

Prospects of Inclusion of Yoga in Education – As revealed through the Study of literature in India and abroad

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Abstract:

At the present time while the paradigm shift in respect to human health is directed to maintain wellness rather than treating illness, popularity of yoga as a means of ensuring wellness of human health is universally accepted. It is not as if international community has become aware of the benefits of yoga as a means of holistic health care only after Indian Prime Minister Narendra Modi's appeal to international bodies for a International Yoga Day, but they were used to it even before this; - and International Yoga Day has only given them an opportunity to share what they find to be the best among the existing health care practices. While the world community felt the need of yoga in restoration of health, promotion of human values, no significant efforts are made to include it into curriculum of formal education. The objective of the present paper is to see whether such global popularity is motivated merely by some underlying perceptions with regard to benefits of yogic practice or there are some scientific/experimental evidences. The authors also want to visualize the prospects of yoga education, especially in India which is assumed on the ground that India is the motherland of yoga and learning it in its motherland itself is naturally a dominant inclination within the minds of all human beings.

Introduction: *“Millions of People around the world have rolled out their yoga mats to celebrate a tradition that was once the preserve of Hindu holy men but is now a worldwide phenomenon.”* - the quoted report of BBC News broadcast on 22 June, 2017 reveals the mass scale global participation in celebration of International Yoga Day on one hand besides the global popularity that Yoga has attained throughout the world on the other hand. It is not as if international community has become aware of the benefits of yoga as a means of holistic health care only after Prime Minister Narendra Modi's appeal to international bodies for a International Yoga Day, but they were used to it even before this; - and International Yoga Day has only given them an opportunity to share what they find to be the best among the existing health care practices. The people of Europe became aware of the mystery of yoga centuries back. Americans first came in touch with yoga through American transcendentalists like Ralph Waldo Emerson and Henry David Thoreau. Swami Vivekananda's address in Parliament of Religion in Chicago in the year 1893, followed by a series of lectures in various places of America, made the Americans appreciate and understand the tremendous

rewards that regular practice of yoga can give to human beings. Yoga has become an integral part of school curriculum in America. Yoga Ed. is playing a significant role in yoga research to adapt yoga programme suitable for schools. Yoga Ed. is an organization that brings physical and mental fitness benefits of yoga to children, teachers, and parents through yoga education programs in schools. Yoga Ed. offers a year-long curriculum for physical education. The mission of Yoga Ed. is to adapt the time-tested system of yoga into educational programs that provide children and teachers with proven techniques for enhancing health, well-being, and learning.¹ The global popularity of yoga lies in the perception that it is not merely a psycho-physical exercise, but a way of life which can make our life happy, beautiful and complete.

The objective of the present paper is to see whether such global popularity is motivated merely by some underlying perceptions with regard to benefits of yogic practice or there are some scientific/experimental evidences. The authors also want to visualize the prospects of yoga education, especially in India, on the basis of empirical evidences of studies conducted on yoga and its influence on learning and human development. Such specificity is assumed on the ground that India is the motherland of yoga and learning something in its motherland itself is naturally a dominant inclination within the minds of all human beings.

Review of the empirical studies in regard to effectiveness of Yoga :

A number of studies have so far been conducted with regard to effectiveness of yoga in various aspects involving our physical and psychological health. Many of these researches were concerned with the study of effectiveness of yogic practice in the field of education: such as improvement of students' academic achievement, enhancing the levels of motivation of students and teachers, reducing stress and aggression, improving physical health conditions of learners, enhancing job-satisfaction among teachers, and so on. In the present paper, the authors are primarily concerned with reviewing those empirical studies which were concerned with exploring specifically the effectiveness of yoga in the field of education.

Sharma² (2004) studied on effect of yoga and meditation practices on self esteem, self disclosure, emotional intelligence and social adjustment of the criminals at a model jail. It was observed in the study that the adolescent criminals who underwent formal training in yoga and meditation practices had significantly higher emotional intelligence, self esteem and self disclosure as compared to those who had no formal training in yoga and meditation practices. In the study done by Bonura (2007)³, an attempt was made to see the impact of yoga on psychological health in older adults. The study revealed that yoga has

¹ Holly Smith-Vogtmann, The Effects of Yoga on Children's Self-Perceived Stress and Coping Abilities, Retrieved from <http://commons.emich.edu/cgi/viewcontent.cgi?article=1245&context=theses> dated, 20th March-5, 2015 at 5 pm.

² Ibid.

³ Kimberlee B. Bonura. The Impact of Yoga on Psychological Health in Older Adults, *Journal of Physical Activity and Health* · December 2013, DOI: 10.1123/jpah.2012-0365

significant positive impact on different psychological variables like self control, self efficacy, anxiety, well being etc.

Hewett (2010)⁴ made a study on effectiveness of *bikram yoga* program on mindfulness, perceived stress, and physical fitness. Fifty-one males and females between the ages of 20-54 years were recruited from the Boise State University. Participation was limited to those who had engaged in less than two years of long-term practice of Bikram yoga, and who had not attended Bikram yoga in the last three months. Participants attended a minimum of three Bikram yoga sessions per week for 8-weeks. Mindfulness was measured pre- and post-intervention using the Five-Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer & Toney, 2006). Perceived stress was measured using the Perceived Stress Scale (PSS) (Cohen & Williamson, 1988). Components of physical fitness were measured with a 1-mile walk, resting heart rate, a modified sit-and-reach test, a total body rotation test, and a single-leg balance test. Results of the study practice of Bikram yoga led to increased levels of overall mindfulness, and also improvement in physical fitness.

Vengatesh (2012)⁵ made a comparative study to see the relative effectiveness of physical exercises and yogic practice on anxiety aggression and achievement motivation levels of college volleyball players. The results of the study reveals that while both yoga and physical exercise lead to improvement in terms of anxiety, aggression and academic motivation among volleyball players as compared to non practitioners, yogic practice group is significantly better than physical exercise practitioner group in such improvement. Yoga group is significantly better in the level of anxiety of various kinds i.e. trait anxiety, cognitive anxiety, somatic anxiety, aggression and in academic motivation than the physical exercise group.

Devid (2013)⁶ studied on effectiveness of yoga on academic motivation, adjustment behavior and self esteem among adolescents with low scholastic performance. The study adopted pr-test - post-test control group design. The experimental group showed significant improvement in terms of academic motivation and adjustment behavior in comparison to control group.

Choudhury (2014)⁷ made a study on effect of *yoga nidra* and *pranayam* on selected physiological and psychological variables of tribal students. The study revealed significant improvement in physiological as well as psychological variables of the sampled students as a result of practice of *yoga nidra* and *meditation*. In terms of physiological dimension, significant improvement was noticed in the experimental group (as compared to the control group), in respect to respiratory rate, systolic blood pressure, cardio-pulmonary index, breath-holding capacity. So far as psychological variables were concerned, significant improvement was noticed in reduction of stress levels as

⁴ Louise Zoe Hewett, An examination of the effectiveness of an 8-week bikram yoga program on mindfulness, perceived stress, and physical fitness, downloaded from <http://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1112&context=td.on> 23rd July, 2016 at 7-45 pm

⁵ Vengatesh P. (2012), Relative effect of physical exercises and yogic practice on anxiety aggression and achievement motivation levels of college volleyball players, Retrieved from URI <http://hdl.handle.net/10603/20569> on 2nd October 2018 at 10.30 pm.

⁶ Anita Devid, Effectiveness of yoga on academic motivation, adjustment behaviour and self esteem among adolescents with low scholastic performance; downloaded from shodhganga.inflinac.in, URI: hdl.handle.net/10603/17935, 18th July, 2016, 6-30 pm.

⁷ Binod Choudhury, Effect of yoga nidra and pranayam on selected physiological and psychological variables of tribal students, Viswa Bharati University Library, West Bengal, also available at Shodhganga.inflinac.in, pp.115-117.

a result of yogic practice among the members of the experimental group. This group was also found significantly improved in terms of social adjustment.

The objective of the study done by Gajjar (2015)⁸ was to see the effect of yoga exercise on achievement, memory and reasoning ability. The study brought to light the fact that practice of yoga significantly improves the power of memory and reasoning ability and academic achievement. Singh's (2015)⁹ study also revealed that academic achievement can be improved through practice of yoga. The yoga practitioners were found to have significantly better academic achievement as compared to non-practitioners.

Kumawat's (2016)¹⁰ study tried to review the effectiveness of yoga on mental health of Primary school teachers in respect to certain variables; i.e. emotional stability, overall adjustment, feeling of security and insecurity, intelligence and self concept. The findings of this study revealed that practice of yoga led to increased emotional stability, good adjustment, and high level of self concept, and also an increase in the sense of security among Primary school teachers. Dange's¹¹ study too tried to make a comparative analysis on the impact of yoga practice on adjustment and aggression of urban and rural teenagers and the findings of the study revealed that yoga practitioners were found to be less aggressive as compared to non practitioners.

The objective of the study done by Rajkumar, M. (2017) was to see effectiveness of yoga and meditation therapy in enriching mental health, self concept and achievement motivation among school students. The study revealed that mental health, self concept and achievement motivation levels significantly improved in the experimental group of school children than in the control group due to influence of yoga and meditation therapy among them. Sachan's study (2017)¹² also tried to see the effect of *kapalbhati* and *pranayama* on selected physiological and psychological variables of school going children in Jaipur. The findings of the study revealed that regular practice of *Anulom-vilom* and *Kapalbhati* bring significant positive changes in physiological as well as psychological variables of school going children. Significant positive changes were noticed in the experimental group after the experimental period in terms of physiological variables; i.e. resting pulse rate, vital capacity, resting respiratory rate, breath holding capacity, systolic blood pressure, diastolic blood pressure and psychological variables i.e. anxiety, stress, and personality.

⁸ B. Nilesh Kumar Gajjar, Effect of yoga exercise on achievement memory and reasoning ability, retrieved from shodhganga.inflibnet.ac.in on 12th May at 8.10 pm, URI <http://hdl.handle.net/10603/39801>

⁹ Gobindra Singh Dhapola, Study of efficacy of yoga practices on self concept and academic achievement of secondary level students, retrieved from shodhganga.inflibnet.ac.in, URI <http://hdl.handle.net/10603/43718>, 10th January, 2016 at 8.30 pm.

¹⁰ Pramod Ramkrishna Kumawat (2016) "Effectiveness of yoga on mental health of primary teachers: Study" Retrieved from URI <http://hdl.handle.net/10603/193001> on 2nd October 2018 at 7.26 pm.

¹¹ Mayuri Rames Dange, A comparative study of impact of yoga practice on adjustment and aggression of urban and rural teenagers, Retrieved from shodhganga.inflibnet.ac.in, URI <http://hdl.handle.net/10603/77930> on 12th June 2015 at 8.30 pm.

¹² Anurag Sachan.(2017) The effect of kapalbhati and pranayama on selected physiological and psychological variables of school going children in Jaipur , Retrieved from URI <http://hdl.handle.net/10603/202725> on 3rd October 2018 at 7.12am.

Implications of the findings in the field of Education:

The review of the empirical studies carries great implications into the field of education, as these highlight the positive evidences of yoga on the teaching learning and adjustment processes of the learner. Learning process is influenced by a number of factors, among which the most significant is learners' basic potentialities: i.e. memory, intelligence, power of attention, interest in learning etc. The findings of above studies revealed the fact that these potentialities can be improved by regular practice of yoga. For example Gajjar's study revealed that memory and reasoning ability can be improved through practice of yoga. The findings of Sarma's study reveal the fact that emotional intelligence can be improved through regular practice of yoga. In addition to memory, reasoning ability, attention towards courses of study etc are also influenced by yogic practice as revealed from the above empirical studies. Today, at an age of fast growing electronic media usage, when many students have become the victims of mobile phone addiction, pornography, etc., - where frequent discourses by adults are held on the issue of rampant ill-effect of mobile phones upon students, it is not uncommon to see that many teachers and parents report that their students/children don't have concentration in studies. As evidenced from the studies mentioned above, regular practice of *yoga* and *pranayama* can be a solution in this regard.

Another significant factor influencing upon learners' performance is motivation. It is said that when a student is motivated to what the teacher is teaching, half of the problems of teaching for the teacher is solved. Motivation is influenced by a number of factors such as physical health condition, confidence level of students, self efficacy, self disclosure; self concept etc. which can be improved through practice of yoga as revealed from the findings of studies; viz., Sarma's study and Banura's study. On the basis of these findings we can say that inclusion of yoga within curriculum would lead to enhancement of motivation levels among students.

At today's circumstance when the life has become competitive, increased level of stress and aggression is a common problem among the learners. High stress and anxiety level among students is related with a number of factors i.e. uncertainty about having a job after completion of education, perusing a course of study not by choice but compulsion due to limited opportunity of alternatives, unattractive teaching learning environment etc. According to a report of research commissioned by UniHealth, the UK's first health and well being messaging platform for students revealed that 82% of UK's students suffer from stress and anxiety and 45% have experienced depression. The more worrying fact as revealed through the report is that 1 in 5 students have suicidal feeling.¹³ In India the situation is even graver than global average. In a survey report of Business Today (Tuesday, July 10, 2018) it is stated that in India 9 in 10 students suffer from stress, 95% of Indian between age group of 18-34 are stressed compared to 86% of global average. The empirical studies revealed the fact that yoga's role in reduction of stress and aggression is very significant

¹³ Retrieved from website, www.thenationalstudent.com>Student on 13/10/2018 at 10.03 am.

i.e. revealed through the studies of Chaudhuri, Dange, Rajkumar and Sachin. On the basis of such empirical studies it can be un-doubtably said that organizing yoga classes in the school will lead to reduction in stress and anxiety level among the students.

Every individual is blessed with tremendous capacity. Swami Vivekananda says “each soul is potentially divine.” But unfortunately most of us are unaware of our capacity. After the death of Einstein his brain was brought to laboratory and after experimentation and what made neuroscientists strange that his brain was almost similar with the brain of an ordinary man. It made many one to say that perhaps Einstein could do the marvelous because he used more of his brain capacity as compared to others. On the basis of the findings of above mentioned studied it is estimated that regular practice of yoga lead to enfoldment of our potentialities, make us capable to achieve the new heights. The findings of studies thus carry great prospects of yoga education. Its inclusion within education can ensure harmonious development, can make the students more creative, can minimize student unrest, and can minimize the level of anxiety, phobia and so on.

Rationale of Yoga research in India:

In the wake of the global popularity of Yoga our country has a significant role to play. While this popularity has ascribed great responsibility in the shoulder of our country on the one hand, it also carries ample prospects and challenges on the other. Our country is the treasure house of all the fundamental literatures on yoga. There are many prominent persons in the nook and corners of our country who have stupendous knowledge and skills in the field of yoga science. However, they have largely remained low-profile, and their works remained unpublished and, even at times unpopular, and untouched by the common people. It is the need of the hour therefore, for resurrection of those literatures and knowledge and to spread them into the life of people across the globe to make this world full of joy, happiness and peace. From this point of view India has a tremendous responsibility to play. So far as the prospect is concerned, in a globalised world where education has become an effective commodity, our country can supply the world with prominent yoga teachers and instructors and also can attract foreign students to learn yoga in its motherland itself and thereby can earn huge foreign exchange. Recently the Ministry of Human Resource Development of India has planned to establish a Department of Yoga in 7 Central universities of India. If it is materialized, it will un-doubtedly be a stepping stone in realizing the above-mentioned responsibility and prospect. However, the mere establishment of Yoga Department is not enough and more things need to be done, - of which attempts to encourage fundamental research in the field of yoga is of utmost importance. India is sadly lacking in empirical research findings in the context of the use of education in the mitigation of the problems of young upcoming generation. At a time, when the paradigm of the focus of health has shifted to holistic health which is to be promoted by preventive health care, Yoga can serve as the most important means of promotion of holistic health in young individuals, especially through preventive techniques practiced as *yogabhyaas* on a regular basis. Extensive research is also a necessity in the field of yoga in

order to develop some working yogic module to adapt easy and convenient yogic practices in an interesting and easy manner for the common people.

Conclusion:

The findings of empirical studies in Yoga have great implications in the field of education. At present day perspective the issues of mental health challenges among students are widely discussed. It is true that learners mental health have close link with external factors like curriculum, methods of teaching, teachers personality but there are some factors whose influences are more significant as compared to the external factors which includes the factors like self esteem, emotional intelligence, power of concentration and so on which can be improved through regular practice of Yoga as revealed by the researches. Significant positive impact of Yoga on regular basis on students' academic achievement is also reported by a number of studies. The empirical findings of yoga researches reveal the fact that inclusion of yoga in school curriculum will certainly contribute to holistic development of learner and realization of broader objectives of education.

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