



## Effect of Yoga Therapy on Academic Social and Vocational Stress of Students

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## ABSTRACT

This study aimed to investigate the effect of yoga therapy (Asanas, Pranayam & Meditation) on academic stress, social stress & vocational stress of students.

Method: - Total 80 Students studying Physiotherapy at Prem Physiotherapy & Rehabilitation College were taken & randomly divided into two groups that is one experimental group (A) & other Control group (B). Academic, social & vocational stresses of both the groups were measured as per test. After that yoga therapy package was given for one month to experimental group & control group left as it is. Again academic, social & vocational stresses of both the groups were measured as per test.

## KEYWORDS

Yoga therapy, Academic stress, Social stress &amp; Vocational stress, Medical students.

## Introduction:

The Indian education sector is evolving, led by the emergence of new sectors like vocational training, sector specific programs and e-learning. The Indian education system is one of the largest in the world & is divided into two major segments of core and non-core education. While schools and higher education constitute the core group, the pre-schools, vocational training and coaching classes are non-core. India has emerged as a strong potential market for investments in education sector, due to its favorable demographics and being a services-driven economy. Academic achievement is an attained ability or degree of competence in school task, usually measured by standardized tests and expressed in grades or units based on norms derived from a wide sampling of pupils' performance.<sup>1</sup> Studies reveal that even low or moderate levels of stress can interfere with task performance.<sup>2</sup> Cognitive reactions of stress result in the inability to concentrate.<sup>3</sup>

## Stress

Selye known as the father of stress theory, wrote his first article on the subject.<sup>4</sup> Stress "wear and tear" our bodies experience as we adjust to our continually changing environmental. It has physical and emotional effects on us and can create positive or negative feelings. As a positive influence, stress can help/compel us to do action. It can result in a new awareness and an exciting new perspective. As a negative influence, it can result in feelings of distrust, rejection, anger and depression which in turn can lead to health problems such as headaches, upset stomach, rashes, insomnia, ulcers, high blood pressure and heart disease etc. Stress is a physical or psychological phenomenon developed through self-cognition of provoking factors, after interacting with one's surroundings.<sup>5</sup> According to Lazarus and Folkman "stress is the feeling you have, you interpret or appraise a situation as being threatening or challenging and when your personal resources are strained or out stripped by your dealing with the situation."<sup>6</sup>

Academic Stress which may be in some specific subjects, excessive competition in class in terms of grades or marks. Stress in academic institutions can have both positive and negative consequences if not well managed. Academic institutions have different work settings compared to non-academic and therefore one would expect the difference in symptoms, causes, and consequences of stress in the two set up. Stress seems to be very common in college students' life. They have to sur-

vive academically and to prepare themselves for further career. There's a lot of pressure for the present generation Physiotherapy students to learn more and more than the past generations. Just as it can be stressful to handle a heavy and challenging workload, some students can experience stress from regular academic work which isn't difficult enough. Studies have shown that students who were under high stress continuously were emotionally exhausted and had been suffering from mental distress, physical manifestations, and eventually, burnout.<sup>7</sup> Fear of failure is the top stressor among the students and observed an increasing trend of stress from first through the final year of study.<sup>8</sup> Social Stress is a dilemma between prevailing situation and acquired ambitions when there is a varied gap among these two parameters. Vocational Stress is resulted from the competition for entry into various vocational courses. When stress is perceived negatively or becomes excessive, students experience physical and psychological impairment.<sup>9</sup> Stress overloads our mental and physical resources and interferes with the effective use of our skills, and thus, affects negatively on the performance.<sup>10</sup> Medical students often experience significant distress during their training. This stress and anxiety along with substance abuse develop early in medical training and may increase with time. It is crucial to have a better understanding of student's perceived stress factors which would in turn contribute to building a positive and effective learning environment.

## Yoga Therapy

Yoga took its origin in ancient India and in its original form consisted of a system of spiritual, moral and physical practices.<sup>11</sup> It is one among the six system of vedic philosophy. Maharishi Patanjali, rightly called the Father of yoga compiled and refined various aspects of yoga systematically in his yoga sutras. Yoga is a method by which one can develop one's inherent powers in a balanced way. It offers the means to reach complete self realization. The word yoga means unity or oneness and is derived from the Sanskrit word Yuj which means to join. This joining is described in spiritual terms as the union of the individual consciousness with the universal consciousness. On a more practical level yoga is a means of balancing and harmonizing the body, mind emotions i.e., head; heart and hand.

According to medical scientists, yoga therapy is successful because of the balance created in the nervous and endocrine system which directly influences all the other organs and systems of the body.

**Emergence of the Problem**

Stress hazard decreases the quality of life and can lead to many ailments. Four distinct stresses attach stages or phases are recognized, psychic, psychosomatic, somatic and organic. Anxiolytic/anti depressant drugs are available to treat the somatic and organic phases of stress, while yoga therapy is most useful in controlling and treating the psychic and psychosomatic phases, thereby nipping the cause in the bud in the early stages.

Yoga through its techniques of meditation, asanas, and pranayama yields a positive effect in the management of stress in adolescents.<sup>13</sup> The processing of sensory information at the thalamic level is facilitated during the practice of pranayama<sup>14</sup> and meditation<sup>14,15</sup>. In one study, it is found that a 4-week program of yoga-sanas and meditation lowers the aggressive behavior of students.<sup>16</sup> Another study has reported that meditation (a) reduced problems related to maladaptive behaviors, (b) increased emotional and physical health and psychological well-being, (c) reduced the frequency of thought, (d) reduced substance abuse, and (e) generally improved the quality of life.<sup>17</sup> Transcendental meditation reduces stress<sup>18</sup> and improves academic performance.<sup>19,20</sup> Chanting "Om" mentally causes increased alertness<sup>21</sup>, and the practice of yoga brings improvement in competitive performance.<sup>22</sup>

Research findings are available on the effect of yoga on stress but not specifically on academic, social, vocational stress. So, this led to conduct the present study in order to find the effect of yoga therapy on academic, social and vocational stress of students.

**Methodology**

**Sample**

The study was conducted on a sample of 80 students of Physiotherapy from Prem Physiotherapy & Rehabilitation college, Panipat. These students were randomly divided into two equivalent groups that is one experimental group (A) & other Control group (B). Academic, social & vocational stresses of both the groups were measured as per test.

**Tools Used**

Academic Stress Scale (ASS), Social Stress Scale (SSS), & Vocational Stress Scale (VSS) taken from Bisht Battery of Stress Scale (BBSS) by Dr. Abha Rani Bisht, (1987).

**Procedure**

Students from both the groups were given a pretest. In pre-test academic, social and vocational stress was measured by using academic, social and vocational stress scale. Thereafter students of experimental group were given one month yoga therapy package. Students of the other group i.e. control group were left as it is. After this both group of students were again tested for academic, social and vocational stress by using academic, social and vocational stress scale. The yoga therapy constituted.

- ASANS (Padmasan, Shivasan and Makarasan).
- PRANAYAM (Deep breathing) and
- MEDITATION

The diagrammatic lay out of the research design is given in the table.

Phase	Experimental Group	Control Group
Phase I (Pre-test)	Administration of ASS, SSS and VSS	Administration of ASS, SSS and VSS
Treatment	Yoga Therapy for one month	No yoga therapy
Phase II (Post-test)	Administration of ASS, SSS and VSS	Administration of ASS, SSS and VSS

**Results & Discussion**

Analysis was done after comparing the mean scores of both

groups.

From the results of table 1, significant differences exist in the mean gain scores of students on academic stress (AS), social stress (SS) and vocational stress (VS) of students of experimental group and control group due to significant t-value (t = 9.20, 6.01 and 6.54 respectively) at .01 level. When gain mean scores were compared treatment group has higher score on all the stress measures. In other words yoga therapy treatment has positive impact in reducing the academic, social and vocational stress of students.

**Table 1: Values of mean, SD and t-ratio to locate differences on ASS, SSS and VSS due to treatment and no-treatment**

Phase	Stress	Experimental Group		Control Group		t-ratio
		Mean	SD	Mean	SD	
Phase I (Pre-test)	AS	135.51	10.13	133.27	10.28	-
	SS	145.89	11.09	147.01	11.13	
	VS	156.77	10.71	154.98	10.32	
Treatment	AS	Treatment of Yogic Therapy		No treatment		-
	SS					
	VS					
Phase II (Post-test)	AS	102.13	10.01	131.38	9.98	-
	SS	122.15	11.02	145.77	11.12	
	VS	131.27	10.13	153.03	10.27	
Gain Scores	AS	33.38	9.57	1.89	9.82	9.20**
	SS	23.74	10.27	1.24	10.91	6.01**
	VS	25.00	10.00	1.95	9.93	6.54**

The findings of this study reveal that the students who experienced yoga module performed better in overall academics as well as in their separate subjects than those students who did not experience yoga module

Above results may be due to the fact that different Asanas promote the state of mental and physical well being, good health and have a positive effect on the body. Also Pranayama cleanses and strengthens the physical body and is beneficial for the mind, which becomes calm, studies and clears.

The results are in tune with the earlier studies, which found that meditation, practiced over long periods, produces definite changes in perception, attention, and cognition. Results of the present study are in line with the results of Kember P (1985), Warner TQ (1986), Michaels RR et al (1992), Anderson (1994), Krejci Milada (1994) & Dua J (1998) .

Thus on the basis of findings of the present study it is concluded that training in yoga therapy (i.e. Asans, Pranayam & Meditation) is found very effective in reducing the academic, social & vocational stress of MPT students as compared to those who did not have formal training in yoga therapy.

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