

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

ABSTRACT



ABSTRACT

Introduction:

Adolescent anger is one of the key contributors of adolescent mortality and many negative developmental outcomes. Research studies indicate, escalated anger issues in schools and colleges across the globe including India. Anger being multidimensional construct, assessment of anger and its management remains a significant challenge. Despite a number of studies done on anger, it is still an emotion that is very much misunderstood. While, the available adolescent anger theories and inventories provide considerable direction towards the way forward, they lack clarity in terms of providing a comprehensive approach in assessment and management of anger. Considering negative developmental outcomes and the far reaching consequences of adolescent anger, there is a growing consensus among researchers, educators and health professionals to develop effective school based anger management programs.

Indian Classical texts, mainly Vedic science provides immense conceptual resources to understand the concept of anger and its dynamics. There is an increasing trend of adopting spiritual concepts and practices for promoting mental health. Yogic Science having its strong roots in spirituality as well as evidence based approaches acceptable to modern science will be able to provide holistic approach to anger assessment and anger management.

Literary Review :

The concept of anger is studied from various Vedic and Vedantic scriptures. The major source of this literary survey is the *astadasha vidhya stanam* (18 abodes of knowledge). Following texts which have dealt the concept of anger explicitly are considered for thorough study. 1) Taittiriya Upanishad, 2) Manyu Sukta, 3) Shatarudriyam, 4) Brihadaranyaka Upanishat, 5) Mahanarayana Upanishat, 6) Srimad Mahabharata, 7) Srimad Ramayana, 8) Srimad Bhagavata, 9) Bhagavad

Gita, 10) Patanjali Yoga Sutra, 11) Yoga Vasista, 12) Ayurveda, 13) Viveka Chudamani, 14) Tirukurrall and 15) Subhashitas.

The key findings include anger is a powerful destructive force. It is an enemy existing within. The consequences of anger affect all aspects of life. Body (kaya), speech (vacha) and mind (manasa) are the three tools (Trikarana) through which anger is experienced and expressed. Assessment and management of anger is holistic when all three levels are considered. The literary review also resulted in deriving a number of anger management techniques such as Manaprashamana (Sublimation), Pratipaksha Bhavana (Distraction), Chittaprasadana (Tranquillity of mind) and practice of Ahimsa (Non-violence), Daya (kindness), Karuna (compassion) etc.

Literature Review:

Anger is a strong influencing factor for many negative behaviour (aggression, violence, road accidents, self-harm etc.), conduct disorders (inter-personal conflicts, substance abuse, crimes of passion etc.) and health issues (depression, stress, heart diseases, PCOS, & anxiety etc.). There are multiple theories of anger and an array of adolescent anger inventories which lack in comprehensive approach thereby does not represent the anger construct adequately. Research on adolescent anger and yoga in schools are still in primitive stage.

Aim & Objectives:

This study is therefore focused on deriving the fundamental principles of anger assessment and anger management from the Traditional Scriptures and adopting these principles to develop an adolescent anger assessment scale and an integrated yoga module for anger management. Further the study aims at examining the efficacy of the yoga module and the scale in management and assessment of anger by conducting a yoga intervention study in high schools.

Materials & Methods:

Considering the multi-dimension nature of this research work, the study was carried out in four phases. Different methods and materials are used in each phases. They include

- a) **Phase 1 : Prevalence Study** : Survey method was used to study the prevalence of anger in Indian High Schools considering 1220 children (boys and girls) from 8 schools. An existing popular western scale (STAXI-2-CA) was used.

- b) **Phase 2 : Development of Adolescent Anger Assessment Scale** : Standard scale development processes such as construction of items, item reduction, factor analysis using Varimax Rotation, validity and test-retest reliability tests were conducted to develop the anger assessment scale. All stake holders such as yoga experts, psychologists, teachers, parents and adolescent children were involved in most of the processes. Test retest reliability was carried out with 127 children and the final field study was conducted with 757 subjects to determine internal consistency (Alpha coefficient). The existing western scale (STAXI-2-CA) was also used parallely for comparison.

- c) **Phase 3 : Development of Integrated Yoga Module for Anger Management** : Based on the IAYT (Integrated Approach to Yoga Therapy) and SVYASA developed meditation MEMT (Mastering Emotion Technique), an integrated yoga module for anger management in high school children was developed. The yoga module was developed in consultation with yoga experts, psychologists and referring to various yogic texts. The module was further validated by 5 yoga experts and 5 psychology experts.

d) **Phase 4:** Pre-post study of Yoga Intervention as a curriculum: Both scale and module was further validated / standardised through a pre-post yoga intervention control study in two English medium high schools with a sample size of 187 (yoga group-114, control group-73). Yoga sessions were conducted for duration of 4 months with 2 sessions per week.

Emphasis was laid more on deriving new approach to assess and manage subtle aspects of anger in addition to ensuring use of statistical methods, authorised tools and software throughout the processes.

Results:

The first of its kind study in many ways resulted in remarkable outcomes against each of the phases which is a testimony for a harmonious blend of eastern concepts with the western processes to achieve holisticity. The literary review resulted in deriving holistic approach to assess anger using **trikarana (mano-vak-kaya) concept** and identifying many techniques to manage anger, such as **manaprashamana, pratipaksha bhavana, and chitta prasadana.**

Phase wise results are given below:

- Phase 1:** Prevalence of **higher levels of anger** (45% of state anger & 23% of trait anger) and moderate levels of anger control among high School children.
- Phase 2 :** Development of A 23 item **adolescent anger assessment scale** which assesses anger at **behavioural (kayika), verbal (vachika) and mental (manasika)** domains. The scale demonstrated high scores of reliability and validity ($\alpha = 0.816$).
- Phase 3:** Development of **Integrated Yoga Module for Anger Management** in high school children which included Asanas, Pranayamas, Meditation and Knowledge points such as yama and niyama. The module was validated by 5 yogic experts and 5 psychologists.
- Phase 4 :** Significant **reduction in anger** scores were observed in **yoga group** as compared to control group in a study conducted in two schools with n=187.

Conclusion:

This is a systematic and comprehensive study of concept of anger in adolescence. It examined various aspects of anger such as its dynamics, assessment and coping mechanisms. Following conclusions were drawn from the study.

Phase 1 : Prevalence of high levels of anger adolescents even in India is an alarming situation.

Phase 2 : Assessment of anger at behavioural (kayika) , verbal (vachika) and mental (manasika) domains provides a holistic or comprehensive approach. The newly developed adolescent anger scale is a holistic tool to assess anger among high school children.

Phase 3 : Validated yoga module found effective as a program for anger management in high school children. Yogic practices such as yama, niyama and short meditations that were included in the module were able to cause significant reduction of anger.

Phase 4 : Yoga is an effective school based anger management program. It is feasible as a curriculum in high schools. The newly developed anger scale and yoga module provide holistic approach to anger assessment and management in high school children.

Special Acknowledgement:

This research is a part of the Research Project funded by Centre for Veda-Science Research, **Sri. Venkateswara Vedic University, Tirupati**. Also many renowned Vedic Scholars and Spiritual leaders have contributed for this study. Sincere acknowledgement is extended to all.

* * * * *