

**Benefits of Yoga Education in High School Curriculum for
Anger Management: A Randomized Control Study**

SECTION – 8

APPRAISAL



SECTION 8 : APPRAISALS

CONCLUSIONS :

- 1) Raising anger issues in Indian adolescents is an alarming situation. High school children exhibited higher levels of anger experience and expression and moderate levels of anger control.
- 2) Indian Classical Scriptures provide enormous resources for developing concept of anger and its management. Identifying trikarana (kaya-vak-manas) concept for holistic assessment of anger is a phenomenal outcome. Concept could be used across any assessment.
- 3) The first of its kind, anger assessment scale for adolescents enjoys strong psychometric properties. Statistically reliable and validated scale found very robust in assessment of anger at behavioural (*kayena*), verbal (*vacha*) and mental (*manasa*) dimensions.
- 4) Yoga Module developed for anger management in adolescents is an effective program for bringing down the anger levels of high school children.
- 5) Yoga Module for anger management in adolescents is feasible to be used as a curriculum in high school children as a holistic anger management program.

IMPLICATIONS OF THE STUDY

The scale developed can be used in any study to assess anger, aggression or violence in adolescent population. The questions can be reworded or edited keeping the underlying principle to suit any culture or gender or age group.

Kaya-Vak-Manas concept could be applied to any bio- assessment. This study provides the foundation to study other core emotions in adolescents.

SUGGESTIONS FOR FUTURE STUDIES

This is only a beginning of understanding the concept of anger and its dynamics especially in adolescent population. There is ample scope for future studies taking this work forward. Few of them are mentioned below :

- 1) Further examining the Traditional Texts to provide further evidence to the derived principles. Current study examined only Vedic and Vedantic Texts. Traditional Texts of other philosophies could also be explored.
- 2) Prevalence of anger issues could be carried out with representative samples of adolescents across India. Current study examined only two English medium high schools.
- 3) The newly developed scale can be improved focusing on gender and age within adolescence. The scale can be translated to other languages too. Emotions are best explained in the mother tongue language.
- 4) The scale can also be improved and standardised to identify domain wise expression as well as to provide range for Mild, Moderate, High and Severe Anger levels.
- 5) Scope for improvement of yoga module by including relaxation component in the module which is found to be effective in reducing the speed and repeatance of any thought process, particularly anger thoughts.

- 6) Longer duration intervention may be required to drive the concept of anger. The current study duration of four months with 2 sessions per week could only yield about 22 to 25 sessions considering holidays, exams, inspections etc.
- 7) Future studies also could consider subjective feedback, experiential aspects and also different types of assessment of anger. The present study only examined the self-reported scales. Further studies could also consider evaluation of individual's anger by teachers, parents and peers.
- 8) The present study focused only on one age group (13-14 years) give huge score for exploring other age group within adolescents.
- 9) The Ayurveda based concepts of Triguna and Tridosha has strong correlation with anger. Studies could be focused in this direction also.
- 10) Current Study tried collecting data related to a number of probable confounding or influencing factors such as food pattern (veg or non-veg), parental anger styles, socio-economic background, personality type etc. However, analysis could be done as the data collected was incomplete and it was beyond the scope of the study. Future studies could work in this line.
- 11) Future studies could also develop the scale and module for adult population too based on the same principles.

SPECIAL MENTION

Supporting this kind of study by SVVU is indeed a great move in the research field. In addition to extending financial support, SVVU showed special interest in executing this project with high quality. The then Vice Chancellor himself was personally monitoring the project work.



Figure 15 : Photograph taken after the pre submission review presentation at sri venkateswara vedic university, tirupati on 2nd February 2017. Dr. Umesh Bhat, Project In-Charge (1st from the left), Dr. K E Devanathan, the then Vice Chancellor (3rd from the left) are seen in the picture.

This project work was exhibited as a Poster Presentation on the following occasion

Figure 16 : Poster Presentations made



Poster Presentation at Kaivalyadham
With the Jury Dr. A M Murthy



Poster Presentation at NIMHANS

- 1) International Conference on Yoga and Education held at Kaivalyadham Yoga Institution, Lonavala during December 26-30, 2015.
- 2) One day workshop on 'Overview of Meditation: Clinical and Research Aspects (OMCARA 2016)' being organized by NIMHANS Integrated Centre for Yoga on June 26, 2016.

Four papers from this work are published in Scientific Journals as detailed below:.

- a) Yogic Management of Anger in High School Children – published in International Journal of Current Research and Academic Review ; ISSN: 2347-3215 Volume 4 Number 12 (December-2016) pp. 93-102; Journal home page: <http://www.ijcrar.com> (Paper annexed)
- b) Anger assessment among high school children – published in International Journal of Current Medical and Pharmaceutical Research, Available Online at <http://www.journalcmpr.com>
- c) Validation of Adolescent Anger Scale - International Journal of Current Microbiology and Applied Sciences ISSN: 2319-7706 Volume 6 Number 1 (2017) pp. xx-xx Journal homepage: <http://www.ijcmas.com>
- d) Holistic assessment of anger in adolescents – Development of a rating scale – Accepted for publication in Journal of Ayurveda and Integrated Medicine, an open-access, peer reviewed journal published on Elsevier.

This research work is unique, innovative and first of its kind study in many areas. They are

- Identifying **Trikarana concept** for holistic assessment of anger and using the same for scale development for anger (combination of Veda and Science in a true sense)
- Adolescent anger assessment scale developed in this study is the **first scale** developed for anger management in India
- The newly developed Integrated Yoga Module for Anger Management in high school children was validated by 5 psychologists and 5 yoga experts. Further it was standardised by administering it on 278 children. This is the **first validated and standardised yoga module specifically developed for anger management in high school children.**
- Short Meditations developed for anger management using **principles derived from Vedic science** is again an innovative work .
- **Emphasising Yama Niyama** in the Yoga Module for anger management and **minimising the religious aspects** makes the module universally acceptable and adoptable.
- Assessing efficacy of **yoga as curriculum** in Schools in India is again the first study.

INDICATORS FOR PROJECT EVALUATION

- a) **Input indicators:** Technical expertise of S-VYASA Yoga University, Bengaluru and financial support from Sri Venkateswara Vedic University, Tirupati. In addition, having two external co-guides one from IISc (Dr. S N Omkar) and other from NIMHANS (Dr. Manoj Kumar Sharma) is a strong input indicator. Studying anger from two perspectives (spirituality & science) is another strong input indicator which is in line with the visions of SVYASA and SVVU.
- b) **Process indicators:** Identifying the Vedic sources and concepts is a landmark process indicator. Developing anger scale based on Vedic principles and also yoga module for anger management emphasising Yama and Niyama provide an holistic outlook to the process. Conducting study in multiple schools and considerably large samples are strong indicators of the process evaluation in this study. Inter-disciplinary (science and spirituality) research work in an another indicator.
- c) **Output Indicators:** a) Excellent psychometric properties of the developed anger scale, b) effectiveness of integrated yoga module for anger management and c) statistically significant reduction in anger in yoga group and no reduction in the control group were a strong output indicator.
- d) **Outcome Indicators:** a) Feasibility of Yoga Module for anger management in schools as a curriculum, b) holistic assessment of anger at Behavioural, Verbal and Mental level and c) validated and standardised Intergrated Yoga Module for Anger Management in High School Children.

e) **Impact Indicators:** Applying trikarana concept can bring in a paradigm shift for assessment and treatment of diseases or conditions. Integrated Yoga Module for Anger Management can contribute to minimise adverse effects of anger such as violence, self-harm, road accidents, substance abuse etc.

f) **Social responsibility indicators:** School has a definite and inevitable role to play in providing moral education in a multicultural society especially in the urban setting where both parents are employed. Akrodha (not getting angry) being one of the key moral value needs to be inculcated during childhood and adolescents as a part of moral education. Adolescent Anger Assessment Scale and Integrated Yoga Module for Anger Management can act as a powerful tool in this direction.

India is going to be the youngest nation by 2020 with 64% of its population comprising of adolescents and youth. Addressing anger issues in this age group is hence very critical. The developed anger assessment scale and the integrated yoga module for anger management can be considered as a dedication to the nation by both the institutions.

g) Holistic assessment of anger also has implications for promotion of mental health thereby enhancing quality of social relationships in adolescent population.