

Why does a lot of students feel sleepy during class hours?  
essay sample



**ASSIGN  
BUSTER**

Based on the table students usually did not use their time wisely when it comes in doing their school works. They usually rushed all the things. As a result they will sacrifice their time sleeping just to finish it. But doing that has negative outcomes that may affect not only one day for it may become a habit that can distract your studies.

#### STATEMENT OF THE PROBLEM

This research will try to answer the following questions that may help us to know why high school students feel sleepy during class hours.

- \* Why a lot of students did not get enough time sleeping?
- \* What are the hindrances that affect their sleeping time?
- \* How do a subject can also affect why they feel sleepy?
- \* How teachers can affect their students to become sleepy?
- \* What is the common time they feel sleepy? Morning time subjects (before lunch)? Or after lunch subjects?

#### SCOPE AND DELIMITATION OF THE STUDY

This research paper will only cover things related to sleeping in class and what are the causes that may affect their sleepy feelings. The respondents in this study are 30 high school students in Namei Polytechnic Institute. The respondents are asked to fill up the data in the survey questionnaire. There are a lot of things that may distract a person as they get more

responsibilities. Not like in elementary high school students have a lot of things to do or responsibilities that may cause their sleeping time shorter.

#### DEFINITION OF TERMS

\* Sleep - is a naturally recurring state characterized by reduced or absent consciousness, relatively suspended sensory activity, and inactivity of nearly all voluntary muscles. \* Phases - Carry out (something) in gradual stages.

\* Expend - Spend or use up (a resource such as money, time, or energy). \* Revealed - make (previously unknown or secret information) known to others. \* Mismanagement - To manage badly or carelessly.

\* Deprivation - The lack or denial of something considered to be a necessity

\* Responsibilities - The state or fact of having a duty to deal with something.

Take a look inside a high school classroom. You will most likely find a teacher at the front of the class and students sitting at their desks. Yet, look closer, and you might notice a familiar trend: many of these students are not paying attention. Instead, they are dozing off or even completely asleep. Today, an overwhelming majority of high school students are not getting enough sleep. This lack of sleep is a serious problem, especially as students are doing more than ever with their time. They come to school early, spend hours listening to teachers and taking tests, then run off to practices and meetings, and come home to be faced with even more work. And the homework load these days is not light; teachers assign hours worth of homework each night. Our nation's teenagers require just as much sleep as they did when they were younger, and they are simply not getting this much needed rest. Most kids

need at least nine hours of sleep per night in order to function properly. Yet the period of this nine hours shifts as a child gets older.

After puberty, the body's internal clock changes so that it is difficult for teens to fall asleep before 11pm. So even if a student falls asleep at eleven, they would need to sleep until at least 8am to get a full night's sleep. Considering the time at which most high schools in this country begin, those nine hours are clearly being cut short. Few high schools starts after 8am. However, there are schools that have paid attention to this research and pushed forward the start of their school day. In schools where the start time is after 8: 30 in the morning, the faculty and staff believe that there has been a real change in their students. They note that the students miss class less, pay more attention in class, perform better in class, and report lower levels of depression. These changes are clearly not just coincidental. The researchers of these studies say that the results are quite significant and that more schools should consider pushing up their start times. Another issue is the time when standardized tests are given.

Most of these tests are given at 8am, which can, in fact, hinder the performance of otherwise intelligent kids. Out of all of the times in the school day, 8am results in the poorest scores, since the brains of the kids are not fully functional at this time. So exactly how much sleep are teens in our nation getting? Over 50% of high school students report that they sleep seven hours or less each night, and about one in five get less than six hours. And 82% of both middle and high school students said that they woke up tired and unrefreshed, and more than half had trouble concentrating in school. These statistics are overwhelming. We are making it so much harder  
<https://assignbuster.com/why-does-a-lot-of-students-feel-sleepy-during-class-hours-essay-sample/>

for kids to learn by forcing them to wake up so early. And the consequences of not getting enough sleep are severe. The short-term consequences include bad moods, a deterioration in learning ability, being wearier, being less alert, having to expend greater effort to learn, and an increase in skipped classes. All of these are common symptoms visible in high schools across the country.

More specifically, the loss of REM sleep (rapid eye movement) may result in memory loss, a decline in information processing, increased irritability and anxiety, decreased socialization and humor, hypersexuality, mental fatigue, decrease in creativity, and a decline in the ability to handle complex tasks. And with consistent lack of sleep, the effects become more serious. The long-term consequences can range from being misdiagnosed with ADHD, to diabetes, serious sleep problems, rebelliousness, cigarette smoking, depression, heart disease, obesity, and even a shortened life span<sup>10</sup>.

Another large consequence of tired teens is that they are more likely to get behind the wheel when they are tired, leading to accidents caused by simply not getting enough sleep. Drowsy driving is a major cause of accidents among adolescents. But many school administrators are hesitant to change school start times. The major reason seems to be bus schedules and after-school activities. Schools are worried that they will have to buy new busses or spend money in other ways.

In fact, some schools that have changed their start time have switched start times with their corresponding middle or elementary schools, easily avoiding this problem. Another counterargument is that if school starts later, then school must get out later. Yet I think that getting out of school later is a <https://assignbuster.com/why-does-a-lot-of-students-feel-sleepy-during-class-hours-essay-sample/>

positive consequence. Ending school at 2: 30pm doesn't really make sense. First of all, kids have more time in between when they get out of school and when their parents get home, which can lead to unproductive behavior. Also, kids that drive home would be less likely to get into an accidents due to fatigue. Then there is also the question of whether this trend is only a problem in the United States. However, similar research has been found all over the world including Brazil, Italy and Israel. This goes to show that the sleep-wake cycle of adolescents is a biological, rather than a cultural phenomenon. Teens all over the world need the same amount of sleep, and they need it at the same times. Yet, it seems as the whole world may be turning a blind eye to this serious topic.

Sleep is essential for a person's health and wellbeing, according to the National Sleep Foundation (NSF). Yet millions of people do not get enough sleep and many suffer from lack of sleep. For example, surveys conducted by the NSF (1999-2004) reveal that at least 40 million Americans suffer from over 70 different sleep disorders and 60 percent of adults report having sleep problems a few nights a week or more. Most of those with these problems go undiagnosed and untreated. In addition, more than 40 percent of adults experience daytime sleepiness severe enough to interfere with their daily activities at least a few days each month - with 20 percent reporting problem sleepiness a few days a week or more. Furthermore, 69 percent of children experience one or more sleep problems a few nights or more during a week.

The Effects of Sleep Deprivation on Brain and Behavior by S. L.

Sleep deprivation is a commonplace occurrence in modern culture. Every <https://assignbuster.com/why-does-a-lot-of-students-feel-sleepy-during-class-hours-essay-sample/>

day there seems to be twice as much work and half as much time to complete it in. This results in either extended periods of wakefulness or a decrease in sleep over an extended period of time. While some people may like to believe that they can train their bodies to not require as much sleep as they once did this belief is false . Sleep is needed to regenerate certain parts of the body, especially the brain, so that it may continue to function optimally. After periods of extended wakefulness or reduced sleep neurons may begin to malfunction, visibly effecting a person's behavior. Some organs, such as muscles, are able to regenerate even when a person is not sleeping so long as they are resting. This could involve lying awake but relaxed within a quite environment. Even though cognitive functions might not seem necessary in this scenario the brain, especially the cerebral cortex, is not able to rest but rather remains semi-alert in a state of " quiet readiness".

Certain stages of sleep are needed for the regeneration of neurons within the cerebral cortex while other stages of sleep seem to be used for forming new memories and generating new synaptic connections. The effects of sleep deprivation on behavior have been tested with relation to the presence of activity in different sections of the cerebral cortex. The temporal lobe of the cerebral cortex is associated with the processing of language. During verbal learning tests on subjects who are fully rested functional magnetic resonance imaging scans show that this area of the brain is very active. However, in sleep deprived subjects there is no activity within this region . The effects of this inactivity can be observed by the slurred speech in subjects who have gone for prolonged periods with no sleep . Even severely

sleep deprived people are still able to perform to some degree on a verbal learning test. This implies that some other area of the brain must become active to compensate for the loss of temporal lobe functioning.

In fact, activity can be seen in the parietal lobe that is not present during verbal learning tests using rested subjects. Greater activity within this region corresponded to better performance by subjects in research studies. Still, sleep deprived people do not perform as well on these tests as do fully rested subjects . One possible reason for the poorer performance after missing sleep, aside from unregenerated neurons, could be the fact that since the parietal lobe is not usually used to performing tasks such as these it is not as adept at carrying them out. Therefore, when control switches from the temporal lobe to the parietal lobe some speed and accuracy is naturally lost. Interestingly, sleep deprived subjects have been shown to have better short-term memory abilities than their well-rested counterparts. Since memory is associated with this region of the cerebral cortex the fact that it is already active in sleep deprived people could make it easier for new synapses to be created, thus forming new short-term memories more easily. While activity is seen within the parietal lobes of rested people as they think through math problems no corresponding activity is visible within the brains of sleep-deprived subjects.

Also, no new area of the brain becomes active while the sleep deprived people work on math problems. Since sleep deprived people can still complete math problems, albeit with less speed and accuracy than a well-rested individual, this data implies that a region of the brain already in use is used for this task. The frontal lobe is the most fascinating section of the <https://assignbuster.com/why-does-a-lot-of-students-feel-sleepy-during-class-hours-essay-sample/>



brain with relation to sleep deprivation. Its functions are associated with speech as well as novel and creative thinking. Sleep deprived test subjects have difficulties thinking of imaginative words or ideas. Instead, they tend to choose repetitious words or clichéd phrases. Also, a sleep-deprived individual is less able to deliver a statement well. The subject may show signs of slurred speech, stuttering, speaking in a monotone voice, or speaking at a slower pace than usual. Subjects in research studies also have a more difficult time reacting well to unpredicted rapid changes. Sleep deprived people do not have the speed or creative abilities to cope with making quick but logical decisions, nor do they have the ability to implement them well.

Studies have demonstrated that a lack of sleep impairs one's ability to simultaneously focus on several different related tasks, reducing the speed as well as the efficiency of one's actions. A person may be able to react to a complex scenario when suddenly presented with it but, similar to the verbal tests, the subject will most likely pick an unoriginal solution. If presented with a similar situation multiple times with slight variations in the information presented the subject chooses the same solution, even though it might not be as applicable to the new scenario. Part of the frontal lobe, the prefrontal cortex, has several functions specifically coupled with it. Judgment, impulse control, attention, and visual association have all been related to this region of the cerebral cortex. A recent study has shown that the prefrontal cortex, usually the most active area of the brain in rested individuals, becomes more active as a person remains awake for long periods of time. This region regenerates during the first stage of sleep, giving a person the ability to feel somewhat refreshed after only a short nap.

The length of the first stage of sleep cycle is somewhat dependant upon how long the person had previously been awake. The longer the period of wakefulness, the longer the brain remains in the first stage of sleep. When the brain enters into the REM stage of sleep the prefrontal cortex is active once more. The implications of this data seem to be fairly important in supporting the location of the I-function within the brain. The prefrontal cortex is active whenever a person is awake, no matter how little sleep they have had. Also, this area is active while dreaming. Since the individual is aware of him or herself during both of these instances, but is not aware during the stages of sleep when the prefrontal cortex is shut down, it seems logical that the I-function is located within this region. This indicates that the I-function is what is resting and regenerating during the first stage of sleep.

It would be interesting to study prefrontal cortex activity while a person is conscious, but unaware of his or her actions, due to an influence such as drugs or alcohol. According to the results of the sleep deprivation studies little or no activity should be seen in the prefrontal cortex at anytime when the individual is unaware of his or herself. One of the symptoms of prolonged sleep deprivation is hallucinations. This could also be related to the I-function since it is the system that integrates the input from all other areas of the brain. If the neurons composing the I-function become too taxed then the picture in the head that the I-function produces may be more dissimilar from reality than usual. The neurons, under pressure to continue functioning but unable to perform optimally, create an image useful enough for a person to see most of his or her surroundings.

Metabolic activity in the prefrontal cortex can drop as much as eleven percent after a person has missed sleep for only twenty four hours. As a person loses more sleep or continues to receive less-than-adequate amounts of sleep the neurons become even more taxed and the I-function may begin to generate even less coherent images possibly resulting in temporary insanity. Another piece of evidence supporting the location of the I-function is that mammals have REM sleep whereas cold-blooded animals do not and mammals have a neocortex, located within the prefrontal cortex, while cold-blooded animals do not. REM sleep stimulates areas of the brain used for learning and memory. When a person is taught a new skill his or her performance does not improve until he or she receives at least eight hours of sleep. An extended period of sleep ensures that the brain will be able to complete the full sleep cycle, including REM sleep. The necessity of sleep for learning could be due to the fact that sleep increases the production of proteins while reducing the rate at which they are broken down. Proteins are used to regenerate the neurons within the brain. Without them new synapses may not be able to be formed, thus limiting the amount of information a sleep-deprived individual can maintain.

One of the possible side effects of a continued lack of sleep is death. Usually this is the result of the fact that the immune system is weakened without sleep. The number of white blood cells within the body decreases, as does the activity of the remaining white blood cells. The body also decreases the amount of growth hormone produced . The ability of the body to metabolize sugar declines, turning sugar into fat. One study stated that people who sleep less than four hours per night are three times more likely to die within

the next six years . Although the longest a human has remained awake was eleven days rats that are continually deprived of sleep die within two to five weeks, generally due to their severely weakened immune system . In a way sleep deprivation studies help us to study the relationship between the brain and behavior in a very unique way by observing how a person's behavior changes as the brain shuts down.

By taking images of the brain showing where activity is located it is possible to correlate the behavior exhibited by a subject with his or her brain patterns. Just like a person cannot jog for three continuous days a person's brain cannot operate without rest breaks. Since different regions of the brain rest during different stages of the sleep cycle, sleep cannot be cut short. In fact, if the brain does not receive a break it will soon begin to shut down for periods of microsleep. This is essentially several seconds of actual sleep; delta waves that interrupt the regular EEG of an awake person thereby impairing his or her continuity of cognitive function. Microsleep generally happens directly before performance failure occurs . Without sleep our brains deteriorate, and if the argument that brain behavior is true, then our behavior will also suffer accordingly.