness scale was computed using the pre- and post-test pilot data of 5 participants in the control group (they only received TAU). The results established that the treatment readiness scale had a reliability coefficient of .83. This was considered acceptable as recommended by Wheelan (2014). Items in this scale are scored on a five-point Likert-type scale ranging from Disagree strongly to Agree strongly. Higher scores on this scale indicate higher TR while lower scores are indicative of lower TR

Prior to conducting the study, necessary approvals, including ethical clearance and research permit, were obtained from the Kenyatta University Ethics Review Board and the National Commission for Science Technology and Innovation (NACOSTI) respectively. In line with the ethical protocols the researcher explained to the participants the nature of the study and informed them that they could drop out at any time if they found the study distressing

A pretest on treatment readiness was administered at the onset of the study using the Texas Christian University (TCU) Treatment Readiness subscale. This was followed by a four-week music-based intervention (in addition to TAU), administered in 60 minute-weekly sessions to the treatment group, while the control group only received TAU. TAU entailed the conventional treatment modalities offered by the staff at the facility such as individual and group counseling, psychoeducation, pastoral activities and pharmacotherapy. A post-test on treatment readiness was administered to both groups after the four weeks. The results of the pre- and post-tests for the two groups were compared to determine if the music-based intervention was efficacious in enhancing treatment readiness levels of the participants.

**Description of the MBI Intervention Protocol**

The treatment/intervention in this study was a Music-based Intervention developed by the researcher based on the Transtheoretical model of behavior change to enhance treatment readiness among the clients. The treatment/ intervention protocol consisted of four (60 minutes) sessions. Each session comprised a live presentation and lyric analysis of a song pre-selected by the researcher-therapist. The selection of the songs was based on four themes anchored on the Transtheoretical model of change by Prochaska and DiClementi (1984). The themes included consciousness raising, self-evaluation and discrepancies in life, decisional balance and self-efficacy. The songs used were; "The more I drink" by Blake Shelton, "Mac Muga" by Ali Kiba, "Desparado" by Eagles and "Roar" by Katty Perry. The researcher chose the songs that match the behavior of the clients as recommended by the Iso principle (Michel & Pinson, 2005). During this intervention that mainly used lyric analysis, the clients were allowed to share their thoughts about the song lyrics and how they applied in their experiences of addiction. The interventionist was also keen to observe the emotional reaction of the clients to ensure towards the songs and discussions as part of the treatment process.

Each MBI session comprised five steps as follows;

1) Step 1; Opening Phase/check-in (15minutes) which involved researcher/interventionist finding out from the participants how they were doing at that moment. They were also allowed to pick instruments (djembe drum and tambourine) that they would like to play (if they wanted to) and the song lyric sheets were distributed.

2) Step 2; Practice phase (5minutes) which involved the researcher/interventionist practicing a simple rhythm for the song of the day with participants playing the djembe drum and the tambourine. This was done to enhance participation and engagement of the clients.

3) Step 3; Live presentation of a pre-selected song by the researcher/interventionist (5 minutes). The researcher was accompanied by a 6 steel-string guitar (played by researcher-interventionist) and the djembe drum and tambourine (played by two participants respectively). The other participants were informed that they were free to sing along.

4) Step 4; Analysis and discussion of the lyrics by the participants (30 minutes), which entailed analysis of the lyrics based on the lyric analysis discussion guide developed by the researcher (See appendix A) to ensure that the participants remained focused on the themes of the sessions.

5) Step 5; Closing Phase (5 minutes) which involved a summary of what happened and a remark on the next session from the researcher/interventionist.

The intervention was delivered every Tuesday between 12 noon and 1.00 pm for a period of four weeks, at the group therapy session room.

The lyric analysis discussion guide had questions to guide the process. For instance, in the second session where the theme was 'self-reevaluation and discrepancies in life,' the song 'Mac Muga' was used. In the lyric analysis phase, the researcher-therapist invited the participants to identify the behaviors they were not proud of in their addiction experience using the following questions; When Ali Kiba narrates the story of Mac Muga in the song, do you relate to it? Are there similarities between your life and Mac Muga's? Are there things or opportunities you lost while in addiction? This, for example, was a question that would help them evaluate their lives and identify the discrepancies in their life as a result of substance use and there make a decisional balance. The questions were used with each song in the intervention and focused on the theme of the session.

## RESULTS

There were a total of 40 participants in this study. The bulk (22.5 percent) were between the ages of 33 and 37, and 92.5 percent were men. The majority (75 percent) had completed university education, while the others had just completed secondary school. Sixty-two percent of those who took part were employed and on a salary. In terms of admission type (voluntary or involuntary), 75% were admitted voluntarily. In addition, 80% of the participants were in their first admission.

The findings of this study that sought to determine if there were significant differences in treatment readiness between clients exposed to music-based intervention in addition to TAU and the control group (only received TAU) in selected substance use disorder treatment centers will be presented in this section. In order to analyze the data using Analysis of Covariance (ANCOVA) the assumptions of normality of distribution, homogeneity of variance and the covariate's linear relationship to the dependent variable were tested. According to the findings, the treatment readiness level was normally distributed and since the p value was greater than .05, at W (40) = .96, $p$=.20, the assumption of normal distribution was met (Insert figure 1 here). The assumption on homogeneity of variance was met as the difference between the treatment and the control group was not significant, $F$ (1, 38) = .02, $p$ =.89 (reported at p< .05) (insert table 2 here). And, the covariate TM pretest had a linear relationship with the dependent variable TM posttest at $r$ =.60, $n$ = 40, $p$ = .00 which is less than .05 (insert Figure 2 here).

The study sought to determine if there were significant differences in treatment readiness between clients exposed to music-based intervention and the control group in selected substance use disorder treatment centers in Kenya. Since the data met the assumptions, the researchers proceeded to test the null hypothesis; there are no significant differences in treatment readiness (TR) between clients exposed to Music-based intervention (MBI) in addition to TAU and the control group (received TAU only). Data was analyzed using one-way analysis of variance. The findings are presented in Table 1.

Table 1 Descriptive Treatment Readiness (TR) Pre-test and Post-test Means Comparison between the Experimental and the Control Group

| | **N=** | **TR Pre-test means** | **Standard Deviation** | **TR post-test means** | **Standard deviation** | **TR post-test adjusted means** | **Std. errors** |
|---|---|---|---|---|---|---|---|
| Experimental group | 20 | 32.30 | 5.91 | 41.25 | 5.05 | 42.07[a] | 0.83 |
| Control group | 20 | 34.70 | 6.48 | 35.80 | 6.52 | 34.98[a] | 0.83 |
| Total | 40 | 33.50 | 6.24 | 38.52 | 6.38 | | |

a. Covariates appearing in the model are evaluated at the following values: Treatment readiness = 33.50, Age of the respondent = 4.28, Level of education = 2.75, Nature of admission = 1.25, Number of admissions = 1.30.

It was established that at post-test the treatment group had higher levels of treatment readiness mean (M= 41.25, SD= 5.05) than the control group (M= 35.80, SD= 6.52) as presented in Table 1 (insert table 1 here). In terms of the standard deviation of the two groups at post-test, the treatment group's treatment readiness scores seem to be clustered around the mean compared to the ones of the control group (SD = 6.52). This indicates that there was a greater variability in TR mean scores in the control group than in the experimental group. The researchers went further to control for a number of covariates, namely treatment readiness pretest scores, age, level of education, nature of admission and number of admission, and the findings indicated that the experimental group had a TR mean score of M= 42.07, SE= .83, compared to the control group that had a mean score of M= 34.98, SE= .83. From these findings, the experimental group that received the MBI and TAU had higher TR scores than the control group that only received TAU even after controlling for the effects of the covariates. This indicates that MBI in addition to TAU seem to have a greater effect in increasing TR means among clients with SUDs, compared to TAU only.

While adjusting for covariates, ANCOVA was computed to test the hypothesis that there are no significant differences in TR between clients exposed to MBI in addition to TAU and the control group that only received TAU. The results are as presented in Table 2.

Table 2 One-way ANCOVA Treatment Readiness Post-test Means Comparison between Experimental and Control Group

| **Tests of Between-Subjects Effects** | | | | | | |
|---|---|---|---|---|---|---|
| Dependent variable: Treatment readiness posttest | | | | | | |
| Source | Type III sum of squares | Df | Mean square | F | Sig. | Partial eta squared |
| Corrected model | 1151.178[a] | 6 | 191.863 | 14.495 | .000 | .725 |
| Intercept | 138.710 | 1 | 138.710 | 10.480 | .003 | .241 |
| Treatment readiness Pre-test | 393.424 | 1 | 393.424 | 29.723 | .000 | .474 |

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| | | | | | | |
|---|---|---|---|---|---|---|
| Age of respondent | 7.880 | 1 | 7.880 | .595 | .446 | .018 |
| Level of education | .383 | 1 | .383 | .029 | .866 | .001 |
| Nature of admission | 49.304 | 1 | 49.304 | 3.725 | .062 | .101 |
| Number of admissions | 10.687 | 1 | 10.687 | .807 | .375 | .024 |
| Group membership | 474.545 | 1 | 474.545 | 35.852 | .000 | .521 |
| Error | 436.797 | 33 | 13.236 | | | |
| Total | 60955.000 | 40 | | | | |
| Corrected total | 1587.975 | 39 | | | | |
| a. R squared = .725 (Adjusted R squared = .675) | | | | | | |

Table 2 shows that the treatment and control groups had a significant difference in TR means $F$ (1, 33) =35.85, $p$=.00, $n_p^2$ =.52. The null hypothesis was rejected in favor of the alternative hypothesis that there are significant differences in treatment readiness (TR) between clients exposed to MBI in addition to TAU and the control group that received TAU only in selected treatment centers in Kenya, because the P value was less than.05. This means that when MBI is combined with TAU, the outcome in TR is considerably better than when simply TAU is used. The findings appear to indicate that the MBI had a favorable impact on improving treatment readiness among clients with SUD. As a result, MBI in combination with TAU was more effective at increasing TR than TAU alone.

MBI coupled with TAU had an effect size of $F$ (1, 33) =35.85, $p$=.00, $n_p^2$ =.52 on TR's variance based on group membership (whether one is in the experimental or control group) in terms of the magnitude of the effect. This reveals that the MBI accounted for 52 percent of the variance in TR based on group membership (experimental or control group) after removing the effects of other variables. This suggests that the effect magnitude was medium, according to Cohen's recommendations.

Further analysis was conducted using the Bonferroni post-hoc test to determine the nature of the differences in TR between the experimental and the control groups. The findings are as presented in Table 3.

Table 3 Bonferroni Post-hoc Test for Size of the Main Effect of the Music-Based Intervention on Treatment Readiness

| **Pairwise Comparisons** | | | | | | |
|---|---|---|---|---|---|---|
| Dependent variable: Treatment readiness post-test | | | | | | |
| (I) Group membership | (J) Group membership | Mean Difference (I-J) | Std. error | Sig.[b] | 95% Confidence interval for difference[b] | |
| | | | | | Lower bound | Upper bound |
| Experimental | Control | 7.090* | 1.184 | .000 | 4.681 | 9.499 |
| Control | Experimental | -7.090* | 1.184 | .000 | -9.499 | -4.681 |
| Based on estimated marginal means | | | | | | |
| *. The mean difference is significant at the .05 level. | | | | | | |
| b. Adjustment for multiple comparisons: Bonferroni. | | | | | | |

Table 3 shows that the main difference in TR (M= 7.09(4.68-9.50) between the experimental and control groups was significant (p=.00). The p value was reported at .05. After correcting for the covariates, TR pre-test mean, age of participants, level of education, nature of admission, and number of admissions, the experimental group's level of TR was significantly greater than the control group's at post-test. Thus, the difference lies on the experimental group, which suggests that the MBI complements the TAU in enhancing TR after controlling for the covariates.

## DISCUSSION

Data analysis on the efficacy of the MBI on treatment readiness established that there were significant differences in treatment readiness between clients exposed to MBI in addition to TAU and the control that only received TAU, after controlling for covariates. From these results, the music-based intervention appears efficacious in enhancing treatment readiness among clients with SUDs.

The results mirror those of Silverman (2015) that found significant differences between the treatment and control groups in TR, with the treatment group having higher means than the control group. Similarly, Silverman (2011) found that patients in the music therapy treatment group scored significantly higher in the contemplation and action stage than those in the talk therapy group, indicating that the clients are ready for treatment and actively participate in it. As a result, this might be seen as evidence that complementary experiential modalities such as MBI are effective in increasing TR. Notably, the difference between Silverman's (2011) and the current study is that it did not compare two interventions instead it had a control group that only received the TAU while the experimental group was exposed to MBI in addition to TAU. On the other hand, the findings of this study are inconsistent with those of Silverman (2009b) that found insignificant differences in treatment eagerness between clients in the treatment group and those in the control group.

Perhaps, the current findings could be due to the MBI's focus on self-efficacy through Katy Perry's song *Roar*, which emphasized the clients' ability to overcome the SUD and boost their self-confidence in their ability to cope with treatment's challenges. The clients may have had a perceived sense of powerlessness in dealing with the SUD problem and therefore there was need to change this perception.

According to Boulle (2011), music helps in changing perceptions. Its inclusion in the intervention may have assisted the clients' shift from a perceived sense of powerlessness to a belief that they can modify their substance use behavior. This, in turn, likely increased their willingness and self-confidence to work on themselves through treatment. Furthermore, Silverman (2014) found that music therapy enhanced drug avoidance self-efficacy. This suggests that MBIs may be beneficial in increasing self-efficacy among clients with SUDs. The musical drill on self-efficacy, combined with their awareness of the harm and disparities in their lives, most likely provided motivation and hope that they would be able to overcome the disorder (Dunlap, 2017). This may have motivated them to engage in treatment. This engagement may be helpful in sustaining recovery as Dingle et al., (2008) note.

Self-efficacy has a role in clients engaging in the change process, which in our instance is treatment, as Prochaska and DiClementi (1984) argue in the transtheoretical model of behavior change. Perhaps their self-belief was improved as a result of the MBI (complementing TAU), resulting in an increase in treatment readiness.

In addition, it is possible that through the lyrics of various songs, the participants were able to reframe their perception of the SUD as well as treatment. As cited by Standley (2014), Hilliard (2001) found that during lyric analysis discussion, reframing can be used to change cognitive distortions that the client may have. Therefore, clients' views about treatment could have been altered in the discussions, hence the enhancement of treatment readiness among clients in the experimental group. Therefore, the MBI (specifically using lyric analysis), which has shown an ability to significantly enhance treatment readiness, may be an important complementary tool in increasing treatment readiness that can be incorporated into the current treatment protocol.

## CONCLUSION

The current study's results indicate that the TAU may not be sufficient in significantly enhancing treatment readiness. It is possible that a client may stay in treatment but is not ready for treatment, for instance the ones who are involuntarily admitted into treatment facilities. Once they finish the program, such clients have a higher likelihood of relapse. Therefore, the MBI, which has shown an ability to significantly enhance treatment readiness, may be an important complementary experiential tool that can be incorporated into the current treatment protocol to help clients tune into recovery. In addition, professionals such as counselors, psychologists and social workers who are involved in outreach programs can use the MBI to motivate potential clients to enter, remain and adhere to treatment.

Due to its potential, NACADA and the Ministry of Health, Kenya should consider including alternative experiential interventions such as MBIs in the treatment approaches recommended in the National Protocol for Treatment of SUDs to enhance treatment readiness among SUD Client.

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**Conflict of Interest*:*** None Declared.

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# APPENDIX A

**Questions To Guide The Lyric Analysis Process**

Introduction of the session: "Today we are talking about life in addiction. Your life in addiction came with challenges, in terms of your behavior and relationship with others. I would invite you to take a lyric sheet, listen to the song, and try to identify the characteristics of addiction as reflected in the song. Also reflect on your life and identify things that are similar to the main character in the song. There are no 'right or wrong' answers as we listen and discuss the song".

The researcher-therapist played the song while the clients listened. Then clients were invited to share about the music using guiding questions.

**Questions to guide the lyric discussion process**

- What message do you think the song was trying to convey?
- What are some of the things the artist mentions to show that the 'coke drinking' guy has an addiction?
- Reflection: Are there similarities between your life and the guy in the song? If there are what are these similarities?
- What was going through your mind as you were listening to the song and what prompted those thoughts?

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- When Blake Shelton says in the chorus “the more I drink, the more I drink then am the world’s greatest lover and a dancing machine. I get loud, I get proud, and it gets worse!” do you relate to this? What are some of the embarrassing things that you did while high/intoxicated?

- What similarities or differences did you notice between your responses and others in the group?

- Several people nodded when……talked about……. It seems as though many of us may have had similar experiences.

- Personal insight: What thoughts did this song generate?

- What feelings did this song generate?

- What insights have you gained about yourself, in terms of behavior, in relation to your substance and drug use?

- Transfer new insights to life; how does this song relate to your life outside the group?

- What awareness have you gained about yourself that you can take with you after the session?