Sleep derviation as a direct correlation to academic performance

Psychology



Sleep Derivation as a Direct Correlation to Academic Performance This study will prove the direct correlation between the incidence of sleep deprivation and academic performance. The study will employ the sleep quotient index in determining the incidence of sleep variation at different levels while also taking into account gender. The results of the study will establish that a significant number of college going students are increasingly affected by sleep deprivation which is affecting their grades. The study will then go ahead to give the limitations and implications of the study on real life situations. Introduction Many adolescents and college going people have been observed to be among the most sleep deprived people in the United States. Studies carried out indicate that incidence of sleep deprivation is in some instances directly related to increased irritability, tension, depression, poor academic or general performance, and general dissatisfaction in life. A study conducted by Carskadon (2002) came to the conclusion that over half of accidents which were sleep related involved people that were below twenty five. A research conducted by the American College Health Association (2005) regarding what students considered as their biggest obstacle, found out that sleep deprivation ranked third on the scale. A study conducted by Walters and Pilcher (1997) also came to the conclusion that learners that did not have sufficient sleep tended to be worse off in academic performance than their counterparts who had enough sleep. The purpose of this study is to expand on existing study by the use of psychometrically reliable and accurate tolls which incorporate the quantitative aspect in order to establish the incidence of sleep deprivation in college going learners. The study asserts that sleep deprivation is directly related to poor academic

performance. Method Participants The participants involved in this experiment consist of 50 undergraduate students drawn from the University of Maryland Baltimore County. All students that are to participate in the study are 18 years of age or older. Participants were randomly selected from the African American Religion and Making a Difference classes. Materials The survey made use of a sleep quality index which is a scale of eight upon which subjects would record their level of sleep deprivation. The index items were to measure sleep quality according to three measures; 0, 1, and 2. Subjects with most critical deprivation would score 2 and those with the least would score 0. An individual's sleep quality would then be obtained by the summation of the weekly scores. 0-1 represented the least sleep deprived; 2-8 represented averagely sleep deprived 9-16 represented the most sleep deprivation (Buboltz et al. 2001). Procedures Each student was given a one page activity survey that consist of a total of 12 questions that they were required to either enter the correct response to a specific question or by circling the correct response to a particular questions. The students were also given the scale for recording the weekly sleeping patterns. All students were prescreened to confirm they were at least 18 years old or older and undergraduates. If students met criteria they were giving a consent form to participate in experiment. Proposed Results The results of the study showed that approximately 11 percent of learners scored between 0 and 2. Approximately 73 percent scored between 2 and 8 meaning they had occasional incidences of sleep deprivation. Over fifteen percent had scores above nine representing critical sleep deprivation. A comparison of these figures to research previously done, shows a telling similarity except for

increases in the number of the sleep deprived. Analysis of the data was done separately in terms of gender since women tended to report disturbances more often than men (American College Health Association, 2005). Times taken in falling asleep, insomnia, drawing on sleep pills and sleep phase disorders did not vary greatly. 18% and 30% of men and women reported instances of insomnia while 9% and 16% of men and women reported difficulties in getting to sleep. There were some differences in perception of sleep of weekdays relative to weekends. Subjects had a desire to have more sleep the weekends as opposed to weekdays. The results established a positive relationship between sleep deprivation and academic performance or gainful employment. Conclusion Data collected is consistent with the study conducted by the American College Association which established that 15% of learners had problems with regard to sleep deprivation which is resulting to poor engagement and academic performance (American College Health Association, 2005). The data also supports Walter and Pilcher studies with regard to young people under twenty five and sleep deprivation (Walter & Pilcher, 1997). While the study was particularly successful its results may be subject to certain limitations such as; generalization since only one academic institution was sampled; the sample was obtained from only two classes, results might differ if more variety were included; the Sleep Quotient Index was developed in Europe and as such may present differences with American subjects; and finally, the study has no system of formally validating the responses of subjects. The study indicates that a significant number of college students experience sleep deprivation. Young people may underestimate the amount of time they sleep during weekends as compared

to weekdays. A perception of not getting enough sleep may result into less motivation and engagement even if the reverse is true. Differences in these times may interfere with sleep patterns making sleep disturbance more likely (Carskadon, 2002). References Carskadon, M. (2002). Adolescent sleep patterns: Biological, social, and psychological influences. New York: Cambridge University, Pilcher, I., & Walters, S. (1997). How sleep deprivation affects psychological variables related to college students cognitive performance. J Am Coll Health, 46, 121-126. American College Health Association. (2005). The American College Health Association-National College Health Assessment, J Am Coll Health, 53, 199-210. Buboltz, W., Brown, F., & Sopcr, B. (2001). Sleep habits and patterns of college students: A preliminary study, Journal of American College Health, 50, 131-135. Appendix Response Sheet How many how of sleep per night? What is your current GPA? How many hours do you study per week? How many classes do you miss per semester? Do you use sleep medication? Would you say your sleep is normally undisturbed and if so to what degree? How many hours do you sleep during weekdays? Do you sleep more during weekends and by how much time? Do you believe you need more time to sleep?