## EFFECTIVENESS OF LAUGHTER THERAPY ON STRESS AMONG EMPLOYEES AT SELECTED INDURSTRY, CHENNAI.

Ms.Ranjitha.U Reg. No: 301732951



## A Dissertation Submitted to The Tamil Nadu Dr. M.G.R. Medical University,

Chennai - 32.

In Partial Fulfillment of the Requirement for the Award of the Degree of MASTER OF SCIENCE IN NURSING BRANCH – V MENTAL HEALTH NURSING

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INTERNAL EXAMINER

EXTERNAL EXAMINER

#### EFFECTIVENESS OF LAUGHTER THERAPY ON STRESS AMONG EMPLOYEES AT SELECTED INDURSTRY, CHENNAL

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### DECLARATION

I hereby declare that the dissertation entitled, "Effectiveness of laughter therapy on stress among employees at selected industry, Chennai", submitted to the Tamilnadu, Dr. M.G.R. Medical University, Chennai, in partial fulfillment of the requirements for the award of the degree of Master of Science in Nursing is a record of original research work done by myself.

This is the study under the supervision and guidance of **Mrs. Saranya.N, M.Sc (N), Associate Professor, Dept of Mental Health Nursing**, Texcity College of Nursing, Coimbatore and the dissertation has not found the basis for the award of any degree/diploma/associated degree/fellowship or similar title to any candidate of any university.

#### SIGNATURE OF THE PRINCIPAL

#### SIGNATURE OF THE GUIDE

#### CANDIDATE

#### Mrs. U.Ranjitha

# DEDICATION

## THIS DISSERTATION IS DEDICATED TO

ALMIGHTY GOD,

## MY BELOVED FAMILY MEMBERS, TEACHERS

## AND

## FRIENDS FOR THEIR SUPPORT AND

ENCOURAGEMENT.

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#### ABSTRACT

#### **INTRODUCTION**

The main aim of this study was to evaluate the Effectiveness of laughter therapy on stress among employees at selected industry, chennai.

#### **OBJECTIVES**

- > To assess the level of stress among employees.
- To evaluate the effectiveness of laughter therapy in terms of stress among employees.
- To determine the association between the pre test level of stress among employees with selected demographic variables.

#### **HYPOTHESIS**

- **H**<sub>1</sub>: There will be a significant difference between the pre test and post level of stress among employees.
- **H**<sub>2</sub>: There will be a significant association between the pre test level of stress among employees with selected demographic variables.

#### METHODOLOGY

Pre experimental one group pre-test post test design was used in this study. Convenient sampling technique was used and the sample size was 30. Modified work place stress scale was used to find out the effectiveness of laughter therapy on stress among employees. Laughter therapy was administered 30 minutes per day for a duration of 4 weeks and post test was done to evaluate its effectiveness.

#### RESULT

The objectives were analyzed by using inferential and descriptive statistics.

The mean post test knowledge score (32.9) was lower than the pre test knowledge score (40.2), the obtained 't' value (29.19\*) was significant at

p < 0.05 level. Hence it was inferred that laughter therapy was effective in reducing the stress level of employees.

There was significant association between pre test level of knowledge score with the selected demographic variables such as age, gender, educational status, marital status, types of family, distance to work place, presence of chronic comorbidities, number of working hours, and leisure time during work.

#### CHAPTER – I

#### **INTRODUCTION**

"My key to dealing with stress is simple: just stay cool and stay focused"

Ashton Eaton

#### **1.1 BACK ROUND OF THE STUDY**

Stress is often coined as a medical term or a psychological phenomenon because of its possibilities in deteriorating the health condition of a person and the stimulus that triggers the fight or flight response respectively. Occupational stress in the workplace can make people dread walking in to the office every morning and then make them worry about their jobs at night. It has become more globalized and has the tendency to affect all workers irrespective of the job profile or category, the only difference being the intensity levels.

Beehr And Newman (1978) defined Stress as a situation which forces a person to deviate from its routine functioning due to change in psychological or physiological condition. When employees are unhappy, they are less efficient, less effective and more likely to squander work hours or ultimately quit. Stress affects not just morale, but a company's bottom line. The main area of this study is occupational stress caused to an individual because of the corporate culture in today's time. As fascinating and alluring it may seem, this package comes with certain cons for most of the people. Juggling between their work and life to strike that balance, meeting with the high demands of the market, giving into the competition at workplace to prove their worth et al. With this and many more struggles which the corporate culture gives in return to what it offers, makes it impossible to achieve the goal for a few.

Stress is not always dreadful, as some people are derived to work much better with certain amount of stress as it provides them motivation, creativity and mild feeling of euphoria but the concern lies where too much stress or repeated stress can have negative physical, mental and emotional consequences on a person's mind and body. Striving to achieve a mark or a goal set is often in the mind of many but by putting health at stake would mean depriving yourself backwards to accomplish that target as excessive stress can interfere with the productivity and impact the physical and emotional health. Ability of an individual to deal with it can mean the difference between success and failure for themselves.

A person can't control everything in their work environment, but that doesn't mean being powerless even when stuck in a difficult situation. Finding ways to manage workplace stress isn't about making huge changes or rethinking career ambitions all the time. The bottom line is, focus on the one thing that's always within a person's control.

Workplace Stress, also known as Occupational Stress is the stress that one gets from working at his job. Chief causes are unrealistic short-term goals, unexpected responsibility-sharing and high expectations. While the job itself might not be stress-inducing, the way it is done and the working environment are crucial factors in creating stress.

Workplace Stress is also related to pressure from seniors and peers and in the absence of support from colleagues. In the US, an overwhelming number of people identify having no control or say in their workplace as the biggest cause of stress in their lives. When workplace stress is not controlled and properly channelized, it can create a lot of coping issues and unreliability.

Indian statistics says that, Employers are increasingly helping workers cope with stress through expert counselling assistance, career guidance, stress management sessions and health awareness programmes. "We have stress management and stress inhibiting systems because we consider anything that comes in the way of wholesome development of an employee stress," said Prince Augustin, executive vice presidentgroup human capital and leadership development at Mahindra & Mahindra.



Laughter therapy is defined as a new kind of therapy that involves giggling, chuckling and a great sense of humor. Humor therapy refers to a form of therapy which encourages the use of natural physiological process of laughter therapy without painful emotion of anger, fear and boredom.

Neurophysiology indicates that laughter is linked with the activation of the ventro-medial prefrontal cortex that produces endorphins. Scientists have shown that parts of the limbic system are involved in laughter. This system isinvolved in emotions and helps us with functions necessary for humans' survival. The structures

in the limbic system that are involved in laughter are the hippocampus and the amygdala.

Laughter is a physical reaction in humans and some species of primate, consisting typically of rhythmical, often audible contractions of the diaphragm and other parts of the respiratory system. It is a response to certain external or internal stimuli. (Berk LS, et.al, 2009).

Laughter is a part of human behaviour regulated by the brain, helping humans to clarify their intentions in social interaction and providing an emotional context to conversations. It is used as a signal for being part of a group, it signals acceptance and positive interactions with others. Laughter is the best relaxant as even one minute of laughter can give the body an effect of 45 minutes of therapeutic relaxation and 10 minutes of laughter is enough for the effect to last throughout the day. (French Neurologist, Henri Ruben stein).

Laughter therapy is the use of humor for the relief of physical or emotional pain and stress. It is used as a complementary method to promote health and cope with illness. It can reduce stress and enhance (Charlie Chaplin, Buster Keaton, Harold LIO). It has more clinical benefits and also Laughter Therapy promotes many physiological changes in our body.

According to American Medical Association it is evident that laughter and its expression depends on neural paths arising in close association with the telencephalic and diencephalic centers concerned with respiration and considered the mechanism to be in the region of the thalamus, hypothalamus, sub thalamus and tegmentum.So while purely emotional responses such as laughter are mediated by subcortical structures, especially the hypothalamus, and are stereotyped, the cerebral cortex can modulate or suppress them. For many years medical professionals have recognized that those patients who maintained a positive mental attitude and shared laughter responded better to treatment. Psychological responses to laughter include increased respiration, circulation, hormonal and digestive enzyme secretion, and a leveling of blood pressure. Many Scientists reported at general sense of euphoria after vigorous laughter.

#### **1.2 NEED FOR THE STUDY**

A 2016 survey of 200,000 professionals employed across 30 Indian firms found that 46 percent reported suffering extreme stress as a consequence of their work. Pressure related to their jobs had caused at-risk individuals to contemplate suicide. A recent study conducted by Associate Chambers of Commerce and Industry of India on a smaller scale found that professionals reported experiencing workplace fatigue, sleeping disorders and a generally feeling like they had 'poor health'.

A Wall Street Journal report from 2016 found that Indian millennial spend more time at work than their counterparts in 25 other countries, an average of 52 hours a week. The work environment is competitive, and there is little sensitivity for those who cannot carry the load.

Business Today updated on July 10, 2018 states that, nearly 9 in 10 Indians suffer from stress. In fact, the recently released findings of the 2018 Cigna 360 Well Being Survey Future Assured, conducted by Cigna TTK Health Insurance, shows that stress levels are higher in Indian compared with other developed and emerging countries, including the United States, the UK, Germany, France, China, Brazil and Indonesia. About 89% of the population in India say they are suffering from stress compared to the global average of 86%. Nearly 75% of respondents here do not feel comfortable talking to a medical professional about their stress and cite cost as one of the barriers. Work and finances are the key reasons people attribute their stress to. However, workplace wellness overall scored high, with about half the respondents saying they have received support and are participating in a workplace wellness programme.

Economic times, conducted a survey, and showed that the proportion of workers at high risk of suicide due to unmanaged stress has grown to 8% of all counselling cases in 2018 from 2-4% two years ago. "There is so much of uncertainty and ambiguity in the environment that it leads to stress. It is the job of the leaders to ensure that they learn to absorb the stress and not pass it on (to employees)," said Saugata Gupta, managing director of Marico.



Dr. Michael Miller (2005) recently in annual "Attitudes in workplace IV" found that 80% of workers feel stress on the job, nearly half say they need help in learning how to manage stress and 42% say their co-workers need such help. 14% of respondents had felt like striking a co-worker in past year. 25% have felt like screaming or shouting because of job stress, 10% are concerned about an individual at work they fear could become violent. 9% are aware of an assault in their work place and 18% had experienced some sort of threat or verbal intimation in the past year.

Stress has harmful psychological and physiological effects on employees. Stress is a major cause of employee turnover and absenteeism. Stress is experienced by one employee can affect the safety of other employees. By controlling dysfunctional stress, individual and organization can be managed more effectively. Job stress may directly and indirectly affect the production and turn over.





Job stress is considered rising and has become challenge for the employer and because high level stress is results in low productivity, increased absenteeism and collection to other employee problems like alcoholism, drug abuse, hypertension and host of cardiovascular problems (Meneze, 2005). Personality factors have shown inclination towards stress, anxiety, and other occupational health outcomes in different areas of medicine, and these factors may contribute to feelings of job dissatisfaction and stress (Michie and Williams 2003).



## Chart: Triggers of workplace stress were similar

The emotional signs of stress include Depression, Anxiety, Irritability, Low sex drive, Memory and concentration problems, Compulsive behaviour, Mood swings.

We physiologically change each time we laugh. Our facial muscles stretch along with the rest of the body, giving way to belly laughs and a full body experience. Aside from burning some extra calories (50 calories per hour), laughter delivers a wealth of health benefits. Over the years, scientists have explored the natural process of laughter along with its potential therapeutic power.

Laughter therapy is a type of therapy that uses humor to help relieve pain and stress and improve a person's sense of well-being. Laughter therapy may include laughter exercises, clowns, and comedy movies, books, games, and puzzles. It is a type of complementary therapy and is also called as humor therapy.

Laughter yoga is a combination of laughter exercises focusing on deep centering breaths and calming movements. It is kind of a fun, effective stress relief program designed for all ages and a typical laughter yoga therapy lasts between 30 minutes to an hour. The class begins with warm-up exercises which include stretching, chanting, clapping and breathing activities. This is followed by a series of laughter exercises combined with breathing techniques. The sequence of clapping, breathing, and laughing is repeated over and over again. The process is mixed with more and more childlike playfulness.

Stress becomes a significant part of the health care environment. While many traditional stress management techniques may be effective. Laughter is a naturally occurring phenomenon and it helps us make sense of understand and cope with reality as serves as natures biofeedback and stress control system. It plays an important role in stress management and it should be recognized and encouraged.

Laughing is an excellent way to reduce stress in our life and can help to cope and survive with stressful lifestyle. Laughter provides a full-scale workout for our muscles and unleashes a rush of stress-busting endorphins. Since our bodies cannot distinguish between real and fake laughter, anything else that makes a positive impact. One does not need to be happy or have a sense of humor. Laughter therapy includes six things as follows deep breathing exercises, Rhythmic clapping, ho-ho-ha-ha-ha chanting, child-like play, laughter exercises and closing technique. Laughter comes from the body not the mind. When you take part in laughter therapy, you get a release and stress is reduced. You also get an effect of aerobic exercise. Laughter tones your muscles, improves your respiration and also your immune system is boosted which helps to resist the disease.

According to the Yale Scientific, when we smile, the brain releases a neurotransmitter known as dopamine, which has the power to produce feelings of happiness and endorphins, which are the body's natural painkillers. Smiling is a natural form of laughter, so once laughter unfolds, the brain responds by releasing nitric oxide, which triggers an anti-inflammatory effect that boosts the immune system - a combination that's essential to fighting cancerous tumour growth.

A report of Tina Dayton relationship trauma to resilience and balance (2010): Our brain actually process laughter to produce mood lifting brain chemicals. Laughter causes our body to release a bulk of serotonin and feels good. It reduces

least four of neuro endocrine hormones associated with the stress response like epinephrine, cortisol, dopamine and growth hormone.

A study conducted by Lee beck 2010: Showed that laughter can find out many of the physiological effects of stress caused by the hormones like cortisol and epinephrine. These hormones trigger a cascade of physiological response that includes increased blood pressure, heart rate, blood glucose and energy available to the brain and muscles.

The Cancer Treatment Centres of America reveals similar findings that support the laughter therapy's impact on the body, as it help to alleviate physical pain and emotional stress. By simply indulging in some laughter, studies have shown it can enhance oxygen- rich air intake, boost the circulatory system, stimulate heart and lungs, balance blood pressure, ease digestion, improve memory and alertness, improve sleep, reduce anxiety, and strengthen social bonds.

The health benefits of Laughter include physical, psychological and social benefits. The physical health benefits of Laughter are improving immunity, lowers stress hormones, decreases pain, relaxes your muscles and prevents heart disease. The psychological benefits include relives stress, managing anxiety and tension and improves mood. The social benefits of laughter include strengthening of relationships, enhances teamwork, helps defuse conflict and promotes group bonding.

As per the old proverb says "laughter is the best medicine" laugh can make miracles. Today in their mechanical life, every individual is full of stress and tension both at home or Old Age Home. They have no time to laugh; their mind is always occupied with other ideas. When you meet socially, you can be happy and can maintain relationship with other people. Therefore Laughing can be a good form of helping other people is happy too.

The researcher while doing her undergraduate studies had a chance to visit an industry for their observational visit, by then researcher was facilitated to mingle with the employees and there she found the employees are running out of time even to manage their personnel work, they even forget to smile to others, and most of the persons were in stress by then onwards she had an intention to help the industrial workers to come out of stress. Hence the researcher felt the need to undertake a study to find out the effectiveness of laughter therapy on stress among employees working at selected industry.

#### **1.3 STATEMENT OF THE PROBLEM**

EFFECTIVENESS OF LAUGHTER THERAPY ON STRESS AMONG EMPLOYEES AT SELECTED INDUSTRY, CHENNAI.

#### **1.40BJECTIVES**

- 1.4.1. To assess the level of stress among employees.
- 1.4.2 To evaluate the effectiveness of laughter therapy in terms of stress among employees.
- 1.4.3 To determine the association between the pre test level of stress among employees with selected demographic variables.

#### **1.5. HYPOTHESIS**

- **H**<sub>1</sub>: There will be a significant difference between the pre test and post level of stress among employees.
- $H_{2:}$  There will be a significant association between the pre test level of stress among employees with selected demographic variables.

#### **1.6 OPERATIONAL DEFINITIONS**

#### **1.6.1 EFFECTIVENESS**

Effectiveness refers to the productive or successful change in the level of stress among employees after administration of laughter therapy and is assessed using modified workplace stress scale.

#### **1.6.2 LAUGHTER THERAPY**

Laughter therapy is the therapeutic use of humour and laughter to improve emotional well being and reduce the level of stress among employees laughter therapy will be carried out daily for 30 minutes for a duration of 4 weeks.

#### **1.6.3 STRESS**

Stress refers to the workplace stress that stems from unexpected responsibilities and pressures that do not align with a person's knowledge, skills, or expectations and inhibiting one's ability to scope. It is measured using Modified Workplace Stress Scale.

#### **1.6.4 EMPLOYEES**

Employees refer to the men and women with stress working in Amphenol Omni Connect India Private Limited.

#### **1.7 ASSUMPTION**

> Employees working in the industry will experience stress.

Laughter therapy will reduce the stress level of the employees

#### **1.8 DELIMITATIONS**

- > The study was delimited to the employees working in selected industry
- Samples were selected by convenient sampling method
- The data collection period was limited to 4 weeks.

#### **1.9. PROJECTED OUTCOME**

Administration of laughter therapy will reduce the level of stress among employees.

#### **1.10. CONCEPTUAL FRAMEWORK**

**Betty Neuman's system model** has been selected as the conceptual framework relevant for this study in order to reduce stress for employees. Neuman's (1982) model focuses on stress and stress reduction and is primarily concerned with the effects of stress on health. Neumann considers the client to be an open system interacting with the environment. The person has a core consisting of basic structure which encompass the facts or energy resources necessary for client survival. Surrounding the basic core structure are the concentric circles which include line of resistance and line of defense. The line of resistance represents the internal factors of a person that help to defend against stressor. The normal line of defense is the solid line outside the lines of resistance and it refers to the equilibrium state or the adaptation state that the client has developed over time. The flexible line of defense acts as a protective barrier to prevent stressor from breaking through the normal line of defense.

#### **1.10.1 Basic core structures**

In this study, the basic core structure is the demographic variables of employees like age of the client, gender, educational status, marital status, type of family, monthly income, years of experience, distance to workplace, mode of travelling to workplace, number of working hours, presence of chronic comorbidities, type of work, leisure time during work and category of work.

#### 1.10.2. Stressors

These are the stimulus that alters the system stability and consists of intrapersonal, interpersonal and extra personal factors. The stressors in this study are lack of work experience, communication problems, work overload, unreasonable work deadlines, difficulty in expressing opinions, job dissatisfaction that leads to stress among employees.

#### 1.10.3. Degree of reaction

It is the amount of system instability that occurs after exposure to a stressor.

#### **Reaction to stressors**

The reaction occurs when the flexible line of defense cannot protect a person from stressors. Reactions occurs to employees include physical, psychological and familial or social reaction.

#### Intervention

Specific interventions are used to retain or maintain system stability and these include primary, secondary and tertiary prevention. In this study primary intervention involves the pre test assessment of the level of stress using Modified Workplace Stress Scale. Secondary prevention involves the implementation of laughter therapy for employees for a duration of 30 minutes per day for 4 weeks. Tertiary prevention involves the continuous practice of laughter therapy to promote physical and psychological well-being of the employees.

#### Reconstitution

The adaptation to stressor that occurs as a part of reaction is called as reconstitution. In this study, reduction in the level of stress is considered as reconstitution and is evaluated by the post-test assessment of the level of stress using Modified Workplace Stress Scale.

#### ASSESSMENT



#### **CHAPTER - II**

#### **REVIEW OF LITERATURE**

#### Give yourself a break, don't stress too much

Review of literature is a systematic identification, location, scrutiny and summary of written materials that contain information on research problem.

The review of literature is conducted to generate a picture of what is known and unknown about a particular topic. The primary purpose for obtaining relevant literature is to gain a broad understanding of the problem. The literature review explains the relation of topic and research aims to significant literature and recent research in the field.

S.K.Sharma defined that review of literature is a broad, comprehensive, in depth, systematic and critical review of scholarly publication, unpublished printed or audio visual materials and personal communication.

#### The review of literature has been organized under the following headings

2.1 SECTION A:	Literature related to the stress among employees.

**2.2 SECTION B:** Literature related to the effects of laughter therapy.

**2.3 SECTION C:** Literature related to the effects of laughter therapy on stress.

## 2.1 SECTION A: LITERATURE RELATED TO THE STRESS AMONG EMPLOYEES.

Laxmi Mittal (2012) conducted a study to identify the level of frequency of the job stressors for corporate individuals surveyed and trace out the distressing factor that affects most individuals. The study assessed the degree to which indicators of job stress at workplace (work timings stretched, inadequate break times, repeated heavy workload, unfair distribution of work, monotony at work, deadline pressures, under utilization of skills and working relationships) influences Indian native's mental and emotional well being. The data was collected by surveying employees of various Corporate through a structured questionnaire. The sample size was 62. Both primary and secondary sources of data were extensively used for analyzing this study and 87% of the respondents felt stressed due to work related issues, 79% felt flexible working hours relieves tension.

**Rex S. M. (2008)** provided a comprehensive, research-based examination of the relationship between occupational stress and job performance. The author proved the relationship between major job-related stressors (such as workload, interpersonal conflict, and lack of control) and a variety of performance indexes. In addition, he identified that a number of other factors may affect the relationship between occupational stress and job performance, including gender differences, age, personality, and job experience.

Nimhans (2007) conducted a study among 100 employees working in the industry's hub, Bangalore focusing on stress and mental health. The result was that 19% of the surveyed felt that they were being 'edgy and bad tempered' 36% of respondents were qualified as 'probable psychiatric cases' some 28% of the respondents felt being 'constantly under strain' whereas 22% felt they were 'unable to enjoy their daily activities', 14% share of respondents who felt they were being 'socially dysfunctional'. Women who made up 16% of the sample, reported somatic symptoms like 'not feeling in good health' and 'feeling ill' much more than the men.

**Michael Miller (2005)** recently in annual "Attitudes in workplace IV" found that 80% of workers feel stress on the job, nearly half say they need help in learning how to manage stress and 42% say their co-workers need such help. 14% of respondents had felt like striking a co-worker in past year, 25% have felt like screaming or shouting because of job stress, 10% were concerned about an individual at work they fear could become violent, 9% were aware of an assault in their work place and 18% had experienced some sort of threat or verbal intimation in the past year.

**M Kivimaki (2002)** conducted a study to examine the association between work stress, according to the job strain model and the effort-reward imbalance model. Prospective cohort study. Baseline examination in 1973 determined cases of behavioural and biological risks, and stressful characteristics of work. Biological risks

were measured at 5 year and 10 year follow up. Staff of a company in the metal industry. 812 employees (545 men, 267 women) who were free from national mortality register. Employees with high job strain, a combination of high demands at work and low job control, had a 2.2-fold (95% confidence interval 1.2 to 4.2) compared with their colleagues with low job strain. The corresponding risk ratio for employees with effort-reward imbalance (low salary, lack of social approval, and few career opportunities relative to efforts required at work) was 2.4 (1.3 to 4.4). The evidence from industrial employees suggests that attention should be paid to the prevention of work stress.

**Robertson et al (2000)** conducted a study of organizational climate, role stress and coping strategy amongst public sector executives. The sample sizes were 453 and variables under study was role stress, coping strategy and organizational climate. The findings of the study were role stress experienced was the general stress and the overload stress. Role erosion was the dominant stressor, followed by role isolation, resources inadequacy and personal inadequacy. Role stress was positively correlated with dysfunctional climate and avoidance coping strategy where as negatively with functional climate.

## 2.2 SECTION B: LITERATURE RELATED TO EFFECTS THE OF LAUGHTER THERAPY.

Lisa Rosenberg (2017) conducted a study to investigate the effects of laughter therapy on depression, cognitive function, quality of life, and sleep of the elderly in a community. We compared Geriatric Depression Scale, Mini-Mental State Examination, Short-Form Health Survey-36, Insomnia Severity Index and Pittsburgh Sleep Quality Index between the two groups before and after laughter therapy. The total study sample consisted of 109 subjects aged over 65 divided into two groups; 48 subjects in the laughter therapy group and 61 subjects in the control group. The study proved that laughter therapy is cost-effective and easily-accessible intervention that has positive effects on depression, insomnia, and sleep quality in the elderly.

Zahra Sharif Ahmadi (2014) conducted a study to assess the effects of laughter therapy among senior citizens at retirement community center in Shiraz. In a randomized controlled trial, the participants were assigned into experimental (n=36)

and control (n=36) groups. Data were collected using General Health Questionnaire and demographic questionnaire. The participants of experimental group attended a laughter therapy program consisting of two 90-minute sessions per week lasting for 6 weeks. The study concluded that laughter therapy can improve general health and its subscales in elderly.

**Cepon, Krebs and Herodez (2012)** studied the effects of laughter therapy on blood pressure, pulse and the amount of oxygen in the blood. The subjects were elderly residing in a retirement home. The researchers used the technique of laughter games, laughter meditation and relaxation. The sample size was 16 (14 women and 2 men) and the average age of participants was 77 years. The researchers used automated measurement device to table the Blood Pressure, Pulse rate and oxygen saturation. Measurement was done before and after the 40 minutes practice sessions which showed a positive result for the study.

Youn (2011) conducted a study among the elderly aged over 65 years to examine the impact of laughter therapy on depression and sleep quality. Sample size for the study was 109 elderly and they were divided into experimental and control group. Experimental group was implemented laughter therapy four times in one month. Their depression and sleep quality was assessed using geriatric depression scale and sleep quality index. The results showed that there was a significant increase in sleep quality and decrease in depression of the elderly after implementing laughter therapy.

**Mahvash Shahidi (2010)** conducted a study to compare the effectiveness of Laughter therapy and group exercise therapy in decreasing depression and increasing life satisfaction in older adult women. Seventy depressed old women who were members of a cultural community of Tehran were chosen by Geriatric depression scale (score > 10). After completion of Life Satisfaction Scale pre-test and demographic questionnaire, subjects were randomized into three groups of laughter therapy, exercise therapy, and control. Subsequently, depression post-test and life satisfaction post-test were done for all three groups. The data were analyzed using analysis of covariance and Bonferroni's correction. Sixty subjects completed the study. The analysis revealed a significant difference in decrease in depression scores

of both Laughter Yoga and exercise therapy group in comparison to control group (p < 0.001 and p < 0.01, respectively).

**Narayan (2010)** illustrated the impact of laughter therapy for patients with various disorders such as diabetes, asthma, depression, stress and blood pressure. He found that after exposure to laughter therapy over a four month period, participants had significant reduction in their stress levels, depression, diabetes and blood pressure. The concept behind this is the laughter improves the lung capacity and oxygen levels in the blood. Further, some clients reported reduced frequency of asthmatic attacks and a decrease in the usage of nebulizers.

Lund (2008) conducted a study to assess the effectiveness of laughter therapy among the bereaved widowed men and women. The sample size for the study was 292 and their stress levels were assessed. After implementing humor therapy for the bereaved spouses it was found that laughter and happiness strongly influenced their positive bereavement adjustments. The study concluded that bereaved spouses finally exhibited lower grief and depression.

**Nagendra et al, (2007)** studied the efficacy of laughter therapy on IT professionals to overcome stress. The participants were healthy IT professionals (both male and female) and the sample size was 53 for the laughter therapy and 51 for the control group. The researchers did only 20 minutes laughter therapy for 7 sessions for a period of 18 days. The results showed a reduction in Blood pressure, early morning cortisol level and perceived level of stress compared to the control group. The results show evidence for stress reduction in people practicing laughter therapy.

**Bethea** (2003) conducted a survey among the family care givers of older adults to evaluate the effectiveness of laughter therapy. The selected 23 family members were interviewed and they included humorous aspects while caring for the elderly with their behavioral and cognitive problems. The results proved that laughter can be a useful strategy while caring for the elderly by their caretakers.
# 2.3 SECTION C: LITERATURE RELATED TO THE EFFECTS OF LAUGHTER THERAPY ON STRESS.

**Dalbirkaur (2014)** conducted a study on laughter therapy among employees with stress. It is observed in pretest of experimental group 1 (3.3%), 0, 29 (96.66%) subjects falls in mild, moderate and severe stress respectively. Control group has 1 (3.3%), 2 (6.6%) and 27 (90%) mild, moderate and severe level. In posttest, there was no decrease level of stress among control group 1 (6.6%) moderate, 29 (96.66%) severe whereas employees increased in moderate 16 (53.33%) and mild 9 (30%) as compared to pretest of experimental group after laughing session 20 to 25 minutes daily for 15 days. Only 5 (16.6%) employees remained in severe stress after laughter therapy. It shows that shifting of samples in various level of stress due to laughter therapy in experimental group only.

Lakhwinder Kaur, et.al (2011) conducted a quasi experimental study with an objective to evaluate the effect of laughter therapy on the stress level of employees. Total forty two industrial workers available during the time of data collection constituted the study sample. Data was collected before and after administering laughter therapy for 15-20 minutes daily. During ten days, laughter therapy has shown positive effect on reducing the stress level of subjects at statistically significant level.

Hirsch RD, et al (2010) conducted a study on laughter therapy in the industrial employees with stress. 120 samples were selected by purposive sampling technique (Experimental group 60, control group 60). Unconditional laughter session was conducted for 2 weeks. It shows significant improvements only in the experimental group for resilience and satisfaction with life (p<0.05). Analyses of the subgroups with at least medium to severe stress showed further significant effects for cheerfulness, seriousness, bad mood, and satisfaction with life (p<0.05). These severely affected persons seemed to profit best from laughter therapy. The results indicate the efficacy of this laughter therapy intervention for industrial employees.

Klatt M.D (2009) conducted a qualitative study among 50 individuals employed in various occupations in Tamilnadu. Individuals are divided as 15 workers, 15 managers, 9 guardians, 5 dentists, 6 teachers and were provided laughter therapy for 30 minutes and after each session asked to continue in work environment. The result showed that there was a great relief from the stress after laughter therapy.

**Bedeman Regier et al (2007)** conducted a study showed that daily laughter sessions significantly improve the work performance and relieve stress. A group of 33 employees in behavioural health centre were laughed together daily for 15 minutes up to 15 days. Researchers measured self –efficacy and other 12 characters. After the laughter therapy session, self - competency scores doubled, relational competencies increased by almost and coping to stress level is also been increased to 50% and role competency also doubled.

**Beckman (2007)** conducted a study to prove the impact of laughter therapy was done on behavioral health centre employees. The number of participants was 33 and their competency scores in terms of self-competent and role performance were assessed before the study. Laughter therapy was implemented daily 15 minutes for15 days. All participants laughed together daily and their post scores were assessed. The results showed that their self-competence scores doubled, relational competencies increased by 50 % and role competencies also doubled.

**Donald (2003)** conducted a study that showed that short daily laughter sessions significantly improved work performance. A group of 33 employees in behavioral health centre laughed together daily for 15 minutes for 15 days. Researchers measured self efficacy and other 12 characters. After the session, self competency scores doubled, relational competencies increased by almost 50% and role competency also doubled.

**Bennett** (2003) conducted a survey to identify the effects of laughter on stress and physical illness in adult women. The number of participants included in this study was 33adult women with stress and decreased immune function. Experimental group was allowed to view a humorous video whereas participants in the control group viewed a tourism video. After implementing both humorous and tourism videos, laughter response scale was used to analyze the findings. The findings showed that stress decreased significantly for subjects in the laughter group compared with those in the control group. The results revealed that laughter enables an individual to reduce stress and improve immune function. **Fabiola M. Mathew (2003)** conducted a study to assess the value of humour in current nursing practice. Using of laughter therapy in nursing practice helps to relive the work stress that associated with low pay offered, intermittent shortages of nurses, high staff turnover work overload and additional stresses associated at workplace. A hearty laugh can break down the barriers of embarrassment, unease and improves coping mechanisms. The result shows that in nursing practice laughter therapy helps to overcome job related stress.

#### **CHAPTER III**

#### **METHODOLOGY**

The present study was designed to evaluate the effectiveness of laughter therapy for employees with stress. The present chapter enumerates an overall plan of the research process and deals with the description of the research approach, design, setting, population, criteria for sample selection, sample and sampling technique, development and description of tool, procedure of data collection and plan for data analysis.

#### **3.1. RESEARCH APPROACH**

The present study was aimed at determining the effectiveness of laughter therapy on stress among employees. Hence, a quantitative experimental research approach was considered to be appropriate for the study.

#### **3.2. RESEARCH DESIGN**

Pre- experimental one group pre test and post test design was adopted to evaluate the effectiveness of laughter therapy on stress among employees.



#### **3.3. VARIABLES OF THE STUDY**

The independent variable of the study was Laughter therapy and the dependent variable was Stress.

#### **3.4. SETTING OF THE STUDY**

The study was conducted in Amphenol Omni connect India private limited and is located at Maraimalainagar, Chennai. It is an industry for antenna production like BSNL, Vodafone and Jio towers and is comprised of both male and female employees with a population of around 500 employees in total. A population of 150 employees are working in each shift. It is equipped with all the basic facilities necessary for the employees like canteen and free cab services.

#### **3.5. POPULATION**

The target population for this study were employees with stress. The accessible population included were employees with stress working at Amphenol Omni connect India private limited at Chennai.

#### **3.6. SAMPLE AND SAMPLE SIZE**

In this study, the sample consisted of employees with stress working at Amphenol Omni connect India private limited at Chennai.

The sample size of the present study were 30 employees who had been identified with stress as per the Modified Workplace Stress scale.

#### **3.7. SAMPLING TECHNIQUE**

Convenient sampling technique, a type of non-probability sampling technique was used to select the employees for the study. Total number of population in Amphenol Omni connect India private limited were 500. The population comprises of both male and female employees. Among those 500 employees, 84 employees were on day shift during data collection and they were selected for the pre-test. Among them, 8 employees were excluded under exclusion criteria. The Modified Workplace Stress Scale was administered to 76 samples as pre test to identify the level of stress. 30 employees who had been identified with stress had been chosen as the samples for the study.

#### **3.8. CRITERIA FOR SAMPLE SELECTION**

The samples were selected based on the following inclusion criteria.

#### **3.8.1 Inclusion Criteria**

- 1. Employees with stress.
- 2. Employees of both gender.
- 3. Employees willing to participate in the study.

#### 3.8.2 Exclusion Criteria

- 1. Employees who are physically challenged.
- 2. Employees with sensory impairment.
- 3. Employees with any mental illness.
- 4. Employees who are already undergoing psychological therapy directed to decrease stress.

#### **3.9. DESCRIPTION OF THE TOOL**

The tool consists of three sections.

Section 1: Demographic Profile

- Section 2: Modified Workplace Stress Scale
- Section 3: Laughter therapy

#### 3.9.1. Demographic Profile

This includes age, gender, educational status, marital status, type of family, monthly income, years of experience, distance to workplace, mode of travelling to workplace, number of working hours, presence of chronic co – morbidities, type of work, leisure time during work and category of work

#### **3.9.2. Modified Workplace Stress Scale:**

The Workplace Stress Scale was developed by The Marlin Company, North Haven, and the American Institute of Stress, Yonkers, New york. It is a self-report scale to measure the level of stress at workplace. It consists of sixteen items which measure workplace stress. The items are answered on a five-point likert scale ranging from never to very often. It takes 5 minutes to administer the Modified WorkplaceStress Scale.

#### Scoring

The questionnaire consists of both negative scoring and positive scoring items. For the statements 1 to 13, scores are calculated as Never = 1, Rarely = 2, Sometimes = 3, Often = 4 and Very often = 5. The statements 14, 15 and 16 are reversely scored. Total score is calculated by adding score of each answer. The score ranges from 0-80.

#### **Interpretation:**

- 0-30 Chilled out and relatively calm
- 31-40 Fairly low stress
- 41-50 Moderate stress
- 51-60 Severe stress
- 61-80 Stress level is potentially dangerous

#### **3.9.3.** Laughter therapy for employees

Laughter is nature's stress buster. It makes us to feel good and improve our behaviour towards others. A laughter therapy is an excellent type of exercise which can be done by all, young and old, individually or in groups. This procedure was found by the laughter therapist Dr.MadanKatariya. The procedure is scheduled in one time per day for a duration of 30 minutes. This intervention was scheduled for 30 minutes for 4 weeks.

#### **STEPS OF PROCEDURE FOR LAUGHTER THERAPY**

A 30-minute session is a perfect blend of stimulated laughter, deep breathing and stretching exercises. Each bout of laughter should last for 30 to 40 seconds followed by clapping and "ho ho ha ha ha" exercise. After each bout of laughter, or sometimes after two bouts, two deep breaths are taken, in order to give a break. This avoids exertion and tiredness. Sometimes, various neck, shoulder and arm stretching exercises are done in place of deep breathing between bouts of laughter therapy.

The session starts with step one procedure of deep breathing, followed by step two procedure of Ho-Ho Ha-Ha exercise, Greeting laughter, Milk shake laughter, one-Meter laughter, Cell phone laughter, Jogging laughter, Headache laughter, Crying laughter/ worry laughter, Gradient laughter, Lion laughter, Silent laughter, Humming laughter, Argument laughter, Boxing laughter, Heart to heart laughter (intimacy laughter), Swinging laughter, Forgiveness/apology laughter, Appreciation laughter, Hearty laughter and followed by closing technique by doing neck and shoulder exercises.

#### **3.10. VALIDITY AND RELIABILITY**

#### **3.10.1** Validity

The tool was given to five experts in the field of Psychiatric nursing and medicine for content validity. All the comments and suggestions given by the experts were considered and corrections were made after discussion with research guide.

#### **3.10.2 Reliability**

The reliability of the tool was obtained by test retest method and the calculated value was r = 0.90 which signified that the tool was reliable.

#### **3.11. PILOT STUDY**

The pilot study was conducted to check the feasibility, practicability, validity and reliability of the tool. The study was conducted in Amphenol Omni connect India private limited, Chennai. The duration of data collection was for a period of 7 days. Convenient sample of 5 subjects were selected for the study. The Modified Workplace Stress Scale was administered to assess the level of stress before and after the laughter therapy. The intervention was given 30 minutes daily for each person for 7 days. On the eigth day, level of stress was reassessed with same scale. The data collected was carefully analyzed and there was a significant reduction in the level of stress of the employees.

#### **3.12. DATA COLLECTION METHOD**

The data was collected for a period of 30 days. The study was conducted in Amphenol Omni connect India private limited, Chennai during April 2019. Assessment of the employees was done with baseline data on the first day. Total number of population in Amphenol Omni connect India private limited were 500. The population comprises of both male and female employees. Among those 500 employees, 84 employees were on day shift during data collection and they were selected for the pre-test. Among them, 8 employees were excluded under exclusion criteria. The Modified Workplace Stress Scale was administered to 76 employees to identify the level of stress. Convenient sample of 30 employees were identified with stress. The samples were divided into three groups consisting of 10 members in each group. The intervention was administered in separate groups from 10.30am to 4.30pm in the company premises. Laughter therapy was implemented daily for duration of 30 minutes for 4 weeks. After the intervention the level of stress was reassessed with the same scale on the last day.

#### **3.12. PLAN FOR DATA ANALYSIS**

Appropriate statistical tool such as descriptive and inferential statistics were applied to analyse the data. A frequency table was formulated for all significant information. Paired 't' test was used to find the significance of intervention. Chi-square test was used to determine the degree of relationship between selected variables and the level of stress among the employees.

#### **3.13. ETHICAL CONSIDERATION**

The researcher planned to carry out the research in Amphenol Omni connect India private limited and got the permission from the manager. Consent was obtained from each subject and the researcher proceeded with the data collection.



#### FIG 3.1 SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

#### **CHAPTER – IV**

#### DATA ANALYSIS AND INTERPRETATION

Data is a set of values recorded on one or more observational units. The collected data may be adequate, valid and reliable to any extent, it does not serve any worthwhile purpose, unless it's carefully edited, systematically analyzed, intelligently interpreted and rationally conducted.

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"The term analysis refers to the computation of certain measures along with searching for the pattern of relationship that exist among data groups".

An evaluative study was carried out to evaluate the effectiveness of laughter therapy on stress among employees at selected industry, Chennai. The collected raw data were organized, tabulated, analyzed and interpreted by means of descriptive and inferential statistics and wherever required the analyzed data were also shown by tables along with graphs.

#### **ORGANIZATION OF FINDINGS:**

According to the objectives, the data were represented under the following section.

- **Section I** : Distribution of demographic variables of the samples.
- Section II : Distribution of level of stress among the samples.
- Section III: Data on effectiveness of laughter therapy on pre test and post test level of stress among the samples.
- Section IV: Association between pre test level of stress with selected demographic variables.

### **SECTION –I**

### DISTRIBUTION OF DEMOGRAPHIC VARIABLES OF EMPLOYEES

**Table :4.1:** Frequency and percentage distribution of samples with the selected demographic variables.

			n=30
S.NO	DEMOGRAPHIC	FREQUENCY	PERCENTAGE
	VARIABLES	( <b>f</b> )	(%)
1.	Age		
	a) 20-30 years	25	83.3
	b) 31-40 years	5	16.7
	c) 41-50 years	0	0
	d) 50 years and above	0	0
2.	Gender		
	a) Male	22	73.3
	b) Female	8	26.7
	c) Transgender	0	0
3.	Educational Status		
	a) No formal education	0	0
	b) Primary education	2	6.7
	c) Secondary education	6	20
	d)Higher secondary education	9	30
	e) Graduate	13	43.3
4.	Marital Status		
	a)Single	8	26.7
	b) Married	22	73.3
	c) Widow/Widower	0	0
	d) Divorced	0	0
	e)Seperated	0	0

(Cont...,)

S.No	DEMOGRAPHIC	FREQUENCY	PERCENTAGE		
	VARIABLES	( <b>f</b> )	(%)		
5.	Type of family				
	a) Nuclear family	16	53.3		
	b) Joint family	14	46.7		
	c) Extended family	0	0		
6.	Monthly income				
	a) <5,000	2	6.7		
	b) 5,000-10,000	25	83.3		
	c)>10,000	3	10		
7.	Years of experience				
	a) Below 5 years	21	70		
	b) 5-10 years	9	30		
	c) Above 10 years	0	0		
8.	Distance to workplace				
	a) Below 5 km	3	10		
	b) 5-10 km	4	13.3		
	c) Above 10 km	23	76.7		
9.	Mode of travelling to				
	workplace				
	a) By walk	3	10		
	b) Two - wheeler	2	6.7		
	c) Four – wheeler	22	73.3		
	d) By bus	3	10		
	e) By train	0	0		
10.	Number of working hours				
	a) Below 8 hours	4	13.3		
	b) 8 – 12 hours	26	86.67		
	c)Above 12 hours	0	0		

(Cont...,)

S.No	DEMOGRAPHIC	FREQUENCY	PERCENTAGE
	VARIABLES	( <b>f</b> )	(%)
11.	Presence of chronic		
	co-morbidities		
	a) Present	4	13.3
	b) Absent	26	86.7
12.	Type of work		
	a) Sedentary work	3	10
	b) Moderate work	20	66.7
	c) Heavy work	7	23.3
13.	Leisure time during work		
	a) 30 minutes	3	10
	b) 60 minutes	21	70
	c) 90 minutes	6	20
14.	Category of work		
	a) Mechanic	16	53.3
	b) Fitter	1	3.3
	c) Welder	13	43.4

Table; 4.1 revealed that

- Among the samples 25 (83.33%) were in the age group between 20-30 years and 5 (16.67%) were in the age group between 31-40 years and none of them were above 40 years.
- Among the samples 22(73.33%) were male and 8(26.67%) were female.
- Among the samples 1 (3.33%) had primary education and 6 (20%) had secondary education and 9 (30%) had completed higher secondary education and 13 (43.33%) were graduates.
- Regarding the marital status 8 (26.67%) were single and 22 (73.33%) were married.
- Regarding the type of family 16 (53.33%) belongs to nuclear family and 14 (46.67%) belongs to joint family and none of them belongs to extended family.

- Among the samples regarding monthly income 2 (6.67%) were earning below Rs.5000 and 25 (83.33%) were earning between Rs.5, 000-10,000 and 3 (10%) were earning above Rs.10, 000.
- Among the samples 21 (70%) have experienced below 5 years, 9 (30%) have experience between 6-10 years and none of them was experienced above 10 years.
- Among the samples 3 (10%) were residing within 5 km distance, 4 (13.3%) between 6-10 km distance and 23 (76.67%) above 10 km distance.
- Among the samples 3 (10%) travel to work place by walk, 2 (66.7%) by two wheeler, 22 (73.33%) are using four wheeler and 3 (10%) are travelling by bus.
- Regarding number of working hours 4 (13.3%) of samples are working for 8 hours, 26 (86.67%) are working between 8-12 hours and none of them are working above 12 hours.
- Among the samples 4 (13.3%) had chronic co-morbidities and 26 (86.67%) had no chronic co-morbidities.
- Among the sample regarding type of work 3 (10%) are sedentary worker, 20 (66.67%) are moderate worker and 7 (23.33%) are heavy worker.
- Among samples regarding leisure time during work 3 (10%) had 30 minutes leisure time, 21 (70%) had 60 minutes leisure time and 6 (20%) had 90 minutes leisure time.
- Among samples 16 (53.33%) were mechanics 1 (3.33%) was fitter and 13 (43.34%) were welders.



Fig 4.1 A bar diagram showing the percentage distribution of sample in terms of age



Fig 4.2 A Pie diagram showing the percentage distribution in terms of educational status of the samples



Fig 4.3 A cylindrical diagram showing the percentage distribution of sample in terms of marital status of the samples



# Fig 4.4 A conical diagram showing the percentage distribution of sample, in terms of number of working hours



# Fig 4.5 A bar diagram showing the percentage distribution of sample in terms of type of family



# Fig 4.6 A Conical diagram showing the percentage distribution of sample in terms of distance to workplace



Fig 4.7 A cylindrical diagram showing the percentage distribution of sample in terms of presence of chronic co-morbidities



Fig 4.8 A conical diagram showing the percentage distribution of sample in terms of leisure time during work

#### **SECTION – II**

# DATA ON DISTRIBUTION OF THE SAMPLES ACCORDING TO THEIR LEVEL OF STRESS IN PRE TEST AND POST TEST

n=30

LEVEL OF	PRE	TEST	POST TEST			
STRESS	Frequency	Percentage	Frequency	Percentage		
	( <b>f</b> )	(%)	( <b>f</b> )	(%)		
Chilled out and relatively calm	0	0	16	53.33		
Fairly low stress	18	60	10	33.3		
Moderate stress	10	33.3	3	10		
Severe stress	1	3.3	1	3.3		
Potentially dangerous level of stress	1	3.3	0	0		

**Table 4.2** shows that, during pretest majority of the samples 18 (60%) had fairly low stress, 10 (33.3%) had moderate stress 1 (3.3%) had severe stress and 1 (3.3%) had potentially dangerous level of stress. After the laughter therapy in the post test, majority of the samples 16 (53.33%) were chilled out and relatively calm, 10 (33.3%) had fairly low stress 3 (10%) had moderate stress and 1 (3.3%) had severe stress. Thus the result revealed that after laughter therapy the level of stress was decreased which was evidenced by the post test level of stress.

**Table 4. 2:** Frequency and Percentage distribution of pretest and post test level of stress among employees.



#### Fig 4.9 : A cylindrical diagram showing the percentage distribution of samples in terms of pre test and post test level of stress among employees.

#### **SECTION – III**

# DATA ON EFFECTIVENESS OF LAUGHTER THERAPY ON STRESS AMONG EMPLOYEES

# Table 4.3: Mean, Standard deviation, mean difference and 't' value of pre andpost test level of stress among samples.

n=30

S.No.	Variables	Mean	Standard deviation	Mean difference	't' Value
1.	Pre Test	40.2	6.97	0.57	29.19*
2.	Post Test	32.9	6.4	0.07	27.17
				<u>a</u>	

\* Significant at P<0.05 Level

Table 4.3 revealed that, the pre test mean and standard deviation of the samples were 40.2 and 6.97 respectively. The post test mean was 32.9 with the standard deviation of 6.4 and the mean difference was 0.57. The obtained 't' value 29.19 was more than the table value and significant at p<0.05 level. Hence the stated hypothesis was accepted. It was inferred that, laughter therapy was effective in reducing the stress level of employees.



Fig 4.10 A cylindrical diagram showing the mean value of pre test and post test level of stress among employees.

### **SECTION-IV**

# DATA ON ASSOCIATION BETWEEN PRE TEST LEVEL OF STRESS WITH DEMOGRAPHIC VARIABLES

**Table 4.4:** Frequency, percentage and  $\chi^2$  distribution of pre test level of stress among samples with their selected demographic variables.

(n=30)

			L	EVEL	OF STI	RESS		_
S.NO	DEMOGRAPHIC VARIABLES	ABOVE		BE	LOW	TABLEVALUE	χ <sup>2</sup> VALUE	
			MEAN			LAN ~		
			f	%	f	%		
1.	Age							
	a.	20-30 years	11	36.6	14	46.6		
	b.	31-40 years	0	0	5	16.6	3.84	3.67*
	c.	41-50 years	0	0	0	0		df=3
	d.	>50 years	0	0	0	0		
2.	Gende	er						
	a.	Male	8	26.7	14	46.7		
	b.	Female	4	13.3	4	13.3	5.99	1.10*
	c.	Transgender	0	0	0	0		df=2
3.	Educa	ational status						
	a.	No formal						
		education	0	0	0	0		
	b.	Primary education	0	0	2	6.6	9.49	
	c.	Secondary education	4	13.3	2	6.6		3.57*
	d.	Higher secondary	3	10	6	20		df=4
		education						
	e.	Graduate	4	13.3	9	30		

4.	Marital status						
	a. Single	1	3.3	7	23.3		
	b. Married	10	33.3	12	40		
	c. Widow	0	0	0	0	9.49	2.63*
	d. Divorced	0	0	0	0		df=4
	e. Separated	0	0	0	0		
5.	Type of family						
	a. Nuclear family	6	20	10	33.3		
	b. Joint family	5	16.6	9	30	5.99	2.8*
	c. Extended family	0	0	0	0		df=2
6.	Monthly Income						
	a. <5000	1	3.3	3	10		
	b. 5000-10000	8	26.6	16	53.3	5.99	15.2#
	c. >10000	2	6.6	0	0		df=2
7.	Years of experience						
	a. Below 5 years	6	20	15	50		
	b. 5-10 years	5	16.6	4	13.3	5.99	6.39 <sup>#</sup>
	c. Above 10 years	0	0	0	0		df=2
8.	Distance to work place						
	a. Below 5 km	2	6.6	1	3.3		
	b. 5-10 km	2	6.6	2	6.6	5.99	1.89*
	c. Above 10 km	7	23.3	16	53.3		df=2

9.	Mode o	of travelling to work						
	place a	By walk	1	33	2	66		
	b. '	Two wheeler	1	3.3	2	6.6	9.49	32.2#
	с. С.	Four wheeler	7	23.3	15	50	<i></i>	df=4
	d.	By bus	2	6.6	0	0		ui i
	e. 1	By train	0	0	0	0		
10.	Numbe	r of working hours						
	a.	Below 8 hours	2	6.6	2	6.6		
	b.	8-12 hours	9	30	17	56.6	5.99	0.45*
	с.	Above 12 hours	0	0	0	0		df=2
11.	Presend	ce of chronic						
	Co- mo	orbidities						
	a.	Present	2	6.6	2	6.6	3.84	0.30*
	b	Absent	9	30	17	56.6		df=2
12.	Type of	f work						
	a.	Sedentary work	3	10	6	20		
	<b>b.</b> 1	Moderate work	7	23.3	13	43.3	5.99	9.47*
	<b>c</b> .	Heavy work	1	3.3	0	0		df=2
13.	Leisure	e time during work						
	a. 1	30 minutes	2	6.6	1	3.3		
	b. (	60 minutes	7	23.3	14	46.6	5.99	1.26*
	c.	90 minutes	2	6.6	4	13.3		df=2
14.	Catego	ry of work						
	a. 1	Mechanic	9	30	7	23.3		
	<b>b.</b> ]	Fitter	1	3.3	1	3.3	5.99	7.08#
	<b>c.</b>	welder	1	3.3	11	36.6		df=2

#-Non significant \*-Significant

\*Significant at p<0.05 level

Table 4.4 : Chi-square analysis was done to find out the association between the pre test level of stress with the selected demographic variable.

The findings suggested that there was a significant association between the pre test level of stress with the selected demographic variables such as age, gender, educational status, marital status, type of family, distance to workplace, number of working hours, presence of chronic co-morbidities and leisure time during work.

There was no significant association between pre test level of stress with the selected demographic variables such as monthly income, years of experience, mode of travelling to work place, type of work and category of work.

## CHAPTER V FINDINGS AND DISCUSSION

The aim of the present study was to evaluate the effectiveness of laughter therapy on stress among employees at selected industry, Chennai. Stress can lead to the state of unhealthy body and mind. Hence it was presumed that performing the laughter therapy would help to reduce stress among employees and promote their health.

A pre-experimental pre-test post-test design was intended to assess the effectiveness of laughter therapy on stress among employees. Modified workplace stress scale was used to evaluate the level of stress. The response were analyzed through descriptive statistics (mean, standard deviation) and inferential statistics (paired 't' test and Chi-Square). The results of major study were discussed according to the objectives.

#### 5.1. Assessment on the level of stress among employees.

Modified workplace stress scale was used to evaluate the level of stress. The study shows that, during pretest majority of the samples 18 (60%) had fairly low stress, 10 (33.4%) had moderate stress, 1 (3.3%) had severe stress and 1 (3.3%) had potentially dangerous level of stress. The Study revealed that, the pretest mean and standard deviation of the samples were 40.2 and 6.97 respectively. This finding is consistent with the study conducted by Vishnu J et.al. (2013) to assess the job stress among employees. The interview was done using workplace stress scale. The results showed that 35% had fairly low stress, 21% had moderate stress, 9% had severe stress and 2% had potentially dangerous level of stress

# **5.2.** Evaluating the effectiveness of Laughter therapy for employees with stress.

Researcher selected the employees with stress and they were divided into 3 groups. Each group consisted of 10 samples. Laughter therapy was administered for 30 minutes per day for 4 weeks. Modified workplace stress scale was used to evaluate the level of stress after implementing laughter therapy. This finding is consistent with the study conducted by Fletcher, (2010) to assess the effectiveness of laughter therapy

on stress among employees. The laughter yoga was given for 4 weeks to the workers and the results showed that the laughter yoga was effective in reducing stress.

During the post-test, majority 16(53.33%) samples are chilled out and relatively calm, 10(33.4%) had fairly low stress, 3(10%) had moderate stress and 1(3.3%) had severe stress and no one potentially dangerous level of stress. The Study revealed that, the post test mean was 32.9 with the standard deviation of 6.4 The mean difference was 0.57.The obtained 't' value was 29.19 significant at p<0.05 level which was more than the table value at 0.05 level. Hence the stated hypothesis "There is a significant difference in the level of stress among employees before and after laughter therapy" was accepted. It was inferred that, laughter therapy was effective in reducing the stress level of employees. This finding is consistent with the study conducted by William (2008) to assess the effectiveness of laughter therapy on stress. One-group pre test post test design was used in the study. The scores were significantly lower for the employees who received laughter therapy (mean=8.9,SD=5.7) which proved that laughter therapy is effective in reducing the level of stress.

# **5.3** Association between the pre test level of stress among employees with selected demographic variables.

The findings suggested that there was a significant association between the pre test level of stress with the selected demographic variables such as age, gender, educational status, marital status, type of family, distance to workplace, number of working hours, presence of chronic co-morbidities, leisure time during work.

There was no significant association between pre test level of stress with the selected demographic variables such as gender, monthly income, years of experience, mode of travelling to work place, type of work and category of work.

#### **CHAPTER VI**

#### SUMMARY AND CONCLUSION

This chapter deals with the summary, conclusion, limitations and recommendations. The essence of any research project is based on the study findings, limitations, interpretations of the research result and recommendation that cooperate in the study implication. It also gives meaning to the result obtained in the study, further it includes implications for the nursing practice, nursing education, nursing administration, nursing research.

#### 6.1 SUMMARY

The present study was done to evaluate the effectiveness of laughter therapy on stress among employees at selected industry, Chennai.

#### **6.1.1 OBJECTIVES**

- To assess the level of stress among employees.
- To evaluate the effectiveness of laughter therapy in terms of stress among employees.
- To determine the association between the pre-test level of stress among employees with selected demographic variables.

#### **6.1.2. HYPOTHESIS**

- H<sub>1</sub>: There is a significant difference in the level of stress among employees before and after laughter therapy.
- H<sub>2</sub>: There is a significant association between the pre-test level of stress among employees with selected demographic variables.

#### **6.1.3 MAJOR FINDINGS**

- Among the samples 25 (83.33%) were in the age group between 20-30 years and 5 (16.67%) were in the age group between 31-40 years and none of them were above 40 years.
- Among the samples 22 (73.33%) were male and 8 (26.67%) were female.

- Among the samples 1 (3.33%) had primary education and 6 (20%) had secondary education and 9 (30%) had completed higher secondary education and 13 (43.33%) were graduates.
- Regarding the marital status 8 (26.67%) were single and 22 (73.33%) were married.
- Regarding the type of family 16 (53.33%) belongs to nuclear family and 14 (46.67%) belongs to joint family and none of them belongs to extended family.
- Among the samples regarding monthly income 2 (6.67%) were earning below Rs.5000 and 25 (83.33%) were earning between Rs.5, 000-10,000 and 3 (10%) were earning above Rs.10, 000.
- Among the samples 21 (70%) have experienced below 5 years, 9 (30%) have experience between 6-10 years and none of them was experienced above 10 years.
- Among the samples 3 (10%) were residing within 5 km distance, 4 (13.3%) between 6-10 km distance and 23 (76.67%) above 10 km distance.
- Among the samples 3 (10%), travel to work place by walk, 2 (66.7%) by two wheeler, 22 (73.33%) are using four wheeler and 3 (10%) are travelling by bus.
- Regarding number of working hours 4 (13.3%) of samples are working for 8 hours, 26 (86.67%) are working between 8-12 hours and none of them are working above 12 hours.
- Among the samples 4 (13.3%) had chronic co-morbidities and 26 (86.67%) had no chronic co-morbidities.
- Among the sample regarding type of work 3 (10%) are sedentary worker, 20 (66.67%) are moderate worker and 7 (23.33%) are heavy worker.
- Among samples regarding leisure time during work 3 (10%) had 30 minutes leisure time, 21 (70%) had 60 minutes leisure time and 6 (20%) had 90 minutes leisure time.
- Among samples 16 (53.33%) were mechanics 1 (3.33%) was fitter and 13 (43.34%) were welders.

- The mean post-test level of stress was 32.9 which was lower than the pre-test level of stress 40.2 among employees. The obtained 't' value 29.19 is statistically significant at 0.05 level. It was inferred that, the stated hypothesis was accepted.
- The findings suggested that there was a significant association between the pre-test level of stress with the selected demographic variables such as age, gender, educational status, marital status, type of family, distance to workplace, number of working hours, presence of chronic co-morbidities, leisure time during work.
- There was no significant association between pre-test level of stress with the selected demographic variables such as monthly income, years of experience, mode of travelling to work place, type of work and category of work.

#### **6.2. NURSING IMPLICATION**

#### **6.2.1.** Nursing Practice

The nurses can implement laughter therapy to the patients which serves as a best therapeutic intervention in relieving the psychological worriness of the patients. Laughter can be implemented to the patients in the form of telling jokes and humorous events. Further, laughter therapy sessions can be conducted periodically by the nurses in health care settings. Industrial nurses should create awareness among employees regarding laughter therapy to reduce the level of stress.

#### **6.2.2.** Nursing Education

The importance of laughter therapy as a best alternative and complementary therapy should be illustrated to the students. This can be done by retrieving adequate information about the physical and psychological benefits of laughter therapy on by the students in the library. Nursing personnel working in industries should be given in-service education about laughter therapy.

#### **6.2.3 Nursing Administration**

The nurse administrator can organize laughter therapy sessions among the staff nurses regularly and providing adequate learning materials to reiterate the importance of laughter therapy among the nurses while taking care of their patients.

#### 6.2.4. Nursing Research

This study can be used as an access to further studies. One of the aims of nursing research is to expand the scope of nursing and providing evidence based practice in the setting. The effect of laughter therapy in improving the physical health of clients with various diseases such as asthma, hypertension and diabetes mellitus could be studied. Further the impact of laughter therapy on serious mental illness and the relationship between stress and health consequences to be studied. The incidence and prevalence of stress in vulnerable populations like strenuous workers also could be studied. Since importance to mental health is as important as physical health alternative methods like laughter therapy can be used to cope up with stress.

#### **6.3 LIMITATIONS**

- The study was limited to the employees only in the selected setting.
- Long term follow up was not possible due to limited data collection period.

#### **6.4. RECOMMENDATIONS**

- A comparative study can be conducted to assess the effectiveness of laughter therapy and other complimentary therapies on the level of stress.
- A study can be conducted on employees with other conditions like anxiety.
- A study can be conducted with nursing students to reduce their examination stress.
- A similar study can be conducted on a large scale for better generalization.
- A similar study can be carried out in different settings.

#### **6.5. CONCLUSION**

The present study was conducted to find the effectiveness of laughter therapy on level of stress among employees. Mean value of the stress score has decreased from 40.2 in pre-test to 32.9 in post-test. The mean difference obtained was 0.57 which was significant. Hence the researcher concluded that laughter therapy is an effective method to reduce the level of stress among employees.

# **APPENDIX-I**

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### **APPENDIX-II**



# **TEXCITY COLLEGE OF NURSING**

Podanur Main Road, Coimbatore - 641 023. Phone : 0422 - 2410854, 2410443 E-mail : texcitycollege@yahoo.co.in.

Approved by the Government of Tamilnadu Vide G.O. MS. No. 226/22-09-2006 & INC INC Code - B.Sc. (N) 2903067, M.Sc. (N) 2904079 Affiliated to TN Dr. MGR Medical University

#### Ref :

Date 5/04/19

Ref: LETTER SEEKING PERMISSION TO CONDUCT STUDY

From

U.Ranjitha, M.Sc (N) II year, Texcity College of Nursing, Coimbatore-23.

To:

The Manager, Amphinol omniconnect india private limited, Chennai.

Respected Sir/madam,

SUB: Texcity College Of Nursing –Project work of M.SC Nursing final year student permission –reg

I wish to state that I am U. Ranjitha, final year M.SC (N) Student of Texcity College Of Nursing has do carry out a research project in year esteemed institution. This is to be submitted to The TN DR.MGR Medical university ,Chennai in partial fulfillment for the topic of research project is

"Effectiveness of laughter therapy on stress among employees at selected industry, Chennai"

I humbly request to grant me the permission to do the research project for employees in Amphinol omniconnect india private limited, Chennai. I assure you that there will not be any hindrance to the daily routine of the institution.

Thanking you

Date: 5/04/19

Yours faithfully, Ø **U.Ranjitha** Mund Production Manager. Coimbatore odanur

### **APPENDIX – III**

### LETTER REQUSTINIG EXPERT OPINION TO ESTABLISH CONTENT VALIDITY

TO:

Coimbatore.

(Through-Principal Texcity College of Nursing)

Respected sir/madam,

SUB: Nsg- Education-M.Sc [N] II year -content validity req-reg,

I wish to state that I am Ms.U. Ranjitha M.Sc [N] II year student of Texcity College of Nursing has to carry out a research project. This is to be submitted to the TN DR.MGR Medical University, Chennai in partial fulfilment for the requirement for the award of Master of Science in Nursing.

The topic of research project is:

# Effectiveness of laughter therapy on stress among employees at selected indurstry, chennai.

I have enclosed,

- 1. Statement of the problem, objectives and hypothesis.
- 2. Demographic data
- 3. Research tool
- 4. Laughter therapy

I request you to go through the items and give your valuable suggestions, modifications, additions and deletion, if any, in the remark column.

Thanking you,

Place: Coimbatore

Date:

Yours faithfully,

Ms..Ranjitha.U
### **APPENDIX – IV**

## LIST OF EXPERTS GIVEN OPENION FOR CONTENT VALITITY

## Mrs.Ramya Bharathi, M.Sc [N], Department of Mental Health Nursing,

Annai Meenakshi College of Nursing, Coimbatore.

## Mr. Manual, M.Sc [N], Department of Mental Health Nursing, RVS College of Nursing, Coimbatore.

## Mrs.Vimala Samsang M.Sc(N) Department of Mental Health Nursing, Venkateswara College of Nursing, Chennai.

## Dr.Shakthivel, M.B.B.S MD [Psy], Karpagam Medical College and Hospital, Coimbatore.

## 5. Mrs. Kavitha , M.B.B.S, MD [Psy], Sudha Anandham medical centre, Chennai.

## **APPENDIX** – V

## EVALUATION CRITERIA CHECK LIST FOR CONTENT VALIDITY TOOL

#### INSTRUCTION;

Expert is requested to go through the following evaluation criteria check list prepared for the intervention. There are there columns given for the response and facilitate remarks in the column given.

DISCRIPTION	RELEVANT	IRRELEVANT	REMARKS
SECTION-A (1-14) Demographic Profile			
SECTION-B (1-16) Modified Work Place Stress Scale			
SECTION – C Laughter therapy			

ANY OTHER SUGGETIONS:

EXPERT SIGNATURE WITH DATE & SEAL

### **APPENDIX – VI**

# LETTER SEEKING CONSENT OF SUBJECTS FOR PARTICIPATION IN THIS STUDY

#### **INTRODUCTIOIN**

I would like to inform you that I'm doing a research "To evaluate effectiveness of laughter therapy on stress among employees at selected industry, Chennai".

Your kind cooperation in highly esteemed and your honest responses are valuable. If you are willing to participate in this study, please sign the consent form given blow.

Your's truly,

#### **CONSENT LETTER**

I, Ms/Mrs. willing to participate in the research laughter therapy for stress among employees as part of M.Sc, Nursing requirements by Ms.Ranjitha.U. The therapy is well explained and I am aware that there is no risk involved in participating the research.

Thanking you,

Signature of the sample

Date:

Place:

## **APPENDIX-VII**

### **CERTIFICATE FOR ENGLISH EDITING**

## TO WHOM SO EVER IT MAY CONCERN

This is to certify that the tool developed by Ms.U.Ranjitha, M.Sc Nursing Student, Texcity College of Nursing for dissertation "Effectiveness of laughter therapy on stress among employees at selected indurstry, Chennai." is edited for Tamil language appropriateness by Mrs. D. Muthumalni Alice, M.A (English)., B.Ed. Texcity College of Nursing ,Coimbatore.

SIGNATURE

## **APPENDIX –VIII**

## TOOL FOR DATA COLLECTION

### SECTION A: DEMOGRAPHIC PROFILE

			Sample no:
1.	Age :		
	a)	20 – 30 years	
	b)	31 - 40 years	
	c)	41 – 50 years	
	d)	50 years and above	
2.	Gende	er:	
	a)	Male	
	b)	Female	
	c)	Transgender	
3.	Educa	itional status :	
	a)	No formal education	
	b)	Primary education	
	c)	Secondary education	
	d)	Higher secondary education	
	e)	Graduate	
4.	Marita	al status:	
	a)	Single	
	b)	Married	
	c)	Widow/Widower	
	d)	Divorced	
	e)	Separated	
5.	Туре	of family:	
	a)	Nuclear family	

- b) Joint family
- c) Extended family

- 6. Monthly income :
  - a) Below Rs.5000
  - b) Rs.5000-Rs.10000
  - c) Above Rs.10000
- 7. Years of experience
  - a) Below 5 years
  - b) 5-10 years
  - c) Above 10 years
- 8. Distance to workplace
  - a) Below 5 km
  - b) 5 km 10 km
  - c) Above 10 km
- 9. Mode of travelling to workplace
  - a) By walk
  - b) Two-wheeler
  - c) Four-wheeler
  - d) By bus
  - e) By train
- 10. Number of working hours
  - a) Below 8 hours
  - b) 8-12 hours
  - c) Above 12 hours
- 11. Presence of chronic co morbidities :
  - a) Present
  - b) Absent

#### If present, specify .....

#### 12. Type of work:

- a) Sedentary work
- b) Moderate work
- c) Heavy work



## 13. Leisure time during work :

- a) 30 minutes
- b) 60 minutes
- c) 90 minutes

## 14. Category of work:

- a) Mechanic
- b) Fitter
- c) Welder

1

## **SECTION B:**

## MODIFIED WORKPLACE STRESS SCALE

Instructions: Thinking about your current job, rate each of the following items in terms of how often the statements was true for you during the last three months.

S NO		Neven	Donaly	Samatimaa	Often	Very
5.110	STATEWIENT	never	Kareiy	Sometimes	Onten	Often
1.	Conditions at work are					
	unpleasant or sometimes					
	even unsafe.					
2.	I am forgetful.					
3.	I feel tired even with					
	adequate sleep.					
4.	I feel that my job is					
	negatively					
	affecting my physical or					
	emotional well being.					
5.	I am eating more or less,					
	drinking more coffee, tea or					
	sodas, smoking more					
	cigarettes, or using more					
	alcohol or drugs in order to					
	cope with my job.					
6.	My resistance to illness is					
	lowered.					
7.	I have too much work to do.					
8.	I have too many					
	unreasonable					
	deadlines.					
9.	I am having difficulty					
	concentrating.					

10.	I find it difficult to express			
	my opinions or feelings about			
	my job conditions to my			
	superiors.			
11.	I feel depressed about my			
	job.			
12.	I feel a sense of			
	dissatisfaction with my job.			
13.	I feel that job pressures			
	interfere with my family or			
	personal life.			
14.	I have adequate control or			
	input			
	over my work duties.			
15.	I receive appropriate			
	recognition or rewards for			
	good			
	performance.			
16.	I am able to utilize my skills			
	and talents to the fullest			
	extent at work.			

### Scoring:

Scores are calculated as follows:

- For statements: 1 13
  - $\circ$  Never = 1
  - $\circ$  Rarely = 2
  - $\circ$  Sometimes = 3
  - $\circ$  Often = 4
  - $\circ$  Very often = 5
- For statements: 14,15 and 16
  - $\circ$  Never = 5
  - $\circ$  Rarely = 4
  - $\circ$  Sometimes = 3
  - $\circ$  Often = 2
  - $\circ$  Very often = 1

### Score interpretation:

Score	Interpretation
0-30	Chilled out and relatively calm
31-40	Fairly low stress
41-50	Moderate stress
51-60	Severe stress
61-80	Stress level is potentially dangerous

## **SECTION C:**

## LAUGHTER THERAPY

### **Duration:**

30 minutes. Each bout laughter should last for 30-40 seconds followed by clapping and "ho ho ha haha" exercise. Take 2 deep breaths after each laughter exercise.

### Step 1:

> Deep breathing

### Step 2:

Clapping in a rhythm 1-2, 1-2-3 along with chanting of "ho ho ha haha"

### Step 3:

Greeting laughter: joining both hands and greeting in Indian style (namaste) or western style (shaking hands) with atleast 4 – 5 people. Shoulder, neck and stretching exercise (5 times)

#### Step 4:

 Deep breathing with inhalation through nose and prolonged exhalation (3times)

### Step 5:

➢ Neck exercise.

#### Step 6:

Milk shake laughter: Hold and mix 2 imaginary glasses of milk or coffee and at the instruction of the leader pour the milk from one glass by chanting aeee., after that everyone laugh making a gesture as if they are drinking milk(4 times).

## Step 7:

One meter laughter: Move one hand over the stretched arm of the other side and extend the shoulder (like stretching to shoot with a bow and arrow). The hand is moved in three jerks by chanting (ae....ae......aeee) and throwing their hands a little backwards by stretching their heads a little backwards and laughing from belly (4times).

### Step 8:

Cell phone laughter: Hold an imaginary mobile phone and try to laugh, making different gestures and moving around in the group to meet different people.

## Step 9:

> Jogging laughter.

## **Step 10:**

Shoulder exercise.

## **Step 11:**

Headache laughter: keep both the palms of the hands in the forehead and bend forward and laugh.

### **Step 12:**

Crying laughter/ worry laughter: Ask the client to think about their worries and sit like a child and laugh as if they are crying.

### Step 13:

Gradient laughter: starts with bringing a smile on the face, slowly gently giggles are added and intensity of laughter is increases further then members gradually burst into hearty laughter and slowly and gradually bring the laughter down and stop.

#### Step 14:

Lion laughter: Extend the tongue fully with eyes open wide and hands stretched out like the claws of lion and laugh from tummy.

#### **Step 15:**

Silent laughter: open your mouth wide and laugh without making any sound and look into each other eyes and make some funny gestures.

### **Step 16:**

Humming laughter: laugh with closed mouth and a humming sound while humming keep on moving in the group and shaking hands with different people.

#### Step 17:

Argument laughter: Laugh by pointing fingers at different group members as if you are arguing.

#### **Step 18:**

Boxing laughter: Laugh by doing boxing.

### **Step 19:**

Heart to heart laughter (intimacy laughter): Come closer and hold each other's hands and laugh. One can shake hands owe hug each other, whatever feels comfort.

## **Step 20:**

Swinging laughter: stand in a circle and move towards the centre by chanting Aee, oee.,ueee.

## **Step 21:**

> Stretching exercise.

## **Step 22:**

Forgiveness/apology laughter: Immediately after Argument laughter catch both ear lobes and laugh while shaking your head or raise both your palms and laugh as if saying sorry.

## Step 23:

Appreciation laughter: Join or pointing finger with the thumb to make a small circle while making gestures as if you are appreciating your group members and laughing simultaneously.

## **Step 24:**

Hearty laughter: Laughter by raising both arms in sky with the head tilted a little backwards, feel as if laughter is coming from your heart.

### **Step 25:**

Closing Technique: Neck and shoulder exercise

## <u>மாதிரி எண்</u>:

1)	ഖயது		
	அ) 20 – 30	(	)
	ஆ) 31 – 40	(	)
	<b>(a)</b> 41 - 50	(	)
	ஈ) 50-க்கு மேல்	(	)
2)	பாலினம்		
	அ) ஆண்	(	)
	ஆ) பெண்	(	)
	இ) மூன்றாம் பாலினம்/திருநங்கை	(	)
3)	கல்வித்தகுதி		
	அ) கல்வியறிவின்மை	(	)
	ஆ) ஆரம்பநிலைக் கல்வி	(	)
	இ) இடைநிலைக் கல்வி	(	)
	ஈ) மேல்நிலைக் கல்வி	(	)
	உ) பட்டப்படிப்பு	(	)
4)	திருமண விபரம்		
	அ) திருமணமாகாதவர்	(	)
	ஆ) திருமணமானவா்	(	)
	இ) கணவன்,மனைவியை இழந்தவா்	(	)
	ஈ) விவாகரத்துப் பெற்றவா	(	)
	உ) பிரிந்து வாழ்பவா்	(	)
5)	குடும்ப வகை		
	அ) தனிக்குடும்பம்	(	)
	ஆ) கூட்டுக்குடும்பம்	(	)
	இ) விரிவான குடும்பம்	(	)
6)	மாத வருமானம்		
	அ) ரூ.5000/-க்கும் குறைவாக	(	)
	ஆ) ரூ.5000/-முதல் ரூ.10000/- வரை	(	)
	இ) ரூ.10000/-க்கும் மேல்	(	)
7)	பணி அனுபவம்		
	அ) ஐந்து ஆண்டுகளுக்கு குறைவாக	(	)
	ஆ) 5 – 10 ஆண்டுகள்	(	)
	இ) பத்து ஆண்டுகளுக்கு மேல்	(	)

8)	வேலைக்கு பயணம் செய்யும் தூரம்					
	அ) 5 – கி.மீ குறைவாக	(	)			
	ஆ) 5 – 10 கி.மீ	(	)			
	இ) 10 – கி.மீ மேல்	(	)			
9)	பயணிக்கும் முறை					
	அ) நடைபயணம்	(	)			
	ஆ) இருசக்கர வாகனம்	(	)			
	இ) நான்கு சக்கர வாகனம்	(	)			
	ஈ) பேருந்து	(	)			
	உ) ரயில்	(	)			
10)	வேலை நேரம்					
	அ) 8 மணி நேரங்களுக்கு குறைவாக	(	)			
	ஆ) 8 – 12 மணி நேரம்	(	)			
	இ) 12 மணி நேரங்களுக்கு மேல்	(	)			
11)	உடல்நலக் குறைபாடு உள்ளது					
	அ) ஆம்	(	)			
	ஆ) இல்லை	(	)			
12)	வேலை தன்மை					
	அ) சுலபமான வேலை	(	)			
	ஆ) மிதமான வேலை	(	)			
	இ) கடினமான வேலை	(	)			
13)	வேலையில் ஒய்வு நேரம்					
	அ) ஒய்வு நேரம் இல்லை	(	)			
	ஆ) 30 நிமிடங்கள்	(	)			
	இ) 60 நிமிடங்கள்	(	)			
	ஈ) 90 நிமிடங்கள்	(	)			
14)	வேலையின் வகைகள்					
	அ) மெக்கானிக்	(	)			
	ஆ)∴பிட்டா	(	)			
	இ) வெல்டா	(	)			

## <u>பகுதி – II</u>

## மாற்றியமைக்கப்பட்ட பணியிடத்தில் ஏற்படும் அழுத்தத்திற்கான அளவுகோல்

கடந்த மூன்று மாதங்களில் கீழ்கண்ட வாக்கியங்கள் எவ்வளவு உண்மையாக இருந்தது என்பதன் அடிப்படையில் தங்களுக்கு பொருத்தமான பதிலை தோவு செய்யவும். (✓ )

வரிசை எண்	பொருளடக்கம்	எப்பொழுதும்	அறிதாக	சில சுலயங்களில்	அடிக்கடி	எப்பொழுதும்
010001		8000000		9.D/D/19199911160		
1.	வேலையில் உள்ள நிலைமைகள் சில விரும்பத்தகாதவாறு அல்லது					
	பாதுகாப்பற்றதாக உள்ளது					
2.	எனக்கு அதிகமாக மறதி ஏற்படுகிறது					
3.	நன்றாக தூங்கிய பிறகும் கூட நான் சோா்வாக உணா்கிறேன்					
4.	எனது வேலை என்னுடைய உடல் அல்லது உணர்ச்சி நலனை எதிர்மறையாக பாதிக்கிறது என்று நினைக்கிறேன்					
5.	நான் அதிகமாகவோ அல்லது குறைவாகவோ சாப்பிடுகிறேன். காபி,தேநீா் அல்லது சோடா அதிக அளவு பருகுகிறேன். அதிக சிகரெட்டுகளை புகைப்பேன் அல்லது எனது வேலையை சமாளிக்க அதிக அளவு மது அல்லது போதைப் பொருட்களை பயன்படுத்துவேன்					
6.	என் நோய் எதிாப்பு சக்தி குறைந்து விட்டது					
7.	எனக்கு அதிக வேலைப்பளு உள்ளது					
8.	குறுகிய கால கட்டத்தில் வேலையை முடித்துத்தரும் சூழ்நிலைக்கு தள்ளப்படுகிறேன்					
9.	நான் கவனம் செலுத்துவதில் சிரமப்படுகிறேன்					
10.	எனது வேலை நிலை குறித்த எனது கருத்தையும் உணர்வுகளையும் மேலதிகாரிக்கு வெளிப்படுத்துவது கடினமாக உள்ளது					

வரிசை எண்	பொருளடக்கம்	எப்பொழுதும் இல்லை	அறிதாக	சில சமயங்களில்	அடிக்கடி	எப்பொழுதும்
11.	நான் என் வேலை காரணமாக மனச் சோா்வடைகிறேன்					
12.	எனது வேலை மனநிறைவு அளிக்கவில்லை					
13.	எனது குடும்பம் மற்றும் தனிப்பட்ட வாழ்க்கையில் கவனம் செலுத்த வேலைப்பளு தடங்கலாக இருப்பதாக உணாகிறேன்					
14.	எனது பணி கடமைகளை கட்டுப்பாட்டிற்குள் வைத்துள்ளேன்					
15.	என் திறமைக்கு ஏற்ற அங்கீகாரமும் வெகுமதியும் கிடைக்கிறது					
16.	எனது திறமைகளை முழுமையாக வேலையில் பயன்படுத்த முடிகிறது					

#### பகுதி - III

### சிரிப்பு சிகிச்சை

#### ഖത്വെയ്യാ:

கைத்தட்டிக் கொண்டே ஹீ ஹா என சிரிக்கவேண்டும். ஒவ்வொரு 30 நிமிட இடைவெளியில் சிரிப்பு 30-லிருந்து 40 வினாடிகளுக்கு செய்ய வேண்டும். ஆதை தொடர்ந்து இருமுறை ஆழமான சுவாசம் உட்கொள்ள வேண்டும்.

#### ⊔uç : 1

1-2, 1-2, 1-2-3 என்றவாறு கைதட்டிக் கொண்டே ஹீ ஹா ஹா என்று சிரிக்க வேண்டும்.

#### LIQ : 2

ஒம் என்னும் மந்திரத்தை சூரியனை பார்த்து உச்சரிக்க வேண்டும்.

цф : 3

இந்திய முறைப்படி (நமஸ்காரம்) அல்லது அயல்நாட்டு முறை படியோ (கைக்குலுக்குதல்) ஐ 4-லிருந்து 5 நபர்களுக்கு கை, தோள்பட்டை, கழுத்து அசைத்தவாறு 5 நிமிடம் செய்யவேண்டும்.

⊔uç : 4

மூன்று நிமிடம் ஆழந்த சுவாசப் பயிற்சி செய்யவேண்டும்.

#### LLQ : 5

கழுத்து உடற்பயிற்சி

#### **ЦQ** : 6

பால் அல்லது காபியை இரண்டு கற்பனை கண்ணாடி தம்லாரில் கலக்கவும்

цф.:7

ஒரு கையை மறுபுறம் நீட்டிய கையின் மேல் நகர்த்தி தோள்பட்டையை நீட்டவும்.

ЦФ : 8

#### கைபேசியை வைத்துக் கொண்டு சிரித்தல் :-

கற்பனையாக ஒரு கைபேசியைகையில் வைத்துக் கொண்டு வெவ்வேறு செய்கைகளை செய்து சிரிக்க முயற்சிக்க வேண்டும்.

⊔uç : 9

ஒட்டத்தின போது உடற்பயிற்சியின் மூலம் சிரிக்க வேண்டும்.

цф : 10

தோள்பட்டை பயிற்சியை மேற்கொள்ளும போது சிரிக்கவேண்டும்.

#### ⊔lop : 11

#### தலை வலிக்கும் போது சிரித்தல் :

இரண்டு உள்ளங்கைகளை நெற்றியில் வைத்து சிரிக்கவும்.

LIQ : 12

#### அழுதுக் கொண்டே சிரித்தல் :

வாடிக்கையாளர்கள் அவர்கள் கவலைகளை நினைத்து அழும்போது அவர்களை குழந்தைகளை போல உட்காரவைத்து சிரிக்க சொல்லவும்

LLQ : 13

#### சாய்வுசிரிப்பு :

முகத்தில் ஒரு புன்னகையை கொண்டு வருவதில் தொடங்குகிறது. மெதுவாக மெதுவாக இதழ்கள் சேர்க்கப்படுகின்றன. மேலும் அதிகரிக்கிறது பின்னர் உறுப்பினர்கள் படிப்படியாகமனம் நிறைந்த சிரிப்பில் வெடித்து மெதுவாகவும் படிபடியாகவும் சிரிப்பை கீழே கொண்டு வந்து நிறுத்துங்கள்.

LIQ : 14

#### சிங்கம் போல் சிரித்தல் :

நாக்கை பெரியதாக வெளியேநீட்டிக் கொண்டு கண்களை பெரிதாக திறந்துக் கொண்டு சிங்கம் போல கை நகங்களை நீட்டி சிரிக்கவும்.

LLQ : 15

#### அமைதியாக சிரித்தல் :

உங்கள் வாயை நன்றாக திறந்து கொண்டு சத்தமில்லாமல் ஒருவரையொருவர் பார்த்த படி கண்களை அசைத்தவாறு சிரிக்கவும்.

⊔lg : 16

#### ஹம்மிங் சிரிப்பு :

வாயை மூடிக் கொண்டு ஹம்மிங் ஒலி ஓசையுடன் ஒரு குழுவிற்குள்ளே ஒருவருக்கொருவர் கைகளை குலுக்கியவாறு சிரிக்கவும்.

LLIQ : 17

#### வாதசிரிப்பு :

நீங்கள் வாதிடுவதை போல வெவ்வேறு குழு உறுப்பினர்களை நோக்கி விரல்களை காட்டி சிரிக்கவும்.

#### LLIQ : 18

#### குத்துச்சண்டை சிரிப்பு :

குத்துச்சண்டை செய்வதின் மூலம் சிரிக்கவும். ஒருவருக்கொருவர் அருகில்

நின்று கைகளை பிடித்து சிரிக்கவும்.

#### ⊔uç : 19

#### நீச்சல் சிரிப்பு :

ஒருவட்டத்தில் நின்று ஏயி,ஏயி,யூய் என்று கோஷமிட்டுவட்டத்தின் மையத்தை நோக்கி நகர்ந்து கொண்டே சிரிக்கவும்.

#### LLIQ : 20

நீட்சி உடற்பயிற்சி

#### Lliq : 21

#### மன்னிப்பு சிரிப்பு :

வாதத்திற்கு பிறகு சிரிப்பு காது மடல்களை பிடித்து நடுங்கும் போது சிரிக்கவும். அல்லது தலையிடவும் அல்லது உங்கள் உள்ளங்கைகளை உயர்த்தி கோபமாக சொல்வதைப்போல் சிரிக்கவும்.

#### LIQ : 22

#### பாராட்டுசிரிப்பு :

குழு உங்கள் குழு உறுப்பினர்களை பாராட்டுவதும் ,ஒரேநேரத்தில் சிரிப்பதை போல சைகைகளை செய்யும<sup>்</sup>போது ஒரு சிறிய வட்டத்ததை உருவாக்க கட்டை விரலால் சேரவும் அல்லது சுட்டிக்காட்டவும்

#### LIQ : 23

#### மனம் நிறைந்தசிரிப்பு :

சிரித்துக்கொண்டே இரண்டுகைகளையும் மேல்நோக்கி உயர்த்தி தலையை சற்று பின்னோக்கி உயர்த்திக் கொண்டு இதயத்திலிருந்து சிரிப்புவருவதைப் போல் உணருங்கள்.

#### LIQ : 24

#### நிறைவுநுட்பம் :

மூன்று கோஷங்களை எழுப்புதல் வேண்டும. இந்த உலகத்திலேயே நாங்கள் தான் மகிழ்ச்சியானவர்கள் ஆம்...