SHORT REST SOLUTIONS IN UNIVERSITY SETTINGS (US)

Irregular sleeping patterns are common among students, for whom the consequences can be especially problematic. Research has largely explored the impact of sleep deprivation on mental health and academic performance, and universities are increasingly adopting resting solutions to mitigate the effects. This paper provides an overview of the risks of fatigue for students, and investigates the benefits of short rest in improving wellbeing as well as grades.

STUDENTS AND SLEEP

70.6% of students sleep less than the recommended 8 hours per week, and only 11% report sleeping well consistently.[1] [2] 50% of college students experience daytime sleepiness (vs. 36% of their younger and older counterparts.), and only 41% declares feeling well-rested during the week.[3] [4] Differences have been found across disciplines, with Architecture students being the most sleep deprived. On average, they sleep 5.7 hours and only 4% get at least 7 hours of sleep a night. Further, the practice of pulling all-nighters is particularly common, with on average 3.71 sleepless nights per month.[5]

CAUSES OF SLEEP DEPRIVATION

Coursework, extra-curricular and part-time work

Course workloads, pressure to perform and extra-curricular activities have been identified as causes of stress and sleep deprivation for students. Similarly, sleep is also often foregone in favor of late-night socializing and early or late obligations.[6] A study carried out at Virginia Commonwealth University also found that part-time work can negatively affect sleep quality, especially in absence of "recovery experiences" such as relaxation, psychological detachment from work and engagement with leisure activities.[7]

Social media and technology

The 2011 Sleep in America poll investigated the pervasive usage of technologies before bedtime and found that the majority of young adults (19-29 years-old) heavily use mobile phones (67%) or computers (60%) prior to falling asleep. 51% reported rarely getting a good night's sleep and often waking up unrefreshed.[8] The link between prolonged media use and sleep quality has long been investigated, with decreased sleep efficiency resulting from exposure to technology before falling asleep and number of night-time awakenings by mobile phones.[9] Specifically, a study carried out at UCLA found that using online platforms late at night significantly affected sleep quality of freshmen college students.[10] Users spending 5+ hours per day on social media were also more likely than average to fall asleep late and wake up during the night.

Stimulants

Stimulant beverages have also been identified as one of the main causes of sleep deprivation. Energy drinks are particularly common among college students, with 34% of 18-24-year-olds consuming them regularly.[11] Insufficient sleep has been indicated as the main reason for consumption by 67% of university students, followed by the need to increase energy (65%) and mixing with alcohol at parties.[12] Excessive intake (3+ beverages per week) has been found to negatively impact sleep quality, oftentimes resulting in daytime dysfunction due to sleep loss and short sleep duration.[13]

CONSEQUENCES OF SLEEP DEPRIVATION

Sleep deprivation and academic performance

Poor sleep quality has been found to severely impact grades and is nowadays the third most common impediment to academic performance after stress and illness.[14] The American Academy of Sleep Medicine reports that students who sleep less than 6 hours a night over a period of two weeks perform as poorly as someone who has been sleep deprived for 48 hours, as their memory and concentration are significantly impaired. The impact of poor sleep on grade point average, specifically, has been compared to that of binge drinking and marijuana use.[15] In analogous studies, those sleeping less than 8 hours scored worse than their non-deprived counterparts.[16] Specifically, performance in tasks such as assessing inference, recognition of assumptions and deduction was significantly lower. Similarly, staying up late during the week and making up for lost sleep during the weekend leads to poor performance.[17] On the contrary, students sleeping longer hours (9 hours) reportedly have higher GPAs than their counterparts (3.24 vs. 2.74 on average) and are less likely to engage in procrastination.[18] [19]

Sleep deprivation and mental health

Mental health has been identified as a growing concern among college student population. In 2019, the American College Health Association found that 87% of students felt overwhelmed by their daily tasks

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and commitment while 66% experienced overwhelming anxiety. In the same study, 45% reported feeling too depressed to function, and 56% felt things were hopeless.[20] Each year, 1000 students take their own lives, making suicide the second most common cause of death among college students after accidental injuries.[21]

Sleep deprivation sets the stage for negative thinking and emotional vulnerability: when the ability to sleep 8 hours a night is impaired, mood changes are more frequent, and emotional regulation is disrupted. Negative feelings such as sadness and anger are heightened while positive responses i.e. happiness and joy are attenuated.[22] A sleep debt of as little as 2 hours per night and/or a bedtime after 2am has also been associated with greater depressive symptoms.[23] In young adults, these effects have been proven to manifest themselves even after one night of poor sleep.[24] In the long term, sleep latency is associated with loss of pleasure, punishment feelings and self-dislike.[25] For individuals with pre-existing mental health issues, a lack of sleep can be particularly dangerous as it has been found to lower the threshold for suicidal thoughts and behaviours.[26] [27]

BENEFITS OF SHORT REST

Short naps have been proven effective in mitigating the disruptive consequences of a lack of sleep. A study conducted among young adults reported improved performance on tasks such as addition, logical reasoning, reaction time, vigilance tasks and symbol recognition following a nap.[28] [29] Similarly, increased attention to detail and decision-making proficiency have been measured.[30] Short rest is also successful in improving memory and it can help remember things learned earlier in the day as much as a full night's sleep.[31] Further, it has been found to be more effective than caffeine supplements (e.g. energy drinks) in improving productivity among undergraduate and graduate students.[32]

The effects on mental wellbeing and mood have also been measured. Napping for as little as 10 minutes improves mental state by increasing feelings of relaxation and joy while reducing sadness.[33] Moreover, it has been found to reduce impulsivity and promote tolerance for frustration, demonstrating higher emotion regulation.[34] Finally, naps help relieve stress even after a disrupted night sleep.[35]

THE ENERGYPOD IN US UNIVERSITIES

Savannah College of Art and Design (SCAD) was one of the first institutions to adopt resting solutions in an effort to encourage students' well-being. Three pods were installed at its Savannah and Atlanta campuses in 2016 and, following positive feedback from the students, a fourth has been added to its Hong Kong campus.

"SCAD was the first to take the power nap to a whole new level by bringing nap pods to a university setting. Beyond their practical function as a restoration station, our pods are symbolic reminders of the need to recharge. Sustainability is the key — in life as in art." -- Paula Wallace, SCAD President and Founder

The **University of Florida** added two devices to the Smathers Library as part of a range of initiatives aimed at helping students relax and promoting mental health. According to Melissa L. Rethlefsen, associate dean of the George A. Smathers Libraries, the pods have since then been in high demand by students and can help in the fight against severe burnout, depression and other issues often caused by academic pressure and stress.

"There is a major challenge among health science students with severe burnout and depression and mental health issues. […] We see the library as a place to promote wellness and wellbeing, a place of rejuvenation, and this is one of the ways we try to provide that service." --Melissa L. Rethlefsen, Associate Dean of George A. Smathers Libraries[36]

California State University Northridge installed six EnergyPods in a purposely created Oasis Wellness Center, where students can "find serenity and relaxation amid the rush and activity of campus life"[37] [38]. Since mid 2015, over 31,000 naps have been taken, for an average duration of 31 minutes. As can be seen below, the pods have been used almost constantly during the center's opening hours (8am-8pm).

Across the country, the EnergyPod has been adopted by a variety of other institutions including the **University of Chapel Hill, Texas A&M University, Sacramento Kings** and **University of Virginia.**

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