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EFFECT OF TWELVE - STEP FACILITATION TECHNIQUE ON OCCUPATIONAL PERFORMANCE AMONG PERSONS WITH SUBSTANCE ABUSE

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ABSTRACT

Background: Substance use disorder, also known as drug addiction, is a brain and behavioural illness that impairs a person's ability to control their use of drugs or medications, whether they are legal or illegal. This includes substances such as nicotine, alcohol, and marijuana. Individuals with addiction may continue using these substances despite the harm they cause. Twelve-Step Facilitation (TSF) therapy is an effective treatment for drug and alcohol addiction, based on the belief in a "power greater than ourselves" and doing "what works" to avoid substance use. It includes structured sessions with specific goals, encourages journaling, and requires the completion of recovery tasks between sessions for sustained recovery.

Objectives: The aim of the study is to determine the effect of twelve - step facilitation technique on occupational performance among persons with substance abuse

Material And Methods: Thirty participants were divided equally into control and experimental groups. The DAST scale was used for screening, and the COPM assessed performance levels. The control group received conventional therapy, while the experimental group participated in Twelve-Step Facilitation therapy. Pre- and post-test COPM scores were collected and analyzed statistically to evaluate the outcomes of the interventions.

Results: Results indicated that the experimental group showed statistically significant improvement of occupational performance with the use of twelve - step facilitation therapy when compared to the control group.

Conclusion: From the findings of this study, it was concluded that twelve - step facilitation therapy has proved its effect to improve occupational performance among person with substance abuse.

Keywords: Substance abuse, Occupational performance, Canadian Occupational Performance Measure, Twelve - step facilitation technique

INTRODUCTION

Occupational performance refers to the ability to perceive, desire, recall, plan, and execute roles, routines, tasks, and sub-tasks necessary for self-maintenance, productivity, leisure, and rest, in response to internal and external demands. Occupational performance roles are patterns of behaviour that encompass various self-maintenance, productivity, leisure, and rest activities, shaped by the individual's interactions with their environment. These roles are established based on need and choice, and they evolve with age, ability, experience, circumstances, and time. Occupational performance areas are the categories of routines, tasks, and sub-tasks that individuals engage in to fulfil their roles, including self-maintenance, productivity, leisure, and rest. The process of classifying these activities into categories is unique to each individual [1].

Substance use disorder, also known as drug addiction, is a brain and behavioural illness that impairs a person's ability to regulate their use of both legal and illegal substances, such as nicotine, alcohol, and marijuana. Addiction can begin with casual drug use in social settings or,

particularly with opioids, from consuming prescription medications either personally or through others. Different substances carry varying risks and rates of addiction, with some, like opioid painkillers, leading to addiction more quickly than others [2].

Twelve-Step Facilitation (TSF) therapy is an evidence-based approach for treating drug and alcohol addiction, rooted in the spiritual concept of a "higher power" defined by each individual and the commitment to do whatever it takes to avoid substance use. The therapy maintains active engagement in a recovery community through highly structured sessions with specific goals, requiring participants to keep personal journals and complete recovery tasks between sessions. Active participation and involvement in the treatment program are crucial for achieving and sustaining long-term recovery.

The twelve steps form the foundational principles of substance abuse treatment, with Narcotics Anonymous (NA) adapting the original steps from Alcoholics Anonymous (AA). The steps include acknowledging our lack of control over our addiction, believing in a

higher power's ability to restore our sanity, and turning our will and lives over to this higher power. They also involve conducting a fearless moral inventory, admitting our wrongs, seeking the removal of character defects, making amends, and continuing self-assessment while striving to improve our spiritual connection.

The five core concepts of 12-step facilitation therapy for drug addiction are:

1. Introduction and Assessment: The therapist presents drug abuse and dependence as a condition where recovery is essential, and evaluates the individual's drug use, motivation for change, and commitment to abstinence.
2. Acceptance: Recognizing that one is powerless over their addiction and that it is unmanageable.
3. People, Places, and Things: Identifying detrimental influences such as people, places, and routines, and planning necessary lifestyle changes.
4. Release: Letting go of something or someone to support recovery by taking responsibility for finding a way out.
5. Active Participation in 12-Step Programs: Adhering to proven strategies used by others in recovery and actively engaging in a 12-step program [3].

There have been more studies done to improve occupational performance in patients with substance abuse. For example: **John F. Kelly**

(2016) conducted study on “**Developing and Testing Twelve-Step Facilitation for Adolescents with Substance Use Disorder: Manual Development and Preliminary Outcomes**”. This systematic review of person with substance abuse used Muti-dimensional mutual help activity scale to measure their level of substance abuse. Both types of intervention, 12-step and CBT, were found to offer comparable benefits. It also demonstrates how individualized treatment approaches benefit patients. The study findings also provide support for the notion that substance abuse is a chronic condition that may benefit from a more protracted aftercare strategy in which occupational therapy could help [4]. Even though there were more studies done to improve occupational performance among patient with substance abuse, there is no study to prove the effect of twelve - step facilitation techniques as occupational therapy intervention based activities to improve occupational performance among patient with substance abuse. Hence, this study has been done to prove the effects of twelve - step facilitation techniques on occupational performance among persons with substance abuse in Indian context.

MATERIALS AND METHODS

Study design

This study is a quantitative quasi-experimental research design with convenient sampling technique samples were collected from the

residents of Confident Health Centre at Chennai from February 2024 to April 2024.

Participants

At Confident Health Centre in Chennai, 45 individuals with substance abuse issues were screened using the DAST scale. Of these, 30 clients meeting specific inclusion and exclusion criteria were selected. Inclusion criteria included males aged 19 to 25, mild to moderate DAST scores, and occupational performance difficulties. Clients were excluded if they had severe drug dependence, refused the program, showed unstable mental symptoms, or had significant attention deficits or cognitive impairments.

Instrument

DAST

The Drug Abuse Screening Test (DAST-10), also known as the DAST Screening Tool, is an effective instrument used to assess a patient for suspected drug abuse and drug dependence over the past twelve months. The DAST-10 consists of a ten-item questionnaire that evaluates various aspects of drug use, including frequency, consequences, and health impacts. The total DAST-10 score is calculated by summing the points assigned to each item, based on the responses provided.

For scoring:

- Each of the nine items, other than item #3, is scored 1 point for a "Yes" response and 0 points for a "No" response.

- Item #3 is scored 1 point for a "No" response and 0 points for a "Yes" response.

After scoring each item accordingly, the total DAST-10 score is the sum of all item scores, which can range from 0 to 10. In summary: score 1 point for each "Yes" response on items 1 through 10, except for item #3, where a "No" response earns 1 point. Then, add up all the points to determine the total DAST-10 score [5].

COPM

The Canadian Occupational Performance Measure (COPM) is used to evaluate occupational performance in individuals with substance abuse issues. The scale comprises 5 items, each scored from 0 (indicating the lowest function) to 10 (indicating the highest function), with a maximum possible score of 50 points. Clients use a 10-point scale to rate their performance and satisfaction for each of the five identified problems. The therapist then calculates the average COPM performance score and satisfaction score, which typically range from 1 to 10. A score of 1 represents poor performance and low satisfaction, while a score of 10 represents very good performance and high satisfaction [6].

PROCEDURE

Ethical approval certificate was got from saveetha college of occupational therapy to work in Confident Health Centre for the research purpose. Consent was obtained for the client as

well as from the concerned centres. the clients were explained about the procedure those who are willing for the therapy were selected using convenient sampling method following that person with substance abuse have been selected with DASH scale. A Canadian Occupational Performance Scale were used to measure the Occupational Performance in controlled and experimental group, Each group consists of 15 participant. The pre test was assessed for both group. The experimental group underwent 12-step facilitation technique and the control group received conventional occupational therapy intervention for the study duration of 12 weeks (36 sessions), Each session consist of 45 minutes. This study was conducted in Confident Health Centre.

Experimental group under went 12 steps facilitation technique which includes, STEP 1: We admitted we were powerless over our addiction, that our lives had become unmanageable, STEP 2: We came to believe that a Power greater than ourselves could restore us to sanity, STEP 3: We made a decision to turn our will and our lives over to the care of God as we understood Him, STEP 4 : We made a searching and fearless moral inventory of ourselves, STEP 5: We admitted to God, to ourselves, and to another human being the exact nature of our wrongs, STEP 6: We were entirely ready to have

God remove all these defects of character, STEP 7: We humbly asked Him to remove our shortcomings, STEP 8: We made a list of all persons we had harmed, and became willing to make amends to them all, STEP 9: We made direct amends to such people wherever possible, except when to do so would injure them or others, STEP 10: We continued to take personal inventory and when we were wrong promptly admitted it, STEP 11: We sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out, STEP 12: Having had a spiritual awakening as the result of these steps, we tried to carry this message to addicts, and to practice these principles in all our affairs.

RESULTS

The statistical analysis was done with the help of IBM SPSS version 23.0. Since the samples belonged to the sample size (thirty-two), non-parametric method was used to test the statistical difference between pre-test band post-test scores of group A and groupB. Wilcoxon signed rank test and Mann Whitney U test were analysed the finding hypothesis being tested identifies whether there exists statistically significant difference in consideration of the treatment given. An alpha level of $P = 0.05$ was measured to be statistically significant.

Table 1: Comparison of pre-test and post-test in control group

Test	Mean	SD	N	Z value	p value
Cntr_Pre	1.8533	0.59265	15	3.329	0.001*
Cntr_Post	2.4	0.55032	15		

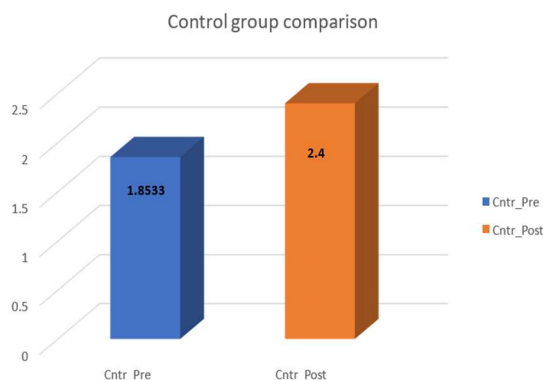


Figure 1: Comparison of pre-test and post-test of COPM in the control group

* Significant at 5% alpha level Since the p value of 0.001 is lesser than 0.05, alternate hypothesis is accepted. Hence, there is statistically significant difference between pre- test and post

test scores in the Control Group of the COPM. This suggests that the intervention received by the control group had significant improvement.

Table 2: Comparison of pre-test and post-test in experimental group

Test	Mean	SD	N	Z value	p value
Expt_Pre	1.8667	0.63095	15	-3.438	0.001*
Expt_Post	3.3467	0.57305	15		

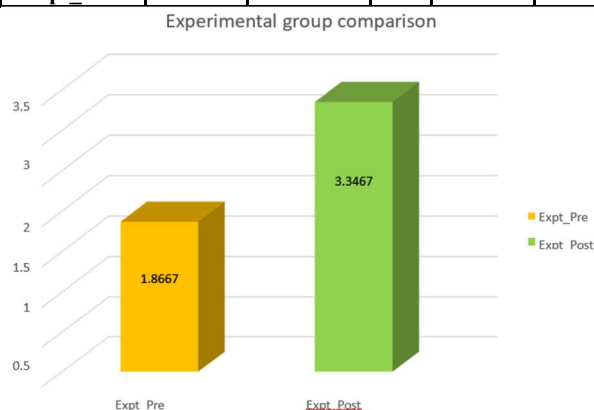


Figure 2: Comparison of pre-test and post-test of COPM in experimental group

* Significant at 5% alpha level In the Experimental group, since the p value of 0.001 is less than 0.05, alternate hypothesis is accepted. Hence, there is statistically significant difference

in Experimental Group between pre- test and post test scores of COPM. This suggests that the intervention received by the experimental group had significant improvement.

Table 3: Comparison between the post-test scores of the control and experimental group

Group	Mean	SD	N	Z value	p value
Cntr_Post	2.4	0.55032	15	-3.761	0.000*
Expt_Post	3.3467	0.57305	15		

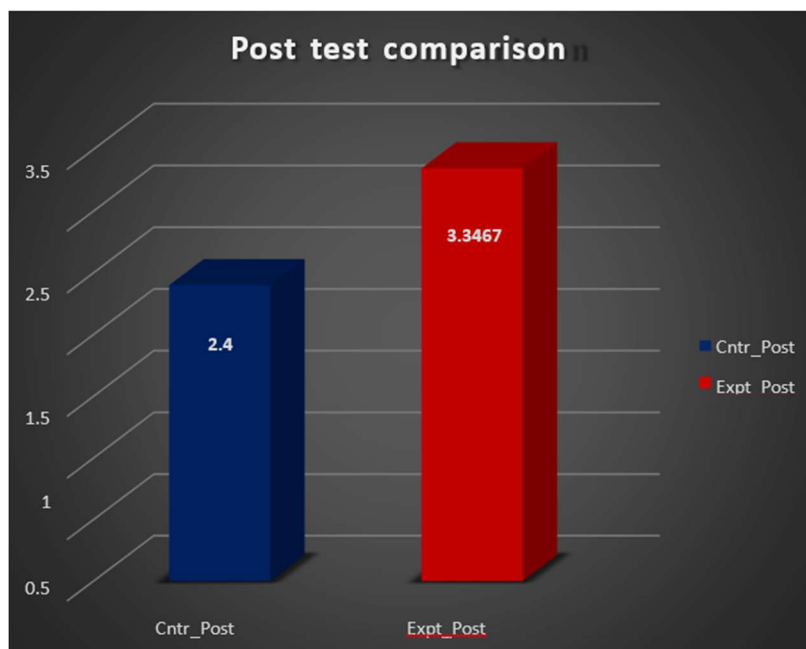


Figure 3: Comparison of pre-test and post-test of COPM in controlled and experimental group

* Significant at 5% alpha level Since the p value of 0.00 is lesser than 0.05, alternate hypothesis is accepted. Hence, there is statistically significant difference in post test scores between Experimental and Control Group of the COPM. This suggests that the intervention received by the experimental group had more improvement when compared to the control group.

DISCUSSION

This study aimed to evaluate the impact of Twelve-Step Facilitation technique on occupational performance among individuals with substance abuse issues. Study conducted over three months at the Confident Health

Centre in Chennai. The study involved 30 clients and substance abuse who were divided into two groups of 15 each using a conventional sampling technique. Occupational performance in both the experimental and control groups was assessed using the Canadian Occupational Performance Measure (COPM). The experimental group received the Twelve-Step Facilitation technique for three months, while the control group underwent conventional occupational therapy. Post-test evaluations were conducted for both groups, and the results were analyzed.

Table 1 and **Figure 1** showed the statistical analysis of the COPM scale test for the control group. With a p-value of 0.001, which is less than 0.05, the alternate hypothesis is accepted, indicating a statistically significant difference between the pre-test and post-test scores in the control group. This suggests that conventional occupational therapy led to significant improvement. The finding was consistent with the previous study which assessed the effectiveness of biofeedback-assisted relaxation techniques for patients with substance abuse and found that these techniques effectively reduced levels of depression, anxiety, and stress in the control group [7].

Table 2 and Figure 2 show the statistical analysis of the COPM scale test for the experimental group. With a p-value of 0.001, which is also less than 0.05, the alternate hypothesis is accepted, indicating a statistically significant difference between the pre-test and post-test scores in the experimental group. This suggests that the Twelve-Step Facilitation therapy led to significant improvement in this group. These findings was similar with the previous study which reviewed evidence-based occupational interventions for individuals with substance-use disorders and found that such interventions were effective for both adolescents and adults with these disorders [8].

Table 3 and Figure 3 presented the statistical analysis comparing the COPM scale test results between the control and experimental groups. With a p-value of 0.000, which is less than 0.05, the alternate hypothesis is accepted, indicating a statistically significant difference between the post-test scores of the two groups. This suggests that the Twelve-Step Facilitation therapy resulted in greater improvement compared to conventional occupational therapy. This finding is consistent with the previous study which examined the effectiveness of Twelve-Step interventions and mutual support programs for substance use disorders. The study emphasized the importance of familiarizing social workers with Twelve-Step approaches to make informed referrals that match clients with appropriate mutual support groups, thereby maximizing engagement and positive outcomes [9].

CONCLUSION

The results showed that there was a high significant improvement in the experimental group than the control group. Thus this study proved the effectiveness of using twelve - step facilitation technique to improve the occupational performance among patient with substance abuse.

LIMITATIONS

AND

RECOMMENDATIONS

The limitation includes that study was done on a small sample size, It was not compared

with gender differences and limited to only one hospital. Recommendations include study can be done with larger sample size, study can be done for a larger duration of time, study can be done with other conditions and disorders. It can be done with gender differences.

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