

Sleep deprivation in adolescence essay

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The lack of sleep can affect “ cognition, emotional regulation, and health” (Grubber, 2013). It is important for children around this age to create and maintain adequate sleeping habits to “ prevent the establishment of unhealthy habits” (Grubber, 2013). Unhealthy habits are easily made from the environment around us and even from biological changes. The main environmental influence discussed is of being involved in school.

The demands of schoolwork and extracurricular activities can take a negative toll on a student’s sleeping habits. Unhealthy habits that are caused by biological changes involve reaching puberty. Once an adolescent has reached puberty, they have the need to stay up late which can further develop potentially harmful sleeping habits. As sleep deprivation becomes a more common issue among adolescents, there will most likely be a larger percentage of adults with negative repercussions. Assumptions The sleep cycle consists of four stages. Stage one is when the brain waves become smaller and where one might be “ drifting on the edge of consciousness.

In stage two, the brain emits short bursts of rapid, high-peaking waves known as sleep spindles. During stage three the brain emits both sleep spindles and delta waves very slow waves with very high peaks), also a person’s breathing and pulse will begin to slow as muscles begin to relax. In the final stage, stage four, delta waves largely take over and one enters into a deep sleep.

(Invitation to Psychology, p. 154, 5th edition) These four stages of sleep are important because having a stage interrupted can lead to a day of fatigue. Being tired, say during a school day, can impair a student’s ability to focus

on a topic, it can affect the way the student's hippocampus processes and stores information, and can overall affect the way the student learns and succeeds. When children reach the school age, " a decrease in total sleep time and a decline in sleep efficiency occur... Accompanied by several changes in sleep architecture" (Quant et al. , 2003).

It is important during this time for children to build good sleep architecture and to consolidate good sleeping habits. This would in turn prevent unhealthy habits later in life. Around the time an adolescent reaches a higher level of education, such as high school, their " life becomes characterized by increasing levels of autonomy, participation in... Extracurricular activities, the beginnings of a social life, and the increasing demands of schoolwork. " (Grubber, 2013) Students stay up late for many reasons.

They could be involved in various afterschool activities and/or have large amounts of school work or they just can't fall asleep. Most students tend to think that sleep isn't needed or isn't as important as the work that needs to be done. When there is an essay due the next morning or if there's a big final, sleep is second priority.

Most students realize that the lack of sleep can affect their mood, but they don't realize how much more it can affect. Gibson has found that " as many as 24% of adolescent students reported that their grades dropped because of sleepiness" (2002). Sleep deprivation not only affects a student's grades, but it has negative effects on functions essential for success in school.

These functions include “ attention/response inhibition, verbal creativity, problem solving and general cognitive abilities” (Grubber, 2013). What most students or people in general don’t realize, is that as little as one hour of sleep can have a large negative impact on their academic performance. Sleep patterns are not only altered by the choices of the person, but also by biological changes such as puberty. As a person moves from childhood to adolescence “ developmental changes in sleep/wake patterns” (Grubber, 2013) become more prevalent. When a person reaches puberty, they tend to stay up much later than children or adults would. This change can cause sleep deprivation during a school week and lead to needed “ catch- up sleep” over the weekend. The inconsistency between sleep during the weeknight and the weekend can “ contribute further to desegregation and may predispose the adolescent to severe insomnia on Sunday nights” (Grubber, 2013). The inability to fall asleep would then start a negative sleep cycle that might last the entire week and then potentially continue to develop into something more serious.

Student’s Position As an adolescent myself, I find this information to be very important. No one knows better than a student what it’s like to pull an all-nighter. The effects on the next day are less than pleasant and they definitely impair my ability to remember, my reaction time, and my attention span.

School can be very demanding at times and can interfere with the amount of sleep I get. An issue that has recently been brought to my attention is that there are thousands of teens who drive every day with very little sleep.

Drowsiness can account for a number of the world's worst incidents, including Chernobyl, Three Mile Island, and the Exxon Valdez Oil Spill. If sleep deprivation has caused accidents of that extent, then it can and definitely does cause accidents among teens and young adults. According to Grader, "55% of drivers involved in crashes attributable to sleepiness were 25 years of age or younger" (1994). It is quite apparent that young, new drivers aren't the best behind the wheel, but the lack of sleep can seriously debilitate a driver's judgment and attention span.

Along with the rise of accidents related to sleep deprivation, technology has become a key problem. Most teenagers or adolescents of today's society feel the need to constantly carry around their cell phones or spend hours a day on their computers. In most cases it is borderline addiction, but in other cases, it is the reality.

Relating to addiction, most adolescents can't help but to mess with their phones and/or computers long into the night. Gruber states that "at older ages, children acquire habits that are not conducive to good sleep; these include exposure to light and to a high level of stimulation at bedtime (e.g., if a computer or television is in the bedroom)" (2013). I feel that phone companies advertise using their product over sleep. This definitely applies to a friend of mine. She has told me before that on numerous occasions she has gotten up around three or four in the morning to use her phone. She did this solely because that was the only time that her carrier offered a double data plan. In today's society people are willing to lose sleep to spend the extra time using their electronics.

Implications and Future Research The research I found touched on many aspects of sleep deprivation in adolescents. The authors used good, scholarly resources and included a large amount of useful data. I feel that most of the research was readily available excluding that of technology and its effects on adolescents. This information was most likely lacking due to the fact that it is becoming a newer topic and a newer problem in today's society. New technology is coming out all the time and it is difficult to keep up with and do extensive research on one specific problem such as how technology affects an adolescent's sleep. In Grubber's Journal she included "barriers" that explained different reasons why sleep is not taken more seriously.

One barrier in particular, lack of awareness and/or knowledge, goes on to talk about how "in the domains of health, learning, and academic success, psychologists, educators, teachers, and health care providers often lack both awareness of and knowledge on the impact of sleep" (2013) I feel that this is a strong point to mention because the practices mentioned tend to deal with the age groups of children and adolescents. If they don't know the importance of sleep in the developmental stages then there can't be any progress made toward identifying and treating unhealthy or even harmful sleeping habits.