included chocolate, hot chocolate, crisps, burger and chips. Only 10 children engaged in calming activities in the hour before bedtime such as reading, colouring, lego and crafts. 28 children were left to self-settle and 22 had a parent laying or sitting next to them in their bedroom in order to fall asleep.

Conclusion There was marked variation from the recommended bedtime routine in children with severe behavioural sleep difficulties, accepting that in some, socially desirable responses may have been given to the research staff during the assessment. Further work to explore the important factors in helping a child to self-settle is ongoing.

46 THE SLEEP, CIRCADIAN RHYTHMS AND MENTAL HEALTH IN SCHOOLS (SCRAMS) FEASIBILITY STUDY

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Introduction Adolescence is a key developmental period for the onset of mental illness. Healthy rhythms of sleep and activity are critical for mental wellbeing in young people. Yet getting healthy diurnal rhythms becomes challenging for teens, due to developmental changes and multiple social and technological factors modifiable risk factor. We addressed this relationship in a feasibility study by investigating sleep-wake patterns of teenagers and their mental health, wellbeing, and cognitive performance.

Methods 9 schools of the SHINE network in Scotland took part in the study. Pupils wore an actigraph for 3 weeks, allowing the collection of objective rest-activity data. During the 3 weeks, they filled in twice a day a brief ecological momentary assessment with mood questions on their mobile phone (EMAapp). At the beginning and at the end of this

period, participants also completed a digital online survey with further questions about mental health, sleep, and wellbeing (pre- and post- questionnaire) and they performed a cognitive assessment (6 subtests) on the online platform Test-MyBrain (TMB).

Results The feasibility study included two data acquisitions. In Winter (Feb-March 2021), during the lockdown, 8 schools took part for a total of 60 students, whereas, in Summer (May-June 2021), 3 schools took part for a total of 15 students.

Preliminary feasibility results are summarised in the table 1 below.

Discussion Overall, relatively good participation, especially during the lockdown. Compliance decreased from the pre- to the post- questionnaire session and within TMB itself. Only 2 people fully completed the study. 11% of the pupils had problem with the EMA app, as reflected in the average low entries. Regarding the actigraph, it was generally well tolerated (a few pupils complained having a rash at the end). Further actigraphy analyses are ongoing.

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47 IS SUBJECTIVE SLEEP CONTINUITY ASSOCIATED WITH FLUID INTELLIGENCE?

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Introduction Previous research has indicated that poor subjective sleep quality is associated with lower fluid intelligence scores (Smith et al., 2019). However, it is not known whether subjective sleep continuity is associated with fluid intelligence, or with set-shifting or mental rotation accuracy, since these are closely related to fluid intelligence (Kafadar et al., 2016; Varriale et al., 2018). The aim of the study was to investigate the relationship between sleep continuity, assessed using daily subjective sleep diaries and fluid intelligence. It was hypothesised that sleep continuity would be positively associated with 1) fluid intelligence, 2) mental rotation and 3) set-shifting.

Methods A total of 39 healthy good sleepers completed a daily subjective sleep diary (Consensus Sleep Diary-M) for

Abstract 46 Table 1

<u>Winter Data Acquisition</u> (Feb-March 2021, lockdown, home schooling)								8 schools; $N_{\text{final}} = 60$ (4 excluded)		Age 14.5; 72% female	
	Online Survey (nr participants)	TMB 1.Letter/Number Switching (nr participants)	TMB 2.Multiple Object Tracking (nr participants)	TMB 3.Verbal Paired Associate (nr participants)	TMB 4.Fast Choices Test (nr participants)	TMB 5.Visual Pairs (nr participants)	TMB 6.Continuous Concentration (nr participants)	EMAapp (nr participants; 3 weeks)	EMAapp (nr entries /43) *	Actigraph (3 weeks)	
Pre questionnaire	56 (91%)	49 (81%)	46 (72%)	46 (72%)	46 (72%)	46 (72%)	45 (70%)	57 (95%)	19 (44%)	Upcoming	
Post questionnaire	47 (75%)	47 (73%)	46 (72%)	46 (72%)	39 (63%)	39 (63%)	40 (64%)				
<u>Summer Data Acquisition</u> (May-June 2021, back to school)								3 schools; $N_{\text{final}} = 15$ (2 excluded)		Age 14; 34% female	
Pre questionnaire	15 (100%)	15 (100%)	14 (83%)	14 (83%)	14 (83%)	14 (83%)	14 (83%)	11 (73%)	21 (49%)	Upcoming	
Post questionnaire	12 (74%)	12 (74%)	12 (74%)	12 (74%)	12 (74%)	12 (74%)	12 (74%)				

*no entries excluded