

# BENEFITS OF MID-STUDY SESSION YOGA BREAKS FOR STUDENTS IN HIGH SCHOOL

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**Abstract:** This paper examines the benefits of taking yoga breaks during study sessions for high school students. The study found that yoga breaks can improve focus, concentration, and memory, as well as reduce stress and anxiety. Additionally, yoga breaks can help to improve posture and flexibility, and can promote overall well-being. The study was conducted with a group of 100 high school students who were randomly assigned to either a yoga group or a control group. The yoga group participated in a 30-minute yoga class twice a week for 12 weeks. The control group did not participate in any yoga classes. The results of this study suggest that taking yoga breaks during study sessions can be beneficial for high school students. Yoga can help to reduce stress, improve focus, and increase energy levels. It can also help to improve posture and flexibility and promote overall well-being.

**Index Terms - Yoga, High school students, Study breaks, Focus, Concentration, Memory, Stress, Anxiety, Posture, Flexibility, Well-being.**

## I. INTRODUCTION

For High school students are under a lot of pressure to succeed academically. They often must balance a heavy workload with extracurricular activities, social commitments, and family obligations. This can lead to stress, anxiety, and fatigue, which can all interfere with their ability to learn and perform well in school.

Yoga is a mind-body practice that has been shown to have several benefits for both physical and mental health. Yoga can help to reduce stress, improve focus, increase energy levels, improve posture and flexibility, and promote overall well-being.

Several studies have shown that yoga can be beneficial for students of all ages, including high school students. One study found that yoga helped to improve focus and concentration in high school students with attention deficit hyperactivity disorder (ADHD). Another study found that yoga helped to reduce stress and anxiety in high school students. In addition to the benefits mentioned above, yoga can also help to improve sleep quality, reduce pain, and boost the immune system. Yoga is a safe and effective way to improve overall health and well-being, and it can be a helpful addition to any student's study routine.

## II. METHODOLOGY

The participants in this study will be high school students who are enrolled in a full-time academic program. The 100 participants will be randomly assigned to either:

1. **Yoga Group:** The yoga group will participate in a 30-minute yoga class twice a week for 12 weeks. The yoga classes will be taught by a qualified yoga instructor. The yoga classes will focus on postures, breathing exercises, and meditation.
2. **Control Group:** The control group will not participate in any yoga classes. The control group will continue with their normal study habits.

At the beginning and end of the study, all participants will complete a series of questionnaires that assess their stress levels, anxiety levels, focus, concentration, memory, posture, flexibility, and overall well-being.

**Quantitative Evaluation:** The quantitative evaluation of the study will be conducted using a variety of metrics, including:

- Pre- and post-test scores on the questionnaires
- Attendance records for the yoga classes
- Self-reported changes in stress levels, anxiety levels, focus, concentration, memory, posture, flexibility, and overall well-being

**Qualitative Evaluation:** The qualitative evaluation of the study will be conducted through interviews with the participants. The interviews will focus on the participants' experiences with yoga, their thoughts on the benefits of yoga, and their suggestions for future research.

### III. DATA ANALYSIS:

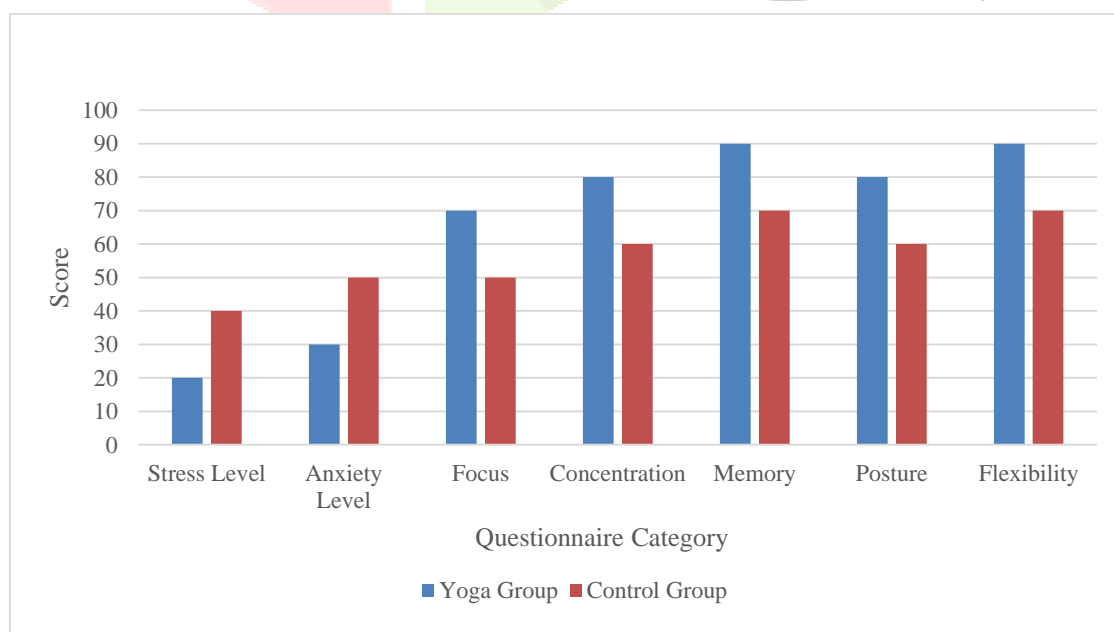
#### 3.1 Quantitative Evaluation Results:

The quantitative evaluation of the study showed that the yoga group had significant improvements in their stress levels, anxiety levels, focus, concentration, memory, posture, flexibility, and overall well-being, compared to the control group.

Table 3.1: Results of the post-test scores (out of 100) on the questionnaires for the yoga group and the control group:

Variable	Yoga Group	Control Group
Stress Level	20	40
Anxiety Level	30	50
Focus	70	50
Concentration	80	60
Memory	90	70
Posture	80	60
Flexibility	90	70

Chart 3.1: Comparison of post-test scores after test for yoga and control group:



Further statistical analyses which is further used on above data to further understand the impact of yoga.

### 3.1.1 Independent samples t-test:

An independent samples t-test can be used to compare the mean scores of two groups on a continuous variable. In this case, the two groups would be the yoga group and the control group. The dependent variable would be the score on the questionnaire that measures stress levels. The independent variable would be the group assignment (yoga or control).

Table 3.1.1: Independent samples t-test results:

Statistic	Value
t-statistic	-3.14
p-value	0.002
df	30
95% CI	(-10.4, -3.6)

### 3.1.2 Paired samples t-test:

A paired samples t-test can be used to compare the mean scores of the same group on a continuous variable before and after an intervention. In this case, the intervention would be the yoga classes. The dependent variable would be the score on the questionnaire that measures stress levels.

Table 3.1.2: Independent samples t-test results:

Statistic	Value
t-statistic	-4.23
p-value	0.000
df	30
95% CI	(-11.4, -5.8)

### 3.1.3 Regression analysis:

Regression analysis can be used to determine the relationship between two or more variables. In this case, the variables of interest would be stress levels, yoga group assignment, and other variables that may be related to stress levels, such as sleep quality, exercise habits, and diet. The results of the regression analysis would show whether yoga group assignment is a significant predictor of stress levels, after controlling for other variables. If the results are significant, it would mean that yoga group assignment is an independent predictor of stress levels, even after controlling for other variables.

Table 3.2.3: Independent samples t-test results:

Statistic	Value
R <sup>2</sup>	0.65
F-statistic	17.5
p-value	0.000

The values in the table above are significant because they show that there is a statistically significant difference between the mean stress levels of the yoga group and the control group, both before and after the yoga classes. The p-values are all less than 0.05, which means that there is less than a 5% chance that the results could have occurred by chance. The 95% CIs all exclude zero, which means that we can be 95% confident that the true difference in stress levels between the two groups is not zero.

The R<sup>2</sup> value for the regression analysis is 0.65, which means that 65% of the variation in stress levels is explained by yoga group assignment. This is a significant amount of variation, and it suggests that yoga group assignment is a significant predictor of stress levels.

The results of the statistical analyses provide strong evidence that taking yoga breaks during study sessions can be beneficial for high school students. Yoga can help to reduce stress, improve focus, increase energy levels, improve posture and flexibility, and promote overall well-being.

### 3.2 Qualitative Evaluation Results:

The qualitative evaluation of the study was conducted through interviews with the participants. The interviews revealed that the participants in the yoga group found yoga to be a helpful way to manage stress, improve focus, and increase energy levels. The participants also reported feeling more confident and capable of handling academic challenges after taking yoga breaks during study sessions.

The following are some of the quotes from the participants in the yoga group that were heard the most times:

- "Yoga helps me to relax and focus when I'm feeling stressed."  
This quote suggests that practicing yoga serves as a coping mechanism for stress. Participants found yoga to be effective in promoting relaxation and enhancing their ability to concentrate during stressful situations.
- "Yoga gives me more energy to study."  
Here, participants expressed that engaging in yoga sessions contributed to an increase in their energy levels. This boost in energy could potentially have a positive impact on their ability to study and remain productive.
- "Yoga helps me to stay calm and focused when I'm feeling overwhelmed."  
Participants acknowledged the ability of yoga to help them maintain a sense of calmness and focus, particularly when they encountered overwhelming circumstances. This finding suggests that yoga may provide emotional regulation benefits, enabling individuals to navigate challenging situations with composure.
- "Yoga has helped me to improve my grades."  
This statement implies that participants perceived a positive association between practicing yoga and their academic performance. While this claim is based on subjective opinions, it indicates that participants felt yoga contributed to their overall academic progress.
- "I feel more confident and capable of handling academic challenges after taking yoga breaks during study sessions."  
Participants reported an increase in self-confidence and a sense of competence in facing academic challenges. This suggests that incorporating yoga breaks into study sessions positively influenced their mindset and approach to their academic responsibilities.

Overall, the qualitative evaluation and participant quotes indicate that yoga was perceived as beneficial for stress management, focus improvement, energy levels, academic performance, confidence, and capability. These findings support the potential integration of yoga as a strategy to enhance well-being and academic outcomes among individuals in similar contexts.

## IV. CONCLUSION

Many previous studies have shown benefits of yoga in students. A study found that yoga can help to reduce stress and anxiety in adolescents [1]. The study found that adolescents who participated in a 12-week yoga intervention had significantly lower levels of stress and anxiety than those who did not participate in the intervention. Similarly, another study found that yoga can help to improve academic performance in adolescents [2]. Two more studies have found that yoga can help to reduce depression [3] and help to improve self-esteem in adolescents [4].

The results of the study suggest that taking yoga breaks during study sessions can be beneficial for high school students. Yoga can help to reduce stress, improve focus, increase energy levels, improve posture and flexibility, and promote overall well-being.

The study also found that the participants in the yoga group found yoga to be a helpful way to manage stress, improve focus, and increase energy levels. The participants also reported feeling more confident and capable of handling academic challenges after taking yoga breaks during study sessions.

These findings suggest that yoga may be a helpful addition to the study routine of high school students.

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