A STUDY TO ASSESS THE EFFECTIVENESS OF PRANAYAMA ON THE LEVEL OF STRESS AMONG POLICE PERSONNEL IN A SELECTED POLICE STATION IN PALAKKAD AT KERALA

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ABSTRACT

Introduction: Stress is our body's response to pressure. Many different situations or life events can cause stress. Stress is often triggered when we experience something new or unexpected that threatens our sense of self. Stress can be reduced by practicing Pranayama in our daily life. The recent prevalence rate of stress among Police Personnel is 82.3%. They are experiencing high levels of stress due to increasing civil infringement crimes and violent incidences, increasingly powerful incidents, citizens rescue requests and witnessing incidents. **Objectives:** To assess the level of stress before and after the administration of Pranayama among Police Personnel. To evaluate the effectiveness of Pranayama on reduction of stress among Police Personnel. To find out the association between the post test score with their selected demographic variables among Police Personnel. **Methodology:** The study was conducted in Kozhinjampara Police station at Palakkad. In this study Pre experimental research design (one group pre test post test design) was adopted. 60 study participants were selected using purposive sampling technique. Perceived Stress Scale were used to collect the data. The Pranayama intervention was given to Police Personnel for a period of 12 days and post test was done on the 12th day. Comparison of mean pre-test and post-test. Findings showed that the level of stress was reduced from day 1st to 12th day. **Results:** The results revealed that calculated value of paired 't' test for reduction of stress (7.95) was greater than the table value 2.66 significant at $p < 0.001$. The study concluded that the Pranayama was effective on reduction of the level of stress among Police Personnel. The present study findings revealed that there was a significant association between stress among Police Personnel and their selected demographic variables. **Conclusion:** Findings of the study revealed that Pranayama was effective to reduce the stress among police personnel. They must be motivated to learn and practice Pranayama to reduce their stress level. This study suggested the need for Pranayama in the reduction of stress.

KEYWORDS

Effectiveness, Stress, Pranayama and Police Personnel.

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INTRODUCTION

Stress is one of the major health hazards of the modern world affecting all people irrespective of age, gender, education, occupation, domiciliary status, finance, religion, race, ethnicity and nationality. Anyone can be affected by stress, but the extend to which we experience stress depends on our

life style and is therefore, largely self imposed. Ken Berg, (2021). Stress is defined as any type of change that causes physical, emotional or psychological strain. Stress is body's response to anything that requires attention. Stress is unique in the causation of diseases. It has no biological carriers such as germs or viruses. Stress and its action result in behavioral responses and conflicts leading to aggressive behavior for stress reduction. Stress affects the body in a variety of ways. Stress is related to several chronic medical conditions. World Health Organization, (2021). Stress, an unpleasant fact, is all around us, at work and in personal life. There are many factors like role ambiguity, conflicts, lack of support excessive work etc. that are responsible for causing stress. It has become a big problem in today's society. More than 70% of the diseases are said to be stress-related. Mathew Abraham, (2021)[1]. Overloads of stress hormones of cortisol and adrenaline have been linked to many health problems including heart disease, high blood pressure and weakens immune function. Managing stress is very important. Townsend, (2021)[2]. In everyone's life stress is present to some degree. Stress can place heavy demand son a person, however in all of the human dimensions and if the person is unable to adopt orcopeup with the stress, it can lead to illness. Personal risk of being exposed to conflict and violence, as well as daily involvement in a range of traumatic occurrences, Police job is generally seen as being intrinsically stressful. As a result, a high level of stress related symptoms might be expected in the population. Leukouette, (2021). If we take a quick overview of Police work the biggest stressors include, lack of support by the department/bosses, shift work and disruptions of family time or family rituals and the daily grind of dealing with the stupidity of the public. Ratna Shila Banstola, (2016). Police officers are often recognized as heroes, many people are unaware of the magnitude of stress that Police officers face. Everyone faces stress on the job, yet Police stress is truly unlike other types of job stress. Long term Police stress can result in high blood pressure, heart diseases, ulcers, headaches and digestive disorders and it can even impair Police officer's mental health Alim, (2010). Pranayama are

Yogic breathing techniques for cultivation of life energy. Pranayama improves your mental, physical, emotional and spiritual health. The regular practice of Pranayama reduces the obstacles that inhibit clear perception. Like the wind carries the smoke and the impurities of the atmosphere, prana takes those impurities out of our bodies and minds. Patanjali, (2021) Yoga is a promising approach for dealing with the stress. Yoga offers many breathing skills for stress affected individuals. These yogic breathing techniques are termed as Pranayama. Pranayama consists of six various ways of inhaling, exhaling and retention of prana. The most effective method of stress reduction is Pranayama. Ellen Serber, (2020). Though there are many complementary therapies available Pranayama is the effective method of reducing stress. Pranayama (breathing exercises) controls mind which inhibits toomuch thought process and makes them feel relaxed and concentrated. Pranayama is one of the simple and convenient method without any side effects to reduce stress. Very few research studies are done to assess the effectiveness of Pranayama on reducing stress among Police Personnel. So researcher wants to assess the level of stress and administer Pranayama interventions in order to assess its effectiveness on the level of stress among Police Personnel.

OBJECTIVES
To assess the level of stress before and after the administration of Pranayama among Police Personnel.
To evaluate the effectiveness of Pranayama on reduction of stress among Police Personnel.
To find out the association between the post test score with selected demographic variables among Police Personnel.

METHODOLOGY
Schematic representation of research methodology
Selected samples were taken from Kozhinjampara Police station. The sample size for the present study was 60 Police Personnel. In this study purposive sampling method was used. Dependent variable is level of stress among Police Personnel. The

independent variable is Pranayama. Police stress was measured by the Perceived Stress Scale questionnaire. However, item measuring the background factors were validated by 5 nursing experts and 1 medical expert. Reliability of the tool was done by test - retest method. In pilot study 10 samples were chosen from setting similar to the research setting and the tool was administered twice with the gap of 12 sessions. In the beginning survey was done from which samples were selected by technique based on sampling criteria. Police Personnel will be identified as per inclusion criteria. Introduction about investigator was given to samples. Written consent was obtained and confidentiality was assured. The Pre-test was conducted and researcher selected 60 samples through purposive sampling technique. Perceived Stress Scale was used to assess the level of stress. The time taken by the researcher to complete the tool for each sample was 15-20 minutes. The samples were asked to choose the correct response from the given options. After the pre test samples were taught about Pranayama in a calm environment daily. The duration of the procedure was 30 minutes. Each day the samples were made to practice Pranayama in front of the researcher. The post test was done after 12 sessions.

RESULTS AND DISCUSSION

The study findings revealed that among 60 Police Personnel, in pre-test 40(67%) of them had high level of stress, 20(33%) of them had moderate level of stress, 0(0%) of them had low level of stress. The study findings revealed that among 60 Police Personnel, in post test 0(0%) of them had high level of stress, 37(62%) of them had moderate level of stress, 23(38%) of them had low level of stress. The pre test mean level of stress was 28.78, standard deviation of 6.56. The post test mean level of stress was 13.98, standard deviation of 6.73. The mean difference 14.80, and the 't' value was 7.95 that is significant at $p<0.05$ level. The present study findings revealed that there was a significant association between stress among Police Personnel and their selected demographic variables.

Discussion

The analysis of pre-test level of stress among Police Personnel, revealed that majority 40(67%) had high level of stress, 20(33%) had moderate level of stress, 0(0%) low level of stress, whereas the post test level of stress, revealed that 23(38%) had low level of stress, 37(62%) had moderate level of stress and 0(0%) had high level of stress. The mean pre-test stress score was 43.06 ±6.56 and mean post test stress score was 45.31±6.73. The estimated 't' value for stress was 7.95 and it is significantly greater than the table value 2.66 at $p\leq0.05$ level. Thus the stated hypothesis was accepted. It shows that the Pranayama is effective in reducing stress among Police Personnel. The present study findings revealed that there was significant association between the post test level of stress among Police Personnel and their gender the obtained Chi-square value 7.89 was significant at 0.05 level and their proper rest the obtained Chi-square value 7.27 was significant at 0.05 level. There is no association between age group, religion, designation, duration of force, education, marriage, stress level, kind of stress, share with anyone, proper ways, suggestion, holidays, neglection. This study has enlightened on the importance of the role of the nurses in identifying the stress and they can provide Pranayama to promote the psychological wellbeing. The above findings give a clear direction to health care professionals that Pranayama is very effective in reducing stress.

Table No.1: Frequency and percentage distribution on pre-test and post-test scores on stress among Police Personnel N =60

S.No	Level of stress	Pre-test		Post-test	
		f	%	F	%
1	Low	0	0	23	38
2	Moderate	20	33	37	62
3	High	40	67	0	0

Research Approach
Quantitative evaluative research approach

Research Design
One group pre test post test research design

Population
Police personnel

Setting
Kozhinjampara police station

Samples
Police personnel at Kozhinjampara police station

Sample size
60

Sampling technique
Purposive sampling technique

Tool
Perceived Stress Scale

Data Collection Procedure
Assess the effectiveness of pranayama on stress among police personnel using Perceived Stress Scale

Pre test
Pre test assessment of stress level using Perceived Stress Scale on 1st day

Intervention
Pranayama for 30 minutes each day for 12 days

Post test
Post test assessment of stress using Perceived Stress Scale on the last day

Data analysis
Descriptive and inferential analysis
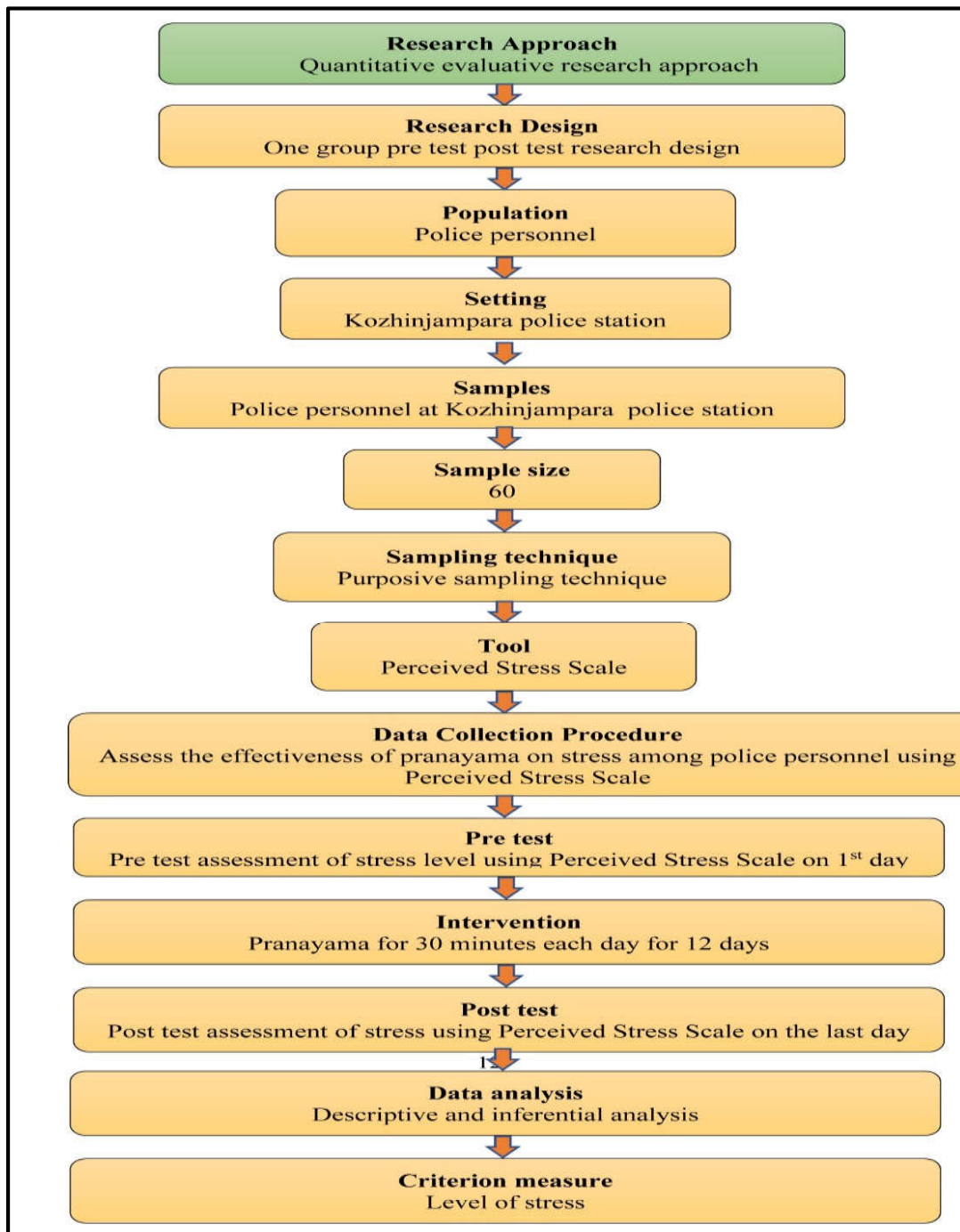
Criterion measure
Level of stress

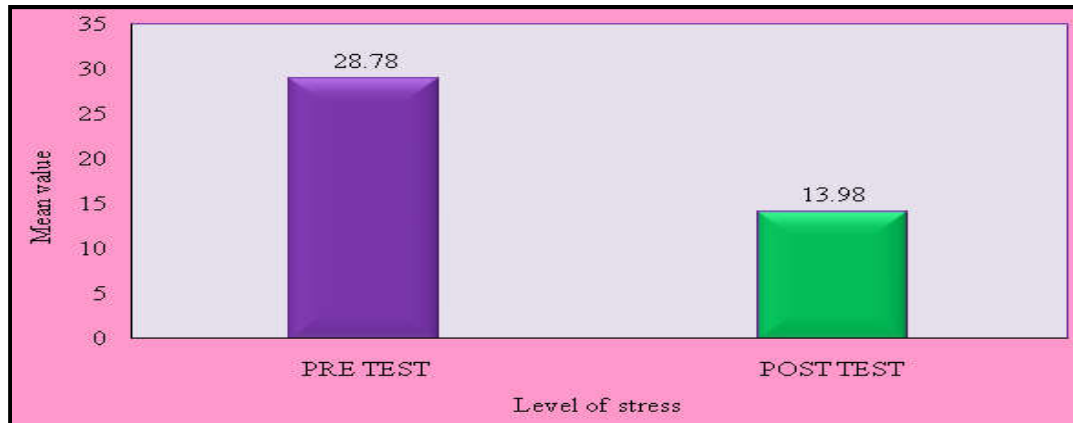**Figure No.1: Schematic representation of research methodology**

Figure No.2: Mean, Standard Deviation, Mean difference and 't' value of pre test and post test level of scores on stress among Police Personnel

CONCLUSION

The main conclusion drawn from this present study was, most of the Police Personnel had high and moderate level of stress during post test level of stress was reduced. This shows that the Pranayama for the present study was effective in reducing the level of stress among Police Personnel.

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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