

EFFECT OF YOGIC INTERVENTION ON STRESS AMONG ADOLESCENTS

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Abstract

Main aim of the present research is to study effect of yogic intervention on stress among adults. Total 120 male and female adolescents of urban and rural areas of Mehsana district were randomly selected. Stress scale by Dr. Vijaya Lakshmi and Dr. Shruti Nrarayan was used for data collection. To analyzed the data t-test was used. A result reveals that Yogic intervention could significantly help in reducing stress among male adolescents. Yogic intervention could significantly help in reducing stress among Female adolescents. Yogic intervention could significantly help in reducing stress among urban male adolescents. Yogic intervention could significantly help in reducing stress among urban female adolescents. Yogic intervention could significantly help in reducing stress among rural male adolescents. Yogic intervention could significantly help in reducing stress among rural female adolescents.

INTRODUCTION

Adolescence is a time of constant brain maturation, particularly in cortical and limbic regions, which undoubtedly plays a role in the physiological and emotional changes coincident with adolescence. Stressors experienced during this crucial developmental stage may affect the trajectory of this neural maturation and contribute to the increase in psychological morbidities, such as anxiety and depression, often observed during adolescence.

The condition of stress has two components: physical, involving direct material or bodily challenge and psychological, involving how individuals perceive circumstances in their lives (Lovallo, 2005). These components can be examined in three ways (Dougall & Baum, 2001). One approach focuses on the environment: stress is seen as a stimulus, as when we have a demanding job or experience severe pain from arthritis or a death in the family. Physically or psychologically challenging events or circumstances are called stressors. The second approach treats stress as a response, focusing on people's reactions to stressors. We see an example of this approach when people use the word stress to refer to their state of tension. Our responses can be psychological, such as your thought patterns and emotions when you "feel nervous," and physiological, as when your heart pounds, your mouth goes dry, and you perspire. The psychological and physiological response to a stressor is called strain. This man's face reveals that he appraises the pain in his chest as stressful.

YOGA

The word Yoga is derived from Sanskrit word 'Yog', which means 'Jod' in Hindi or 'Joining' in English. This is joining of 'Jivatam' (Human) with 'Parmatma' (God). Through he practice of Yoga, one can have Self- realisaion and achieve God. 'Yog' word became Yoga in English. For a simple person, Yoga is another form of physical exercise. By doing physical exercises, one can develop only body muscles. But through Yoga, one achieves the conditioning of even all the internal organs like - heart, brain, spleen, liver, lungs, intestines, etc. Apart from these vital organs, through Yoga all the glands, like -thyroid, pituitary and penal gland of the brain, function better.

ADVANTAGES OF YOGA

Yoga is a spiritual, mental and physical practice that has been around since ages. With time, people have discovered a number of health benefits associated with yoga. Yoga does more than burning calories and strengthening muscles, it is a workout which involves both body and mind. This International Yoga Day start a good habit and promise yourself the following health benefits:

- **Increases Flexibility:** When was the last time you wished you could easily touch your toes which bending forward? Well, practicing yoga could help you in that. Yoga can not only help you in

increasing your flexibility but also let you perform complex asana.

- **Builds muscle strength:** Yoga could help in strengthening weak muscles of the body. It helps in toning which prevents frequent straining of the muscles.
- **Boosts metabolism:** Yoga helps in retaining the vitality in your body along with keeping it fit. It motivates you towards healthy eating and improves the metabolic system of the body.
- **Helps in lowering blood sugar:** Yoga not only helps in lowering blood sugar but also lowers bad cholesterol and boosts good cholesterol. It encourages weight loss and improves the body's sensitivity to insulin.
- **Increases blood flow:** The relaxation exercises in yoga regulates blood to all parts of your body. Exercises such as handstand, helps venous blood from the lower part of the body to flow back to your heart, where it can be pumped back to the lungs to be oxygenated.
- **Keep diseases at bay:** Yoga exercises have a beneficial effect on the immune system. It not only helps in destroying various viruses we catch during season change, but also boosts our immunity to fight off diseases.
- **Increases self-esteem:** Practicing yoga would help you explore a different side of yourself. It would make you feel good about yourself and helps you take a positive approach in life.
- **Improves lung function:** A lot of breathing exercises are said to improve lung function. Doing such exercises in a long run could cure respiratory problems. It also increases the capacity of your lungs.
- **Helps you sleep better:** Yoga helps in reducing stress and creates a routine which in turn makes a regular sleeping pattern. A relaxed body gets a deeper and more peaceful sleep.

REVIEW

Ray Us, Mukhopadhyaya S, Purkayasha SS, et al. (2001) : viewed that although Yoga has been shown to be beneficial in a variety of conditions. However, one of the most important benefit of Yoga is its application in relieving stress, fatigue, invigoration and vitality and its anti-aging properties and its application for relaxation therapy.

Ponte SB, Lino C, Tavares B, Amaral B, Bettencourt AL, Nunes T et al. (2019), Positive effect of yoga on psychological quality of life has been reported implying the feasibility of role of yoga in primary care.

Jadhav and Havalappanavar (2008) studied the effect of yoga intervention on anxiety and subjective well-being. It was found that there was a significant decrease in both state and trait anxiety levels and positive change in the subjective wellbeing of the students.

Sharma 2014: reviewed studies of yoga interventions in a broad range of healthy populations including elementary and high school youth, company employees, and military workers. They concluded that yoga is a promising modality for stress management, as the majority of reviewed studies demonstrated positive changes in psychological and/or physiological outcomes related to stress.

Pascoe showed similarly positive effects of yoga practice on stress as demonstrated by decreased cortisol, blood pressure, and cytokine levels in a heterogeneous population of individuals with acute and chronic conditions. These results were similar to those from an earlier systematic review of yoga interventions for individuals with acute and chronic health conditions revealed positive effects of yoga.

Riley, K.E. and C.L. Park: 2015 Findings demonstrated that a yoga intervention was effective in reducing stress and burnout in this population, and a synergistic positive effect could be achieved when yoga is combined with other interventions including rescheduling working shifts or frequency and duration of breaks.

Puri and dubey 2011: in the present has become more attention-catching for a student. Students undergo stress at assignments, mid-term exams, etc. which is driving many students to frustration. Academic stress has increased more with the increasing awareness of education.

Alam 2010: Adolescents today are living in an increasingly stress-ridden atmosphere. Stress among adolescent boys and girls are very common and natural. Be it about self, career, academics or any other issue the youth undergo feelings of anxiety at some phase of lives. They live in a world issue the youth undergo feeling of anxiety at some phase of the same time they are expected to perform at every front, the main being the academics. This is a generations where everybody lives, breathes and eats competitions the all-pervasive competitive atmosphere be it social or academic, encourages adolescents to constantly compare themselves with their peers. Consequently, their self-image is in a continual. State is partly created by parental pressure too when they expect the adolescents to perform and stand out among their group. When they can't rise up their expectations or are in a process of meeting it, adolescents suffer from frustrations, physical stress, aggression, undesirable complexes, anxiety and depression.

Liu and Tein (2005) : One recent study found that adolescents who engaged in suicide ideation were more likely to have experienced negative life events in the past years that adolescents who did not engage in suicide.

OBJECTIVES

- [1] To know the effect of yogic intervention on stress among male adolescents.
- [2] To know the effect of yogic intervention on stress among female adolescents.
- [3] To know the effect of yogic intervention on stress among urban male adolescents.
- [4] To know the effect of yogic intervention on stress among urban female adolescents.
- [5] To know the effect of yogic intervention on stress among rural male adolescents.
- [6] To know the effect of yogic intervention on stress among rural female adolescents.

HYPOTHESIS

- [1] There is no significant effect of yogic intervention on stress among male adolescents.
- [2] There is no significant effect of yogic intervention on stress among female adolescents.
- [3] There is no significant effect of yogic intervention on stress among urban male adolescents.
- [4] There is no significant effect of yogic intervention on stress among urban female adolescents.
- [5] There is no significant effect of yogic intervention on stress among rural male adolescents.
- [6] There is no significant effect of yogic intervention on stress among rural female adolescents.

Sample:

To know the effect of yogic intervention among various group of adolescents in relation to stress. Total 120 adolescents were randomly selected from the urban and rural areas of Mahesana city. Total sample was categorized as under.

	Male	Female	Total
Urban	30	30	60
Rural	30	30	60
Total	60	60	120

Variables :

In present research yogic intervention is an independent variable and the level of stress among adolescents is dependent variables.

Tool:

Stress scale by Dr. Vijya Lakshmi and Dr. Shruti Nrarayan. This scale consists of 40 items which measures four dimensions such as pressure, physical stress, anxiety, frustration. Dimensions wise items.

Sr. no.	Dimensions	Serial wise item no.	Total
1	Pressure	2,9,15,16,21,22,27,28,29,32,34,35,36,38	14
2	Physical stress	1,3,30,39	4
3	Anxiety	6,8,14,,17,18,19,20,23,25,31,33,37,40	13
4	Frustration	4,5,7,10,11,12,13,24,26	9
		Total	40

Reliability :

The test re-test reliability was calculated and was found to be .82, which was significant at .01 level.

Validity

Stress scale was validated against the following scales:

- [1] Singh's personal stress source inventory (2004) and the resulting validity Coefficient was 0.72
- [2] With stress dimension of anxiety, Depression and stress Scale by Bhatnagar Et al. (2011) and the resulting validity coefficient was 0.83.

Scoring

In Present scale positive items are Given a score of +1 on 'yes' and zero on 'no' and negative items are given +1 on 'NO' and zero on 'YES'. Higher the score, greater is level of the stress.

Procedure

After establishing the repo and giving the instruction regarding administration of the scale to the participants. Stress scale was administered in small manageable group of participants before the yogic intervention. After completion of the data collection of pre test three months yogic international was applied among participants.

After completion of three months yogic intervention again same stress scale was administered to the participants. After completion of post test session of data collection scoring was done with the help of scoring key of the stress scale.

Yogic Intervention Module :

Om Chanting	05 Min
Anulom Vilom Pranayam (With Awareness on of Breathing)	10 Min
Surya Namaskara (With Awareness of Physical Body)	15 Min
Antaryatra (Internal Trip)	05 Min
Yoga Nidra (With Awareness of Present Moment)	10 Min
	45 Min

Yogic Intervention module was given to the participants for 45 min for three months every day.

Statistical Analysis

To Know the effect of yogic intervention on stress among adolescents ‘t’ test was used. Each hypothesis was tested at 0.01 and 0.05 level of significant. To analyse the data latest version of SPSS Was used.

RESULT AND DISCUSSION

Table No. 1
Mean, SD and t value of Pre and Post Yogic Intervention on Stress among Male Adolescents

Group	N	Mean	SD	T	Level of Significant
Pre	60	35.98	7.12	3.53	0.01
Post	60	27.96	10.46		

The results of table no. 1 indicate that t value of pre and post Yogic Intervention on Stress is 3.53. Means scores of stress of Male adolescents were found 35.98 and 27.96 respectively on pre and post Yogic intervention with SD 7.12 and 10.46 this results shows that pre and post means score of Yogic intervention on stress of male adolescents significantly differ at 0.01 level. It means the null hypothesis “There is no significant effect of Yogic intervention on stress among male adolescents” is rejected. It implies that Yogic intervention could significantly help in reducing stress among male adolescents.

Table No. 2
Mean, SD and t value of Pre and Post Yogic Intervention on Stress among Female Adolescents

Group	N	Mean	SD	t	Level of Significant
Pre	60	28.45	7.20	2.75	0.01
Post	60	32.15	5.60		

The results of table no. 2 indicate that t value of pre and post Yogic Intervention on Stress is 2.75. Means scores of stress of female adolescents were found 28.45 and 32.15 respectively on pre and post Yogic intervention with SD 7.20 and 5.60 this results shows that pre and post means score of yogic intervention on stress of female adolescents significantly differ at 0.01 level. It means the null hypothesis “There is no significant effect of Yogic intervention on stress among female adolescents” is rejected. It implies that yogic intervention could significantly help in reducing stress among female adolescents.

Table No.3
Mean, SD and t value of Pre and Post Yogic Intervention on Stress among Urban Male Adolescents

Group	N	Mean	SD	t	Level of Significant
Pre	30	21.17	5.58	10.66	0.01
Post	30	15.60	5.44		

The results of table no. 3 indicate that t value of pre and post yogic intervention on Stress is 10.66. Means scores of stress of urban male adolescents were found 21.17 and 15.60 respectively on pre and post yogic intervention with SD 5.58 and 5.44 this results shows that pre and post means score of yogic intervention on stress of urban male adolescents significantly differ at 0.01 level. It means the null hypothesis “There is no significant effect of yogic intervention on stress among urban male adolescents” is rejected. It implies that yogic intervention could significantly help in reducing stress among urban male adolescents.

Table No.4

Mean, SD and t value of Pre and Post Yogic Intervention on Stress among Urban Female Adolescents

Group	N	Mean	SD	T	Level of Significant
Pre	30	24.83	4.42	10.00	0.01
Post	30	17.90	4.33		

The results of table no. 4 indicate that t value of pre and post yogic intervention on Stress is 10.00. Means scores of stress of urban female adolescents were found 24.83 and 17.90 respectively on pre and post yogic intervention with SD 4.42 and 4.33 this results shows that pre and post means score of yogic intervention on stress of urban female adolescents significantly differ at 0.01 level. It means the null hypothesis "There is no significant effect of yogic intervention on stress among urban female adolescents" is rejected.

It implies that yogic intervention could significantly help in reducing stress among urban female adolescents.

Table No.5

Mean, SD and t value of Pre and Post Yogic Intervention on Stress among Rural Male Adolescents

Group	N	Mean	SD	t	Level of Significant
Pre	30	26.40	3.56	10.54	0.01
Post	30	19.00	4.18		

The results of table no. 5 indicate that t value of pre and post yogic intervention on Stress is 10.54. Means scores of stress of rural male adolescents were found 26.40 and 19.00 respectively on pre and post yogic intervention with SD 3.56 and 4.18 this results shows that pre and post means score of yogic intervention on stress of rural male adolescents significantly differ at 0.01 level. It means the null hypothesis "There is no significant effect of yogic intervention on stress among rural male adolescents" is rejected. It implies that yogic intervention could significantly help in reducing stress among rural male adolescents.

Table No.6

Mean, SD and t value of Pre and Post Yogic Intervention on Stress among Rural Female Adolescents

Group	N	Mean	SD	t	Level of Significant
Pre	30	24.90	4.02	5.79	0.01
Post	30	21.23	3.10		

The results of table no. 6 indicate that t value of pre and post yogic intervention on Stress is 5.79. Means scores of stress of rural female adolescents were found 24.90 and 21.23 respectively on pre and post yogic intervention with SD 4.02 and 3.10 this results shows that pre and post means score of yogic intervention on stress of rural female adolescents significantly differ at 0.01 level. It means the null hypothesis "There is no significant effect of yogic intervention on stress among rural female adolescents" is rejected.

It implies that yogic intervention could significantly help in reducing stress among rural female adolescents.

CONCLUSIONS

- Yogic intervention could significantly help in reducing stress among male adolescents.
- Yogic intervention could significantly help in reducing stress among Female adolescents.
- Yogic intervention could significantly help in reducing stress among urban male adolescents.
- Yogic intervention could significantly help in reducing stress among urban female adolescents.
- Yogic intervention could significantly help in reducing stress among rural male adolescents
- Yogic intervention could significantly help in reducing stress among rural female adolescents.

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