

Much research offers valuable insights into the sleep practices and challenges faced by university students, which expanded our understanding of our domain. According to the research [10], over 60% of university students are experiencing disturbed sleep in their life. They were classified as having poor sleep quality and are experiencing delayed bedtimes and waking times on weekends.

Regarding to the sleep duration, research projects demonstrate the prevalence of sleep insufficiency among young adults [11]. The research demonstrated that a notable portion of youth experience poor sleep conditions, with 30% of young individuals sleeping less than seven to nine hours per night and 18% taking more than half an hour to fall asleep. Sixty percent of young adults did not maintain consistent sleep schedules. Furthermore, the study revealed a considerable dissatisfaction with sleep among many young individuals, as 25% described their sleep as either "fairly bad" or "very bad." In addition, 10% reported impaired alertness during the day.

In another research conducted in one Australian university, researchers reported one third of participants (about 200 university students) confirmed that they do not have sufficient sleep (less than 6.5 hours), and two third (about 400 students) presented a perception of not having enough sleep [12]. The research also suggested there is a significant association between the sleep hours and participant's perception of high-quality sleep.

In addition, the study conducted by Lund et al. investigated factors that negatively affects sleep quality, which are emotional and academic stress [10]. This result highlights a critical aspect for our design to address and outline the need for stress-reduction techniques and coping mechanisms to enhance students' sleep quality. This also shows the importance of integrating stress management tools and mindfulness exercises into our design to mitigate stress and anxiety to help students have a more restful sleep.

In summary, these published documents showcase most contemporary Australian university students experience poor sleep quality, their perceptions of it and some reasons for their difficulty in falling asleep. This gives us more insights about our domain and encourage us to explore hidden reasons of university students' sleep problems.

[10] Lund, Hannah G., B.A, Reider, Brian D., B.A, Whiting, Annie B., R.N, and J. R. Prichard, "Sleep Patterns and Predictors of Disturbed Sleep in a Large Population of College Students," *Journal of adolescent health*, vol. 46, no. 2, pp. 124–132, 2010, doi: 10.1016/j.jadohealth.2009.06.016.

[11] A. P. Metse, P. Eastwood, M. Ree, A. Lopresti, J. J. Scott, and J. Bowman, "Sleep health of young adults in Western Australia and associations with physical and mental health: A population-level cross-sectional study," *Australian and New Zealand journal of public health*, vol. 47, no. 4, pp. 100070–100070, 2023, doi: 10.1016/j.anzjph.2023.100070.

[12] R. Batten, K. Liddiard, A. J. Raynor, C. A. Brown, and M. Stanley, "Cross-sectional survey of sleep practices of australian university students," *Nature and science of sleep*, vol. 12, pp. 39–48, 2020, doi: 10.2147/NSS.S221472.