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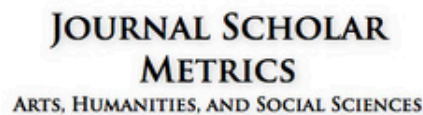
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# Impact of Mindfulness-Based Yoga Training on Need for Achievement, Attitude towards Education and Work Methods among Senior Secondary Students

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## ABSTRACT

The present study highlights the therapeutic application of mindfulness and yoga techniques. The researchers introduced the Mindfulness-Based Yoga Training (MBYT) as a novel intervention to investigate its impact on need for achievement, attitude towards education and work methods among senior secondary students. A total of 100 students participated from the selected school based on total enumeration method and they were equally assigned to the experimental and waitlist control groups. This study was conducted in Assam, India and data were collected from the Government Higher Secondary School, Tezpur, Assam. The study employed a quasi-experimental design along with comparative, pre-post and repeated measure design. The Deo-Mohan Achievement Motivation Scale was used to analyze the pre-post assessment scores. This research was carried out in two phases. Phase 1 involved developing the MBYT intervention, while Phase 2 focused on assessing its impact. Both the experimental group and the waitlist control group participated in eight weeks of MBYT sessions. Data analysis was conducted using descriptive statistics, paired t-test, independent t-test and repetitive measure of one-way analysis of variance (ANOVA). The pre-test and post-test findings indicated that the intervention had a significant impact on the variables of need for achievement, attitude towards education and work methods in both the experimental and waitlist control groups, with a large effect size.

*Key words:* mindfulness, yoga, need for achievement, attitude towards education, work methods.

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### Novelty and Significance

*What is already known about the topic?*

- Motivation is a crucial factor in achieving academic success, and low achievement motivation can negatively impact academic performance.
- Mindfulness practices help individuals focus on the present, develop concentration, and achieve a one-pointedness of mind.
- Mindfulness-based interventions help reduce attention problems, anxiety symptoms, and behavior issues.

*What this paper adds?*

- Mindfulness-based Yoga Training is an effective intervention for school students to improve achievement motivation components including the need for achievement, attitude towards education, and work methods.
- It highlights the importance of incorporating mindfulness-based yoga training into school programs to enhance various psychological constructs.
- It addresses the lack of empirical research on the effectiveness of mindfulness-based yoga training, for school students.

Mindfulness and yoga are ancient disciplines practiced in Indian culture since the time of the Vedas and collected in Vedanta's. These practices are predominantly found in Hinduism and Buddhism. Mindfulness is the English translation of the Pali word "sati," which connotes awareness, attention, and remembering. The word yoga is derived from the Sanskrit *yuj*, which means to join or unite. The ancient perspective

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of mindfulness and yoga was to achieve *enlightenment*, known in Sanskrit as *nirvana* (see Buswell, 2004 for an etymological reconstruction of these terms).

Buddhism explains the Noble Eightfold Path of life, which is divided into three main divisions and eight paths. One of these divisions, mental discipline, includes three key paths of life: right effort, right mindfulness, and right concentration. Right effort involves developing and maintaining wholesome mental states while preventing and eliminating unwholesome ones. It encourages self-discipline, perseverance, and cultivating positive thoughts and emotions. Right mindfulness focuses on living in the present, while right concentration focuses on one-pointedness of mind (*dhyana* or meditation). Numerous meditation practices were developed inside different Eastern religious and philosophical traditions like Tibetan and Zen Buddhism. One of such practices is mindfulness, although with different goals. The term mindfulness meditation is often used synonymously with *Vipasana*, a form of meditation that derives from Theravada Buddhism (Gunaratana, 2002; Young, 1997).

Sharf (2015) stated that early Buddhist beliefs specify different sources of suffering in life, and propose some practices to relieve this suffering. In ancient times, one way of practicing mindfulness was abandoning the goods and happiness of this world in order to cultivate suffering liberation. However, as time continues, Buddhist beliefs have progressed towards a stronger focus on happiness. More recently, mindfulness is practiced as a “therapeutic release” in search of peace and fulfillment (Sharf, 2015).

Nowadays, mindfulness has been adopted by western psychotherapies and has migrated away from its ancient roots, expanding in meaning. Mindfulness is now incorporated as a core technique, along with other interventions, in Acceptance and Commitment Therapy (Hayes, Strosahl, & Wilson, 2012), Mindfulness-based Cognitive Therapy (Segal, Williams, & Teasdale, 2013), and Mindfulness Stress Reduction Therapy (Kabat-Zinn, 1990).

The most explicit application of mindfulness in psychotherapy is mindfulness-based psychotherapy (Germer Siegel, & Fulton, 2005). Mindfulness-based therapists teach mindfulness practices to help patients navigate psychological difficulties. A host of mindfulness-based interventions are being developed for both clinical and non-clinical populations. Therefore, the present study utilizes mindfulness techniques, to understand their impact on achievement motivation components among school students.

Yoga an ancient discipline found in Indian culture, incorporates postures (*asanas*), controlled breathing techniques (*pranayama*), and meditation practices. Before recorded history yoga was practiced as a method of mental and physical discipline. The first definite references to yoga were found in the four *Vedas* (*Rig*, *Yajur*, *Sama*, and *Atharva*) of ancient Hindu texts. Patanjali was the foremost person to formally organize the practices of yoga, detailed in his famous *Yoga Sutras*. He explained *Ashtanga Yoga* or *Eight Limb Yoga* as a multidisciplinary approach to ultimate self-realization. The Eight Limbs of yoga are *Yama* (moral instructions), *Niyama* (self-purification), *Asana* (posture), *Pranayama* (rhythmic breath control), *Pratyahara* (sense withdrawal), *Dharana* (concentration), *Dhyana* (meditation) and *Samadhi* (higher unitive consciousness).

Several studies found that transcendental meditation (TM), a practice that involves focusing attention using a mantra, led to overall psychological health. Researchers found that meditators had markedly higher levels of self-actualization compared to those engaging in other forms of relaxation (Alexander, Rainforth, & Gelderloos, 1991). Some of the studies also claim that yoga methods enhance cognitive functioning (Sarang & Telles, 2006), significantly improve performance in the perceptual and short-term memory of

students (Dillbeck, 1982), and significantly improve the intelligence performance of university students (Cranson, Orme-Johnson, Gackenbach, & Dillbeck, 1991).

Yoga methods offer experiences that foster individuals develop healthy coping strategies, essential for the natural rebalancing of the mind-brain system and overcoming psychological disturbances. The yoga framework integrates seamlessly with traditional therapeutic techniques, supporting undergo healthy changes. When yoga methods are integrated into psychotherapeutic treatments, clients increase self-awareness and self-control, but the benefits extend far beyond basic coping skills. The ultimate goal of yoga is not just to resolve psychological issues but to promote optimal functioning, heightened consciousness, and spiritual enlightenment. Through its refined techniques, yoga activates the mind's natural ability for understanding and transformation (Simpkins & Simpkins, 2011).

In the modern era, mindfulness practice serves a broader purpose beyond achieving enlightenment. In the last few decades, mindfulness and yoga have gained significant attention in behavioral science, with researchers exploring their impact on psychological modalities. Mindfulness practice has been adopted into psychotherapy, incorporating a diverse range of techniques and approaches. It is a core component of several standardized psychotherapy models, many of which fall under the category of third-wave psychotherapies.

Mindfulness-Based Stress Reduction (Kabat-Zinn, 1990) was one of the first clinical models incorporate mindfulness practices into therapy. Research has shown its effectiveness in treating various anxiety disorders, especially Generalized Anxiety Disorder (GAD), panic disorder, and social phobia (Kabat-Zinn *et alii*, 1992; Borkovec & Sharpless, 2004; Miller, Fletcher, & Kabat-Zinn, 1995). Nowadays, mindfulness-based practices are applied to diverse populations, including students. A study by Shapiro, Brown, & Astin (2011) on Mindfulness-Based Intervention (MBIs) among university and college students found that MBIs had a positive impact on cognitive and academic performance, management of academic-related stress, and personal growth.

The practice of mindfulness fosters thoughtful responses rather than immediate actions, helping students navigate daily obstacles and stressors at school more effectively (Parker, Kupersmidt, Mathis, Scull, & Sims, 2014; Pepping, O'Donova, & Davis, 2013). Research has shown that mindfulness practices enhance adolescents' psychological well-being and influence personality traits such as agreeableness and emotional stability (Huppert & Johnson, 2010). Schonert-Reichl and Lawlor (2010) stated that mindfulness education can also enhance optimism in early adolescent. Mindfulness-based yoga plays a crucial role in self-regulation, enabling students to stay calm, alert, and focused on their tasks (Blair & Razza, 2007). Additionally, studies suggest that mindfulness meditation reduces reactivity (Cahn & Polich, 2009) and enhances cognitive flexibility (Moore & Malinowski, 2009).

Mindfulness can be cultivated through yoga, which integrates a physical element into mindfulness practices. Yoga helps students' foster self-regulation by allowing them to pause, reflect, and process their surroundings before reacting to stressors (Razza, Raymond, & Bergen-Cico, 2013). Gawali and Dhule (2013) said that yoga has a positive effect on both physiological and psychological well-being as well as emotional intelligence. Research further indicates that yoga practice enhances overall health boosts psychological well-being (Woodyard, 2011) and increases subjective feeling of energy, positive affect, and self-esteem (Shapiro & Cline, 2004).

Yoga is increasingly being used into classrooms across the United States to enhance students' behavioral and academic functioning (Galantino, Galbavy, & Quinn,



2008). Studies by Michaels, Huber, & McCann (1976) and Miskiman (2006) suggest that transcendental meditation helps reduce stress and improve academic performance. Students who practice yoga perform better in academically both overall and in individual subjects, compared to those who do not (Singh, 2018). Additionally, yoga has the potential to stimulate an underactive parasympathetic nervous system and increase the inhibitory action of the hypoactive GABA system -a key mechanism involved in threat perception, emotional regulation and stress management (Streeter, Gerbarg, Saper, Ciraluo, & Brown, 2012).

Research on the effects of yoga and meditation in school settings is still in its infancy stages. However, emerging evidence suggests that these practices may offer promising benefits (Greenberg & Harris, 2012). While studies indicate the effectiveness of yoga for youth, the existing literature has several limitations including small sample sizes, inconsistent study designs, lack of systematic intervention protocols, and absence of comparison groups (Galantino et alii, 2008). In recent years, researchers have growing interest in examining the impact of mindfulness-based interventions on various psychological modalities among school going students.

Motivation is a key psychological factor that drives the successful completion of goal-directed activities. It activates, guides, and maintains behavior (Baron, 1998). Achievement motivation is a crucial psychological domain for students to achieve success in their school life. Research on academic success and motivational orientation suggests that intrinsic motivation is strongly related to classroom success (Church, Elliott, & Gable, 2001). Self-determination theory (Deci & Ryan, 1985) said that individual have an innate tendency to internalize value and behavioral regulation from their social environment, making their own (Ryan & Deci, 2000). The theory also posits that intrinsic goal pursuits have positive effects on wellbeing and learning. Academic achievement is fundamental aspect of education, contributing to the development of human capital and enhancing individual well-being and life opportunities (Battle & Lewis, 2002). Kohli (1975) defined academic achievement as the level of proficiency attained in academic work, typically measured by students' exam scores or percentage of marks.

One of the most influential theories in achievement motivation is McClelland's theory of achievement motivation (McClelland, 1961), which posits three primary psychological needs: the need for achievement, the need for affiliation, and the need for power. He said that individuals with a high need for achievements are driven to set challenging goals, take calculated risks, and seek feedback to improve their performance continuously. Another prominent theory is Atkinson's expectancy-value theory, which suggests that achievement motivation is a function of the individual's expectancy of success and the value they place on that success (Maehr & Sjogren, 1971). In the context of school students, achievement motivation is a strong predictor of academic performance. Research shows that students with higher achievement motivation tend earn better grades, higher educational attainment, and demonstrate greater persistence when faced with challenges (Linnenbrink & Pintrich, 2002).

Zimmerman and Kitsantas (2014) examined the impact of achievement motivation on the academic performance of high school students. Their study found that students with higher levels of achievement motivation were more likely to set and pursue challenging academic goals, engage in effective learning strategies, and demonstrate persistence in their efforts, even when encountering setbacks.

The study on mindfulness-based yoga training (MBYT) aimed to explore the feasibility and potential impact of this approach on achievement motivation focusing,

on factors such as achievement, attitude towards education and work methods. The intervention module incorporated several mindfulness and yoga techniques designed to help students gain clear awareness of their mental state, improve attention, and maintain motivation, ultimately enhancing their educational performance.

The research questions addressed in this study are: 1) what impact does mindfulness-based yoga training have on the need for achievement? 2) How does mindfulness-based yoga training affect attitudes towards education? 3) What is the effect of mindfulness-based yoga training on work methods? The aim of the study was to examine impact mindfulness-based yoga training on need for achievement, attitudes towards education, and work methods among senior secondary students.

The objectives of the this study were: 1) To assess the pre-test mean scores for need for achievement, attitude towards education and work methods, in both the experimental and waitlist control groups before introducing the MBYT; 2) To evaluate the post-test 1 mean scores for the need for achievement, attitude towards education and work methods, after introducing the MBYT to the experimental group while no intervention to the waitlist control group; 3) To compare the pre-test and post-test-1 mean scores for need for achievement, attitude towards education and work methods, within the experimental group to measure the impact of MBYT; and 4) To analyze the pre-test, post-test-1 and post-test-2 mean scores for need for achievement, attitude towards education and work methods, within the waitlist control group to measure the impact of MBYT.

## METHOD

### *Participants*

A total of 100 participants were selected from a pool of 135 students at Government Higher Secondary School (Tezpur, Assam, India). Among them 53 were female. The school was selected through a purposive sampling method while the Total Enumeration Method (TEM) was used to determine the final sample size based on inclusion and exclusion criteria. The final sample consisted of 100 students (see Table 1) who consistently participated the eight-week intervention program, maintained regular school attendance, were between 15 to 19 years old and studied in classes XI (39 students) and XII (61 students). The participants were both arts (51 students) and science (49 students) streams, had no psychological problems, and were not frequently absent except in necessary situations. Additionally, 27 students were from urban area, 37 from semi-urban areas, and 36 were from rural areas.

*Table 1. Participants' sociodemographic data (N= 100)*

Personal data variables		<i>n</i>	(%)
Age	15-17 years	58	58%
	18-19 years	42	42%
Gender	Male	47	47%
	Female	53	53%
Educational Stream	Arts	51	51%
	Science	49	49%
Educational Qualification	Class-XI	39	39%
	Class-XII	61	61%
Place of Origin	Urban	27	27%
	Semi-urban	37	37%
	Rural	36	36%

### *Instruments and Measures*

*Personal Data Sheet Form.* The personal data sheet is used to collect the students' demographic profiles. This personal data sheet included variables such as age, educational stream, educational qualification and place of origin.

*Deo-Mohan Achievement Motivation Scale (DMAMS; Deo & Mohan, 1985).* DMAMS was developed to assess student's achievement motivation. It is a self-report survey consisting of 50 items; each rated using a five-point Likert scale (always, frequently, sometimes, rarely and never). The tool assesses 15 variables, such as academic motivation, need for achievement, academic challenges, achievement anxiety, importance of grades /marks, meaningfulness of task, relevance of school/college to future goals, attitude towards education, work methods, attitude towards teachers, interpersonal relations, individual concern, general interests, dramatics and sports. The DMAMS demonstrated concurrent validity with the projective test ( $r= 0.54$ ) (McClelland, 1958) and *Aberdeen Academic Motivation Inventory* ( $r= 0.75$ ) (Entwistle, 1968), as well as test-retest reliability ( $r= .69$ ). One stencil key is used for scoring positive and negative items. The total score is the summation of all the positive and negative items scores. The score range on the test is 0 to 200, with higher scores indicating higher achievement motivation.

### *Design*

This study used a quasi-experimental research design to examine the impact of Mindfulness-Based Yoga Training (MBYT) on the need for achievement, attitude towards education and work method. Participants were randomly and equally assigned into experimental group and waitlist control group with 50 students in each. Table-1 provides details of the students in both groups. A comparative, pre-post, and repeated measures design was used to evaluate the effects of MBYT on both groups.

The study was conducted in two phases. In the first phase, Mindfulness-Based Yoga Training (MBYT) was developed as an intervention program, incorporate from an integrated theoretical model and empirical research on the effectiveness of mindfulness-based intervention for students. In the second phase, the MBYT intervention was implemented. To minimize the influence of extraneous variables, participants in both the experimental and waitlist control groups, were instructed to avoid engaging in other special programs, such as motivational seminars, conferences, symposia, or additional mindfulness and yoga training sessions.

### *Procedure and setting*

The MBYT intervention and tests were carried out with class XI and XII students from arts and science streams at Government Higher Secondary School, Tezpur, Assam, India. Both the intervention and testing were carried out in a classroom setting.

The researchers obtained permission from the school to conduct the study. All students were informed about the research in a group setting and provided written informed consent before participating. The study followed the ethical standards of the Tripura University Institutional Research Committee for research involving human participants. Data collection was carried out in four phases.

*Pre-test phase:* The DMAMS was used to assess participants' need for achievement, attitude towards education, and work method. The assessment was conducted for all participants in both the experimental and waitlist control groups.

*Intervention phase:* The MBYT Intervention for the experimental group started one week after the pre-test and continued for 8 weeks. The waitlist control group did not receive any intervention during this period.



*Post-test 1 phase:* To assess the impact of MBYT, a post-test was conducted with experimental group and waitlist control group using the DMAMS. The evaluation took place one week after the MBYT to measure differences between the two groups.

*Post-test 2 phase:* After analyzing the differences between the experimental and waitlist control groups, the MBYT was administered to the waitlist control group for 8 weeks. To assess its impact, a post-test was conducted for the waitlist control group following the intervention.

### *Intervention*

An MBYT program was specifically designed for senior secondary students. The MBYT Intervention Program, consisting of six techniques, was designed and administered over 8 weeks. The training incorporated mindfulness and yoga techniques, with group discussions, role plays, short PowerPoint presentation, and home assignments. The interventions included the following techniques: *Sitting Meditation* (Kabat-Zinn, 2001), *Lying down Meditation* (Kabat-Zinn, 2001), *Giving and Receiving Patience of Mindfulness* (Salgado, 2016), *Expressing Appreciation of Mindfulness* (Salgado, 2016), *Asanas-Tadasana* (Iyengar, 1977) and *Ujjayi Pranayama* (Iyengar, 1977). The steps for each technique are provided in Appendix A. As per the study design, participants practiced these techniques in 16 supervised sessions (100 minutes each), conducted twice a week. On the remaining days, they practiced independently, with progress monitored using a tracking sheet, overseen by the subject teacher.

### *Data Analysis*

The data were analyzed using SPSS (version 20.0). Before conducting inferential statistical analysis, data normality was assessed using skewness. Descriptive statistics were used to describe the variables and compare differences between the experimental and waitlist control groups across three stages: Pre-test, Post-test-1, and Post-test-2. For inferential statistical analysis, the following tests were applied: Independent *t*-test, paired *t*-test and repeated measures one-way analysis of variance (ANOVA). Mauchly's test of sphericity was used to examine the assumptions of repeated measures variance. The significance level was set at a 95% Confidence Interval (*CI*).

## **RESULTS**

The normality of the data was assessed using pre-test and post-test scores. The Deo-Mohan Achievement Motivation subscales, including need for achievement, attitude towards education, and work methods scores, were found to be normally distributed. Therefore, parametric analysis was conducted accordance with the study's objectives.

An independent samples *t*-test was conducted on the pre-test scores of both groups to check for any significant differences before the intervention. The analysis revealed no significant differences between the experimental and waitlist control groups during the pre-test phase.

Table 2 shows mean (*M*) and standard deviation (*SD*) scores for experimental (with intervention) and waitlist control (without intervention) groups, as measured by the Deo-Mohan Achievement Motivation Subscales in the post-test-1 phase. The *M* and *SD* values for experimental group indicate a significant increase for all variables with respect to the values of waitlist control group. Specifically, the values obtained for need for achievement were 14.06 (1.12) in the experimental group versus 10.06 (1.67) in the

Table 2 Results (Independent Sample *t*-test) of experimental and waitlist control groups after the introducing MBYT.

	Exp. Group ( <i>n</i> = 50)	Control Group ( <i>n</i> = 50)	<i>t</i>	<i>df</i>	<i>p</i>	95% CI	
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )				Lower	Upper
Need for Achievement	14.06 (1.12)	10.06 (1.67)	14.083	49	.000	3.436	4.563
Attitude towards Educacion	14.40 (.83)	8.36 (1.3)	27.578	49	.000	5.605	6.474
Work Methods	13.48 (1.29)	8.04 (1.53)	19.214	49	.000	4.878	6.001

waitlist control group, attitude towards education were 14.40 (.83) in the experimental group versus 8.36 (1.3) in the waitlist control group, and work methods were 13.48 (1.29) in the experimental group versus 8.04 (1.53) in the waitlist control group.

In contrast, the mean scores for needs for achievement, attitude towards education and work methods in the wait-list control group remained unchanged. This indicates that, since the students in the waitlist control group did not receive any intervention, there were no changes in their scores for these variables.

Table 2 also depicts the statistical findings of significant differences between experimental and waitlist control groups after the intervention was introduced. The post-test1 scores for both groups were analysed using an independent sample *t*-test to determine if there were any significant differences. Table 2 shows highly significant differences ( $p = .000$ ) between the groups in the post-test-1 analysis for all variables.

Table 3 shows that there were changes in the *M* (and *SD*) scores of need for achievement, attitude towards education and work methods in the experimental group after introduction MBYT. The values obtained for need for achievement were 10.28 (2.33) in pre-test scores versus 14.06 (1.12) in post-test-1 scores. Similarly, obtained values for attitude towards education were 8.06 (1.46) in the pre-test scores versus 14.40 (.83) in post-test-1 scores and the obtained values for work methods were 8.00 (1.63) in the pre-test scores versus 13.48 (1.29) in the post-test-1 scores.

Table 3. Pre-test and Post-test 1 phases results in the experimental group after introducing MBYT.

	Pre-test ( <i>n</i> = 50)	Post-test 1 ( <i>n</i> = 50)	<i>t</i>	<i>df</i>	<i>p</i>	95% CI	
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )				Lower	Upper
Need for Achievement	10.28 (2.33)	14.06 (1.12)	-11.964	49	.000	-4.415	-3.145
Attitude towards Educacion	8.06 (1.46)	14.40 (.83)	-30.306	49	.000	-6.760	-5.919
Work Methods	8.00 (1.63)	13.4 (1.29)	-20.418	49	.000	-4.941	-20.418

A paired sample *t*-test was conducted to assess whether the differences between pre-test and post-test-1 scores in the experimental group were statistically significant. Table 3 shows that the the pre-test versus post-test-1 values for all variables were highly significant at the 5% significance level ( $p < .05$ ,  $p = .000$ ). The statistical value for need for achievement were  $t = -11.964$ ,  $df = 49$ ,  $p = .000$ . Similarly, the statistical value for attitude towards education were  $t = -30.306$ ,  $df = 49$ ,  $p = .000$  and the statistical value for work methods were  $t = -20.418$ ,  $df = 49$ ,  $p = .000$ . The analysis also revealed large effect sizes for all variables: need for achievement was  $r = .86$ , attitude towards education was  $r = .97$  and work methods were  $r = .94$ .

Table 4 shows the *M* and *SD* values for the pre-test, post-test-1, and post-test-2 scores of the waitlist control group, measured using the Deo-Mohan Achievement Motivation Scale. No significant changes were observed in the mean and standard deviation values between the pre-test and post-test-1 scores for all three variables before

Table 4. One-way repeated measure (ANOVA) of Pre-test and Post-test phases results in the waitlist control group after introducing MBYT.

	Pre-test <i>M</i> ( <i>SD</i> )	Post-test 1 <i>M</i> ( <i>SD</i> )	Post-test 2 <i>M</i> ( <i>SD</i> )	<i>F</i>	<i>p</i>	$\eta p^2$
Need for Achievement	10.02 (1.71)	10.06 (1.67)	14.02 (1.06)	<i>F</i> (1.016, 49.78) 215.72	.000	.82
Attitude towards Education	8.40 (1.33)	8.36 (1.31)	13.50 (.91)	<i>F</i> (1.024, 50.17) 529.85	.000	.92
Work Methods	8.10 (1.48)	8.04 (1.53)	17.18 (1.62)	<i>F</i> (1.285, 62.98) 898.68	.000	.95

MBYT. The value obtained for need for achievement were 10.02 (1.71) in pre-test and 10.06 (1.67) in post-test-1. However, significant changes were observed in mean values ( $M= 14.02$ ,  $SD= 1.06$ ) at the post-test 2 level after MBYT. Similarly, the obtained value for attitude towards education were 8.40 (1.33) in pre-test and 8.36 (1.31) in post-test-1. A significant changes were observed in mean values ( $M= 13.50$ ,  $SD= .91$ ) at post-test-2 level after MBYT. Additionally, the obtained value for work methods were 8.10 (1.48) in pre-test and 8.04 (1.53) in post-test-1. However, a significant changes observed in mean values ( $M= 17.18$ ,  $SD= 1.62$ ) at post-test-2 level after MBYT. These results indicate that mindfulness-based yoga training (MBYT) had a significant positive impact on all the variables.

The results of a one-way repeated measure ANOVA examined the impact of MBYT on need for achievement, attitude towards education, and work methods were shown in table 4. Macuchly's test of sphericity indicated a violation of the sphericity assumption ( $p= .000$ ,  $p < .05$ ). To insure the validity of the results, the Greenhouse-Geisser correction was applied across all variables. Examining the differences in mean scores across pre-test, post-test-1, and post-test-2 the obtained *F* values were significant at  $p < .01$ :  $F(1.016, 49.78)= 215.72$ , and Mean Square Error ( $MSE$ )= 2.41; for need for achievement  $p= .000$ ;  $F(1.024, 50.17)= 529.85$ , and  $MSE= 1.61$ ; for attitude towards education,  $p= .000$ ; and  $F(1.285, 62.98)= 898.68$  and  $MSE= 2.39$  for work methods,  $p= .000$ .

Considering the effect size, the obtained value of Partial Eta Square ( $\eta p^2$ ) were .82 for need for achievement, .92 for attitude towards education, and .95 for work methods. Since all values exceed 0.14, they were indicated a high effect size, demonstrating the strong effectiveness of MBYT on the waitlist control group.

## DISCUSSION

The interplay between mindfulness and achievement motivation among school students has garnered significant attention in recent years (Maynard, Solis, & Miller, 2015). This study aimed to investigate the feasibility and potential impact of mindfulness-based yoga training (MBYT) on three key variables: the need for achievement, attitude towards education, and work methods among senior secondary students. Based on the objectives it was found that there were significant changes in these variables in both the experimental and waitlist control group following the MBYT intervention.

The first objective of this research was to examine achievement motivation in relation three key variables: need for achievement, attitude towards education, and work methods before conducting MBYT. The analysis of this objective revealed no significant improvements across all these variables prior to the intervention. The primary goal of MBYT was to strengthen the achievement motivation, ultimately fostering academic success and future growth.

The analysis of second objective indicated that MBYT has significant impact on across three variables after conducting MBYT in the experimental group. The post-test-1 findings indicate a significant mean difference between the experimental and waitlist control groups across all three variables- need for achievement, attitude towards education, and work methods. Since the waitlist control group did not receive any intervention, the observed changes in the experimental group can be attributed to the MBYT intervention rather than any external confounding variables. Additionally, no significant changes were observed in the wait-list control group across any of the variables, further confirming that the intervention was the key factor driving the improvements in the experimental group. Similarly, sitting meditation has proven to be an effective intervention for addressing physiological, psychosocial, and behavioral conditions among youth. In the realm of psychosocial and behavioural issues, meditation helps children reduce externalizing problems, improve attention, and enhance self-esteem. It also contributes to improvements in aggression management, bullying prevention, adaptive functioning, and externalizing behavior (Black, Milam, & Su, 2009).

After, analyzing objective three, there were significant changes were observed in the mean scores across all three variables -need for achievement, attitude towards education, and work methods- when comparing pre-test and post-test 1 results, following MBYT intervention in the experimental group. The effect sizes were notably large for all variables: need for achievement ( $r = .86$ ), attitude towards education ( $r = .97$ ), and work methods ( $r = .94$ ). These finding suggest that MBYT had a significant impact on across all three variables: need for achievement, attitude towards education, and work methods among senior secondary students. Similarly, previous research demonstrated that mindfulness-based interventions positively impact university and college students, by enhancing cognitive and academic performance, reducing academic-related stress, and fostering personal growth (Shapiro *et alii*, 2011). Additional studies shown that incorporating mindfulness practices into the classroom can significantly improve students' achievement motivation (Caballero *et alii*, 2019).

The same intervention was introduced to the waitlist control group after two months. Following the implementation of MBYT, significant mean differences were observed between pre-test and post-test findings across all three variables: need for achievement, attitude towards education, and work methods. The analysis of fourth objective indicates notably large effect sizes for all variables: need for achievement ( $\eta^2 = .82$ ), attitude towards education ( $\eta^2 = .92$ ), and work methods ( $\eta^2 = .95$ ). These findings suggest that MBYT had a significant impact on across all three variables: need for achievement, attitude towards education, and work methods among senior secondary students in the waitlist control group as well. Supporting this, Naveen, Nagarathna, Nagendra, & Telles (1997) applied different yoga breathing techniques to four groups of school children and found a significant increase in spatial memory in the experimental group, whereas no changes were observed in the control group. Similarly, Verma, Shete, Thakur, Kulkarni, and Bhogal (2014) found that yoga practices enhance primary cognitive processes such as attention, perception, and observation among school age children. Mindfulness meditation is positively associated with reduced stress, flourishing, and improved academic achievement. Research on college students has shown a significant positive relationship between mindfulness and flourishing, while stress is negatively associated to both mindfulness and flourishing. Additionally, students who participated in brief mindfulness intervention demonstrated a significant positive relationship between their grade point average (GPA), mindfulness, and flourishing (Bambacus, 2018).

The findings of this study will make a valuable contribution to the fields of psychology, education, guidance, counseling and school mental health program. MBYT can serve as an effective intervention for mental health professionals working with school students, helping to improve their academic performance, school achievement, and motivation.

In our opinion, this study has four key strengths. First, according to our knowledge, this is the first research in Northeast India to examine need for achievement, attitude towards education, and work methods as critical variables among students. Secondly, MBYT was used as a novel intervention approach for Indian school students, with findings that can be generalized to a broader population dealing with similar variables. Third, MBYT primarily focuses on enhancing the students' achievement motivation, rather than merely addressing mental health difficulties. Fourth, MBYT is an accessible and easy-to-practice intervention that does not require extensive supervision, allowing students to incorporate it into their daily routines anytime, anywhere. Additionally, beyond its impact on achievement motivation, MBYT has been qualitatively reported by students to help them manage exam anxiety and stress.

The present study has a few limitations. First, the sample size was relatively small, and data were not collected from across India using cluster sampling. As a result, the findings may not be fully generalizing to the entire Indian student population. Second, it was not possible to control various psychosocial factors that could influence achievement motivation such as exam anxiety, self-expectation, parental pressure, or the tendency to ignoring or devaluing changes. Third, the study sample consisted of students from late adolescence to early adulthood. Therefore it is unclear whether the MBYT intervention would be equally effective for students in other age groups.

Achievement motivation is a key factor in students' academic success. Several factors influence achievement motivation including, the need for achievement, academic motivation, challenges, achievement anxiety, school performance, attitude towards education, individual concerns, work methods. McClelland's theory of achievement motivation (McClelland, 1961), states that individuals with high achievement motivation set challenging goals and take calculated risk to achieve their goals. Similarly, self-determination theory (Deci & Ryan, 1985) suggests that pursuing intrinsic goals positively impacts wellbeing and learning.

MBYT helps students navigate everyday challenges such as attention difficulties, low motivation, study related stress, anxiety, competitiveness, attitudinal issues, and interpersonal issues. Mindfulness meditation practices encourage students to adopt a "being" mode rather than a "doing" mode fostering a state of awareness and presence. Meditation cultivates mindfulness, enabling individual to pay attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment to moment (Kabat-Zinn, 2003). The core mechanisms of mindfulness include attention, consciousness, awareness, and metacognitive awareness (Brown & Ryan, 2003). Mindfulness training program enhance selective attention, improving the ability to focus on relevant information among first, second, and third grade students (Napoli, Krech, & Holly, 2005).

The findings of the present study suggest that mindfulness-based yoga training can effectively enhance achievement motivation components, including the need for achievement, attitude towards education, and work methods. Implementing MBYT in school can improve student behaviour and overall well-being. By fostering a strong mind-body connection, yoga helps students stay motivated, focused, composed in their academic pursuits. School psychologists, can integrate these intervention techniques

to enhance students' psychological well-being and boost their academic achievement motivation. MBYT integrates mindfulness and yoga skills for senior secondary students. The findings of present study indicate that the MBYT was highly effective at the .05 level of significance, with a substantial effect size in enhancing achievement motivation. Additionally, no significant time interaction effect was observed between the pre-test and post-test-1 findings in the waitlist control group. Mindfulness-based yoga is an emerging intervention method that can effectively enhance students' academic performance, achievement motivation, and cognitive, behavioral, emotional, interpersonal, and social skills.

## REFERENCES

- Alexander CN, Rainforth MV, & Gelderloos, P (1991). Transcendental meditation, self-actualization, and psychological health: A conceptual overview and statistical meta-analysis. *Journal of Social Behavior and Personality*, 6, 189-247.
- Bambacus ES (2018). *An intervention study on mindfulness meditation and mindfulness, stress, flourishing, and academic achievement in a first-year experience seminar*. Doctoral dissertation, Virginia Commonwealth University.
- Baron RA (1998). *Psychology (4th ed.)*. London: Pearson Publisher.
- Battle J & Lewis, M (2002). The increasing significance of class: the relative effects of race and socioeconomic status on academic achievement. *Journal of Poverty*, 6, 21-35. Doi: 10.1300/J134v06n02\_02
- Blair C & Razza, RP (2007). Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kindergarten. *Child Development*, 78, 647-663. Doi: 10.1111/j.1467-8624.2007.01019.x
- Black DS, Milam J, & Sussman, S (2009). Sitting-meditation interventions among youth: a review of treatment efficacy. *Pediatrics* 124, 532-541.
- Borkovec TD, & Sharpless, B (2004). Generalized anxiety disorder: Bringing cognitive-behavioral therapy into the valued present. In SC Hayes, VM Follette, MM Linehan, (Eds.), *Mindfulness and acceptance* (pp. 209-242). New York: Guilford Press.
- Brown KW & Ryan, RM (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.
- Buswell RE (2004). Nirvana. *Encyclopedia of Buddhism*. 1, 600-605. New York: MacMillan.
- Caballero C, Scherer E, West MR, Mrazek MD, Gabrieli CFO, & Gabrieli, JDE (2019). *Mind Brain and Education* 13, 157-166. Doi:10.1111/mbe.12200
- Cahn BR & Polich, J (2009). Meditation (Vipassana) and the P3a event-related brain potential. *International Journal of Psychophysiology*, 72, 51-60. Doi: 10.1016/j.ijpsycho.2008.03.013
- Church MA, Elliott AJ, & Gable, SL (2001). Perception of classroom environment, achievement goal and achievement outcomes. *Journal of Educational Psychology*, 93, 43-54. Doi:10.1037/0022-0663.93.1.43
- Cranson RW, Orme-Johnson DW, Gackenbach J, & Dillbeck, MC (1991). Transcendental meditation and improved performance on intelligence-related measures: A longitudinal study. *Personality and Individual Differences*, 12, 1105-1116. Doi: 10.1016/0191-8869(91)90040-I
- Deci EL & Ryan, RM (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Springer.
- Deo P & Mohan, A (1985). *Manual for Deo-Mohan Achievement Motivation Scale*. Agra: National Psychological Corporation.
- Dillbeck MC (1982). Meditation and flexibility of visual perception and verbal problem solving. *Memory & Cognition*, 10, 207-215. Doi: 10.3758/BF03197631
- Entwistle NJ (1968). Aberdeen academic motivation inventory. *British Journal of Educational Psychology*, 38, 181-188.
- Galantino ML, Galbavy R, & Quinn, L (2008). Therapeutic effects of yoga for children: A systematic review of the literature. *Pediatric Physical Therapy*, 20, 66-80. Doi: 10.1097/PEP.0b013e31815f1208
- Gawali SR & Dhule SS (2013). Effect of yoga on anxiety levels in working women. *International Journal of Science and Research*, 2, 2319-7064.
- Germer C, Siegel R, & Fulton, P (2005). *Mindfulness and Psychotherapy*. New York: Guilford Press.



- Gunaratana H (2002). *Mindfulness in plain English*. Somerville, MA: Wisdom Publications.
- Greenberg M T & Harris AR (2012). Nurturing mindfulness in youth and children: Current state of research. *Child Development Perspectives*, 6, 161-166. Doi: 10.1111/j.1750-8606.2011.00215.x
- Hayes SC, Strosahl KD, & Wilson, KG (2012). *Acceptance and Commitment Therapy*. London: The Guilford Press.
- Huppert FA & Johnson, DM (2010). A controlled trial of mindfulness training in schools: The importance of practice for an impact on well-being. *The Journal of Positive Psychology*, 5. Doi: 10.1080/17439761003794148
- Iyengar BKS (1977). *Light on Yoga*. New York: Schocken Books.
- Kabat-Zinn J (1990). *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness*. New York: Dell Publishing.
- Kabat-Zinn J, Massion AO, Kristeller J, Peterson LG, Fletcher KE, & Pbert, L (1992). Effectiveness of a meditation-based stress reduction program in the treatment of anxiety disorders. *American Journal of Psychiatry*, 149, 936-943. Doi: 10.1176/ajp.149.7.936
- Kabat-Zinn J (2001). *Mindfulness Meditation for everyday life*. London: Piatkus Books.
- Kabat-Zinn J (2003). Mindfulness: The heart of rehabilitation. In E Leskowitz (Ed.), *Complementary and alternative medicine in rehabilitation* (pp. xi-xv). Saint Louis: Churchill Livingstone.
- Kohli TK (1975). *Characteristic behavioural and environmental correlates of academic achievement of over and under achievers at different levels of intelligence*. Doctoral dissertation, Punjab University.
- Linnenbrin EA & Pintrich, PR (2019). Motivation as an Enabler for Academic Success. *School Psychology Review* 31, 313-327. Doi: 10.1080/02796015.2002.12086158
- Maehr ML & Sjogren, DD (1971). Atkinson's theory of achievement motivation: First step toward a theory of academic motivation? *Review of Educational Research* 42, 143-146. Doi: 10.3102/00346543041002143
- Maynard BR, Solis MR, & Miller, VL (2015). PROTOCOL: Mindfulness-based interventions for improving academic achievement, behavior and socio-emotional functioning of primary and secondary students: A systematic review. *Campbell Systematic Reviews*, 11, 1-47. Doi: 10.1002/CL2.143
- McClelland DC (1958). Methods of Measuring Human Motivation. In JW Atinson (Ed.) *Motives in fantasy, action and society* (pp. 7-42). Princeton, NJ: Van Nostrand.
- McClelland DC (1961). *The achieving society*. Princeton: Van Nostrand.
- Michaels RR, Huber MJ, & McCann, DS (1976). Evaluation of Transcendental Meditation as a Method of reducing stress. *Science*, 192, 1242-4. Doi: 10.1126/science.775639
- Miller J, Fletcher K, & Kabat-Zinn, J (1995). Three years follow-up and clinical implications of a mindfulness meditation-based stress reduction intervention in the treatment of anxiety disorders. *General Hospital Psychiatry*, 17, 192-200. Doi: 10.1016/0163-8343(95)00025-M
- Miskiman DE (2006). The effect of Transcendental Meditation Program on the organization of thinking and recall (secondary organization). *Scientific research on the Transcendental Meditation program: Collected papers*, 1, 385-392. Doi: api.semanticscholar.org/CorpusID:42376466
- Moore A & Malinowski, P (2009). Meditation, mindfulness and cognitive flexibility. *Consciousness and Cognition*, 18, 176-186. Doi: 10.1016/j.concog.2008.12.0
- Napoli R, Krech PR, & Holly, LC (2005). Mindfulness training for elementary school students: the attention academy. *Journal of Applied School Psychology*, 21, 99-119.
- Naveen KV, Nagarathna R, Nagendra HR, & Telles, S (1997). Yoga breathing through a particular nostril increases spatial memory scores without lateralized effects. *Psychological Reports*, 81, 555-561. Doi: 10.2466/pr0.1997.81.2.555
- Parker A, Kupersmidt J, Mathis E, Scull T, & Sims, C (2014). The impact of mindfulness education on elementary school students: Evaluation of the master mind program. *Advances in School Mental Health Promotion*, 7, 184-204. Doi: 10.1080/1754730X.2014.916497
- Pepping C, O'Donovan A, & Davis, PJ (2013). The positive effects of mindfulness on self-esteem. *The Journal of Positive Psychology*, 8, 376-386. Doi: 10.1080/17439760.2013.807353
- Razza R, Raymond K, & Bergen-Cico, D (2013). Enhancing preschoolers' self-regulation via mindful yoga. *Journal of Child and Family Studies*, 24, 372-385. Doi: 10.1007/s10826-013-9847-6
- Ryan RM & Deci EL (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78. Doi: 10.1037/0003-066X.55.1.68
- Salgado B (2016). *Real world mindfulness for beginners*. Berkeley, California: Sonoma Press.
- Sarang SP & Telles, S (2006). Changes in P300 following two yoga-based relaxation techniques. *International Journal*

- of Neuroscience*, 116, 1419-1430. Doi: 10.1080/00207450500514193
- Schonert-Reichl KA & Lawlor MS (2010). The effects of a mindfulness-based education program on pre- and early adolescents 'well-being and social and emotional competence. *Mindfulness*, 1, 137-151. Doi: 10.1007/s12671-010-0011-8
- Segal ZV, Williams JMG, & Teasdale, JD (2013). *Mindfulness-Based Cognitive Therapy for Depression*. London: The Guilford Press.
- Sharf R (2015). Is mindfulness Buddhist? (and why it matters). *Transcultural Psychiatry*, 52, 470-484. Doi: 10.1177/1363461514557561
- Shapiro D & Cline K (2004). Mood changes associated with Iyengar yoga practices: a pilot study. *International Journal of Yoga Therapy*, 14, 35-44. Doi: 10.17761/ijyt.14.1.47r6323xv20h786u
- Shapiro SL, Brown KW, & Astin, J (2011). Toward the integration of meditation into higher education: a review of research evidence. *Teachers College Record*, 113, 493-528. Doi: 10.1177/016146811111300306
- Simpkins AM & Simpkins CA (2011). *Meditation and yoga in psychotherapy: techniques for clinical practice*. New Jersey: John Wiley & Sons.
- Singh KP (2018). Effect of yoga on stress and academic performance. *Educational Quest: An International Journal of Education and Applied Social Science*, 9, 69-173.
- Streeter CC, Gerbarg PL, Saper RB, Ciraluo DA, & Brown, RP (2012). Effects of the yoga on the autonomic nervous system, gamma-aminobutyric-acid, and allostasis in epilepsy, depression and post-traumatic stress disorder. *Medical Hypothesis*, 78, 571-579. Doi: 10.1016/j.mehy.2012.01.021
- Verma A, Shete SU, Thakur GH, Kulkarni DD, & Bhogal, RS (2014). The effect of yoga practices on cognitive development in rural residential school children in India. *National Journal of Laboratory Medicine*, 3, 15-19.
- Woodyard C (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. *International Journal of Yoga*, 4, 49-54. Doi: 10.4103/0973-6131.85485
- Young S (1997). *The science of enlightenment*. Boulder, CO: Sounds True.
- Zimmerman BJ & Kitsantas, A (2014). Comparing students' self-discipline and self-regulation measures and their prediction of academic achievement. *Contemporary Educational Psychology*, 39, 145-155. Doi: 10.1016/j.cedpsych.2014.03.004

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APPENDIX

Steeps of MBYT intervention.	
<i>Sitting Meditation</i>	<p><i>Step-I:</i> Setting aside a time every day for just being.</p> <p><i>Step-II:</i> Sit down and watch the moments unfold, with no agenda other than to be fully present.</p> <p><i>Step-III:</i> Use the breath as an anchor to tether your attention to the present moment.</p> <p><i>Step-IV:</i> Bring your attention back to the breath, (when thinking mind will drift here and there, depending on the currents and winds moving in the mind until, at some point, the anchor line grows taut and brings you back) in all its vividness, every time it wanders.</p> <p><i>Step-V:</i> Keep the posture erect but not stiff.</p> <p><i>Step-VI:</i> Think of yourself as a mountain.</p>
<i>Lying down Meditation</i>	<p><i>Step-I:</i> Tuning in to your breath when you find yourself lying down.</p> <p><i>Step-II:</i> Feel it moving in your entire body.</p> <p><i>Step-III:</i> Dwell with the breath in various regions of your body, such as the feet, the legs, the pelvis and genitals, the belly, the chest, the back, the shoulders, the arms, the throat and neck, the head, the face, the top of your head.</p> <p><i>Step-IV:</i> Allow yourself to feel whatever present watch is the sensations in the body flux and change.</p> <p><i>Step-V:</i> Watch your feelings about them flux and change</p>
<i>Giving and Receiving Patience of Mindfulness</i>	<p><i>Step-I:</i> Sit in a comfortable position, lowering your gaze or closing your eyes.</p> <p><i>Step-II:</i> Breathe deeply a few times. When your attention is steady, repeat these words in your mind with each breath: "Breathing in, I breathe love for myself. Breathing out, I breathe patience for myself." Do this for one minute.</p> <p><i>Step-III:</i> Now think of someone you are happy with. As you think of them, repeat these words in your mind with each breath: "Breathing in, I breathe love for you. Breathing out, I breathe patience for you." Do this for one minute.</p> <p><i>Step-IV:</i> Now think of someone you are struggling to be patient with. As you think of them, repeat these words in your mind with each breath: "Breathing in, I breathe love for you. Breathing out, I breathe patience for you." Do this for one minute.</p> <p><i>Step-V:</i> Finally, take three breaths, repeating these thoughts in your mind: "Breathing in, I am an embodiment of love. Breathing out, I am an embodiment of patience." Go about your day.</p>
<i>Expressing Appreciation of Mindfulness</i>	<p><i>Step-I:</i> Settle yourself in a comfortable sitting or lying posture. Be aware of your breathing. Allow your body to rest and release tension.</p> <p><i>Step-II:</i> Bring to mind a person in your life you wish to appreciate. Reflect on this person's good qualities, how they have been helpful or kind to you or others, or how they live with integrity and respect.</p> <p><i>Step-III:</i> Be aware of how reflecting on this person's goodness affects your body and mind.</p> <p><i>Step-IV:</i> Express your appreciation to this person verbally or in writing as soon as you are able to.</p>
<i>Asanas-Tadasana</i>	<p><i>Step-I:</i> Stand erect with the feet together, the heels and big toes touching each other. Rest the heads of metatarsals on the floor and stretch all the toes flat on the floor.</p> <p><i>Step- II:</i> Tighten the knees and pull the kneecaps up, contract the hips and pull up the muscles at the back of the thighs.</p> <p><i>Step-III:</i> Keep the stomach in, chest forward, spine stretched up and the neck straight.</p> <p><i>Step- IV:</i> Do not bear the weight of the body either on the heels or the toes but distribute it evenly on them both.</p> <p><i>Step-V:</i> Arms should be stretched out over the head, but for the sake of convenience, one can place them by the side of the thighs.</p>
<i>Ujjayi Pranayama</i>	<p><i>Step-I:</i> Sit in any comfortable position like Padmasana.</p> <p><i>Step-II:</i> Keep the back erect and rigid. Lower the head to the trunk. Rest the chin in the notch between the collar-bones just above the breast-bone.</p> <p><i>Step-III:</i> Stretch the arms out straight and rest the back of the wrists on the knees. Join the tips of the index fingers to the tips of the thumbs, keeping the other fingers extended.</p> <p><i>Step- IV:</i> Close the eyes and look inwards.</p> <p><i>Step-V:</i> Exhale completely.</p> <p><i>Step-VI:</i> Take a slow, deep steady breath through both nostrils. The passage of the incoming air is felt on the roof of the palate and makes a sibilant sound (sa). This sound should be heard.</p> <p><i>Step-VII:</i> Fill the lungs up to the brim. Care should be taken not to bloat the abdomen in the process of inhalation.</p> <p><i>Step-VIII:</i> The entire abdominal area from the pubes up to the breastbone should be pulled back towards the spine.</p> <p><i>Step-XI:</i> Hold the breath for a second or two.</p> <p><i>Step-X:</i> Exhale slowly, deeply and steadily, until the lungs are completely empty. As you begin to exhale, keep your grip on the abdomen. After two or three seconds of exhalation, relax the diaphragm gradually and slowly. While exhaling the passage of the outgoing air should be felt on the roof of the palate. The brushing of the air on the palate should make an aspirate sound.</p> <p><i>Step-XI:</i> Wait for a second before drawing a fresh breath.</p> <p><i>Step-XII:</i> Repeat the cycles for twenty minutes keeping the eyes closed throughout.</p> <p><i>Step-XIII:</i> Lie on the floor in Savasana.</p>