A Study to Assess the Effectiveness of Sudarshan Kriya Yoga on Academic Stress Among B.Sc Nursing Students At Selected Nursing Colleges, Bangalore, Karnataka

Srilatha C

Associate Professor, AECS Maaruti College of Nursing, Department of Psychiatric Nursing, Kammanahalli, of Bannerghatta Road, Bangalore, Karnataka, Bangalore-76.

Abstract:

Stress is an endemic problem. Its presents in each stage of human life. It may be eustress which motivate the human beings and distress which produce negative effects to the people. Every child spending around four developmental stages in educational institutions that is from toddler period to early adult stage for finishing up of their higher degree courses. Everyone adolescent having their own goals to achieve the higher carrier job. Especially in college level students are getting more stress related to studies because after that, they must enter in job to earn money or huge college fees and parents couldn't be able to pay the fees or their medium of education they studied in college level. so many causes are producing stress to the college students that leads to low academic performance.

Complementary and alternative medicines have been practised thousands of years by many people. Sudarshan kriya is a type of simple breathing technique which reduce stress, anxiety, and improve attention & concentration and mental well-being of people. This study had done for the benefit of students as they will get relax from their academic stress and enhance their academic performance.

The major objective of the study is, Assess the Effectiveness of Sudarshan Kriya on Academic Stress among B.Sc nursing 1st year students. The research design is adopted in this study is quasi experimental one group pre-test post-test design. 60 samples were selected by purposive sampling technique and data were collected with the use of Academic Stress Scale. The findings of the study shows that the mean and standard deviation value for pre-test 3.8 &.68 and post-test mean and Standard Deviation is 1.75&.7 and the "t" test value 4.5 which is highly significant at $p<0.05$.

Results: The study conclude that Sudarshan kriya is effective for reduce the academic stress and improve mental relaxation to the students.

Introduction

"Every child has creativity in them, and this finds an expression when they do meditation, yoga and Sudarshan kriya"

"Gurudev Sri SriRavishankar "

In India, chasing of Academic success and finding the carrier is the top priority for Society, especially parents are well pressurised their child to success in their academic areas. While focusing on education,

it's yielding remarkable achievement in various fields, and it's giving the importance where children are pushing by their parents into specific studies, Neglecting the child whole development.

The research study had done by kalpina Kumari et al. (2022) Family and Academic Stress and Their Impact on Students' Depression Level and Academic Performance. The target audience of this study contains all male and female students studying in the public, private, or semi-government higher education institutions located in Rawalpindi/Islamabad. Non probability sampling techniques were used and around 220 students were participated. 186 responses were useful and the results revealed that extended academic stress positively impacts students' depression levels with a β of 0.293 and a p-value of 0.003. With the $\beta= 0.358$ and $p = 0.001$ values, the data analysis discloses that the family stress (Fam. Strs) has a significant positive effect on the students' depression level.

Education is important for everyone life as it provides stability, financial success, equality, independent success, and confidence. One of the primary reason for why need to get success in academics is, it's competitive nature of the education system, societal expectations, fear of uncertainty and cultural traditions.

While prioritizing academic studies for children, it has merits as the same time its producing different consequences for students. When students are facing high level of academic stress it leads to mental health issues, affects the quality of life, they couldn't able to show their talents in other areas like sports, music or hobbies and focusing on specific studies limits the child's exposure to alternative career paths.

Need for the study with reviews:

Stress is a major cause for all ill health problem. In that students stress area need to focus in a broder manner as its start from toddler stage to under or Post Graduate. Many of the students will face more difficulties, some of them will express and some of them are not get a help of others for improving themselves. Academic stress is one of the major ground of stress, anxiety, and depression among university students. Academic stress is defined in terms of mental distress linked with estimated failure in academics or resulting from a combination of academic related burdens , college or university demands, various external and internal stressors, and environmental or social obligations that exceed students' available adaptive resources (Krishan, 2014; Kadapatti and Vijayalaxmi, 2012;)

Neelam banga et al. (2022) conducted study, psychological distress due to academic stress among first year medical students of government medical college and hospital of patiala. Data were collected from 154 consenting 1st-year medical students using a three-part structured, self-administered questionnaire (Part I: Background Data, Part II: The 20- item Self Reporting Questionnaire [SRQ-20] English version, and Part III: Academic Stress Score [ASS-40]). The results were shows that 35.06% of the sample is experiencing high levels of psychological distress. Results further suggests that psychological distress is related to perceived health and academic stress. There were no significant differences in gender and other demographic variables.

Teen age students will not have much communication with their parents when they are felling stressed out or overwhelmed. They will show their emotionality in other ways like feeling irritability, crying spells, mood swings, headaches, malaise, fatigue, stomach distress etc.

George Dimitrov (2017) conduced study on the impact of Academic Stress among college students in India. The present study finds out stress among college students in various fields of arts and science. The study comprises of 200 college students from various institution in and around Dindukal Tamilnadu district. Open ended questionnaires were used to collect date and study findings revealed that, the factors

include food, discipline, perfection, exams, assignments lead to stress among college students. The results showing that out of 200, 165 were having higher level of anger and frustration, 86 of them are showing depressive symptoms.

Not only the schoolwork, which is producing the stress, some other factors also will add to the school stress. They might include packed schedules, lack of sleep, using smart phones continuously, poor organizational habits, not enough down time, and lack of support from environment.

Debyani Roy Bhowmick (2017) Conducted study about "Academic stress and its management among the college students". The study aims to explain about the causes of academic stress among college students. Around 131 students were participated in this study and results revealed that economic problem, higher expectation by teachers, writing assignments, lack of sleep, excessive competition and poor performance are the factors produce academic stress among college students.

For reducing of stress all over the world people are following different types of managemental therapies. Those include yoga, meditation, breathing exercise, laughing therapy, music, dance therapy and one of the innovative technique Sudarshan kriya (SKY) etc. these techniques are improve the relaxinharmone and give relaxation to the people.

Sudarshan Kriya which is a Sanskrit term meaning "proper vision by purifying action" is an progressive form of rhythmic, cyclical breathing with slow, medium, and fast cycles. This technique advocated by Gurudev Sri Sri Ravishankar, The Art of Living - Bangalore, India. It is not single technique. It is combined with asanas, pranayama's, meditation, and approach learning. It has four techniques include:

1. Ujjayi or "Victorious Breath": This involves experiencing the conscious sensation of the breath touching the throat. This slow breath technique (2–4 breaths per minute) increases airway resistance during inspiration and expiration and controls airflow so that each phase of the breath cycle can be prolonged to an exact count. The subjective experience is physical and mental calmness with alertness.

2. During Bhastrika or "Bellows Breath," air is rapidly inhaled and forcefully exhaled at a rate of 30 breaths per minute. It causes excitation followed by calmness.

3. "Om" is chanted three times with very prolonged expiration.

4. Sudarshan Kriya (Soham Kriya)

Sameer A Zope, Rakesh A Zope (2013) done a study about Sudharshan Kriya yoga: Breathing for Health. The study results revealed that practicing suharshan kriya is a low cost adjunt to treatment of stress, anxiety, depression, Post traumatic stress disorder and other stress realated medical illness.

Diya sojrani et al (2023) studied experimental study regarding effectiveness of sudarshan kriya yoga (sky) on stress in undergraduate physiotherapy students. 73 Students age between 18 to 23 years practiced SKY for 4 weeks. perceived stress scale were used to assess the pre and post test. The present study represents Sudarshan Kriya Yoga (SKY) as an intervention to cope with stress in undergraduate physiotherapy students.

The benefits of Sudarshan kriya include:
- Promotes a sense of quietness to the brain by reducing the impact of overstimulation of frontal lobes.
- Helps to increase the Respiratory Sinus Arrhythmia and relieve mental health issues such as anxiety and depression.
- Improves sleep quality
- Reduces the effects of mental trauma

- Regulates the levels of stress hormones in the body.
- Controls the urge of substance abuse
- Makes a person calmer and reduces the instances of anger outburst.
- Helps with post-traumatic disorder
- Enhances the brain functioning and increases creativity
- Increases self confidence

As a researcher considering benefits of Sudarshan kriya, she has chosen this technique to prove that, Practising SKY reduce academic stress.

OBJECTIVES

- To assessthepre and post-test level of Academic Stress amongB.Sc Nursing Students
- To comparethe Pretestand Post-testlevelof Academic Stress among B.Sc Nursing Students after the intervention .
- To associate the Pretest level of stress with selected demographic variables.

ASSUMPTIONS:

- The students may experience stress in their academic life.
- Students will actively participate in yoga program.
- SKY technique will enhance sense of well being and reduce level of stress.

HYPOTHESES:

- RH_1: There is a significant difference between Pretest and Post-test level of academic stress among B.Sc Nursing students at $p<0.05$ level.
- RH_2: There is no significant Association in the pretest level of academic stress with their selected socio demographic variables at $p<0.05$ level.

DELIMITATION:

- The study is delimited to students studying in selected Nursing colleges at Bangalore.
- The study is limited to period of 1 month
- The study is limited to students who are willing to accept to do SKY.
- The study is delimited to a sample size of 60.

RESEARCH METHODOLOGY:

Research Design: Quasi experimental research design- One group pretest- post-test design

VARIABLES:

Independent Variable: Sudharshan Kriya

Dependent Variable: Academic Stress

Demographic Variables: Age, Gender, religion, Medium of study, Area of Residence, Type of Family, Ordinal position of child, Academic Percentage in Higher Secondary, Selection of Course, Study Habits, Personal Problems.

Setting of study: AecsMaaruti College of Nursing, Bangalore.

Population: The study Sample consist of Students studying B.Sc Nursing Course. Total population of students is around 230.

Sample: 60 students who all are studying first year B.Sc Nursing in AECS Maaruti College of Nursing, Banglore.

CRITERIA FOR SAMPLE SELECTION:

Inclusive criteria:

1. Students who all are willing to participate.
2. Students who all are available at the time of data collection.
3. Students who were free from mental and physical disorders.
4. Nurses who were studying B.Sc Nursing Course
5. Nurses age between 17-25 years.

Exclusive Criteria:

1. Students who were practicing any stress reduction measures.
2. Students who were suffering with physical disorders.

Sample Size: The sample size is 60 1st year B.Sc. Nursing Students.

Sampling Technique: Non-Probability Sampling Technique- Purposive Sampling were used.

Procedure for Data Collection: Study subjects were chosen by Purposive sampling Technique and the pre-test level of Academic stress were assessed for 60 Samples. The Researcher explained the technique of Sudarshan Kriya (SKY) to the study subjects. Students were practised SKY everyday half an hour for 1 month period.

DEVELOPMENT AND DESCRIPTION OF TOOL:

The tool consists of 2 sections:

Section A: Deals with Demographic Variables include Age, Gender, religion, Medium of study, Area of Residence, Type of Family, Ordinal position of child, Academic Percentage in Higher Secondary, Selection of Course, Study Habits, Personal Problems.

Section B: Deals with the tool which is using for collection of Data. Academic Stress Scale was developed by Kim (1970) used to measure the Academic Stress among Students. It Contains 40 Questions with 1 to 5 Point Rating Score.

Scoring Key:

- 1-40 – No stress
- 41-80 – Slight or Mild Stress
- 81-120 – Moderate stress
- 121- 160 – High or Severe Stress
- 161- 200 – Extreme Stress.

Plan for Data Analysis:

The data were analysed by using descriptive and inferential statistics.

Statistical Data analysis:

Table 1: Shows the mean, standard Deviation, and 't' test value for comparison. n=60

S.No		Pre-test	Post test	T test
1	Mean	3.8	1.75	4.50

2	Standard Deviation	0.68	0.7	S

Level of significance at 0.05 level. Table 't' value 2.3

Table 1 Shows that, Marked decrease in mean value from 3.8 in pre-test and 1.75 in post-test value. Standard deviation slight increase in .68 in pre-test to .7 in post-test. The 't' value 4.5 is highly significant at $p<0.05$ level. This indicates the academic stress was decreased hence, the RH1 Hypothesis is accepted. Means there is a significant difference between Pre-test level of academic stress and post-test level of academic stress after practicing Sudarshan kriya

Association of Pre-test level of academic stress with selected demographic Variables.

Research Analysis Revealed that there was a significant association found in pre-test level of academic stress with the demographic variable of Age and No Significant Association with the Gender, Religion, Medium of education in School, Area of Residence and Type of Family, Academic Percentage in Higher Secondary, Selection of Course, Study Habits and Personal Problems.

Discussion:

In the present study demographic characteristics of samples found that majority 83.33% of Samples were in the age group 17-19 years, 80% of samples were Females, 63.33% of samples were Hindus, 36.66% of samples were in Malayalam Medium, 55% of samples were residing in Urban Areas, 66.66 % of samples were from Nuclear Family, 63.33% of samples were first ordinal position in the Family, 60% of samples were scored 60-79 academic percentage in Higher Secondary, 45% of samples were Forcefully Selected the Course, 68.33% of samples were have the habit of individual study, 40% of sample were having Financial Issues. In Pre test majority of samples were in the severe level of academic stress 50%, 33.33% in moderate level of stress and 16.6% sample were in extreme level of stress. In Post test majority of samples were in mild level of stress 45 %, 40% in No stress and 15 % samples were in Moderate level of stress.

Results:

The mean Pre test level of academic stress among the sample is 3.83 and SD is 0.68. The mean post test level of academic stress among the sample is 1.75 and SD is 0.7. The calculated 't' value was 4.50 which was statistically significant at "$p<0.05$" level. Hence the research Hypothesis RH1 There is a significant difference in pre and post test level of academic stress among B.Sc nursing students at $p<0.05$ level is accepted.

Data findings revealed that, there was statistically significant association found in pretest level of stress with the selected demographic variable Age and there was no statistically significant association found in pre-test level of stress with the selected demographic variables Gender, Religion, Medium of education in School, Area of Residence and Type of Family, Academic Percentage in Higher Secondary, Selection of Course, Study Habits and Personal Problems. Hence the research hypotheses stated RH₃ :There is a significant Association in the pre-test level of academic stress with their selected socio demographic variables at $p<0.05$ level was rejected and

Conclusion:

The study concluding that, practicing Sudarshan Kriya is reducing the level of academic stress and impr-

ove the well-being of students. There is evidence suggest that, SKY is beneficial, low risk and low cost relaxing exercise that can practice by anyone. Every subject will experience physical and mental calmness.

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