
How Sleep Deprivation Is Linked To Some Serious Health Problems And It's Impact On Academic Achievement Of The Students

Globally, sleep problems are prevalent amongst university students. A cross-sectional study by Lund shows that 60% of students get poor-quality and insufficient sleep; 70.6% reported that they get less than the recommended 8 hours each night for optimal health. Many university students are still in adolescence and physiologically they tend to have a delayed sleep phase due to preference of later bedtime and brain maturation during adolescence can be affected by this. The aim of this paper is to investigate how sleep deprivation is linked to a variety of serious medical conditions and also how it may impact on university students' academic life. This essay will argue that SD negatively affects university students' academic performance to a large extent due to the decline in cognitive abilities which leads to lower GPA, increased risk of adverse physiological and long-term health outcomes and mental health issues. There is growing evidence that shows sleep deprivation negatively affects university students is the impact on academic performance. Numerous studies have established that quality of sleep impacts mental functioning and therefore impacts students' performance on assessments eventually grades received. Kelly, for example, observed the clear correlation between sleep length and GPA. Long sleepers (who obtain more than 8 hours of sleep) had higher GPAs than short sleepers (who obtain less than 6 hours of sleep).

The mean of GPAs were 3.24 and 2.74, respectively. The reason why students who are suffering from SD have lower grades is in cognitive impairment. Mental functions and cognition are the processes of acquiring information, including thought, memory, attention and lead directly to knowledge acquisition, whose level could be shown through academic performance and success. Even one night of SD reduces sustained attention, speed of information processing and causes response inhibition. All of the above, suggest that sleep irregularity may directly negatively affect students' academic performance. Poor sleep quality not only impacts on academic performance but also puts students at a heightened risk of various medical conditions. Sleep has a strong influence on the maintenance of homeostasis, by which the human body keeps internal stability to compensate for physiological changes or outside factors. Batool claim that the above mentioned demonstrates an interconnection between optimal health, general well-being and sufficient sleep.

Many studies have observed an association between sleep duration and obesity both in adults and children, suggesting that sleep irregularity may be a predictor of weight gain and increased risk for chronic conditions such as diabetes and cardiovascular disease. In addition, inadequate sleep results in a decreased secretion of leptin, a hormone which participates in sleep regulation and increased secretion of ghrelin, an appetite-stimulating hormone, which leads to overeating. Spiegel observe that two consecutive nights of sleep deprivation increase the secretion of ghrelin for 28% and reduce leptin's level by 18% during the day, leading to increased hunger (24%) and appetite (23%), typically for high-energy foods with substantial amount of carbohydrates and low nutritional quality, such as salty snacks, sweetened and starchy meals. These changes caused by sleep restriction indicate a probable imbalance between food intake and energy expenditure (the amount of energy that is needed to carry out physical functions)

and cause metabolic disturbances, leading to metabolic diseases such as obesity and type II diabetes. Finally, short sleep duration associated with certain lifestyle habits, which can negatively affect health. These may include drinking too much alcohol, smoking cigarettes and suicidal thoughts. Overall, based on the greater evidence above, it is clear that sleep deprivation has a significant impact on students' physical health.

Besides, sleep also has a strong influence on students' mental health, because it is a fundamental operating state of the central nervous system. Thus, sleep can be considered as one of the most important psychophysiological processes for brain functioning and mental health. This correlation between sleep quality and length with mental health has been observed in numerous other studies. The authors' investigations have shown that sleep disturbances are highly prevalent in mental illnesses and have been associated with adverse effects for emotional, and interpersonal functioning. In most psychiatric disorders such as affective, anxiety, eating, pervasive developmental, borderline and antisocial personality disorders, Baglioni observe the presence of sleep continuity issues. The study conducted by Brooks, Girgenti, and Mills found that students who reported themselves as short-sleepers were likely to have higher Beck Depression Inventory scores (measure for evaluating the severity of depression). Accordingly, sleep deprivation may be a relevant factor concerning depression and stress. Nevertheless, some researches have suggested that sleep duration and depression are not interconnected, as it is complicated to define the reason of depression due to the subjectivity of each case. Despite the strength of the proposed argument, it appears that sleep deficiency may cause conditions resulting in various mental health through their interaction with cognitive and emotional processes.

To conclude, sleep deprivation is an epidemic, which has been extensively documented in university students around the world. This essay has argued that inadequate sleep habits negatively impact on students' academic performance, physical and mental health to a large degree. Firstly, a significant negative correlation between students' sleep duration and their cumulative GPA was determined. In addition, it was found that SD may lead to several physical health illnesses such as obesity and diabetes and finally, associated with adverse effects for emotional and interpersonal functioning. A detailed study is required because coping with SD, recovering from it also deserves attention. The data that sleep problems present at an alarming level in the university student population should encourage authorities to conduct health education programs designed to improve sleep hygiene of this population. Given the growing recognition of the importance of sleep in maintaining general health suggests that campus-based programs to address this issue are worth further investigation.