

A pre-experimental study to assess the effectiveness of laughter therapy on stress among bus drivers in selected areas of Pune City

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ABSTRACT

Laughter therapy also known as humor therapy has gain recognition as a complementary approach to improving mental and physical health. This therapeutic approach leverages the benefits of laughter to enhance mood, reduce stress and promote overall wellbeing. Studies have shown that laughter therapy can have a positive impact on various health outcomes. Given the growing evidence supporting the benefits of laughter therapy, it is essential to explore its effectiveness in various populations, including those with high stress occupations, such as bus drivers. Bus drivers often experience high levels of stress which can impact their physical and mental health. The Present study title is To assess the effectiveness of laughter therapy on stress among bus drivers in selected areas of Pune city Material and method: The research design used in this study was Non- Equivalent Pre-test Post-test design in which the sample size consists of 50 bus drivers from selected bus depots of Pune city. Non-probability purposive sampling technique was used to select the sample. The Inclusion criteria includes bus drivers who can read, write English or Marathi, Male driver will be included in the study and bus driver who are illiterate are also be included in the study and the exclusion criteria include those who have already exposed to this type of therapy. Tool used for the study was Perceived stress scale. Results: Majority 40% of bus drivers were of age range between 25-40, 84% were male, 64% were from Hindu religion, among them all 50 samples were 60% married and overall, 40% were not having formal education. Before the intervention of laughter therapy in bus drivers. 15 % has the low stress, 30% of them had moderate stress level and 5% had severe stress. The overall mean was 16.6 and the standard deviation was 10.28 and the level of stress among bus drivers after the intervention of laughter therapy 97 % were in low stress level 6% were in moderate stress level. In which the overall mean 33.06 ± 2.29. And the difference between the pre and post intervention level of Stress among bus drivers was calculated by applying the paired test and the value was 2.021 and the t critical value was 24.78 with p value of 0.00001 therefore it was found to be significant and there were also found significant association in gender, religion, marital status, education. Conclusion: This indicates that laughter therapy helped in reducing the level of stress among bus drivers.

KEYWORDS: Level of Stress, Laughter therapy, Bus driver, Effectiveness.

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INTRODUCTION

Life is stressful and represents a constant, dynamic exchange of energy between people and their environment. The human organism uses innate processes to maintain and restore homeostasis under stressful conditions. The nature of stress is determined by one's resources and coping mechanisms and response to internal and external demands. Overall, stress is an internal part of everyday living and is encountered throughout the life span.

Stress is a force pressure, or strain exerted upon material, object or person which resist these forces and helps to maintain its original state" stress is ubiquitous in our society now a days stress is pandemic in our society. It has become an integral part of everyday living. (Hans Selye – 1936)

Stress is an unavoidable consequence of modern living. With the growth of industries, pressure in the urban areas, quantitative growth in population and various problems in day-to-day life are some of the reasons for increase in stress a condition of strain that has a direct bearing on emotions, thought process and physical condition of a person.

The signs of job stress vary from person to person, depending on the particular situation, how long the individual has been subjected to the stressors, and the intensity of the stress itself. Typical symptoms of job stress can be insomnia, Loss of mental concentration, Anxiety, stress, Absenteeism, Depression, Substance abuse, Extreme anger and frustration, Family conflict, Physical illnesses such as heart disease, migraine, headaches, stomach problems, and back problems. Occupational stress is associated with a variety of negative emotions such as anxiety, depression, job dissatisfaction and reduced quality of life. It is also implicated in a variety of "disease of civilization" such as cardiovascular diseases, diabetes, and gastro intestinal conditions and may alter immune functions.

Job stress is a chronic disease caused by conditions in the workplace that negatively affect an individual's performance and/or overall well-being of his body and mind. One or more of a host of physical and mental illnesses manifests job stress. In some cases, job stress can be disabling. In chronic cases a psychiatric consultation is usually required to validate the reason and degree of work-related stress.

NEED OF THE STUDY

Laughter therapy has shown promise in reducing stress levels among various populations, including bus drivers. The positive effects of laughter on stress reduction are well-documented, as it triggers the release of endorphins, the body's natural feel-good chemicals, and reduces the production of stress hormones like cortisol. Implementing laughter therapy programs for bus drivers could potentially help mitigate stress and improve their overall well-being. However, the effectiveness may vary depending on factors such as the frequency and duration of the therapy sessions, individual differences, and the support system in place. The effectiveness of laughter therapy on stress has been a subject of interest for researchers and healthcare professionals.

Laughter therapy, also known as laughter yoga or laughter meditation, involves intentional laughter exercises to promote physical and psychological well-being. Several studies have shown that laughter therapy can reduce stress levels by promoting relaxation, boosting mood, and improving social interactions. Additionally, laughter has been linked to physiological benefits such as reduced levels of stress hormones like cortisol and increased production of endorphins, which are natural mood enhancers

Research has demonstrated the potential effectiveness of laughter therapy in various populations, including bus driver chronic stress. However, more studies are needed to further understand the mechanisms underlying its effectiveness and to explore its applicability in different contexts and populations Overall, while laughter therapy may not completely eliminate stress, it can be a valuable complementary approach to stress management, offering both immediate relief and long-term benefits for overall well-being

AIM OF THE STUDY

To assess the effectiveness of laughter therapy on stress among bus drivers in selected areas of Pune city

METHODOLOGY

The type of research in this was quantitative and nonequivalent pretest posttest research design was used. The independence variable was laughter therapy and dependent was level of stress. Total 50 samples were taken 30 experimental and 30 in control group. The sample were bus drivers from selected bus depot of Pune city. On-probability purposive sampling technique was used in this research. The tool consists of two section the first section deal with demographic data and second section was standardized perceived stress scale. reliability was done on five samples. Reliability was done on five samples. The scores were entered on a data sheet, and total mean and variance was calculated using Cronbach's formula and hence it was found as reliable for the further study .The pilot study was also found feasible for the main study. In the data analysis Frequency and percentage Mean, Standard deviation and Inferential statistics pair "t" test Fisher's test was used in this study.

RESULTS SECTIONI

Table no.1

Description of the participants based in terms of frequencies and percentage.

n=50

Demographic Variables	Freq	(%)
	1.Age	
a)18-25yrs	15	30
b) 26-40yrs	20	40
c)40-55yrs	15	30
2.Gender		
a)Male	50	100
b)Female	0	0
3.Religion		
a)Hindu	32	64
b)Muslim	8	16
c) Christian	4	8
d)others	6	12
4.Maritalstatus		
a)married	30	60
b)single	15	30
c)divorce	3	6

d)widow	2	4
5.Education		
a)No formal education	20	40
b)Primary education	15	30
c)Secondary education	13	26
d)Higher secondary education	2	4

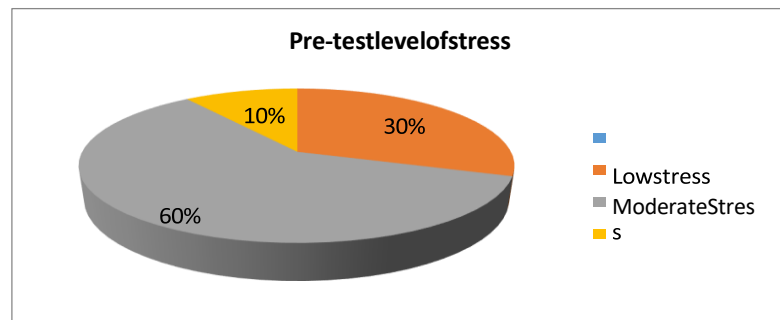
This above table no 1 depicts that there were majority 40% of bus drivers were of age range between 25-40, further proceeding 84% were male, 64% were from Hindu religion, among them all 50 samples there were 60% married and overall 40% were not having formal education

SECTION II

Table No. 2

Findings related to the level of stress among bus drivers before laughter therapy.

n=50



Figno:2 The above table 2, fig no 2 shows the findings related to the level of stress before the intervention of laughter therapy in bus drivers. 15 % has the low stress, 30% of them had moderate stress level and 5% had severe stress. The overall mean was 16.6 and the standard deviation was 10.28.

SECTION III

Table No. 3

Findings related to the level of stress among bus drivers after laughter therapy.

n=50

(Post-test) Level of stress	Frequency	%	Mean	SD
Low stress	47	97	33.06	2.29
Moderate stress	3	6		
Severe stress	0	0		

The above table 3 shows findings related to the level of stress among bus drivers after the intervention of laughter therapy 97 % were in low stress 6% were in moderate stress. The overall mean 33.06+2.29.

SECTION-IV

Table no: 4

Comparison between the pre and post-test level of stress among bus drivers

n=50

level of stress	Mean	SD	Df	T stat value	P value	t critical value	Remark
Pretest	21.54	2.42	49	2.021	0.00001	24.78	Significant
Post Test	33.06	2.29					

The above table 4 shows findings related to the difference between the pre and post intervention level of Stress among bus drivers. by applying the paired t test the value is 2.021 and the critical value is 24.78 with p value of 0.00001 therefore it was found to be significant.

SECTION V

TableNo:5

To associate the pre intervention findings with selected demographic variables

n=50

demographic variables	Low stress	moderate stress	df	chi square table value	Chi square calculated value	p value	remark
Age							
a)18-25years	5	15	2	5.99	1.69	0.43	NOT SIGNIFICANT
b) 26-40yrs	10	10					
c)40-55yrs	5	10					
Gender							
a)Male	25	25	1	3.84	50	0.001	SIGNIFICANT
b)Female	0	0					
Religion							
a)Hindu	20	12	3	7.81	9.00	0.02	SIGNIFICANT
b)Muslim	4	4					
c) Christian	1	3					
d)others	0	6					
Marital Status							
a)married	10	20	3	7.81	23.51	0.003	SIGNIFICANT
b)single	10	5					
c)divorce	3	0					
d)widow	2	0					
Education							
a)no formal education	10	10	3	7.81	11.96	0.007	SIGNIFICANT
b)primary education	5	10					
c)secondary education	10	3					
d)higher secondary education	0	2					

The above table no 5 depicts that there was significant association found in gender, religion, marital status, education as the p value is less than 0.05 level of significance hence it successfully rejected the null hypothesis by showing the association by applying the Chi - Square test.

DISCUSSION

The purpose of the present study was to assess the effectiveness of Laughter Therapy on the level of stress among bus driver from selected bus depots of Pune city.

The approach used for the present study was Quantitative approach and the design Non- Equivalent Pre-test Post-test design. Target population were all bus drivers. Accessible population were bus drivers from selected bus depot of Pune city. Non-probability Purposive sampling techniques was used. Inclusion criteria were Bus driver who can read, write Hindi or Marathi, Male driver will be included in the study, Bus driver who are illiterate will also be included in the study and Exclusion criteria was those who have already exposed to this type of therapy and who were suffering with organic and neurotic conditions the researcher had taken the sample size of 50 bus drivers. Content Validity of questionnaires as validated by a panel of 23 experts from Psychiatrist and nursing field. The tool was tested for the reliability and the pilot study was conducted on 12 patients. Paired t-test was used for the effectiveness Laughter therapy. Hence it shows that Laughter therapy was effective to reduce the level of stress.

CONCLUSION

Based on the finding the present study the following conclusions weredrawn. Laughter therapy has shown in reducing the level of stress among bus driver. Research reveals that 50 bus drivers under went Laughter Therapy have experienced an improvement in reducing the level of stress. By incorporating laughter therapy into daily routine, bus drivers can potentially experience improved mental wellbeing, reduced stress and enhanced job performance. These results have implications for promoting occupational health and well ageing in the transportation industry.

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or

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