"A Study to assess the Efficacy of Mirror Tracing Persistent Task (MTPT) On Distress Tolerance among Clients Admitted in Selected De-Addiction Centers of Belagavi."

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ABSTRACT:

Background of the study:

Peoples utilize substance abuse not for positive state of mind but instead to keep apart from negative inner state. As per World Health Organization seven lakh fifty thousand mortality rates are seen each year worldwide due to addiction to substances. At some phase in their lives everybody contacts with uttermost affecting states and variances with some people being of intense feelings in reaction to stress occurs consistently. Distress tolerance is an important condition where an individual suffers with stress issue cannot be practically ignored or the client has no truthful means of getting away from their harmful emotions.

Objectives

1.To assess the distress tolerance among clients admitted in De-addiction center.

2.To evaluate the effectiveness of mirror tracing persistence task in enhancing distress tolerance.

3.To find the association between pre-test levels of distress tolerance among clients with selected socio demographic variables.

Introduction:

"Mental health is a condition wholesomeness, which an individual acknowledges his or her own capabilities and able to cope up with everyday pressures, work adequately and he or she is able to assemble a contribution to community."[1] They also highlight that protecting and repairing mental stability on an individual level, as well as in community and society bases.[1] Anguish of mind explains when you are submerged with irritability and unpleasant feelings or emotions. These emotions and feelings can get in the way of your daily living and affect how you react to the people in surrounding.[2] Distress tolerance is an individual capacity to control real or perceived emotional distress. Also involves being allowed to make it constant emotional occurrence without making it bad. [2] There are several techniques in to improve distress tolerance Distraction, Self soothing, Dialectical Behavior Therapy and Mirror Tracing Persistent Task.[3]

The MTPT has been used as a measure of distress tolerance, or the ability to experience of noxious thinking. In GAD there is deficient ability to tolerate aversive internal states may relate to the inability to adaptively regulate emotion. [3] Addiction is a biologic and emotional relay on alcohol or other misuse of drug that acts on the central nervous system in such a way that withdrawal symptoms are experienced when we stop using substance.[3]

Maladaptive pattern of use of the substance causes distress and clinically significant impairment in every

step of the life cycle. Following are often observed in a dependent substance user.[4] There is narrowing of the personal 'repertoire' of patterns of substance use (e.g., a propensity to drink alcohol in the same way on during week, Saturday and Sunday, in any case of social/family/ job constraints). The utilization becomes compulsive, with extended pre-occupation and neglect of alternative activities. Individual feels a loss of control over limiting the intake of substance. Drug-seeking behavior is one of the main features of the dependence. Emergence of negative emotional state (e.g. state of unease, irritable) when approach to the substance impossible.[4]

From last 10 years there is increased rate of suicide because of the substance use and alcohol dependency. In 2010, 3,343 suicides cases were recorded. In 2019 the total number of suicide has risen to 7,860.[5] Some people say that addiction is not bad habit or any type of guilty pleasure it's a medical disorder where they need to consult the medical professionals to recover. According to people assumption that adductors have choice for a addiction in real it's a chronic disease that distinguished that uncontrollable thought that need to have the drugs instead of severe side effects.[5]

Chemical abuse it not only influence the individual who is abuser also affects the families. The member of the family need to listen the societal ramification worries and it also causes the poverty. This acts on the household which results to helpless and depression. In some cases victim is a bread earner of the family and money for the daily needs is spared on the drugs which results the difficult to live for the family members.[5]

Need for the study

Distress tolerance is measured as latency in seconds to mirror-tracing persistence task termination. The mirror-tracing persistence task has been shown to be a valid method of inducing stress in adults, children and adolescents.[6] The survey estimated that in India, whose population is over a billion, 62.5 million people use alcohol, 8.75 million use cannabis, two million use opioids and 0.6 million use sedatives or hypnotics.[7] In Karnataka 64.3% people use alcohol, 1.3% people use Heroin, 0.4% people use Cannabis.[7] Consumption of alcohol is the third leading psychiatric problem in the world today. Alcohol dependence is a common

psychiatric disorder in the general population, has a significant impact on public health. In current scenario abusing of the alcohol is become a highest in the individual and public.[8]

A significant proportion of the disease burden attribute to harmful drinking arises from unintentional injuries, including those due to road traffic accidents, violence, and suicides. Dangerous accident cause due to use of the alcohol in teenager. Consumption of alcohol is problem that jeopardizes in worldwide in both individual and social development. It also leads to hurt the somatic and mental well-being of the drinker.[9] From initiation to till end of the MTPT, Distress Tolerance is measured. In youngsters, pediatrics and elder task has been built to be sound technique of reducing tension in adults, children and adolescents.[10]

An experimental study conducted on mirror tracing task was used as task for auxiliary therapy for misuse of substance for patients, which shows effectiveness in improvement of the client's distress tolerance.[11] Chemical addiction endeavor from abstinence should merit from continue in cognitive and behavioral coping methods in order to reach and maintain abstention. Task persistence, which explains the conduct of persisting in a tough or hard task, is likely to be prescribed in the face of upset the signal or other removal manifestation.[5]

Prevention of the Chemical abuse is important now days because it made mental health issues in person and public. Study analysis in this area started with examining the characteristics of the addicts, possibility risk of the addiction, currently existing preventive measures, closely monitoring of the import and export of the drug, in national and worldwide addiction is spreading faster. As per UNODC, World drug report 2005 shows age group between 15 to 64 among 200 million population of the world are used in 12 months before publication of the report. In 15 years number of addictors is gradually increased. Correspondingly according to study 2003-2004 reports that addictors are increased. Union Nations Office on Drugs and Crime 2010 it can be noticed in 2008. Ethnic group age period between 15 to 64 who received abused substance used previous year was reported high. This show roughly 3.52%- 5.68% of global population. Due to increase population the number of drug users and its related illness are increasing according to UNODC 2013.[12]

Thus this study will help psychiatric nurses to

recognize, different defense method followed by alcoholics and will encourage them to harden the healthy adaptive coping strategies and correct those negative defense mechanisms and help to perceive the worrying situations as manageable and challenging by strengthen the distress tolerance.[5]

HYPOTHESIS

H0: There will be significance association between the pre-test level of distress tolerance among clients with selected socio demographic variables.

H1: There will be reduced stress level by administering Mirror Therapy Persisting Task.

RESEARCH METHODOLOGY
RESEARCH APPROACH:

Quantitative research approach was most relevant for the investigations. Goalof the research is to find out the level of distress tolerance among substance abusers.

RESEARCH DESIGN

To reach the objective of this study research design utilized for the study was "True

Experimental One Group pre-test post-test control group design".

SETTING OF THE RESEARCH

This study was conducted in Hope Recovery Center Piranwadi, Belagavi

SAMPLE SIZE

There were 31 respondents in respective groups i.e., one experimental group and control group. Hence overall sample size selected was 62 [31 x 2] for the study based on the simple random sampling technique by Lottery Method.

CRITERIA FOR SELECTION OF SAMPLES

Inclusion criteria for sampling

- Those who are admitted in de-addiction center.
- Those who are present during procedure.
- Those who are willing to take part in the study.

Exclusion criteria for sampling

- Those who are not willing to participate in the study.

- Abusers those who have sensory and motor disabilities.

TOOL FOR DATA COLLECTION
Standardized Distress Tolerance Scale (Simons and Gaher 2005)

DEVELOPMENT AND DESCRIPTION OF THE TOOL
Section A: This division deals with the demographic variables which consist of age of the participants, Religion, Education, Marital Status, Number of Children, Type of family, Occupation, Income per month, Place of Domicile, Type of substance abuse, Duration of substance abuse.

Section B: This part contains Standardized tool on Distress Tolerance

DATA COLLECTION AND PROCEDURE

Approval was taken from the concerned authority of Hope Recovery Center for investigation. The main study was conducted at De addiction center. Informed consent and Socio demographic data were collected.

Pretest:
The researcher administered the pre-test to examine the level Distress Tolerance in 62 participants by using Distress Tolerance Scale.

Intervention:
The Mirror Therapy Persistence Task was provided for Experimental group in 2 sessions for 5 days. The time period was 15 to 20 minutes/section.

Control Group:
For control group only the pencil and paper was given without mirror.

Post -test:
Post-test was carried out on 5th day after providing the MTPT to check the its effect in terms of increase the level of distress tolerance by using the same standardized tool which was used in pre-test.

ANALYSIS OF DATA

- Data was organized based on the objectives.
- Master sheet was prepared.

- Data was analyzed by using Mean, Standard Deviation for Quantitative variables, frequency and proportion for Categorical variables .Non – normally distributed quantitative variables were summarized by median.
- The change of the quantitative parameters , before and after the intervention was assessed by Paired t-test
- Data was represented using appropriate graphs like bar diagrams, etc.

RESULT

This part deals with the enquiry and clarification of the collected data on Efficacy of Mirror Tracing Persistent Task on Distress Tolerance among substance abusers. The goal of this analysis is to reduce the data to a manageable and interpretable form so that the research problem can be studied and tested.

The data was collected through standardized instrument Distress Tolerance Scale. Total 62 participants were collected using a Probability simple random technique by Lottery method. Then data was evaluated by using descriptive and inferential statistics.

PRSENTATION OF THE DATA

Section 1: Socio demographic variables of intervention group and control group

Section 2: Comparison of severity of distress tolerance in both experimental and
control group.

Section 3: In both Experimental and control group variables are associated accordingto socio demographic profiles.

Section I

Socio demographic Profiles of Experimental and Control Group   n=62

The data collected and tabulated shows that maximum number of the samples 27(43.54%) are from age group 31-40 years and Minimum from 6(9.67%). Majority number of the samples 48(77.4%) were belongs to Hindu and Minority 3(4.83%) werebelongs to Muslim. Maximum number of subjects 22(35.4%) studied Primary whereas minimum 4(6.45%) had no formal education. Majority participants 34(54.8%) were married and minority 1(1.61%) were widow. Maximum 28(45.1%) Samples don't have children. 3(4.83%) had

3 children and above. Majority samples 39(62.9%) belongs to Joint family whereas 23(37%) belongs to Nuclear family. Maximum number of clients 20(32.2%) were private and daily wages where 3(4.83%) Government job holders. Majority of the subjects 28(45.1%) monthly income were 20,000 and above &Samples 8(12.9) monthly income were 10,001-15,000. Majority of participants 55(88.7%) were using alcohol and 1(1.61%) were using smoking, tobacco chewing. Maximum participants 28(45.1%) were taking substance since 5 or less than 5 years and 2(3.22%) were taking since 16-20years and above.
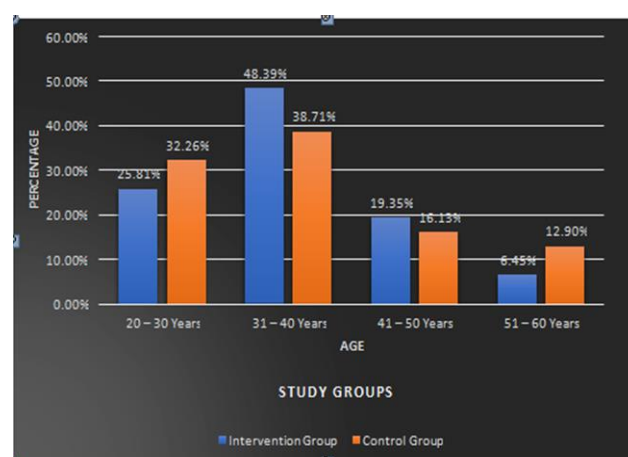

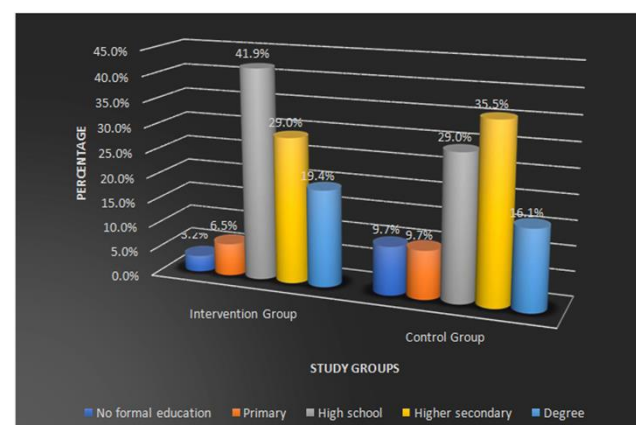**Figure: Cluster bar chart of comparison of age between study groups (N=62)**

Figure: Cluster bar chart of comparison of education between study groups (N=62)
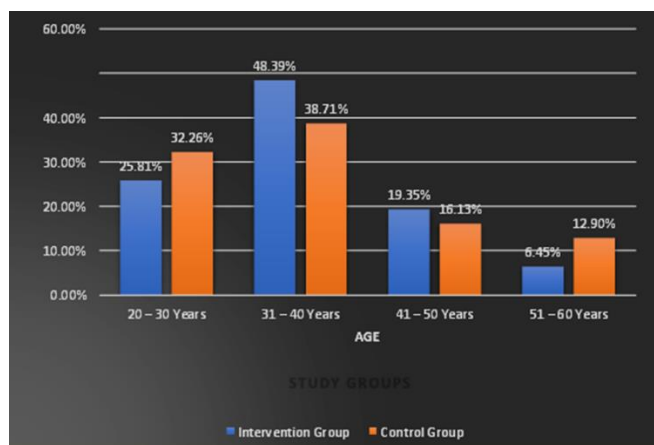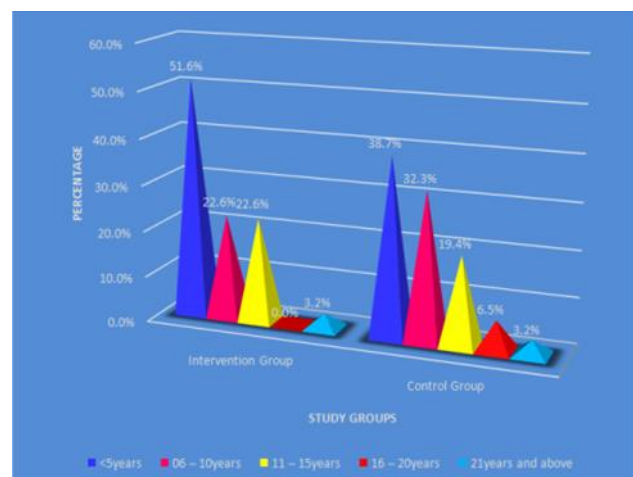
Figure: Cluster bar chart of comparison of duration of substance abusebetween study groups (N=62)

Section 2

Comparison of change in score within each intervention groups and withinControl group (N=62)

Score			
Parameter	**Pre test (Mean±SD)**	**Post test (Mean±SD)**	**Paired t-test (P Value)**
Intervention Group (N=31)	46.96 ± 4.55	55.45 ± 3.74	<0.001
Control Group (N=31)	45.51 ± 4.38	43.80 ± 4.23	0.001

Among the study population, in intervention group the mean score at pre-test was 46.96 ± 4.55, it was 55.45 ± 3.74 at post-test. The mean difference of score between pre and post- test was statistically significant. (p value <0.001)

Among the study population, in control group the mean score at pre-test was 45.51 ± 4.38, it was 43.80 ± 4.23 at post-test. The mean difference of score betweenpre and post-test was statistically significant. (p value 0.001)

H_1: There will be reduced stress level by administering Mirror TherapyPersisting Task.

Hence H_1 is accepted at <0.001 level.

Section 3

Association between Socio demographic Variables Of Control And Experimental Group

A. Association Between Socio Demographic Profiles Of Pre-Test InterventionGroup

- The above table describes Intervention group Chi square value of age and distress tolerance level of substance abusers was 8.22 and p value was 16.13 Hence there is no significance found in the age group.
- Majority mean of the religion group 25(80.6%) and chi square value was 5.92 and p value was 22.46 there is no significance.
- Majority mean of the Education in experimental group 13(41.9%) and chi square value was 2.792 and p value was 16.13 it shows no significance.
- The majority mean of the marital status of the intervention group 17(54.8%).Chi square value was 10.56 of marital status and distress tolerance level and p value was 22.46 and it shows there is no significance.

- Number of children majority mean of the experimental group 16(51.6%) . p value was 22.46 it shows that no significant.

- The maximum mean of the type of family 18(58%) and p value was 18.47 hence it reveals that no significant.

- The highest mean of the Occupation in the experimental group 11(35.4%) and p value was 22.46 it says that no significance.

- Income per month majority mean was 14(45.1%) and chi square value was11.74 and p value was 22.46 hence it said that no significance.

- Most of the patient belongs to Urban 16(51.6%). X2 value was 1.87 and p value was 18.47 hence no significance.

- Majority of the patient uses Alcohol 29 (93.5%) and chi square value was 2.16 and p value was 22.46 hence no significant.

- Most of the patient usage of the substance abuse is less than 5 years 15 (48.3%) & chi square was 5.61, p value was 16.13 hence no significant.

B. Association Between Socio Demographic Profiles Of Pre-Test Control Group

- Maximum age group belongs to31-40 years (38.7%) and chi square was 5.98 and p value was 16.13 hence it shows no significant.

- Most of the samples belongs to Hindu 23 (74.1%) and chi square was2.09 and p value was 2.46 and it shows no significance.

- Majority participants studied 12th standard 11(35.4%) and chi square was 8.3 and p value was 16.13 hence it shows no significance.

- 17(54.8%) were unmarried and chi square was1.86 and p value was 22.46 hence it shows no significance.

- 1(38.7%) clients doesn't have children and chi square was 28.17 and p value was 24.46 hence it shows significance.

- Majority of study samples belongs to joint family 21 (67.7%) and chi square was2.34 and p value was 18.47 therefore no significance.

- 13(41.9%) chosen their profession as private job and chi square was 10.04 and p value was 22.46 hence it shows no significance.

- Maximum samples 14(45.1%) were earning per month is 20,001 and above chi square was2.32 and p value was 22.46 there is no significance.

- Majority of samples 15(48.3%) belongs to staying in Urban and chi square was6.87 and p value was 18.47 hence it shows no significance.

- Majority of the participants 27(87%) were using alcohol and chi square was 1.64 and p value was 22.46 hence t shows no significant.

- 13(41.96%) samples were using substances less than five years and chi square was 5.53 and p value was 16.13 hence it says no significance.

H0: There is no significance association between the pre- test levels of distress tolerance among clients with selected socio demographic variables. H0 is rejected.

DISCUSSION
1. Findings related to demographic variables
The majority age of the abusers 31-40 years (43.54%) and minority of the abusers are of age 51-60 years (9.67%). Chi square of the experimental group was and p value was16.13 and in control group chi square value was5.98 & p value was 16.13.

Findings of the present study are identical with a study conducted by Ramakrishna et al to assess the Effectiveness of Mirror Tracing Task on Distress Tolerance among alcoholics admitted in de-addiction ward at Government Rajaji Hospital, Madurai. Demographic variables show that age in year's maximum number of participants 14(23.3%) clients were belongs to age group 41-50 years and chi square value was 1.7532. They found that higher frequency for difficulty found in the age group between 41-50 years.[13]

2. Findings related to efficacy of the Mirror Therapy Persistent Task.
In the experimental group pre-test of participants mean was 46.96 and Standard Deviation was 4.55 and in post-tests mean was 55.45 and SD was 3.74 and pvalue was <0.001. In Placebo group Pre-test of the clients was SD 45.51 and mean was 4.38 and in post-tests SD was 43.80 and mean was 4.23 and p value 0.001. This shows efficient in reduction of Distress by giving Mirror

Tracing Persistence Task.

A similar study was investigated by Stacey B. Daughters to investigate the relationship between duration of most recent drug and alcohol abstinence attempt and psychological distress tolerance. 89 samples were taken for the study. Mirror Therapy Task for 5 consecutive days. By using Distress Tolerance scale Distress was assessed. The authors result revealed that p<0.001. Suggested that Mirror Tracing Task is potentially promising equipment for assessing persons psychological distress tolerance.[14]

CONCLUSION

It shows that Mirror Tracing Task demonstrate that effective treatment in progressing the distress tolerance level and helps the individual's to lead sound life. Interventions are cost efficient, convenient, non-invasive, non-pharmaceutical, free from adverse effects and highly practicable. It is not only useful for substance abusers but also for the normal human beings which help in defense skills to overcome day- to-day stressors of the life by enhancing distress tolerance. Nurses can plan to change physical and psychological uneasiness of substance abusers by building up the coping strategies by which level of the distress tolerance progressed in chemical abusers.

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