

Effectiveness of Motivational Enhancement Therapy on Coping Strategies and Life Satisfaction among Patients with Substance Abuse

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ABSTRACT

Background: Substance abuse is a complex issue influenced by historical, biological, geographic, cultural, social, and economic factors. It poses a serious problem among teenagers and young people, with estimates suggesting that by the ninth grade, more than half of Indian boys have experimented with at least one substance. **Objective:** To evaluate the effectiveness of motivational enhancement therapy on coping strategies and life satisfaction among patients with substance abuse. **Methods:** The study used a pre-experimental design with a one-group pre-test and post-test. The Coping and Satisfaction with Life scale was used in this study. A substance abuse patient and a purposive sampling technique was applied. The collected data were coded and analysed by using descriptive and Inferential Statistics. **Results:** In the pre-test, over half of substance abuse patients (50.83%) showed poor coping, while post-test results revealed improvement, with 66.7% demonstrating adequate coping. Dissatisfaction was high before the intervention (58.3%), including 25% severely dissatisfied. After the intervention, 48.3% reported being satisfied, and 41.7% were somewhat satisfied. A significant positive correlation ($r = 0.778$, $p = 0.001$) was found between coping skills and life satisfaction. **Conclusion:** The study concludes that implementing a motivational enhancement therapy program improves coping skills and life satisfaction in substance abuse patients, allowing them to meet their motivational needs while also developing cognitive, emotional, social, and self-management skills for future life transitions.

Keywords: *Coping Strategies; Life Satisfaction; Motivational Enhancement Therapy; Substance Abuse*

INTRODUCTION

Substance abuse is a multifaceted issue with implications for society, culture, biology, geography, history, and the economy. Drug addicts who use drugs as a way to escape the harsh realities of life are becoming more common. These factors include the breakdown of the traditional joint family system, the absence of parental love and care in contemporary homes where both parents work, and the deterioration of moral and religious beliefs from the past (Abba Hassan, Ibrahim & Nadkarni, 2024; Expósito-Álvarez *et al.*, 2024). Substance abuse is a collection of related diseases brought on by the use of substances that change thought and conduct and have detrimental effects on behaviour as well as health. Because of social attitudes towards alcohol and illegal drug use, as well as political and legal responses to it, substance misuse is one of the most complex public health issues (McKee *et al.*, 2007; Padmanabhanunni, Pretorius & Isaacs, 2023). Drug addiction has adverse effects on one's health. However, it has also become a contentious issue in the criminal justice system and discussions about society's values. People disagree about whether substance abuse is a disease with biological and inherited roots or a matter of personal choice (Becker, Curry & Yang, 2011; Evon *et al.*, 2017; Theodorakis, Hassandra & Panagiotounis, 2024).

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Substance use disorder (SUD), commonly known as substance abuse, is a medical condition characterised by the uncontrolled use of substances despite harmful consequences. It affects brain function and behavior, leading to an inability to control the use of legal or illegal drugs, alcohol, or medications. In a Global Perspective, Substance abuse is a leading cause of preventable illnesses and premature deaths worldwide. United States: In 2023, approximately 48.5 million Americans aged 12 and older (16.7%) reported having a substance use disorder in the past year. This includes 10.2% with an alcohol use disorder and 9.7% with a drug use disorder (Kelly, Daley & Douaihy, 2012; Biswal *et al.*, 2024).

In 2024, Substance abuse remains a significant public health challenge in India, affecting various demographics and contributing to social and economic issues. Alcohol: Approximately 17.1% of the adult population (about 15.1 crore individuals) consume alcohol, with 1.3% (around 30 lakh people) experiencing alcohol dependence. Cannabis: About 2.8% of the population (3.1 crore individuals) have used cannabis products in the past year, with 0.66% (72 lakh people) facing cannabis-related problems. Opioids: The prevalence of opioid use is estimated at 2.1%, with 1.14% for heroin, 0.96% for pharmaceutical opioids, and 0.52% for opium (Stone, 2023; Dominguez-Rodriguez *et al.*, 2024; Hunt *et al.*, 2024).

Misuse of substances affects people individually, in families and communities. The cumulative effects of substance addiction can lead to severe issues with public, mental, physical, and social health. Themes addressed include teenage pregnancy, spousal violence, child abuse, HIV/AIDS, other STDs, car crashes, physical altercations, criminal activity, homicide, and suicide (Sellman *et al.*, 2001; Rowe & Liddle, 2003; López *et al.*, 2021). Coping methods are techniques people employ to deal with stress daily. The success of these tactics varies significantly. Negative coping strategies might make life more difficult in the long term. There are hundreds of various coping mechanisms. They can be classified into cognitive, behavioural, and emotional categories (Steinglass, 2009; Morgan & Crane, 2010).

The actions people take to regulate, modify, and lessen the consequences of stress exposure are known as coping mechanisms. Task-oriented coping strategies are believed to result in fewer problems. In contrast, emotion-oriented strategies are connected to an increased risk of anxiety and depression symptoms, health problems, and drug use (Lovejoy *et al.*, 1995; McHugh, Hearon & Otto, 2010). Coping techniques and their association with substance use disorders (SUD) are essential because the adoption of adaptive strategies during stressful situations or events influences how people respond and their likelihood to use substances. When confronted with new stressors, those with limited coping methods have a higher risk of taking drugs than those with a broad coping repertoire because the former tends to utilise psychoactive medicines to cope with negative feelings and stress (Kidorf *et al.*, 2009; Smedslund *et al.*, 2011). Among drug users, a large proportion use the substance as self-medication to deal with daily stressors. In general, this avoidance coping pattern is positively connected with drug use. In contrast, adaptive coping is associated with a decrease in substance misuse, which improves SUD treatment. In this regard, the adoption of dysfunctional methods among SUD patients has been connected to the severity of their addiction and the frequency of relapses (McIndoo *et al.*, 2016; Klamert *et al.*, 2023).

The use of drugs, alcohol, or other substances in ways that make it challenging to go about one's regular life is a standard definition of substance abuse. People's cognitive assessments of the overall quality of their lives, the quality of particular life domains like family, friends, and school, and the mental aspect of subjective well-being are called life satisfaction (Britton *et al.*, 2011; Srivastava, Singh & Chahal, 2019). It is essential to the study of positive psychology, which concentrates on identifying and enhancing qualities that act as barriers to the emergence of psychopathological problems. Life satisfaction is widely quantified using scores to indicate people's pleasure or dissatisfaction. Favourable life satisfaction rates are related to joy and living the 'good life.' In contrast, poor assessments of life satisfaction are linked to melancholy and unhappiness (Zafar *et al.*, 2023; Chrétien *et al.*, 2025).

Motivational Enhancement Therapy (MET) is a method that assists people in dealing with their inconsistency about entering treatment and discontinuing drug usage. This therapy tries to stimulate speedy and inwardly interested transformation slightly rather than helping the patient step by step complete the recovery journey (Tevyaw & Monti, 2004). Those who engage in self-destructive activities are frequently uncertain or lack the motivation to stop them while acknowledging the harmful impact of such actions on

health, family life, and social functioning. In addition to an initial evaluation session, two to four individual treatment sessions with a therapist make up this therapy (Myers *et al.*, 2022). A MET-trained therapist can frequently help a person recognise their behaviour objectively. Motivational enhancement therapy is a direct, person-centred approach to treatment that focuses on growing a person's desire to progress and help people overcome their mood swings or problems to change their conduct. Its goal is to increase inbred motivation by raising awareness of a problem, correcting self-defeating beliefs about the circumstance, and boosting self-assurance in one's ability to transform. To encourage someone and use self-motivating language, demonstrating a deep understanding of the situation and a commitment to change (Dominguez-Rodriguez *et al.*, 2024).

Significance for the Study

Substance and other opioid usage are reported by 2.1% of the population, with heroin being the most common (1.14%), followed by prescription opioids (0.96%) and opium. Users are the most dependent in terms of their usage habits. India consumes three times more opioids than the international average. Alcohol is the most popular substance, followed by marijuana and pain medications. Alcohol consumption is 4.6%, with a 17:1 male-to-female ratio, followed by cannabis (2.8%) and opioids (2.1%). In terms of dangerous and dependent use, 19% of alcohol users are dependent, while just 0.25% of cannabis users are engaged (Marquez-Arrico *et al.*, 2019).

Motivational enhancement therapy would be administered for seven days in a row, with each session lasting roughly 30 - 45 minutes. Four external specialists validated the intervention model for their judgments on finding the activities that sorted out the various steps (Caldarelli *et al.*, 2024). An Introduction of the Group and Lifestyle Investigation, the phases of change, awareness: the positive and negative aspects, looking forward, decisional balance: the advantages and disadvantages of change against stability, investigating values, and promoting self-efficacy: The following strategies are used: the significance of self-assurance, desire for change, and importance; change success stories; identifying strengths and making plans for change. After each session, a group discourse was held to gather comments on the previous week's activities, which were taught and discussed with the patient with substance abuse (Schwenker *et al.*, 2023; Marín-Navarrete *et al.*, 2017). After the session, a post-test was administered to evaluate the level of coping strategies and life satisfaction among substance-addicted patients. Even though many studies have been conducted on coping strategies and life satisfaction among patients with substance abuse, the researcher was unable to locate any valid studies on the impact of motivational enhancement treatment on techniques for coping and life satisfaction in these individuals. As a result, the researcher felt compelled to evaluate the effects of motivational enhancement therapy on coping strategies and life satisfaction among substance misuse patients at a designated de-addiction centre in India.

METHODOLOGY

Design, Setting and Participants

This study's objective was to assess the impacts of Motivational Enhancement Therapy on coping strategies and life satisfaction in substance misuse patients at a designated de-addiction centre in India. The pre-experimental pre-test and post-test research design was performed on 60 substance abuse patients who were in a de-addiction centre. The study was limited to a selected de-addiction centre in Kochi, Kerala, India.

Sample, Sampling Technique and Sample Size

The study sample is the patients with substance abuse in a selected de-addiction centre in Kochi, Kerala, India, and those who meet the inclusion criteria. The patient with substance abuse was informed of the nature and objective of the study, as well as the purposive sampling technique utilised to pick the samples.

The sample size is the number of subjects involved in the study. The sample size consists of 60 substance abusers in a selected de-addiction centre in Kochi, Kerala.

Data Collection Methods

The patient with substance abuse was informed of the nature and objective of the study, as well as the

purposive sampling technique utilised to pick the samples (Milosevic *et al.*, 2017). The sheet was presented, and the patient with substance abuse gave signed consent. The demographic characteristics were gathered using a meeting schedule. The Coping and Satisfaction with Life scale was used in this study. A pre-test assessment of the level of coping strategies and life satisfaction was performed on patients with substance dependence (Monarque, Sabetti & Ferrari, 2023). Motivational enhancement therapy was administered for seven consecutive days, with each session lasting around 30-45 minutes. After the session, a post-test was administered to assess the level of coping strategies and life satisfaction among the substance addiction patients.

Motivational enhancement therapy would be imparted for 7 consecutive days, with each session lasting for about 30-45 minutes. The intervention model was validated by four external specialists for their own opinions on finding the activities that sorted out the different steps: Introduction to Group and Exploration of Lifestyles, The Stages of Change, Awareness: The Good Things and Not-So-Good Things, Looking Forward, Decisional Balance: Pros and Cons of Changing and Staying the Same, Exploring Values, Supporting Self-Efficacy: Change Success Stories and Exploring Strengths and Planning for Change and the Role of Importance, Confidence, and Desire for Change are used. After every session, a group conversation was incorporated to obtain feedback for a week; these activities were taught and discussed with the patient with substance abuse. After the intervention and post-test were conducted and assessed the level of coping strategies and life satisfaction among the patients with substance abuse was assessed.

Motivational enhancement therapy includes the following:

1. Introduction to Group and Exploration of Lifestyles
2. The Stages of Change
3. Awareness: The Good Things and Not-So-Good Things
4. Looking Forward
5. Decisional Balance: Pros and Cons of Changing and Staying the Same
6. Exploring Values
7. Supporting Self-Efficacy: Change Success Stories and Exploring Strengths and
8. Planning for Change and the Role of Importance, Confidence, and Desire for Change

Table 1: Motivational Enhancement Therapy

1	Introduction to Group and Exploration of Lifestyles Explore lifestyles and daily activities among group members and discuss how substance use fits in with these issues.
2	The Stages of Change Explain the concept of change occurring as a process over time, rather than a single event. Explore and discuss changes that have previously been made, and how they occurred. Introduce the idea that changes can be made using specific strategies that are useful at the different stages.
3	Awareness: The Good Things and Not-So-Good Things Awareness of the good things and not-so-good things about substance use. Explore ambivalence about substance use.
4	Looking Forward Assist members to look forward and think about their possible futures. Develop a sense of hope for the future and develop discrepancies with current choices.
5	Decisional Balance: Pros and Cons of Changing and Staying the Same Increase awareness of ambivalence about substance use. Increase awareness of ambivalence about change.
6	Exploring Values Review decisional balance status. Explore goals and values. Contrast decisional balance status with central values.
7	Supporting Self-Efficacy: Change Success Stories and Exploring Strengths Enhance self-efficacy by reminding clients of past successes. Encourage members to be hopeful about the possibility of change. Build trust among group members. Remind members that there is more to them than their substance use.
8	Planning for Change and the Role of Importance, Confidence, and Desire for Change Review progress through the stages of change during the group experience. Develop a concrete plan to change one thing in the member's life. To explore feelings about the importance of making changes, their confidence that they can succeed, and their desire to make changes.

Table 1 shows the Intervention of Motivational Enhancement Therapy among patients with substance abuse.

Validity of the Instruments

“Validity is the degree to which an instrument measures what is intended to measure”

The tool was validated by 3 experts in the Department of Psychiatry and 3 experts in the Department of Mental Health Nursing. Experts validate the clarity, relevance, comprehensiveness, and appropriateness of the content. Based on their suggestions, the reframing of the tool was made. Valuable suggestions given by the experts were incorporated, and the tool was modified and finalised.

Reliability of the Instruments

Reliability of the research instrument is defined as the extent to which the instrument yields the same results on repeated measures. After validation, the tool was subjected to testing for its reliability. The reliability coefficient of the whole test was estimated by the software named Statistical Package for the Social Sciences (SPSS) version 25, Cronbach's alpha reliability (r), which was found to be 0.87 and 0.91 for the Coping Scale and Satisfaction with Life Scale - 5 Questions. The reliability test score shows there is stability and consistency in the tool items. Hence, the tool was considered highly reliable for proceeding with the main study (Murphy *et al.*, 2018; Abdel Moneam *et al.*, 2023).

Pilot Study

Pilot research was applied to evaluate the instrument's feasibility and clarity, besides determining how long it would take to fill them. Ten percent of the recruited sample was included in the pilot study and then excluded from the study.

Statistical Analysis

Data analysis is a technique used to reduce, organise, and give meaning to data. The collected data were coded and analysed by using descriptive and Inferential Statistics. The analysis of data was done by the following methods. In Descriptive statistics, A Socio-demographic variable among patients with substance abuse was analysed by using frequency and percentage distribution, and the Assessment of the Coping Scale and Satisfaction with Life scale was analysed by using frequency and percentage distribution. In Inferential statistics, the Paired ' t '- test was used to determine the effectiveness of motivational enhancement therapy on coping strategies and life satisfaction among patients with substance abuse. The Pearson correlation ' r '- test was used to determine the Correlation between coping strategies and life satisfaction among patients with substance abuse. Chi-square test was used to find out the Association between the post-test level of the coping strategies and life satisfaction among patients with substance abuse (Ramadas *et al.*, 2023).

Ethical Consideration

The researchers obtained ethical clearance from the Institutional Ethics Committee of Vinayaka Mission's Annapoorna College of Nursing, Vinayaka Missions Research Foundation, Salem, Tamil Nadu, India with reference number VMACON/IEC/02/2020 on 12th October 2020.

RESULTS

The data was organised, tabulated, and analysed according to the objectives. Data analysis begins with a description that applies to the study in which the data are numerical, with some concepts. Descriptive statistics allows the researcher to organise the data and examine the quantum of information, and inferential statistics is used to determine the relationship.

Table 2: Frequency and Percentage Distribution of Demographic Characteristics among Patients with Drug Abuse (n=60)

Sl. No.	Demographic Variables	Frequency (N)	Percentage (%)
1	Age (in years)		
	< 25 years	14	23.3
	26-30	9	15
	31-35	11	18.3
	>35 years	26	43.4
2	Religion		
	Hindu	45	75
	Christian	11	18.3
	Muslim	4	6.7
3	Educational Status		
	Illiterate	17	28.3
	Primary	17	28.3
	Secondary school	21	35
	Higher secondary school	5	8.4
	Graduate	0	0
4	Occupational Status		
	Coolie	14	23.3
	Govt employee	0	0
	Private employee	36	60
	Business	10	16.7
5	Income		
	Less than rs.10000	17	28.3
	Rs.10000-15000	14	23.3
	Rs.15000-20000	25	41.7
	More than Rs.20000	4	6.7
6	Residence		
	Rural area	27	45
	Urban area	33	55
7	Type of Family		
	Joint family	25	41.7
	Nuclear family	35	58.3
8	Duration of Substance Use (in years)		
	<2 years	17	28.3
	3-6 years	13	21.7
	7-10 years	21	35
	>10 years	9	15
9	Previous History of Treatment for Substance Abuse		
	Yes	54	90
	No	6	10
10	Preferred Leisure Activities		
	Reading newspaper	4	6.7
	Listening to music	14	23.3
	Gardening	14	23.3
	Singing	6	10

Table 2 displays the % distribution and frequency of demographic characteristics among substance abusers. Among the 60 drug addiction patients interviewed, the majority (26/43.4%) were over the age of 35 years. The Hindu religion accounts for the majority of substance misuse sufferers (45%). Most of them (35%) completed secondary school at the education level 21. The majority of substance abuse patients were assigned to private employees 36 (60%). The majority of substance misuse patients' families have a monthly income of 25 (41.7%) rupees 15000 - 20000. The majority of substance addiction patients lived in metropolitan areas (33/55%). The majority of substance addiction patients belonged to nuclear families 35 (58.3%). The majority of drug abuse patients aged 7 to 10 years ingested substance abuse 21 (35%). The majority of them have already had treatment 54 (90%). The majority of substance addiction patients spent their free time watching movies and television 22 (36.7%).

Table 3: The Frequency and Percentage Distribution of Pre-Test and Post-Test Coping Strategies Among Drug Addiction Patients (n = 60)

Level of Coping Strategies among Substance Abuse Patients	Pre-test		Post-test	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
Inadequate Coping	50	83.3	5	8.3
Moderately Adequate Coping	10	16.7	40	66.7
Adequate Coping	0	0	15	25

Table 3 shows the frequency and percentage distribution of pre-test and post-test coping techniques among substance abuse patients. In the pre-test, the majority of substance abuse patients reported inadequate coping (50.83%), with only ten having somewhat adequate coping (16.7%). In post-test substance addiction patients, the majority had relatively adequate coping 40 (66.7%), 15 (25%) had sufficient coping, and a small number had inadequate coping 5 (8.3%).

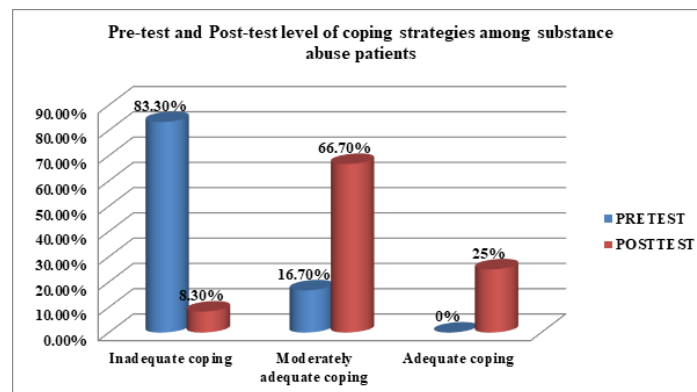


Figure 1: The Frequency and Percentage Distribution of Pre-Test and Post-Test Coping Strategies among Substance Abuse Patients

Figure 1 shows the frequency and percentage distribution of pre-test and post-test coping strategies among substance abuse patients.

Table 4: The Distribution of Pre-Test and Post-Test Levels In Terms of Frequency and Percentage of Life Satisfaction among Substance Abuse Patients (n = 60)

Level of Life Satisfaction among Substance Abuse Patients	Pre-test		Post-test	
	Frequency (N)	Percentage (%)	Frequency (N)	Percentage (%)
Extremely Dissatisfied	15	25	0	0
Dissatisfied	35	58.3	0	0
Slightly Dissatisfied	10	16.7	0	0
Neutral	0	0	6	10
Slightly Satisfied	0	0	25	41.7
Satisfied	0	0	29	48.3
Extremely Satisfied	0	0	0	0

Table 4 shows the frequency and percentage distribution of life satisfaction levels previously and after testing among substance addiction patients. In pre-test substance addiction patients, the majority (58.3%) were unsatisfied, with 15 (25%) being severely dissatisfied and 10 (16.7%) being slightly unhappy. In post-test substance addiction patients, the majority had Satisfied 29 (48.3%), 25 (41.7%) were somewhat satisfied, and a minority had Neutral 6 (10%).

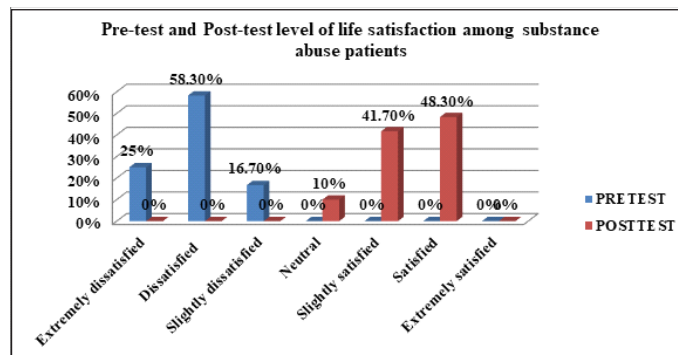


Figure 2: The Frequency and Percentage-Wise Distribution of Pre-Test and Post-Test Levels of Life Satisfaction among Substance Abuse Patients

Figure 2 shows the frequency and percentage-wise distribution of Pre-test and Post-test levels of life satisfaction among substance abuse patients.

Table 5: Comparison of the Pre-Test and Post-Test Coping Strategies and Life Satisfaction Among Substance Abuse Patients (n=60)

Effectiveness of Motivational Enhancement Therapy	Test	Mean	Standard Deviation	Mean Difference	t	df	p
Coping Strategies	Pre-test	13.13	5.222	-20.73	-25.61	59	0.001**
	Post-test	33.87	9.258				
Life Satisfaction	Pre-test	11.58	3.529	-13.50	-24.72	59	0.001**
	Post-test	25.08	3.201				

** $p < 0.001$ highly significant

Table 5 shows that the effectiveness of motivational enhancement treatment on coping strategies was found to have a mean score of 13.13 ± 5.222 in the pre-test and 33.87 ± 9.258 in the post-test. Substance addiction patients' pre-test and post-test coping strategies differ significantly, according to the obtained paired test value of $t = -20.73$. The effectiveness of Motivational Enhancement Therapy on life satisfaction was shown to have a mean score of 11.58 ± 3.529 at the pre-test and 25.08 ± 3.201 at the post-test. When comparing the life satisfaction of drug addiction patients before and after the test, there is a statistically significant difference, as indicated by the derived paired 't' test result of $t = 24.72$.

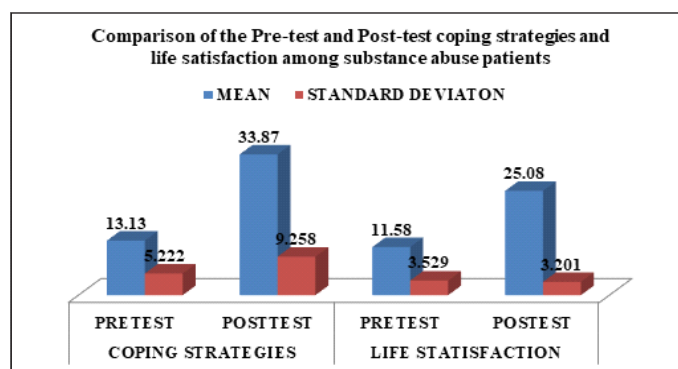


Figure 3: Mean and Standard Deviation of Pre-Test and Post-Test Coping Strategies and Life Satisfaction among Substance Abuse Patients

Figure 3 shows the Mean and standard deviation of pre-test and post-test coping strategies and life satisfaction among substance abuse patients.

Table 6: Correlation Between the Coping Approaches and Life Fulfilment among Substance Abuse Patients (n=60)

Correlation Between the Coping Approaches and Life Satisfaction	Mean	Standard Deviation	'r' Value	'p' Value
Coping Strategies	13.13	5.222	0.778	0.001**
Life Satisfaction	11.58	3.529		

**-.P<0.001highly Significant

Table 6 indicates a relationship between coping techniques and life satisfaction among substance abuse patients. The mean and standard deviation for coping techniques and life satisfaction are 13.13 ± 5.222 and 11.58 ± 3.529 , respectively. The link between coping techniques and life satisfaction is positive, as evidenced by the Pearson correlation r-value of 0.778 and p-value of 0.001, which are statistically important.

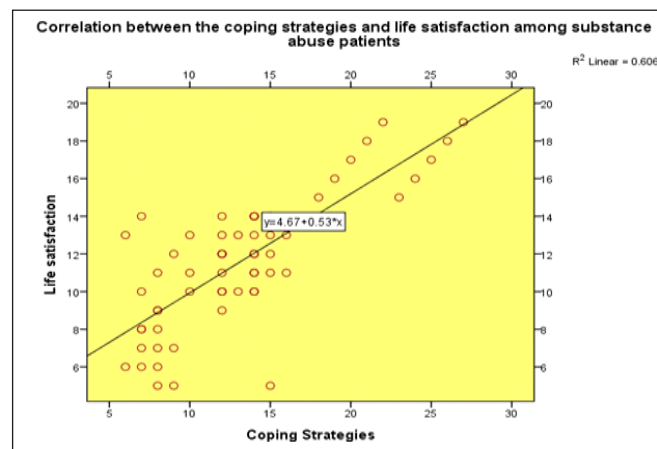


Figure 4: A Scatter Diagram Shows the Correlation Between the Coping Strategies and Life Satisfaction among Substance Abuse Patients (Positive Correlation)

Figure 4 shows the scatter diagram of the correlation between the coping strategies and life satisfaction among substance abuse patients.

Post-test levels of coping strategies among substance abuse patients were significantly associated with demographic data such as religion, age (in years), educational status, employment position, income, residence, type of family, duration of substance abuse, prior treatment, and leisure activity (chi-square value < 0.001). The demographic factors age (in years), religion, occupational status, educational status, income, residence, family type, how long are consuming substance misuse, whether have received any treatment previously, and Leisure activities had a statistically significant correlation with post-test life satisfaction levels among substance addiction patients (chi-square value $p < 0.001$). As a result, H2 was accepted, indicating that there would be a substantial relationship between post-test levels of coping mechanisms and life satisfaction with their chosen demographic variable, and the null hypothesis was excluded.

DISCUSSION

Motivational Enhancement Therapy (MET) is a client-centred and goal-oriented psychotherapeutic approach that aims to strengthen an individual's internal motivation for change by addressing ambivalence, a common psychological barrier in individuals struggling with substance use disorders. MET is based on the principles of motivational interviewing, but it is structured to be brief, directive, and focused on building intrinsic motivation. Its efficacy in improving treatment outcomes has gained considerable attention, particularly concerning how it enhances coping strategies and life satisfaction in individuals with substance abuse issues (Darharaj *et al.*, 2023).

The role of MET in addiction treatment is increasingly recognised for its ability to move individuals from a state of uncertainty toward a commitment to positive behavioural changes. In the present study, its impact on coping and life satisfaction was notably significant. Before receiving MET, a majority of patients (50.83%) displayed poor coping mechanisms, indicating a struggle to manage stress, emotions, and life challenges effectively. Only 16.7% of the participants reported moderate coping abilities. This data underlines the psychological vulnerability and emotional dysregulation that often accompany substance use disorders, making it essential for interventions to target emotional resilience (Piché *et al.*, 2024).

After the implementation of MET, a remarkable shift was observed. Post-test data revealed that 66.7% of the participants had developed relatively adequate coping strategies, while only 8.3% continued to demonstrate poor coping. This transformation illustrates the potential of MET to reframe negative thought patterns, encourage self-reflection, and guide patients in identifying healthier ways to handle distress. The improvement in coping ability may be attributed to MET's emphasis on exploring discrepancies between current behaviours and future goals, which helps patients align their actions with desired life outcomes (Zafar *et al.*, 2023).

In parallel with coping, life satisfaction also underwent notable improvement. Life satisfaction is an essential indicator of psychological well-being, often impacted by substance use. In the pre-test stage, 35.3% of patients expressed dissatisfaction with life, with 25% reporting severe dissatisfaction. Such low levels of satisfaction often reflect underlying issues such as broken relationships, poor self-esteem, economic instability, and lack of purpose. Following MET intervention, 48.3% of the participants reported being satisfied, and another 41.7% described themselves as somewhat satisfied. This marked improvement highlights MET's role in helping individuals regain a sense of control, optimism, and fulfilment - elements that are critical for sustained recovery (Easton & Crane, 2016).

Supporting the study of these findings, it explored the connection between dysfunctional beliefs and stress-coping strategies in individuals with substance use disorders. Their study reported high mean scores on both the Coping Orientation to Problems Experienced Inventory Scale (COPE) is of 171.60 ± 23.35 and the Dysfunctional Attitudes Scale (DAS) is of 161.66 ± 36.94 , indicating a tendency toward emotion-focused coping and irrational beliefs. Emotion-focused coping, which involves avoidance, denial, or emotional venting, often exacerbates psychological distress and can hinder recovery. By targeting such maladaptive patterns, MET encourages individuals to replace these strategies with more constructive approaches, such as problem-solving and seeking social support (Myers *et al.*, 2025).

In the current study, MET significantly improved both coping and life satisfaction scores. The mean coping score increased from 13.13 ± 5.222 in the pre-test to 33.87 ± 9.258 in the post-test. Similarly, the life satisfaction score rose from 11.58 ± 3.529 to 25.08 ± 3.201 . These substantial improvements not only suggest clinical effectiveness but also highlight the role of MET in restoring self-efficacy, the belief in one's ability to achieve desired outcomes. Self-efficacy is essential in the recovery journey, as individuals with higher confidence in their abilities are more likely to resist temptations, manage triggers, and maintain abstinence (Schumacher *et al.*, 2011).

A supporting study, which used a quantitative design involving 55 participants, further reinforced the efficacy of MET. The research found significant post-treatment gains in several motivational domains. The external motivation scale improved to $M = 4.37$ ($p = 0.005$), internal motivation increased to $M = 6.62$ ($p = 0.015$), and confidence-related scores rose to $M = 3.25$ ($p = 0.009$). These findings align with the current study's outcomes and suggest that increased motivation both externally driven and internally sustained plays a central role in recovery. MET's ability to nurture these motivational aspects likely contributes to the enhanced coping and life satisfaction seen post-treatment (Merino *et al.*, 2024).

A strong and statistically significant correlation was also found between coping strategies and life satisfaction in the present study. The Pearson correlation coefficient ($r = 0.778$) and the p -value (0.001) suggest a positive relationship: as individuals adopt more effective coping strategies, their overall satisfaction with life increases. This makes intuitive sense, as better coping leads to reduced stress, improved emotional regulation, healthier relationships, and more successful goal attainment all of which contribute to a greater sense of well-being (Vázquez *et al.*, 2019).

The demographic characteristics of the participants also appeared to influence the effectiveness of MET. Factors such as age, educational status, occupational background, income, religious beliefs, family structure, and place of residence were included in the study's analysis. These variables are known to affect both coping and life satisfaction. For instance, individuals with supportive family environments or higher educational backgrounds may have more resources and opportunities to engage meaningfully with therapeutic interventions. Similarly, older individuals may have different motivational drivers compared to younger participants, affecting how they respond to treatment (Brooks *et al.*, 2016).

One of the most interesting observations in this study was the association between post-test improvements in coping and life satisfaction with two specific variables: prior treatment experience and engagement in leisure activities. Patients who had previously received treatment showed better outcomes, suggesting that familiarity with therapeutic environments and concepts can enhance responsiveness to MET. Meanwhile, involvement in leisure activities whether creative, physical, or social was strongly linked to improved results ($p < 0.001$). Leisure serves as a coping outlet and can fill the void left by substance use, helping individuals build new routines, foster connections, and rediscover enjoyment in sober living (Abdel Moneam *et al.*, 2023).

Taken together, the evidence underscores the value of MET as a multidimensional intervention. It not only facilitates behavioural change but also nurtures internal transformation by empowering individuals to recognise their strengths, challenge their dysfunctional beliefs, and pursue a more meaningful life. In an addiction treatment landscape that often relies on rigid or prescriptive models, MET offers a compassionate and empowering alternative (Setiawan *et al.*, 2024).

Motivational Enhancement Therapy plays a vital role in the recovery journey of individuals with substance use disorders. This study, along with corroborating research, highlights its capacity to significantly enhance both coping mechanisms and life satisfaction. The marked improvements observed from the pre-test to post-test support the effectiveness of MET in promoting resilience, motivation, and well-being. Furthermore, the strong correlation between coping and life satisfaction reinforces the interconnected nature of psychological health and adaptive functioning. As the treatment field continues to evolve, MET stands out as a powerful and person-centred approach capable of fostering lasting change and improved quality of life.

Limitation

As the sample size is small and it is a hospital-based study, the results cannot be generalised to every field. A purposive sample is utilised for the recruitment of subjects, which indicates researcher convenience. The study is limited to only selected de-addiction centres, so generalisation is not possible. The duration of the study is limited to about 6 months.

Implication

Trained nurses can provide motivational enhancement treatment to increase coping strategies and life satisfaction for patients with substance dependence. Nurse educators should introduce student nurses to interventions like motivational enhancement therapy to increase coping strategies and life satisfaction. Given the ever-changing healthcare demands, administrators are responsible for providing nurses with educational opportunities and motivational enhancement therapy programs to increase coping strategies and life satisfaction. The nurse administrator helps nurses stay up to date on motivational enhancement treatment advancements to increase coping strategies and life satisfaction. Encourage clinical and community health nurses to apply research findings, such as motivational enhancement therapy, to improve coping strategies and life satisfaction through nursing research.

CONCLUSION

The study suggests that providing a motivational enhancement therapy program improves the coping strategies and life satisfaction of substance misuse patients. Implementing a motivational enhancement therapy program or education for substance misuse patients will assist them in meeting their needs by motivating them and building cognitive, emotional, social, and self-management abilities for any changes in their lives. Motivational enhancement therapy education will transform the patient's attitude and behaviour toward substance misuse, providing the supportive atmosphere that they require. Future research scope should explore

the long-term effects of MET on relapse prevention and sustained life satisfaction. Comparative studies with other therapies can help identify context-specific efficacy. Integration with digital tools and culturally adapted interventions can enhance reach and effectiveness. Practical applications include embedding MET into standard addiction treatment and community programs.

Recommendation

The study's recommendations for maintaining improvements in coping mechanisms and life satisfaction among patients after treatment, with an emphasis on relapse prevention and long-term behavioral changes. Expand the study's demographics to include teenagers, women, people with co-occurring mental health conditions, and patients of various ethnicities. To evaluate the most effective treatment methods, compare MET to other therapeutic approaches like Cognitive Behavioral Therapy (CBT), 12-step programs, and pharmacological medications. Examine the use of technology, like as telemedicine, smartphone apps, and AI-powered platforms, to make MET more accessible and personalised for patients in a number of settings. To provide a more comprehensive view of MET's efficacy, evaluate familial ties, social reintegration, vocational achievement, and overall quality of life.

Conflict of Interest

The researchers did not have a conflict of interest with anyone, either individuals or institutions.

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REFERENCES

- Abba Hassan, A., Ibrahim, A. M. & Nadkarni, A. (2024). A systematic review of task-sharing interventions for substance use and substance use disorder in low- and middle-income countries. *Drug and Alcohol Dependence*, 256(May 2023). <https://doi.org/10.1016/j.drugalcdep.2024.111093>
- Abdel Moneam, M. H. E. D., Mohsen, N., Azzam, L. A. B., Elsayed, Y. A. R., & Alghonaimy, A. A. (2023). The outcome of integrated motivational interviewing and cognitive-behavioral therapy in Egyptian patients with substance use disorder. *Middle East Current Psychiatry*, 30(1), 1-12. <https://doi.org/10.1186/s43045-023-00377-3>
- Becker, S. J., Curry, J. F. & Yang, C. (2011). Factors that influence trajectories of change in frequency of substance use and quality of life among adolescents receiving a brief intervention. *Journal of Substance Abuse Treatment*, 41(3), 294-304. <https://doi.org/10.1016/j.jsat.2011.04.004>
- Biswal, B., Bora, S., Anand, R., Bhatia, U., Fernandes, A., Joshi, M. & Nadkarni, A. (2024). A systematic review of interventions to enhance initiation of and adherence to treatment for alcohol use disorders. *Drug and Alcohol Dependence*, 263(July). <https://doi.org/10.1016/j.drugalcdep.2024.112429>
- Brooks, A. C., Chambers, J. E., Lauby, J., Byrne, E., Carpenedo, C. M., Benishek, L. A., Medvin, R., Metzger, D. S. & Kirby, K. C. (2016). Implementation of a brief treatment counselling toolkit in federally qualified healthcare centers: patient and clinician utilization and satisfaction. *Journal of Substance Abuse Treatment*, 60, 70-80. <https://doi.org/10.1016/j.jsat.2015.08.005>
- Britton, P. C., Patrick, H., Wenzel, A. & Williams, G. C. (2011). Integrating motivational interviewing and self-determination theory with cognitive behavioral therapy to prevent suicide. *Cognitive and Behavioral Practice*, 18(1), 16-27. <https://doi.org/10.1016/j.cbpra.2009.06.004>
- Caldarelli, G., Pizzini, B., Cosenza, M. & Troncone, A. (2024). The prevalence of mental health conditions and effectiveness of psychological interventions among university students in Italy: A systematic literature review. *Psychiatry Research*, 342(September). <https://doi.org/10.1016/j.psychres.2024.116208>

- Chrétien, S., Giroux, I., Smith, I., Jacques, C., Ferland, F., Sévigny, S., & Bouchard, S. (2025). Emotional regulation in substance-related and addictive disorders treatment: A systematic review. *Journal of Gambling Studies*. Advance online publication. <https://doi.org/10.1007/s10899-024-10366-8>
- Darharaj, M., Roshanpajouh, M., Amini, M., Shrier, L. A. & Habibi Asgarabad, M. (2023). The effectiveness of mobile-based ecological momentary motivational enhancement therapy in reducing craving and severity of cannabis use disorder: Study protocol for a randomized controlled trial. *Internet Interventions*, 34(May). <https://doi.org/10.1016/j.invent.2023.100669>
- Dominguez-Rodriguez, A., Herdoiza-Arroyo, P. E., González-Ramírez, L. P., Martínez-Arriaga, R. J., Villarreal-Zegarra, D., Santos da Silva, A. C., ... & Castellanos-Vargas, R. O. (2024). Internet-based self-administered intervention to reduce anxiety and depression symptomatology and improve well-being in 7 countries: protocol of a randomized control trial. *Frontiers in Psychology*, 15(May). <https://doi.org/10.3389/fpsyg.2024.1279847>
- Easton, C. J. & Crane, C. A. (2016). Interventions to reduce intimate partner violence perpetration among people with substance use disorders. *International Review of Psychiatry*, 28(5), 533-543. <https://doi.org/10.1080/09540261.2016.1227307>
- Evon, D. M., Golin, C. E., Ruffin, R. & Fried, M. W. (2017). Development and pilot-testing of a cognitive behavioral coping skills group intervention for patients with chronic hepatitis C. *Contemporary Clinical Trials Communications*, 6, 85-96. <https://doi.org/10.1016/j.conctc.2017.03.008>
- Expósito-Álvarez, C., Roldán-Pardo, M., Gilchrist, G. & Lila, M. (2024). Integrated motivational strategies for intimate partner violence perpetrators with substance use: A randomized controlled trial. *Psychosocial Intervention*, 33(3), 187-200. <https://doi.org/10.5093/pi2024a13>
- Hunt, A., Merola, G. P., Carpenter, T. & Jaeggi, A. V. (2024). Evolutionary perspectives on substance and behavioural addictions: Distinct and shared pathways to understanding, prediction and prevention. *Neuroscience and Biobehavioral Reviews*, 159(February). <https://doi.org/10.1016/j.neubiorev.2024.105603>
- Kelly, T. M., Daley, D. C. & Douaihy, A. B. (2012). Treatment of substance abusing patients with comorbid psychiatric disorders. *Addictive Behaviors*, 37(1), 11-24. <https://doi.org/10.1016/j.addbeh.2011.09.010>
- Klamert, L., Craike, M., Bedi, G., Kidd, S., Pascoe, M. C. & Parker, A. G. (2023). Behaviour change techniques in physical activity-focused interventions for young people at risk of problematic substance use: A systematic review and meta-analysis. *Early Intervention in Psychiatry*, 17(12), 1139-1153. <https://doi.org/10.1111/eip.13467>
- Kidorf, M., King, V. L., Neufeld, K., Peirce, J., Kolodner, K. & Brooner, R. K. (2009). Improving substance abuse treatment enrollment in community syringe exchangers. *Addiction*, 104(5), 786-795. <https://doi.org/10.1111/j.1360-0443.2009.02560.x>
- López, G., Orchowski, L. M., Reddy, M. K., Nargiso, J. & Johnson, J. E. (2021). A review of research-supported group treatments for drug use disorders. *Substance Abuse: Treatment, Prevention and Policy*, 16(1), 1-21. <https://doi.org/10.1186/s13011-021-00371-0>
- Lovejoy, M., Rosenblum, A., Magura, S., Foote, J., Handelsman, L. & Stimmel, B. (1995). Patients' perspective on the process of change in substance abuse treatment. *Journal of Substance Abuse Treatment*, 12(4), 269-282. [https://doi.org/10.1016/0740-5472\(95\)00027-3](https://doi.org/10.1016/0740-5472(95)00027-3)
- Marín-Navarrete, R., Horigian, V. E., Medina-Mora, M. E., Verdeja, R. E., Alonso, E., Feaster, D. J., Fernández-Mondragón, J., Berlanga, C., Sánchez-Huesca, R., Lima-Rodríguez, C. & De la Fuente-Martín, A. (2017). Motivational enhancement intervention in outpatient addiction treatment centres: a multicentre randomized trial [Intervención de incremento motivacional en centros ambulatorios para las adicciones: un ensayo aleatorizado multi-céntrico]. *International Journal of Clinical and Health Psychology*, 17(1), 9-19. <https://doi.org/10.1016/j.ijchp.2016.05.001>

- Marquez-Arrico, J. E., Río-Martínez, L., Navarro, J. F., Prat, G., Forero, D. A. & Adan, A. (2019). Coping strategies in male patients under treatment for substance use disorders and/or severe mental illness: Influence in clinical course at one-year follow-up. *Journal of Clinical Medicine*, 8(11). <https://doi.org/10.3390/jcm8111972>
- McHugh, R. K., Hearon, B. A. & Otto, M. W. (2010). Cognitive behavioral therapy for substance use disorders. *Psychiatric Clinics of North America*, 33(3), 511- 525. <https://doi.org/10.1016/j.psc.2010.04.012>
- McIndoo, C. C., File, A. A., Preddy, T., Clark, C. G. & Hopko, D. R. (2016). Mindfulness-based therapy and behavioral activation: A randomized controlled trial with depressed college students. *Behaviour Research and Therapy*, 77, 118- 128. <https://doi.org/10.1016/j.brat.2015.12.012>
- McKee, S. A., Carroll, K. M., Sinha, R., Robinson, J. E., Nich, C., Cavallo, D. & O'Malley, S. (2007). Enhancing brief cognitive-behavioral therapy with motivational enhancement techniques in cocaine users. *Drug and Alcohol Dependence*, 91(1), 97 -101. <https://doi.org/10.1016/j.drugalcdep.2007.05.006>
- Merino, M., Tornero-Aguilera, J. F., Rubio-Zarapuz, A., Villanueva-Tobaldo, C. V., Martín-Rodríguez, A. & Clemente-Suárez, V. J. (2024). Body perceptions and psychological well-being: a review of the impact of social media and physical measurements on self-esteem and mental health with a focus on body image satisfaction and its relationship with cultural and gender factors. *Healthcare (Switzerland)*, 12(14). <https://doi.org/10.3390/healthcare12141396>
- Milosevic, I., Chudzik, S. M., Boyd, S. & McCabe, R. E. (2017). Evaluation of an integrated group cognitive-behavioral treatment for comorbid mood, anxiety, and substance use disorders: A pilot study. *Journal of Anxiety Disorders*, 46, 85 -100. <https://doi.org/10.1016/j.janxdis.2016.08.002>
- Morgan, T. B. & Crane, D. R. (2010). Cost-effectiveness of family-based substance abuse treatment. *Journal of Marital and Family Therapy*, 36(4), 486- 498. <https://doi.org/10.1111/j.1752-0606.2010.00195.x>
- Monarque, M., Sabetti, J. & Ferrari, M. (2023). Digital interventions for substance use disorders in young people: Rapid review. *Substance Abuse: Treatment, Prevention and Policy*, 18(1), 1- 29. <https://doi.org/10.1186/s13011-023-00518-1>
- Murphy, C. M., Ting, L. A., Jordan, L. C., Musser, P. H., Winters, J. J., Poole, G. M. & Pitts, S. C. (2018). A randomized clinical trial of motivational enhancement therapy for alcohol problems in partner violent men. *Journal of Substance Abuse Treatment*, 89(March), 11- 19. <https://doi.org/10.1016/j.jsat.2018.03.004>
- Myers, B., Koch, J. R., Johnson, K. & Harker, N. (2022). Factors associated with patient-reported experiences and outcomes of substance use disorder treatment in Cape Town, South Africa. *Addiction Science and Clinical Practice*, 17(1), 1-13. <https://doi.org/10.1186/s13722-022-00289-3>
- Myers, B., Da Silva, N., McLaughlin, S., Purnomo, J., Shumskaya, D., Koume, K., Suhartono, S., Campello, G. & Busse, A. (2025). The relationship between patient-centred care for substance use disorders and patient outcomes: A scoping review. *International Journal of Drug Policy*, 139(March). <https://doi.org/10.1016/j.drugpo.2025.104770>
- Padmanabhanunni, A., Pretorius, T. B. & Isaacs, S. A. (2023). Satisfied with life? the protective function of life satisfaction in the relationship between perceived stress and negative mental health outcomes. *International Journal of Environmental Research and Public Health*, 20(18). <https://doi.org/10.3390/ijerph20186777>
- Piché, F., Girard, S., Plourde, C. & Romain, A. J. (2024). Physical activity during a treatment for substance use disorder: A qualitative study. *Mental Health and Physical Activity*, 26(August 2023). <https://doi.org/10.1016/j.mhpa.2024.100590>
- Ramadas, E., de Lima, M. P., Caetano, T., Lopes, J. & Dixe, M. dos A. C. R. (2023). Effectiveness of smartphone interventions as continuing care for substance use disorders: A systematic review. *Acta Psychologica*, 235(February). <https://doi.org/10.1016/j.actpsy.2023.103898>

- Rowe, C. L. & Liddle, H. A. (2003). Substance abuse. *Journal of Marital and Family Therapy*, 29(1), 97-120. <https://doi.org/10.1111/j.1752-0606.2003.tb00386.x>
- Schwenker, R., Dietrich, C. E., Hirpa, S., Nothacker, M., Smedslund, G., Frese, T. & Unverzagt, S. (2023). Motivational interviewing for substance uses reduction. *Cochrane Database of Systematic Reviews*, 2023(12). <https://doi.org/10.1002/14651858.CD008063.pub3>
- Schumacher, J. A., Coffey, S. F., Stasiewicz, P. R., Murphy, C. M., Leonard, K. E. & Fals-Stewart, W. (2011). Development of a brief motivational enhancement intervention for intimate partner violence in alcohol treatment settings. *Journal of Aggression, Maltreatment and Trauma*, 20(2), 103-127. <https://doi.org/10.1080/10926771.2011.546749>
- Smedslund, G., Berg, R. C., Hammerstrøm, K. T., Steiro, A., Leiknes, K. A., Dahl, H. M. & Karlsen, K. (2011). Motivational interviewing for substance abuse. *Cochrane Database of Systematic Reviews*, 2011(11). <https://doi.org/10.1002/14651858.CD008063.pub2>
- Srivastava, P., Singh, K. & Chahal, S. (2019). Application of motivational enhancement therapy in group settings among patients with substance abuse. *Indian Journal of Psychiatric Social Work*, 10(1). <https://doi.org/10.29120/ijpsw.2019.v10.i1.105>
- Setiawan, A., Sahar, J., Santoso, B., Mansyur, M. & Syamsir, S. B. (2024). Coping mechanisms utilized by individuals with drug addiction in overcoming challenges during the recovery process: A qualitative meta-synthesis. *Journal of Preventive Medicine and Public Health*, 57(3), 197- 211. <https://doi.org/10.3961/jpmph.24.042>
- Sellman, J. D., Sullivan, P. F., Dore, G. M., Adamson, S. J. & MacEwan, I. (2001). A randomized controlled trial of motivational enhancement therapy (MET) for mild to moderate alcohol dependence. *Journal of Studies on Alcohol*, 62(3), 389-396. <https://doi.org/10.15288/jsa.2001.62.389>
- Stone, B. M. (2023). Integrating positive psychology into substance use treatments. *Encyclopedia*, 3(3), 1133-1144. <https://doi.org/10.3390/encyclopedia3030082>
- Steinglass, P. (2009). Systemic-motivational therapy for substance abuse disorders: An integrative model. *Journal of Family Therapy*, 31(2), 155-174. <https://doi.org/10.1111/j.1467-6427.2009.00460.x>
- Tevyaw, T. O. L. & Monti, P. M. (2004). Motivational enhancement and other brief interventions for adolescent substance abuse: Foundations, applications and evaluations. *Addiction*, 99(SUPPL. 2), 63-75. <https://doi.org/10.1111/j.1360-0443.2004.00855.x>
- Theodorakis, Y., Hassandra, M. & Panagiotounis, F. (2024). Enhancing substance use disorder recovery through integrated physical activity and behavioral interventions: A comprehensive approach to treatment and prevention. *Brain Sciences*, 14(6). <https://doi.org/10.3390/brainsci14060534>
- Vázquez, F. L., Torres, Á. J., Otero, P., Blanco, V., López, L., García-Casal, A. & Arrojo, M. (2019). Cognitive-behavioral intervention via interactive multimedia online video game for active aging: Study protocol for a randomized controlled trial. *Trials*, 20(1), 1- 15. <https://doi.org/10.1186/s13063-019-3859-5>
- Zafar, R., Siegel, M., Harding, R., Barba, T., Agnorelli, C., Suseelan, S., Roseman, L., Wall, M., Nutt, D. J. & Erritzoe, D. (2023). Psychedelic therapy in the treatment of addiction: The past, present and future. *Frontiers in Psychiatry*, 14(June). <https://doi.org/10.3389/fpsy.2023.1183740>