

increased odds ratio (OR) of diseases including diabetes (OR= 1.42, $p<0.001$), hypertensive disease (OR= 1.22, $p<0.001$), ischaemic heart disease (OR= 1.12, $p<0.001$) and organic mental disorder (OR= 1.77, $p<0.001$).

Discussion Using the largest accelerometry cohort to date, 6-8 hours of sleep along with non-fragmented sleep was associated with better, future metabolic and mental health. However, sleep duration and quality alone were not sufficiently sensitive or specific to be a stand-alone biomarker for future health status. Future studies should consider additional lifestyle and health factors.

4 COMPARING THE SUBJECTIVE SLEEPINESS AND SOCIAL HEALTH OF HIGHER EDUCATION STUDENTS ALONGSIDE A NON-STUDENT SAMPLE

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Introduction This paper will evaluate the difference between Sleepiness, Loneliness and Social Connectedness between a higher education and mundane sample. Although current literature evaluates the role of Sleepiness within Higher education (Araújo et al, 2021), to the best of our knowledge there are no papers comparing a student population to a non-student sample.

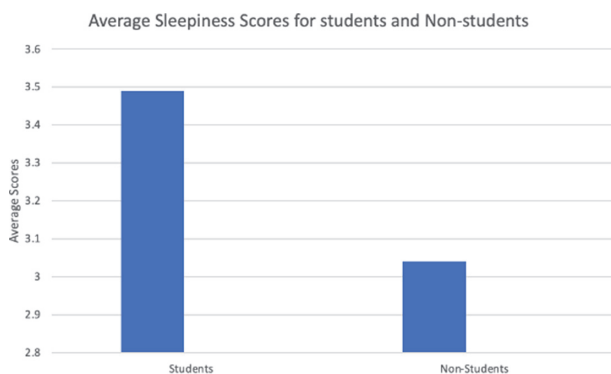
A significant difference between the subjective sleepiness scores of a student and non-student population is expected, which would demonstrate that a student sample perceive themselves to be sleepier than their non-student counterparts.

Methods An online survey was administered to 202 participants via Qualtrics. 94 were non-students and 108 were higher education students. Sleepiness was measured using the Stanford Sleepiness Scale (Shahid et al, 2011), The UCLA Loneliness Scale was used to measure loneliness (Russell, 1980).

Results An independent t-test showed that there was a significant difference between students and non-students subjective sleepiness scores. ($t(200) = 2.23$, $p = 0.02$) with students being significantly more likely to rate themselves higher on the Stanford Sleepiness Scale. (Figure 1).

Further analysis shows that Loneliness and Subjective Sleepiness are significantly correlated for a student sample ($r(108) = 0.308$, $P = 0.001$).

Discussion This study suggests that students enrolled within higher education are more highly associated with the risks of



Abstract 4 Figure 1 Demonstrates the average Sleepiness scores for students and non-students

Excessive daytime Sleepiness and the resultant detrimental effects on social health. Further research needs to be performed to determine the negative effects of Sleepiness on Student's social health.

6 INVESTIGATING METHODS OF SHARING INFORMATION TO SUPPORT ADOLESCENT SLEEP ISSUES DURING COVID-19

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Introduction Many studies outline adolescents are particularly at risk of developing sleep issues, experiencing delayed sleep onset. The aim of our study was to identify effective ways to support young people to improve sleep patterns using behavioural intervention during Covid-19 by promoting youth participation and sharing information at scale.

Method The study entailed recruiting young people with lived experience of sleep issues to create three distinct advisory boards. Through consultation it was established that Covid-19 was having a significant impact on sleep patterns in this cohort and there was an urgent need to create accessible, evidence-based sleep intervention. We established a website dedicated to sharing sleep education. A downloadable e-Book, live web chat, videos, a newsletter and resources for schools and parents were all created with the input of the boards.

Results The website launched on 1st October 2020 with the aim to reach 400 young people by the end of the project on 6th June 2021. The project had the following reach:

Website visitors - 19,766

eBook downloads - 33,468

Newsletter signups - 1,601

Video views sharing sleep tips - 14,491

Young people receiving direct support through live chat - 34

Schools receiving resource pack - 3,500

Feedback from 50 individuals was evaluated to inform future work around the eBook and it was established that there is a strong preference for printed material, these findings were also supported by our youth advisory board.

Discussion Young people consistently told us that they want to be able to access evidence-based sleep information to support their own sleep patterns, our work lays important foundations on which to build nationally to support adolescent sleep and wellbeing at scale.

7 EVALUATION OF A ONE-TO-ONE SLEEP SERVICE DELIVERED VIA ONLINE CLINICS BY COMMUNITY SLEEP PRACTITIONERS IN THE UK

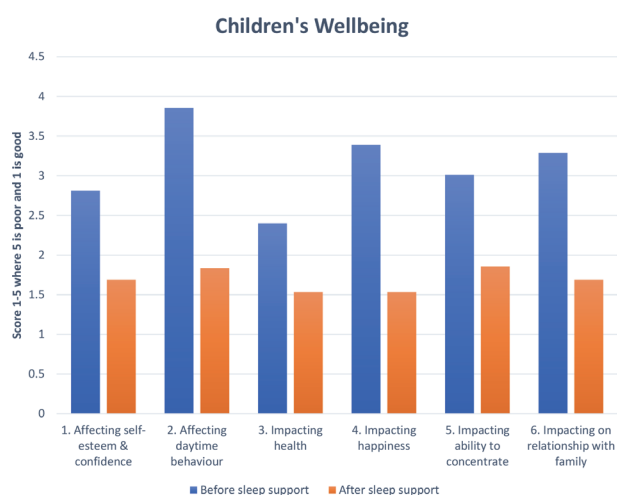
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Introduction Poor sleep is associated with many adverse outcomes in childhood. The most common sleep difficulty experienced by children is behavioural insomnia which responds to behavioural therapy. The Coronavirus disease 2019 (COVID-19) global pandemic in 2020 has had a profound effect on children's sleep patterns. This project aimed to evaluate a one-

Variable	Baseline (mean)	Post-intervention (mean)	Mean difference; 95% CI
Time to fall asleep (mins)	99.26	20.38	MD 78.88; 95% CI 65.46-92.29, p<0.05
Number of nights wake per week	3.92	0.85	MD 3.08; 95% CI 2.51-3.64, p<0.05
Number of awakenings per night	1.88	0.45	MD 1.42; 95% CI 0.96-1.88, p<0.05
Time awake during night (mins)	66.78	5.75	MD 60.39; 95% CI 42.36-78.42, p<0.05
Number of hours sleep (hrs)	7.98	10.18	MD 2.20; 95% CI 1.82-2.57; p<0.05

Abstract 7 Figure 1 Sleep measures before and after the sleep intervention (n=104). Improvement in all measures was statistically significant ($p < 0.05$)



Abstract 7 Figure 2 Children's individual wellbeing measures and mean total wellbeing score before and after the sleep intervention (n=92). Each question was rated on a scale of 1-5 where 1 was good and 5 was poor. All measures showed significant improvement ($p < 0.05$)

to-one sleep service delivered via on-line clinics by community sleep practitioners in the UK.

Methods The study was an observational pre- and post- evaluation in a 12-month period. The intervention is derived from the behavioural aspects of Cognitive Behavioural Therapy for insomnia. The evaluation was questionnaire-based and assessed sleep parameters and wellbeing.

Results 104 parents returned completed questionnaires. Average sleep onset was 1 hour, 39 minutes pre-intervention and 20 minutes post-intervention. Average nights that the child woke per week was 3.9 pre-intervention and 0.9 post-intervention; night awakenings fell from 1.9 to 0.5 and time awake after sleep onset fell from 66.8 minutes to 5.8 minutes. The average time slept asleep per night was 8.0 hours pre-intervention and 10.2 hours post-intervention. Improvement in all sleep measures was statistically significant

($p < 0.05$) see figure 1. All measures of parental and children's wellbeing improved significantly ($p < 0.05$) except for their perceived ability to drive ($p = 0.07$), see figure 2 for children's wellbeing scores. 100% parents stated that they would recommend the sleep support and 20% already had.

Discussion We believe that this is the first report of a video-based clinic developed for children's behavioural insomnia during the COVID-19 pandemic in the UK.

The COVID-19 pandemic has accelerated the evolution of telehealth and, in the case of children's sleep clinics, has provided a mode of intervention delivery that is as effective as face-to-face delivery, acceptable and accessible.

9 INVESTIGATING THE CLINICAL COURSE OF CHILDREN WITH CENTRAL SLEEP APNOEA SEEN AT SHEFFIELD CHILDREN'S HOSPITAL: A RETROSPECTIVE DESCRIPTIVE ANALYSIS

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Introduction Central sleep apnoea (CSA) is an uncommon paediatric syndrome characterised by recurrent cessations of ventilatory effort related to a lack of central drive to breathe during sleep. Literature describing the expected clinical course of CSA is limited and there are no guidelines on appropriate management. The study aimed to follow children with CSA from presentation to final outcome and investigate the factors associated with the choices for management of these patients.

Methods A retrospective analysis of medical records of children with CSA seen at Sheffield Children's Hospital (SCH) over 10 years was conducted (n=30). Children with a diagnosis of CSA or polysomnography (PSG) findings that would be classified as CSA under current practices (an apnoea-hypopnoea index (AHI) of ≥ 5 /hour or significant physiologic changes related to central apnoeas) were eligible for inclusion. Data was collected on demographics, co-morbidities,