

Influence Of 12-Week Group Activities Training On The Mental Well-Being Of The Residents Of The Rehabilitation Centre For Drug And Alcohol Abuse In Various Age Groups

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Abstract-

It's evident that the younger generation indulges in substance abuse, with alcohol, nicotine, and drugs being the most common examples. Substance abuse has negative effects and can lead to a variety of behavioural, psychological, and cognitive issues. The purpose of this experimental study was to find out how 12-week group activities training affected on mental well-being among the residents of the rehabilitation centres for drug and alcohol abuse? And secondly to see on which age group (20-30 years or 31-40 years) group activities training is more effective. Warwick-Edinburgh Mental Well-being Scale (WEMWBS) was used to measure the Mental Well-being. For the current study, 120 participants from six rehabilitation clinics were taken into consideration. Four further groups of thirty patients each were then formed: Experimental Group I (20–30 years old), Active Group I (20–30 years old), Experimental Group II (31–40 years old), and Active Group II (31–40 years old). Participants in the experimental groups I and II, who were between the ages of twenty and thirty and thirty and forty, respectively, attended three 45-minute sessions per week for a period of twelve weeks. The other two groups, the control/active group I and II, went about their regular business. Data analysis was done using SPSS, Version 20.0, the Statistical Package for the Social Sciences. The findings indicate that group activities significantly improved Mental Wellbeing. The experimental group II (aged 30 to 40) benefited more from this training programme, as evidenced by the significant differences observed during the mid-test; in contrast, the experimental group I (aged 20 to 30) only showed a significant difference between pre- and post-training. Taking part in group activities helps improve the cognitive and psychomotor skills of those in recovery from drug and alcohol addiction. Additionally, it might offer them support when they give priority to their mental health therapy.

Keywords- Mental Wellbeing, Rehabilitation, Group Activities, Drug, Alcohol

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I. Introduction-

The 21st century has brought about more technical developments, which have also had a negative impact on medical advancements. One of the biggest public health concerns in the world is substance abuse, which includes the misuse of drugs, alcohol, and nicotine. Substance abuse causes a variety of negative issues and consequences, including symptoms related to cognition, behaviour, and psychology. It is evident that the younger generation indulges in substance abuse. Drug addiction is defined as a chronically relapsing condition marked by compulsive use of addictive substances in spite of negative effects on the user and society (Uhl, 2008; Koob, 2010). The World Health Organisation (WHO) reports that at least 15.3 million individuals suffer from substance use disorders (SUD) and that alcohol addiction claims the lives of 2.5 million people annually (WHO, 2018). Apart from the global situation, India is also facing difficulties in exerting any kind of control over the misuse of several natural and synthetic chemicals that are being abused across the nation. Survey results indicate that the nation's smaller states—Sikkim included—also play a significant role in the harm done to the country in a number of ways. In Sikkim, 45% of males and 19% of women over the age of 15 reported using alcohol; these numbers are significantly higher than the national average, which is 32% for men and 2% for women (Satish R, 2018). The people who are already caught in the cycle of drug and alcohol abuse need intensive treatment and rehabilitation, despite all legal constraints and stringent standards of the health care system in Sikkim. It has been laboriously worked on by the Sikkim State administration, the federal government, and non-governmental organisations. Numerous behavioural changes have been documented, according to research. Unusual food habits,

adjustments in alcohol intake, and substance abuse are a few typical effects. Throughout the viral outbreak, a variety of psychological effects have been noted, such as a decline in wellbeing and an increase in symptoms of anxiety and depression (Moreland, 2020; Valentin, 2020; Chodkiewicz, 2020).

The benefits of physical activity have come to light as one of the many variables influencing an individual's mental health (Li, 2020). Group activities are frequently advised as a means of addressing these issues and maintaining mental health. The connection between physical activity and mental health has been the subject of numerous studies (Linke, 2014; Dongshi, 2014; Gaihre, 2018; Rasaily, 2018; Singh, 2022, 2023). Weinstein et al. (2017) conducted a thorough analysis of 19 studies regarding the impact of exercise withdrawal on mental health. Their findings indicated that both experimentally-controlled and continuous exercise withdrawal had negative effects on mental health and consistently increased anxiety and depressive symptoms. Examining potential variables that may lessen the detrimental impacts of social distancing on mental health should aid in the development of therapeutic measures, given the importance of group activities (GA) (Kim, 2013; Marconcin, 2022). The benefits of exercise for physical health include reducing weariness, building muscle, boosting immunity, and many other things. In addition, numerous researches have demonstrated a strong correlation between physical activity and mental health (Lu, 2019; Jiang, 2018; Maung, 2022). It is commonly known that group activity (GA) plays a critical role in the prevention and treatment of mental illness, including mental disorders like depression and anxiety, as well as in the promotion of mental health outcomes like wellbeing, improved memory and brain function, better sleep, and improved mental and cognitive function (Peluso, 2005; Sharma, 2006; Marques, 2016; Teychenne, 2020). The study has two goals in mind. First, to investigate if training in 12-week group activities has a positive impact on the mental health of those residing in drug and alcohol rehabilitation centres? Secondly, to determine which age group (20–30 years old or 30–40 years old) benefits more from group activity training.

II. Methodology-

This experimental study attempted to determine the effects of group activities on the psychological (or mental wellbeing) characteristics of residents in rehabilitation facilities in the Indian state of Sikkim. The study had 120 participants from six rehabilitation centres. Four groups of thirty participants each were assigned to: Experimental Group I (20–30 years), Active Group I (20–30 years), Experimental Group II (30–40 years), and Active Group II (30–40 years). The experimental group I and II, which included participants aged between twenty to thirty and thirty to forty, respectively, attended 45-minute sessions three times a week for a duration of twelve weeks. The control/active group I and II, which included participants aged between twenty to thirty and thirty to forty, respectively, continued with their regular schedules. There was a pre-, mid-, and post-test in the repeated measure ANOVA experiment research design. Group exercises such as guided yoga sessions, cooperative games, and the thoughtful exchange of opinions and experiences comprised the training, as Table 1 illustrates. 12-weeks Group Activity Training Program.

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) is a mental health assessment tool that solely acknowledges positive facets of mental health. It shows potential as a tool for population-level mental health monitoring because it is a brief, psychometrically sound scale without ceiling effects in a population sample. Each question on the scale is evaluated by adding up the replies on a Likert scale from 1 to 5. The scale has a minimum score of 14 and a maximum score of 70. WEMWBS has been approved for use with individuals 16 years of age and older.

Picture 1. Pictorial Selection of Subjects

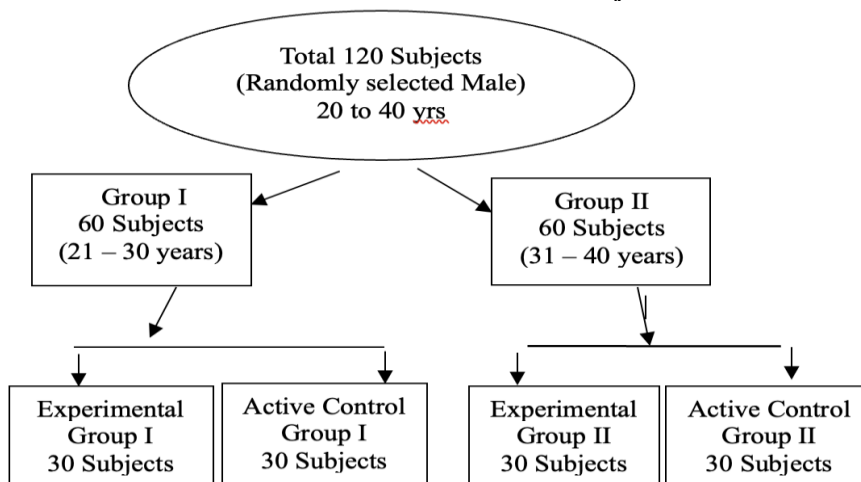


Table 1. shows 12-Weeks Group Activity Program

S. No.	Game/Activity	Exp.Group I (Days)	Exp. Group II (Days)	Warm-up	Main activity	Cool down
1	Green light- Red light/Mindfulness	Monday	Tuesday	10 min	25 min	10 min
2	Aerobics/Zumba	Wednesday	Thursday	10 min	25 min	10 min
3	Jenga / Simon says/Guided Meditation	Friday	Saturday	10 min	25 min	10 min

III. Results-

As to fulfil the study’s objectives, the researcher used IBM Statistical Package for the Social Sciences (SPSS) software (version 20.0.0) to analyse the data with Repeated Measure ANOVA Test. Pre-test , Mid Test and Post-test Group Design. The analyses were done using four groups (two experimental and two control/active), $p = 0.05$ was chosen as the statistical significance level.

Table 2. Descriptive Statistics (Mean ± Standard Deviation) of Warwick-Edinburgh Mental Well-being Scale (WEMWBS) for Mental Wellbeing of all the subjects of different groups.

	Subject	Mean	Std. Deviation	Std. Error
Exp_Group_I Pre	30	43.9667	9.21574	1.68256
Exp_Group_I During	30	46.5333	5.54439	1.01226
Exp_Group_I Post	30	49.5667	7.62339	1.39183
Exp_Group_II Pre	30	43.0667	7.68309	1.40273
Exp_Group_II During	30	44.0333	7.02941	1.28339
Exp_Group_II Post	30	48.4667	6.27932	1.14644
Contrl_Group_I Pre	30	42.5000	7.47294	1.36437
Contrl_Group_I During	30	43.7333	7.13869	1.30334
Contrl_Group_I Post	30	43.3000	6.88902	1.25776
Contrl_Group_II Pre	30	42.5667	8.64504	1.57836
Contrl_Group_II During	30	42.5667	7.95541	1.45245
Contrl_Group_II Post	30	43.8333	6.13685	1.12043

* Exp_Grp I= Experiment Group 20-30 years Contrl_Group_I = Control Group 20-30 years
 Exp_Group_II = Experiment Group 31-40 years Contrl_Group_II = Experiment Group 31-40 years

Table 3. ANOVA table between various groups of Warwick- Edinburgh Mental Well-being Scale (WEMWBS)

		Sum of Squares	df	Mean Square	F	Sig.
Exp_Grp I	Between Groups	471.489	2	235.744	4.070	.020
	Within Groups	5039.800	87	57.929		
	Total	5511.289	89			
Contrl_Group_I	Between Groups	23.489	2	11.744	.228	.796
	Within Groups	4473.667	87	51.421		
	Total	4497.156	89			
Exp_Group_I	Between Groups	497.489	2	248.744	5.046	.008
	Within Groups	4288.300	87	49.291		
	Total	4785.789	89			
Contrl_Group_II	Between Groups	32.089	2	16.044	.274	.761
	Within Groups	5094.900	87	58.562		
	Total	5126.989	89			

* Exp_Grp I= Experiment Group 20-30 years Contrl_Group_I = Control Group 20-30 years
 Exp_Group_II = Experiment Group 31-40 years Contrl_Group_II = Experiment Group 31-40 years

Table indicates since the level of significance is .020 which is <0.05 it is seen that there is a significant difference in scores between various groups of Warwick- Edinburgh Mental Well-being Scale (WEMWBS) among age group of 20 to 30 years of the Experimental Group I. Table indicates since the level of significance is .79 which is > 0.05 it is seen that there is no significant difference in scores between various groups of Warwick-Edinburgh Mental Well-being Scale (WEMWBS) among age group of 20 to 30 years of the Control Group I. Further Table indicates since the level of significance is .008 which is <0.05 it is seen that there is a significant difference in scores between various groups of Warwick- Edinburgh Mental Well-being Scale (WEMWBS) among age group of 30 to 40 years of the Experimental Group II. Table indicates since the level of significance

is .76 which is >0.05 it is seen that there is no significant difference in scores between various groups of Warwick-Edinburgh Mental Well-being Scale (WEMWBS) among age group of 30 to 40 years of the Control Group II.

Table 4. Multiple Comparisons of Dependent Variable Warwick-Edinburgh Mental Well-being Scale (WEMWBS) for Mental Wellbeing

Groups	(I) Test	(J) Test	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval
Exp_Grp I	Pre	During	-2.56667	1.96518	.396	-7.2526 2.1193
		Post	-5.60000*	1.96518	.015	-10.2859 -.9141
	During	Pre	2.56667	1.96518	.396	-2.1193 7.2526
		Post	-3.03333	1.96518	.276	-7.7193 1.6526
	Post	Pre	5.60000*	1.96518	.015	.9141 10.2859
		During	3.03333	1.96518	.276	-1.6526 7.7193
Exp_Grp II	Pre	During	-.96667	1.81275	.855	-5.2891 3.3558
		Post	-5.40000*	1.81275	.010	-9.7225 -1.0775
	During	Pre	.96667	1.81275	.855	-3.3558 5.2891
		Post	-4.43333*	1.81275	.043	-8.7558 -.1109
	Post	Pre	5.40000*	1.81275	.010	1.0775 9.7225
		During	4.43333*	1.81275	.043	.1109 8.7558

*. The mean difference is significant at the 0.05 level.

Table indicates that there is a significant difference between pre and post-training with .01 as the level of significance while it is seen that there is no significant effect of the intervention till the 6th week (during) the training on the mental wellbeing in the Experimental Group among age group of 20 to 30 years. Table indicates that there is a significant difference between pre and post-training with .01 as the level of significance and also between during and post while it is seen that there is no significant effect of the intervention till the 6th week (during) the training on the mental wellbeing in the Experimental Group among age group of 30 to 40 years.

IV. Discussion

The two goals of the current study were The first question is: Does a 12-week programme of group activities have a positive impact on the mental health of the people who live in drug and alcohol rehabilitation centres? And second, to determine which age group (20–30 years or 31–40 years) benefits more from group exercise training. After 12 weeks of group activities training, it was evident that both experimental groups I and II benefited from it. However, to determine the extent of this training program's effectiveness, the researcher focused on its second objective. The results reveal that experimental group II (aged 31 to 40 years), where significant differences were seen after 6 weeks of intervention, benefited more from it than experimental group I (aged 20 to 30 years), where there is a significant difference between after 6 weeks of intervention.

Prior to The connection between exercise and mental health has been the subject of several research. In 2018, Rasaily et al. conducted research on the state of substance use disorders in Sikkim at the time. In order to develop a variety of strategies for the establishment of services for substance use disorders in the State within the framework of the current health care system, it sought to assess the prevalence of alcohol and other drug use in Sikkim, compare it to the national situation, and summarise government efforts related to control and prevention and the current health care system. It was determined that even though the State Government is engaging in a number of creative initiatives to control, regulate, and prevent alcohol and drug misuse in society, policymakers must also incorporate measures that guarantee early detection and improved management of alcohol and drug-related harm by empowering the community through sufficient human resource and capacity-building training. In a separate study by Gaihre (2018) on the impact of yoga on psychomotor and cognitive performance in substance abusers, Singh et al. (2022; 2023) found that doing yoga significantly improved overall wellness and mental health.

An investigation was conducted by Linke (2014) on the evidence, theory, and applicability of exercise-based treatments for drug use disorders. With a few notable exceptions, such as athletes and teenagers, epidemiological research show that people who report using dangerous substances are typically less likely to reach recommended levels of physical exercise. More and more research points to the possibility that people with substance use disorders (SUDs) like working out and that regular exercise might help them recover from their SUDs as well as improve their overall fitness and general health. Dongshi (2014) conducted a meta-analysis to examine the relationship between physical exercise and substance use disorders. This meta-analysis set out to investigate the possibility that sustained physical exercise could be a successful treatment for substance use disorders (SUD). Exercise can help those who misuse alcohol and illegal drugs more than those who abuse nicotine by easing the symptoms of depression in the former group and by increasing the abstinence rate in the latter. Three categories—exercise types, activity intensity, and follow-up periods—showed similar treatment results. Conclusion: For individuals with SUD, mind-body workouts and moderate-to high-intensity aerobic

activities created in accordance with the American College of Sports Medicine Guidelines can be a successful long-term treatment.

Exercise-based treatments for SUDs are supported by a number of theoretical and practical factors, including psychological, behavioural, and neurobiological aspects, a nearly universal safety profile, and overall favourable health impacts. Behavioural tendencies of the subjects and a lack of motivation throughout training could be two possible constraints. Future studies on the personalities, motor skills, and cognitive functioning of drug and alcohol addicts can be conducted using group-based activities training programmes.

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Conflict of Interest-

No authors shows any conflict of interest.

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