

## MEDITATION IN SCHOOL ADOLESCENTS WHO SIT IN OLYMPIC AND ACCELERATION CLASS

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### Abstract

**Background:** Meditation is a state of consciousness in which the individual eliminates environmental stimuli from awareness so that the mind has single focus, producing a state of relaxation and relief from stress. Stress that happen in school environment or education is called academic stress. The purpose of this research was to analyze the influence of meditation to academic stress in school adolescents who sit in olympic and acceleration class.

**Method:** The researcher used a experimental quantitative with one-group pre-test and post test design without control group. This research had done to 27 respondents, such as first and second grade of olimpiade class and last grade of acceleration class in SMA N 3 Semarang. The tool that used in this research was Academic Expectations Stress Inventory (AESI) that indicated academic stress from expectations of self and expectations of parents and teacher Data analysis used Paired Sample t-Test.

**Result and Suggestion:** This research showed that 25 respondents (92,59%) had depreciation score of academic stress, 1 respondent (3,70%) had permanent score and 1 respondent (3,70%) increase score of academic stress. Significant score from Paired Sample t-Test showed that  $0,000 < \alpha (0,05)$  so that  $H_0$  was aversed and  $H_1$  was accepted. This research resulted there was influence of meditation to academic stress in school adolescents who sit in olympic and acceleration class, it is expected in nursing practice and some resorts to use meditation as a self supporting intervention.

**Key words:** meditation, school adolescents, olympic and acceleration

### Introduction

Adolescence is also synonymous with the word 'rebellion', in terms of psychology is often referred to as the period of storm and stress because of the many shocks and changes quite radically from the previous period (Soetjningsih, 2004). Stress in adolescents may also be caused by the demands of parents and the community. Parents usually require their children to have good grades in school, regardless of the child. Heavy loads experienced by adolescents can lead to various diseases such as headache, wrong diet, excessive anxiety, and other (N Kemala Indra, 2007). Some teens who succeed will defend with the good management of stress that comes from themselves, as well as with other stress management techniques, while teenagers who fail to develop negative traits that may harm themselves or others as deviant behavior (delinquent),

truant, lying, doing crime (such as stealing, cheating, destroying, fighting and breaking decency) or shut down (isolation) from society.

Preliminary survey conducted on February 23, 2012 at SMA Negeri 3 Semarang data obtained were 63 students in attendance from 72 students to say or complain stress. 9 students followed the Olympic coaching and study tour. This data is obtained with a numerical scale of stress (scale 1-10), showed that 100% of the students complained of stress. A total of six students from the eight students interviewed expressed much stress from school work, keep up with classmates in the classroom and the many achievements of the material that must be understood and repeated, while two other students claimed stress from extracurricular duties. Two of the eight students told how to cope with academic stress experienced by listening to music and relaxation and to say more at ease or relaxed. Data taken from the class of X-Olympics, XI-Olympics and XI-acceleration.

### **Method**

This study is a quantitative study using an experimental design with pre-test and post-test design without a comparison group. The study involved 27 students who made the respondents met the inclusion criteria for the youth aged 14-18 years (adolescent school), would be the respondent, not being sick and not on the exam or test (test). Research conducted on May 26, 2012 in Holistic Room School of Nursing Faculty of Medicine, Diponegoro University Semarang. Means of collecting data using questionnaires AESI (Academic Expectations Stress Inventory). The questionnaire consisted of nine items and is divided into two parts which is the academic stressor, the expectations of self and expectations of parents and teachers (R.P. Ang, 2007). Pilot study conducted on 30 students in grade X-Olympics SMA Negeri 1 Semarang. The questionnaire has been stated that reliable using Cronbach Alpha formula obtained from the sample of Canadian adolescents, teens and teens Singapore Asia (Korea, Singapore, China) (Tan Beiyu, Joyce and Shirley Yates, 2010 and R.P. Ang, Vivien S. Huan, 2006). Tested for normality using Skewness and Kurtosis, the results of data are normally distributed.

### **Result**

**Table 1.**

**Frequency Distribution of Demographic Data of Respondents (students X-Olympics, XI-Olympics and XI-acceleration) on May 26, 2012  
(n = 27)**

<b>Demographic Data</b>	<b>f</b>	<b>%</b>
Sex		
Male	8	29,63%
Female	19	70,37%
Age		
14 year-old	1	3,70%
15 year-old	12	44,44%
16 year-old	11	40,74%
17 year-old	3	11,11%
Religion		
Islam	25	92,59%
Kristen	0	0
Katolik	2	7,40%
Budha	0	0
Hindu	0	0
Budha	0	0
Kong Hu Chu	0	0
Extracurricular that followed		
1 type	18	66,67%
2 types	6	22,22%
3 types	2	7,40%
4 types	1	3,70%

Table 1. showed that most respondents were female sex as many as 19 respondents (70.37%), a total of 12 respondents (44.44%) were adolescents aged 15 years, and as many as 25 respondents (92.50%) is an adherent of the religion of Islam and no respondents who did not follow school extracurricular (0%).

**Table 2.**

**Comparison of Academic Stress Measurement Results Before and After Meditation on School Adolescents who sits on the Olympic and Acceleration Class (SMA Negeri 3 Semarang) May 26, 2012, (n = 27)**

Number of Respondent	Meditation		Difference (x1-x2)
	Before (x1)	After (x2)	
1	22	24	-2
2	28	22	6
3	19	15	4
4	27	22	5
5	33	23	10
6	26	22	4
7	36	32	4
8	24	20	4
9	30	16	14
10	37	32	5
11	33	26	7
12	35	30	5
13	22	20	2
14	32	29	3
15	29	29	0
16	31	30	1
17	32	31	1
18	24	23	1
19	25	24	1
20	28	25	3
21	29	28	1
22	27	26	1
23	29	25	4
24	30	27	3
25	35	26	9
26	29	28	1
27	23	18	5

Table 2. showed a comparison of academic stress before and after meditating with significant changes. There are 25 respondents (92.50%) experienced a decline in academic stress, one respondent (3.70%) has increased the value of academic stress and 1 respondent (3.70%) have a fixed value of academic stress.

**Table 3.**  
**Comparison of Academic Stress Mean values before and after Meditation in school adolescents who sit in an Olympic and acceleration class (SMA Negeri 3 Semarang) May 26, 2012 (n= 27)**

	Mean	Standard of Deviation
Before Meditation	28,70	4,631
After Meditation	24,93	4,632

Table 3. showed that the mean score or mean before meditation is 28.70 with a standard deviation value of 4.631 and also shows that the mean score or mean after the meditation is 24.93 with a standard deviation value is 4.632. That is, there are differences in academic stress before and after the intervention, in the form of meditation.

### Discussion

Most respondents were female sex as many as 19 respondents (70.37%), a total of 12 respondents (44.44%) were adolescents aged 15 years, and as many as 25 respondents (92.50%) is an adherent of the religion of Islam and no respondents who did not follow school extracurricular (0%). This proves that the environment is a major factor when a person experiences stress (Faiqah Viqa, 2009). Academic stress arising from the high expectations of yourself, parents and teachers (R.P Ang, 2009). Respondents most widely followed extracurricular Olympics, which will be mandatory extracurricular mengkader students to participate in various competitions exact. Students tend to have high motivation and emotion to achieve and demands (Faiqah Viqa, 2009).

Doing the meditation every child or adolescent school above table.2 showed that the respondents prior to the academic stress is higher than the meditation after meditation. There are 25 respondents (92.50%) experienced a decline in academic stress, one respondent (3.70%) has increased the value of academic stress and 1 respondent (3.70%) have a fixed value of academic stress. SMA Negeri 3 Semarang has three types of classes, which include an Olympic and acceleration class. Olympic class is a class of students with a capacity of 30-32 students and there is the addition of different materials in each Olympic students, the desire to succeed as a race and expectations for student achievement to make an Olympic class community as a high-class competition, giving rise to different pressures to the class regular. Again with a different acceleration classes, classes with a capacity of 20 students filled out by students who have the IQ to smart category. Small communities will make the competition is getting higher and the acceleration of matter a source of stress is different from the regular class and Olympic classes. Different conditions on each type of class that will impact on different levels of academic stress in Olympic classes and SMA Negeri 3 Semarang acceleration.

Meditation is the art of self-empowerment through breathing which is very useful to heal and help provide physical changes to the better. With a focus on breathing during meditation, blood vessels provide a shortcut in order to train the muscle tissue of the heart muscle to work better, although in a poor state of oxygen. Blood flow to all parts of the body, leading to cell tissue, with meditation then the cells will become more resistant and remain strong trained to perform its functions, particularly brain cells. From the description, it will not damage brain tissue found that difficult to repair, on the contrary that the balance of the brain becomes trained and stable so it is not vulnerable to nausea, dizziness, or driving while intoxicated (Joko Sukmono Rizki, 2011 and Simon, MD, 2005). Meditation is also an effect on the three hormones, the hormone cortisol, a stress hormone that is made to feel more vulnerable to disease, then the hormone DHEA, a hormone that acts as a buffer against stress-related hormones (cortisol), and the hormone melatonin, a hormone that functions as an antioxidant fat-soluble and water, increase the body's immune causes muscle relaxation and improve mood (Aleeze, 2011)

### Conclusion and Suggestion

Environment is the most influential sources of stress, accompanied by high expectations and demands of self, parents and teachers. With meditation, some hormones are affected, the hormone cortisol, DHEA and melatonin. Based on the result showed that differences in academic stress at school adolescents who sit in Olympic and acceleration class before and after meditation is  $H_0$  rejected. The results of data analysis showed that Sig. The resulting mean is 0.000 which is smaller than  $\alpha = 0.05$ . Based on these results there is a difference between academic stress before and after meditation. Thus, showing that meditation reduced stress influence on adolescent academic school who sit in Olympic and acceleration class. So that, there is a meditation on the influence of academic stress at school adolescents who sit in an Olympic and acceleration class.

Respondent actually benefit from the research conducted, respondents are expected to practice independently as a meditation practice, eg every waking. This meditation is expected to be implemented in schools as one of the existing extra-curricular and school nurses in school health guidance. Meditation can utilize any form of Complementary and Alternative Medicine as a form of holistic or comprehensive nursing and can be used as a standalone intervention in the matter of nursing. More reasearch, can exploring, studying, and researching more about meditation and the instruments used in meditation and hope there are comparison group.

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