

A Cross Cultural Study of Effect of Yogic Life Style on Neuroticism

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Abstract

Yoga is an ancient science of life developed and practiced in India since thousands of years. Science of Yoga focuses on techniques for better physical and mental health. Recently there is renewed interest in Yoga practices including asanas (physical postures), pranayama (breathing techniques), meditation etc. It is well accepted that these techniques have a positive effect on body and mind. Yogic lifestyle includes many techniques other than asanas and pranayama. These techniques include practices such as karma yoga, chanting of Om Mantra, different meditations, healthy vegetarian food, changing the way of thinking, practice of ethics and morality etc. All these practices affect the mind, emotions and behaviour bringing balance to the personality. Current study focuses on the effect of this Yoga lifestyle on certain important personality factors such as neuroticism using NEO-PI (60 item inventory). Yoga students from various countries participated in this study. They experienced a traditional Yoga Ashram Life where Yoga lifestyle is practiced. Students stayed in isolated place away from modern city life and away from comforts of modern world. The duration of the Yoga lifestyle program was 30 days. The findings of the pre-post test design clearly indicate the significant reduction in personality factor such as neuroticism. These findings suggest that Yoga lifestyle can have positive effect on the personality.

Key words: Yoga, Yoga life style, Personality.

CHAPTER 1: INTRODUCTION

1.1 Introduction

People are suffering from many physical and mental problems. The modern society has brought technical advances but along with that the problems people face are also on the rise. Maintaining health has become a challenge. Stress, stress related disorders, anxiety, depression etc. are some of the main reasons for the suffering of human beings. The techniques that help reduce the stress, anxiety, depression are also becoming popular. Yoga techniques have shown a lot of promise in helping reduce these negative aspects. Several recent studies suggest that yoga may help strengthen social attachments, reduce stress, and relieve anxiety, depression and insomnia. "The evidence is showing that yoga really helps change people at every level," says Stanford University health psychologist and yoga instructor Kelly McGonigal, PhD.

The present cross cultural study focuses on examining the effect of Yogic life style on neuroticism.

1.2 Concepts

1.2.1 Yoga

Yoga is now a very well known name to many all over the world. Yoga is an ancient science discovered by great sages and seers thousands of years ago. The history of Yoga is very old and many different schools of thought have been inspiring human beings. 'Ashtanga Yoga' of Patanjali, 'Hatha Yoga' of Nath Tradition, 'Karma Yoga', 'Bhakti Yoga', 'Jnana Yoga', 'Tantras' are various types of Yoga which, talk about different techniques and practices bringing unity of experience. The word Yoga means union, it has its roots in the Sanskrit verb 'Yuj' which, means to join. So yoga is a science of joining the individual with the universe. Yoga has a profound positive effect on the body and mind. Yogic techniques bring balance between the three aspects. First aspect is actions or expressed

behaviour, second aspect is the emotions or will power and the third aspect is the intelligence or rational thinking. Yoga integrates these three aspects of personality and brings balance to the personality.

1.2.2 *Yogic Life Style*

Yogic practices involve a range of initiatives on physical level, mental and emotional level, behaviour level, intellectual level. The purpose of these initiatives is to modify the abnormal processes and bring new adaptive positive modifications. For example, 'Hatha Yoga' & 'Ashtanga yoga' focuses on various 'asanas' or body postures. Stress and other mental conditions affect the body in adverse way. Muscles are stressed; heart rate, blood pressure, hormonal balance, and metabolism are affected. Practice of 'Asanas' restore this lost balance by progressively stretching and relaxing various muscles and internal organs integrated with breathing. Another technique is 'Pranayama' which is the control of breathing process. The breathing is involuntary process but at the same time it can be controlled voluntarily to some extent. It has been observed that breathing is affected by the thoughts and emotions. For example when we are angry, the breathing is very fast and shallow. But when we are relaxed, the breathing is deep and slow. 'Pranayama' uses this link between mental processes and breathing process. So 'Pranayama' techniques attempt to alter the abnormal mental processes by controlling the breathing. Yoga Nidra is another relaxation procedure used in the Yogic Life Style for reducing the stress.

Other than 'Asanas', 'Pranayama' and meditation, there are many other important aspects of Yoga which are part of Yogic Life Style. 'Karma Yoga' is a very powerful approach which is behavioural therapy talking about changing the approach and attitude while initiating any action on physical and mental level. Any actions done without expectations bring 'no stress' is the philosophy behind 'Karma Yoga'. Objective of

‘Karma Yoga’ is to develop equanimity of mind, unaffected by positive or negative events. Another approach is controlling the emotions by using positive sound repetitions called ‘Mantras’. ‘Mantras’ are integral part of Yogic life style and play an important role in strengthening of positive approach and attitude.

1.2.3 *Neuroticism:*

It is the degree to which a person is anxious and insecure as opposed to calm and self-confident. Anxiety, self-consciousness, angry hostility, impulsiveness, depression and vulnerability these are the facets of Neuroticism. Neurotic people have the tendency to interpret the life events in a negative manner. It affects their physical and psychological well being also.

The current study examines that performing asanas, doing pranayam, havans and relaxation techniques like Yog Nidra and to have the approach of Karma-Yoga will affect the Neuroticism or not.

1.3 **Statement of the Problem**

To study the effect of Yogic Life Style on neuroticism.

1.4 **Significance of the Present Study**

In 1948, the World Health Organization defined health as the presence of well-being—physical, mental, and social—not as the absence of disease. The role of mind in treatment and maintenance of health is well recognized by all health professionals.

An increase in hope and a decrease in despair and hopelessness—all functions of the mind—may be critically important factors in our improved health and longer life. There are many data to support this. A prospective study of coronary heart disease (CHD) and paper-and-pencil measured optimism found that “a more optimistic explanatory style, or viewing the glass as half full, lowers the risk of CHD in older men”

(Kubzansky, Sparrow, Vokonas, & Kawachi, 2001, pp. 913–914) and discussed other research showing a link “between pessimism, hopelessness, and risk of heart disease” (Kubzansky et al., 2001, p. 910). A 30-year study reported that “a pessimistic explanatory style . . . is significantly associated with mortality” (Maruta, Colligan, Malinchoc, & Offord, 2000, p. 140).

Psychological interventions like Cognitive Behavioural therapy have proved its usefulness in helping people in effective way. Yogic Life Style is a way to bring the change in behaviour by positively integrating the body and mind aspects. Yoga says that if people are trained to handle the negative events and experiences without disturbing the state of harmony then events and experiences will not lead to health problems.

Present study focuses on the effect of Yogic life style which has much more to offer than just practicing Asanas or Pranayama alone.

1.5 Objective of the Present Study

1. To Study the effect of Yogic Life Style on Neuroticism.

CHAPTER 2: REVIEW OF LITERATURE

Much research has been carried out to study the effects of yoga on various health problems, including stress, stress related disorders, anxiety, depression et al.

Between March and June 2004, a systematic review was carried out of the research evidence on the effectiveness of yoga for the treatment of anxiety and anxiety disorders. Eight studies were reviewed. They reported positive results, although there were many methodological inadequacies. Owing to the diversity of conditions treated and poor quality of most of the studies, it is not possible to say that yoga is effective in treating anxiety or anxiety disorders in general. However, there are encouraging results, particularly with obsessive compulsive

disorder. Further well conducted research is necessary which may be most productive if focused on specific anxiety disorders. (Kirkwood G, et al. "Yoga for Anxiety: A Systematic Review of the Research," British Journal of Sports Medicine (Dec. 2005): Vol. 39,)

The Harvard Medical School's website details an interesting 2008 study conducted at the University of Utah that looked at the way yoga may impact the stress response. The researchers worked with a varied group of subjects and noted that people who have a poorly regulated response to stress are typically also more sensitive to pain. The study involved 12 people who were experienced in yoga, 14 people suffering from fibromyalgia, and 16 generally healthy subjects. The three groups had varying amounts of pressure applied to their thumbnails, the subjects with fibromyalgia felt the pain at lower pressure levels, while the yoga group had the highest pain tolerance. The researchers also did MRIs on each of the subjects, and interestingly, the fibromyalgia group had the most activity in the areas of the brain associated with response to pain. But the yoga group's MRIs showed the lowest pain-related activity in the brain. This study seems to give concrete proof that practicing yoga on a regular basis can help a person control their stress and as a bonus, their response to pain.

A new study reports that yoga can reduce the stress of cancer diagnosis and treatment experienced by childhood cancer patients and their parents. The findings were published in the September/October 2010 edition of *Journal of Pediatric Oncology Nursing*, published by the Association of Pediatric Hematology/Oncology Nurses (APHON).

Available reviews of a wide range of yoga practices suggest they can reduce the impact of exaggerated stress responses and may be helpful for both anxiety and depression. In this respect, yoga functions like other self-soothing techniques, such as meditation, relaxation, exercise, or even socializing with friends.

Above studies were focused on use of Asanas, Pranayama, relaxation techniques and mentioned in Yoga. But Yoga has much more to offer in terms of life style changes. Yogic Life Style focuses on these modifications on physical, emotional and mental level. Yogic Life Style changes the cultural impact. Culture is known to affect health and well being. It has been proved that life style has powerful impact on management of health. Following are some researches focused on the cultural impact on health.

It's no secret that the poor, uninsured, obese, heavy drinkers and smokers of the world tend to have the most health problems. However, cultural factors may be as important as these well-known health risks, according to a study that appeared last year in the *Journal of the American Medical Association* (Vol. 295, No. 17, pages 2037-2045).

Parents, both rich and poor, may be passing on this culture of stress to their children, adds Marin County, Calif., psychologist Madeline Levine, PhD, author of "The Price of Privilege: How Parental Pressure and Material Advantage Are Creating a Generation of Disconnected and Unhappy Kids" (HarperCollins, 2006). Levine wrote her book after observing more and better-off young people entering her office with depression, anxiety, loneliness and self-destructive behaviors, such as cutting, eating disorders and substance abuse. The epidemic, she thinks, results from messages from parents and teachers that tell children to excel and seek material success, even at the expense of healthy prosocial development—a phenomenon she calls "the culture of affluence."

CHAPTER 3 – DESIGN AND METHODOLOGY

3.1 Design and Methodology

To study the neuroticism level on cross cultural sample, a within group design was used.

3.2 Operational Definitions:

Yoga: Yoga is to join. Yoga is harmony between, actions, emotions and intellect.

Yogic Life Style: An integrated approach involving various practices like, asanas or physical postures, pranayama or controlling the breath, karma yoga or selfless service, yoga nidra or deep relaxation, mantra chanting or practice of concentration and positive thinking.

Neuroticism: The general tendency to experience negative affects such as fear, sadness, embarrassment, anger, guilt and disgust.

3.3 Hypothesis:

1. There is no difference in neuroticism levels of the pre and post scores of experimental group.

3.4 Sample:

| | Group | Sample Size | Sample Source |
|---|--------------|-------------|---|
| 1 | Experimental | 33 | Participants of Yoga Course at Yoga Vidya Gurukul |

3.5 Procedure

Data collection and administration of the test.

The NEO-PI was given to participants of the experimental group on the first day of the course and again on the last day of the course. The duration of the course was 28 days. The course was a residential course where the participants were only allowed to go to town once in a week. The test was administered to the group, which took approximately 15 minutes for each individual.

3.6 Statistical Analysis

The main Statistical techniques employed in the present study were:

1. t- test - "t" test was applied to compare the pre test and post test Neuroticism.

2. Descriptive Statistics

CHAPTER 4: RESULTS AND DISCUSSIONS

4.1 Results and Interpretation

| Variable | N | Mean | SD | Mean | SD | 't' Score |
|-------------|----|----------|------|-----------|------|-----------|
| | | Pre Test | | Post Test | | |
| Neuroticism | 33 | 21.39 | 7.55 | 18.84 | 7.51 | 2.127** |

4.2 Discussion

Yoga is a very well known science in the world today, especially because of the benefits that it offers to physical and mental health. People practice asanas or body postures, pranayama or breathing control, relaxation and meditation as practices from yoga but yoga has much more to offer than these techniques. It is a complete life style which considers many modifications on thought, emotional and behavioural level. It focuses on changing the distorted belief systems, changing the negative thought patterns, changing the stress inducing action or behaviour, use of intellectual rationalization. Yoga seeks better emotional control and balanced perception or balanced attitude with optimism.

For the present study, the subjects were randomly selected from different countries between age ranges of 20 to 52 years. These subjects were interested in learning yoga as a science. These subjects practiced the Yoga Life Style in controlled environment so that the influence of the Yoga techniques can be studied.

'Neuroticism' pre test and post test scores of experimental group were compared. The obtained 't' test value (2.12, $p < 0.05$ level) is found to be statistically significant. The post test mean value is significantly lower than the pre test mean value. The neuroticism of experimental group reduced significantly after the yoga course.

So the results directly suggest the effect of Yoga Life Style on lowering neuroticism. The study support previous research findings.

The results are, may be due to the balancing effect that Yoga Life Style has on physical level, mental or thought level, emotional or feelings level and maturity level. The effects on physical level may point to balance of neurotransmitters (serotonin & GABA), hormones (norepinephrine & cortisol) and increased fitness levels. The practical training of Yoga focuses on negative thoughts, distorted views, wrong beliefs and tries to correct the same. The Yoga techniques look similar to cognitive behavioural treatments.

CHAPTER 5 – CONCLUSION, LIMITATIONS AND SUGGESTIONS

5.1 Conclusion:

1. Yoga Life Style has helped in reducing the neuroticism of the participants.

5.2 Limitations:The cross cultural sample taken for this research was restricted to only 33 subjects, which did not give sufficient predictability of the results. Even though the sample was cross cultural, it consisted of those who wanted to study yoga in depth and were more positive about yoga practices. The sample consisted of more female participants than male.

5.3 Suggestions:

1. A large sample size would be recommended which would give more predictability and give reliable conclusive results.
2. We could have a control group consisting of subjects from different countries.
3. More variables like depression, stress, life satisfaction can also be included which will increase the scope of future research.