



Sleep Deprivation And Exam Anxiety

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ABSTRACT:

The present study was undertaken to study the effect of exam anxiety on students' sleep deprivation and also correlation between exam anxiety and sleep deprivation. A sample of 260 students (174 males and 86 females) of 10th grade were drawn through the simple random technique from Gandhinagar district.

A self-made Sleep Deprivation Identification Questionnaire [SDIQ] and exam anxiety inventory [EAI] were used respectively to find out the relationship between sleeping hours and exam anxiety of the students. Findings of the study indicated that there were significant negative correlation ($r=-0.26$) between exam anxiety and sleeping hours. It was also found that exam anxiety significantly affects sleeping hours taken by the students. It means to reduce sleep deprivation, it is necessary to reduce the anxiety level of the students, for this there is need of exam anxiety reduction programs for the students. It is also necessary for teachers & parents to take care of their children & check their time schedules.

KEYWORDS:

Exam Anxiety, Deprivation,

INTRODUCTION:

Sleep deprivation impacts many aspects of cognitive and behavioral functioning in young adults. Previous researches on sleep time reduction showed that even small changes of sleep length could lead to cognitive and non-cognitive deficits in school-age children (Gozal, 2005). If the students are sound with body and mind, these qualities can be inherited among their next generation too. The researches on sleep deprivation focus on the importance of sufficient sleep for proper outcome in all spheres of lives. We know about exam anxiety lead the students toward negative thinking, depression, & sleep deprivation.

Quality and quantity of sleep in students at school level is generally inadequate, irregular, and of poor quality. As sleep quality and quantity decrease, academic performance worsens (2008, Amin). Children in India routinely receive less than the recommended nine hours of sleep. The impact of sleep

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deprivation on the development of cognition, language, attention, and neurological functioning remains poorly understood. The present study focuses on the relation between the sleeping hours and exam anxiety of 10th grade students of Gandhinagar district.

OBJECTIVES:

To study the correlation between exam anxiety and sleeping hours of the students.
To study the effect of exam anxiety of the students on sleeping hours.
To suggest the remedies for proper sleep & reduce the exam anxiety of the students.

HYPOTHESIS:

- (1) There is no significant relationship between the exam anxiety and sleep hours of the students.
- (2) There is no significant effect of exam anxiety on sleep hours of the students.

Procedure:

TOOLS:

In the present study, self made SDIQ and EAI were used to collect the required data. SDIQ cover 10 simple questions related to sleeping time and hours, activity, school and examination time. EAI cover 120 items related to anxiety of the students at the time of examination, before examination and after examination.

SAMPLE:

The present study focuses on the relationship between the sleeping hours and exam anxiety of 10th grade students of Gandhinagar District. This survey was conducted on 260 (174 boys and 86 girls) students of three rural and three urban schools of Gandhinagar district. One class of each school was randomly selected and all the students of the selected class were given the tool for data collection.

STATISTICAL TREATMENT OF THE DATA:

Standard deviations and means of the sleep hours and exam anxiety score were computed directly from the respective raw scores for the entire sample with the help of computer. The correlation coefficient between exam anxiety scores and sleeping hours of the students were calculated by computer and found significant at 0.01 levels. Also f-test and t-test was applied to find out significant effect of exam anxiety.

The descriptive statistics for sleep hours and exam anxiety of the students are as shown in table-1.

Table-1
Sleeping Hours and Exam Anxiety of the Students

Descriptive statistics	Exam Anxiety	Sleeping Hours
Sample (n)	260	260
Mean (M)	232	8.14
S.D.	75.05	1.21

Above table indicates 8.14 average sleeping hours taken by the 10th grade students at the time of their examination at school level. It also indicates average anxiety of the students is 232 at the time of examination.

EXAM ANXIETY LEVEL:

The scores on EAI of the students are classified in three levels with help of σ (sigma) distance and NPC (Normally Probability Curve). Higher anxiety mean those students whose scores on EAI is greater than $+1\sigma$ distance and lower level mean less than -1σ distance, while those student having scores in between $+1\sigma$ distance to -1σ distance are considered as medium anxiety level students.

After calculations of sleeping hours, students were grouped according to exam anxiety level and then sleeping hour are calculated according to each level of exam anxiety. The details about sleeping hours taken by the students are mentioned according to exam anxiety level.

Table-2
Summary of Analysis

aAnxiety Level	Number of Students (n)	Mean (M)	Standard Deviation (S.D.)	F-value	t-value	Correlation (r)
H	135(51.92%)	7.18	1.16	3.20*	t=1.64 for L- M	-0.26*
M	121(46.54%)	8.11	1.50		t=5.50* for H-M	
L	4 (1.54%)	9.15	1.24		t=3.13* for H-L	
Overall	260	8.14	1.21			

* Significant at 0.01 level, L=Lower level, M=Medium level and H= Higher level of exam anxiety

Table-2 shows the negative and significant correlation between sleep hours taken by the students and exam anxiety. This indicates that sleeping hours taken by the students get decreased with increased of exam anxiety level, mean exam anxiety and sleep deprivation is directly correlated. F-test indicates the significant effect of exam anxiety on sleep hours. Above table also indicates that there is more number of students having higher exam anxiety level and sleeping hours taken by them are less than average hours.

FINDINGS:

- There was a negative & significant correlation between sleeping hours taken by the students of 10th grade and their exam anxiety. This indicates that students can not take proper sleep due to exam anxiety.
- Significant effect of exam anxiety was found on sleeping hours & favors the lower sleep takers group. This indicates that exam anxiety significantly effect the sleep deprivation.
- 51.92 percent of students were found with higher exam anxiety level. This indicates half of the 10th grade students are suffering from higher level exam anxiety.
- Students having higher exam anxiety level were found less sleep takers, less than average sleeping hours.
- Students having lower exam anxiety level found more sleep takers, and number of such students were found very less (1.54%). Lower anxiety level students were taking more sleeping hours than average sleeping hours.

SUGGESTIONS:

We can suggest some of the measures to be taken by students, parents well as the institute

pertaining to the students. These suggestions are as mentioned below:

The sleep hours and exam anxiety of 10th grade students showed the direct & negative relationship, so it must be taken into consideration. The students must be provided sufficient sleep at home.

Parents have to taken the care of their children and they have to check the time scheduled of his children and advise to take proper or average sleep.

Also teachers and school have think about this issue and try to test the anxiety level of students before exam, during exam and after exam and guide the students and parents.

Teacher has to manage their activities in accordance with time the students have.

At school level, teachers can use some anxiety reduction program for the students suffering from higher anxiety.

One more reason of sleep deprivation was their habit of going to bed late, so they must be made aware of early to go bed and early to get up.

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