The correlation of sleep quality, perceived stress, and academic performance on u...



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The purpose of this study conducted is to observe whether the quality of sleep and stress have any effect on the academic performance of university students.

The 2013 study conducted by Calkins, Hearon, Capozzoli, and Otto's purpose was to figure out how environmental factors-such as insomnia related distress can predict the outcome of sleep quality. Calkins et al. (2013) investigated the connection between neuroticism on sleep disruption, faulty assumptions about sleep, and anxiety sensitivity. This study used 118 undergraduate students from Boston University through advertisements who were enrolled in a psychology course, and in return were given credit towards there grade for participating (Calkins et al., 2013). Calkins et al. (2013) used professional survey software called SurveyMonkey to gather information pertaining to the four scales to measures; Dysfunctional Beliefs and Attitudes about Sleep Scale (DBAS-16), Anxiety Sensitivity Index (ASI), Neuroticism, Extraversion, Openness to experience Five-Factor Inventory (NEO-FFI), and the Pittsburgh Sleep Quality Sleep Index (PSQI). Calkins et al. (2013) hypothesized that higher AS and neuroticism, and greater faulty opinions about sleep would significantly result in decreased quality of sleep.

Overall, Calkins et al. (2013) found that women scored significantly higher than men. The results found that there is a significant difference based on ethnicity on DBAS and neuroticism scores, with Latino, African American, and Hispanic participants having relatively lower scores. On the PSQI scale sleep disruption is positively correlated with the ASI score, DBAS, and neuroticism (Calkins et al., 2013). Also, sleep quality and daytime dysfunction subscale were connected with ASI social and mental concerns, DBAS, and neuroticism https://assignbuster.com/the-correlation-of-sleep-quality-perceived-stressand-academic-performance-on-university-students/ (Calkins et al., 2013). The sleep latency subscale was only associated with neuroticism and DBAS, while sleep duration and sleep efficiency were found not to be associated with any variable (Calkins et al., 2013). The use of sleeping pills was only associated with DBAS (Calkins et al., 2013).

Calkins et al. (2013) findings significantly put an importance on how neuroticism should not be forgotten to be included when discussing the problems related to sleep dysfunction and also contributes to the development of cognitive symptoms like AS-mental incapacitation and may play a role in sleep-related distress and dysfunction.

The 2010 study conducted by Gilbert and Weaver's purpose was to determine whether the amount and the quality of sleep in non-depressed university students get is associated with poor academic performance. Gilbert and Weaver (2010) hypothesized that low sleep quality and decreased amount of sleep in non-depressed students would have a poor academic performance than those who are well rested. This study included 468 undergraduate students in an introductory course in psychology who were identified as not having depressive symptoms (Gilbert and Weaver, 2010). This study used three forms of measures including; Demographic Survey (DS), the Goldberg Depression Inventory (GDI), and the Pittsburgh Sleep Quality Index (PSQI) (Gilbert and Weaver, 2010).

Gilbert and Weaver (2010) found there to be a significant negative correlation between Global Sleep Quality (GSQ) and Grade Point Average (GPA) in females; which supports their initial hypothesis that low sleep quality and decreased the amount of sleep in non-depressed students to have poorer academic performance. Students that do not have depression with low quality and reduced amount of sleep had significantly lower GPAs (Gilbert and Weaver, 2010).

Gilbert and Weaver (2010) state how the importance of sleep quality is related to academic success and that the quality of sleep should also be looked at alongside the quantity of sleep since findings point out that college student sleep habits are on the low end. Also, even though students GPA may not be effected through sleep deprivation other social, medical, and cognitive detrimental effects (Gilbert and Weaver, 2010).

The 2012 study conducted by Ahrberg, Dresler, Niedermaier, Steiger, and Genzel's purpose was to determine the relationship between stress, sleep, and academic performance. Ahrberg et al. (2012) investigated the stress levels and sleep quality in students before, during, and after the exams. This study used 144 out of 632 medical students who completed the online surveys that include a 10-point rating stress scale, and the PSQI. The results show that academic performance is associated with sleep quality and the level of stress before the exam, however not during or after the exam (Ahrberg et al., 2012). PSQI before exam results show that the tension before the exam is still associated significantly with grades (Ahrberg et al., 2012). However, it is seen that students with poor sleep guality do not necessarily get bad grades, but in fact, stress plays a significant role in receiving poor grades as well causing one to have poor sleep guality (Ahrberg et al., 2012). Ahrberg et al. (2012) states that it is a cycle that starts with stress you may be afraid of getting bad grades, which then causes one to feel sleepy due to not getting a proper amount or quality of sleep which then causes a lower https://assignbuster.com/the-correlation-of-sleep-guality-perceived-stressand-academic-performance-on-university-students/

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academic performance, and comes around in full cycle since lowperformance rate cause stress to most students.

It is essential to have a somewhat knowledge of the background of the experiment that is being to conduct, to have some information to support your the overall conclusion along with your results. We will be using the Perceived Stress Scale (PSS) and the Pittsburgh Sleep Quality Index (PSQI) to see whether the undergraduate students overall academic performance was affected by the amount of stress and the sleep quality they had. It is predicted that increased levels of stress and PSQI scores will result in the poor quality of sleep and academic performance of undergraduate students compared to students who have lower stress levels. It is also predicted that lower PSQI scores will result in the student's academic performance to improve overall. This is anticipated because of the three studies by Calkins et al. (2013), Gilbert and Weaver (2010), and Ahrberg et al. (2012) findings that support the stress level and the quality of sleep is negatively correlated with overall academic performance of undergraduate students

References

- Ahrberg, K., Dresler, M., Niedermaier, S., Steiger, A., & Genzel, L. (2012). The interaction between sleep quality and academic performance. *Journal of Psychiatric Research*, *46* (12), 1618–1622. https://doi. org/10. 1016/j. jpsychires. 2012. 09. 008
- Calkins, A. W., Hearon, B. A., Capozzoli, M. C., Michael, W., Calkins, A. W., Hearon, B. A., ... Otto, M. W. (2013). Psychosocial Predictors of Sleep Dysfunction : The Role of Anxiety Sensitivity , Dysfunctional

The Role of Anxiety Sensitivity , Dysfunctional Beliefs , and Neuroticism, *11* (2), 133–143. https://doi. org/10. 1080/15402002. 2011. 643968

 Gilbert, S. P., & Weaver, C. C. (2010). Sleep Quality and Academic Performance in University Students : A Wake-Up Call for College Psychologists, *24* (4), 295–306. https://doi. org/10. 1080/87568225. 2010. 509245