**Restful Minds Initiative** 

# ADOLESCENT SLEEP PROCRASTINATION PROGRAMME: A SKILLS MANUAL

A quick and easy guide for busy practitioners

by Lucy B.G. Tan





### Restful Minds Initiative Temasek Foundation Youth Connect Programme

## Universal Sleep Programme for Adolescents A Tier 1 and 2 Intervention Skills Manual for Youth Counsellors

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### About the author

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Her research focuses on mental health condition development, treatment mechanisms, and bridging the evidence-practice divide, particularly regarding work readiness. Her research has earned several prestigious awards, including the Australian Prime Minister's Award. Dr. Tan's treatment protocol, *Taming the Adolescent Mind®*, is widely used in Youth Mental Health services in Australia and international schools in Hong Kong, with partnerships with the University of Texas, USA.

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### Introduction: What is this Programme about?

The Basic Sleep Procrastination Programme for Adolescents.

Sleep is a fundamental aspect of overall well-being, especially for adolescents who are undergoing significant physical, emotional, and cognitive development. However, many young people struggle with sleep procrastination—delaying bedtime in favour of activities such as social media, gaming, or studying. This behaviour can lead to sleep deprivation, affecting mood, academic performance, and overall health.

Bedtime procrastination is particularly concerning when it comes to adolescents (Kühnel et al., 2018). Kroese et al. (2014) believe that it is not that bedtime procrastinators dislike sleep, but rather, they have difficulty stopping other activities to go to bed. Also, delays in young people's melatonin secretion (a hormone that assists with falling asleep) means it takes longer for adolescents to feel sleepy and so, they are more likely to delay their bedtimes (Vidal and Shochat, 2023; Kadzikowska-Wrzosek, 2020). However, even though they do not feel tired, the need for sleep remains the same. Evidence-based guidelines recommend adolescents **need between 8-10 hours of sleep every night.** When they delay their bedtime, it becomes necessary for adolescents to delay their morning wake times. Of course, on school days, this isn't possible. Necessary early wake times following late nights means a shorter sleep duration, and bedtime procrastinators end up not getting the amount of sleep they need until the weekend. This leads to irregular sleep patterns throughout the year (Vidal and Shochat, 2023).

The *Body Sleeps, the Mind Follows* is the basic premise for this 4-session Sleep Programme and aims to equip youth counsellors with practical tools and strategies to help adolescents recognize the importance of healthy sleep habits and overcome procrastination. It provides a comprehensive framework for understanding sleep patterns, identifying barriers to sleep, and implementing effective strategies.

As counsellors, you play a critical role in guiding young people towards better sleep practices. This Programme offers evidence-based techniques, interactive activities, and resources designed to engage adolescents and empower them to prioritize their sleep. Together, we can help them achieve the rest they need to thrive in all aspects of their lives.



### Word of Warning:

You may come across adolescents who may be identifying with more serious sleep disorders (e.g., delayed sleep phase disorder, i.e., cannot sleep till 3am or 4 am; sleep apnoea, etc). These adolescents will require more tailored individual treatments (Tier 3 and 4 interventions) and are not suitable for this intervention.

Let's embark on this journey to promote healthy sleep habits and enhance the well-being of the youth we serve.

### **Background:**

### What Is the Psychology Behind Bedtime Procrastination?

Sleep procrastination is still an emerging concept in sleep science. As a result, there are ongoing debates about the psychology behind this voluntary sleep reduction. People who engage in bedtime procrastination know and generally want to receive enough sleep, but they fail to actually do so. This is known as an **intention-behaviour gap**<sup>1</sup>. One explanation for this gap is a failure in self-regulation or self-control. Our capacity for self-control is already at its lowest at the end of the day, which may facilitate sleep procrastination. Some people may be naturally inclined to procrastination in general, including around bedtime. In addition, daytime demands at school or work may reduce the reserves of self-control available in the evening.

Not everyone agrees with this explanation, with some arguing that it places too much emphasis on self-control. Instead, sleep procrastination may result from people who have an evening chronotype —i.e. "night owls" who are forced to try to adapt to schedules designed for "early birds." In revenge bedtime procrastination, sacrificing sleep for leisure time may also be seen not as a failure of self-control but rather an attempt to find recovery time in response to stress. Further research continues in this area, which may be the result of multiple interacting factors including chronotype, daytime stress, and difficulties in self-regulation.

### Who Is Most Affected by Bedtime Procrastination?

Because research about sleep procrastination is still in the early stages, experts are uncertain who is most affected by it. That said, one study found that adolescents and women were most likely to engage in bedtime procrastination. People with an evening chronotype are inclined to stay up later, which may manifest as bedtime procrastination. Sleep procrastination also appears to be more frequent in people who procrastinate in other aspects of their life.

### **Consequences of Bedtime Procrastination**

Bedtime procrastination can cause sleep deprivation. Without enough hours of sleep, the mind and body cannot properly recharge, which can have widespread negative effects on health and learning. Insufficient sleep degrades thinking, decision making and memory. Sleep deprivation also raises the risk of daytime sleepiness, which can harm productivity and academic achievement while heightening the risks of drowsy driving in youths.

<sup>&</sup>lt;sup>1</sup> The concept is deeply rooted in social psychology and behavioural research, with significant contributions from researchers like:

Kurt Lewin (1890-1947), a pioneering social psychologist who studied human motivation and behaviour change. Martin Fishbein and Icek Ajzen, who developed the Theory of Reasoned Action in the 1970s, which explores the relationship between attitudes, intentions, and behaviours.

### **How To Prevent Sleep Procrastination**

The best remedy for sleep procrastination is a healthy sleep hygiene, which involves creating good sleep habits and an environment conducive to sleep. Remember that it will take more than one night's sleep to truly get into good sleep habits. Having set routines can make behaviours feel almost automatic.

### This Programme is **NOT**:

- about "just drink some chamomile tea before bed"
- about sleep meds
- a quick fix, magic pill
- suitable for adolescents with severe sleep disorders, e.g.
  - loud snoring
  - o stopping breathing, breathing pauses, gasping, or snorting during sleep
  - falling asleep unintentionally/dozing during the day
  - o a creepy-crawly sensation in your lower legs in the evening along with an irresistible urge to move your legs to get rid the sensation
  - very frequent leg jerking during your sleep
  - sleepwalking or the urge to walk while asleep
  - o chronic repeating nightmares
  - feelings of panic disrupting your sleep

This Programme IS practical and focused; helps you to help the student to:

- train their bodies for sleep "Body sleeps, the mind follows"
- establish their pre-conditions for sleep "Habit formation"
- increase control of their sleep patterns

### How will we do this?

- Using the Facts of Sleep Science to move adolescents to action
- To inform and practice specific strategies for improving sleep
- Focus on knowledge-transfer to action with the adolescents

### Who can join in this Programme (Tier 1 and 2)?

- This Programme is aimed for secondary school-age adolescents
- Programme targets Tier 1 and 2 interventions (healthy to low/mild categories)
- Participants with higher scores on the Sleep screening questionnaires will be advised to seek professional and medical assistance.

Tiered Care Model for Mental Health Care Delivery

	Tier 1 Mental Well-being Promotion	Tier 2 Low Intensity Services	Tier 3 Moderate Intensity Services	Tier 4 High Intensity Services
Who will benefit?	Healthy individuals (i.e., coping well, no or minimal symptoms of mental health conditions)	Individuals with low mental health needs (e.g., some difficulties coping, mild symptoms of mental health conditions)	Individuals with moderate mental health needs (e.g., difficulties coping, moderate symptoms of mental health conditions)	Individuals with high mental health needs (e.g., major difficulties coping, showing severe symptoms of mental health conditions)
		Facilitate coping and prevent the escalation of symptoms	Reduce the severity of symptoms	Stabilise chronic mental health conditions
Examples of interventions/ resources provided	School curriculum to build mental well-being and resilience     Public education and self-help (e.g. MindSG, SG Mental Well-Being Network)     Parenting/ Peer/ Community support     Workplace mental well- being support	Mental health needs detection     Counselling     Stress and anxiety management, social skills training, behaviour management	Mental health assessment     Psychotherapy (e.g. Cognitive Behavioural Therapy)     Medical treatment	Psychiatric assessment and diagnosis     Specialised and longer-term psychological interventions     Medical treatment     Emergency services

Singapore mental health strategy 2023

### Screening for Sleep Problems: right fit, right time

How do you know which adolescents fit into which Tier? When to refer those who require more tailored intervention? Along with session plans and resources, a suite of Sleep screening measures would guide you to determine the right fit.

This intervention program aims to empower adolescents to understand and take control of their sleep habits, ultimately enhancing their overall well-being. In each session, it sets out the Objectives and Materials Needed for the session's activities, along with tipsheets and worksheets.

### Sleep Screening Measures

A suite of measures with scoring instructions can be found in this manual. These are used at the start of Session 1 and repeated at the end of the programme during Session 4, thus providing you a comprehensive way of tracking the adolescent's progress. You will also utilise the adolescent's responses from the measures to tailor a personalised sleep plan in Session 2 and 3.

### ISI (Insomnia Severity Index\*\*)

For each question, please CIRCLE the number that best describes your answer.

Please rate the CURRENT (i.e. LAST 2 WEEKS) SEVERITY of your insomnia problem(s).

Insomnia Problem	None	Mild	Moderate	Severe	Very Severe
1. Difficulty falling asleep	0	1	2	3	4
2. Difficulty staying asleep	0	1	2	3	4
3. Problems waking up too early	0	1	2	3	4

4. How <b>SATISFIED/DISSATISF</b>	ED are you with your	r CURRENT sleep pattern?
-----------------------------------	----------------------	--------------------------

Very Satisfied Satisfied Moderately Satisfied Dissatisfied Very Dissatisfied 0 1 2 3 4

5. How **NOTICEABLE** to others do you think your sleep problem is in terms of impairing the quality of your life?

Not at all

Noticeable A Little Somewhat Much Very Much Noticeable 0 1 2 3 4

6. How WORRIED/DISTRESSED are you about your current sleep problem?

Not at all

Worried A Little Somewhat Much Very Much Worried 0 1 2 3 4

7. To what extent do you consider your sleep problem to **INTERFERE** with your daily functioning (e.g. daytime fatigue, mood, ability to function at work/daily chores, concentration, memory, mood, etc.) **CURRENTLY**?

Not at all

Interfering A Little Somewhat Much Very Much Interfering 0 1 2 3 4

### **Guidelines for Scoring/Interpretation:**

Add the scores for all the above seven questions = \_\_\_\_\_\_your total score

### **Total score categories:**

0-7 = No clinically significant insomnia

8-14 = Sub-threshold insomnia

15–21 = Moderate severity Clinical insomnia

22-28 = Severe Clinical insomnia



### Next - What to do with the ISI scores?

### Group the adolescents according the 4 categories

- Adolescents who **score 15 and above** on the ISI will be encouraged to seek out personalised interventions i.e., Tier 3 or 4
- Adolescents who **score 8-14** will be offered Tier 2 interventions and continue with this programme (a further 3 sessions)
- Adolescents who score below 7, may stop after session 1, and exit the Programme.

<sup>\*\*</sup> Bastien, H., Vallieres, A. & Mori, C.M. (2001). Validation of the Insomnia Severity Index as an outcome measure for insomnia research. *Sleep Medicine* 2(4), 297-307.

### (ASHS) Adolescent Sleep Hygiene Scale

**Directions:** Using the choices below, circle **how often** the following things have happened **during the past month**.

1	Never – has not happened
2	Once in a while – happened 20% of the time
3	Sometimes – happened 40% of the time
4	Quite Often – happened 60% of the time
5	Frequently, if not always – happened 80% of the time
6	Always – happened 100% of the time

					Alway	s (10	0%)
	Freq	-			ways		
		Q	uite C	Often	(60%)		
				(40%)			
	Once in a v	vhile	(20%)				
	Never	r (0%)					
Duri	ng the day						
1.	I take a nap that lasts <i>more than</i> 1 hour.	N	0	S	Q	F	Α
2.	I play or exercise for <i>more than</i> 20 minutes.	N	0	S	Q	F	Α
Afte	r 6:00 in the evening						
3.	I have drinks with caffeine (for example: cola, root beer, iced tea, coffee).	N	0	S	Q	F	Α
4.	I take a nap.	N	0	S	Q	F	А
5.	I do some kind of physical activity (for example: exercise, play sports).	N	0	S	Q	F	А
6.	I smoke or chew tobacco.	N	0	S	Q	F	Α
7.	I drink beer (or some other drinks with alcohol).	N	0	S	Q	F	Α
Duri	ng the 1 hour before bedtime						
8.	I do things that make me feel <i>calm or relaxed</i> (for example: taking a hot bath/shower, listening to soft music, reading).	N	0	S	Q	F	А
9.	things happen that make me feel <b>strong emotions</b> (sadness, anger, excitement).	N	0	S	Q	F	А
10	I am <i>very active</i> (for example: playing outside, running, wrestling).	N	0	S	Q	F	Α
11	I do things that make me feel <i>very awake</i> (for example: playing video games, watching TV, talking on the telephone).	N	0	S	Q	F	А

12	I drink <i>more than</i> 4 glasses of water (or some other liquid).	N	О	S	Q	F	Α
•							

					A	lways (	1009
	Fr	•	• • •			s (80%)	)
				Often			
				(40%) ¬			
	Once in a v			)			
		r (0%) ⁻					
go	o to bed						
L3	and do things in my bed that keep me awake (for example: watching TV, reading).	N	0	S	Q	F	А
.4	and think about things I <i>need</i> to do.	N	0	S	Q	F	А
.5	feeling upset.	N	0	S	Q	F	Α
.6	and replay the day's events over and over in my mind.	N	0	S	Q	F	Α
.7	and worry about things happening at home or at school.	N	0	S	Q	F	А
8.	with a stomachache.	N	0	S	Q	F	А
9	feeling hungry.	N	0	S	Q	F	А
fa	ıll asleep						
20	while listening to loud music.	N	0	S	Q	F	А
1	while watching TV.	N	0	S	Q	F	Α
2	in a <b>brightly</b> lit room (for example: the overhead light is on).	N	0	S	Q	F	А
23	in one place and then move to another place during the night.	N	0	S	Q	F	А
24	in a room that feels <b>too hot</b> or <b>too cold</b> .	N	0	S	Q	F	А
sl	eep						
25	in a home where someone smokes cigarettes, cigars, or a pipe.	N	0	S	Q	F	Α
•••	•						
26	get <i>too little</i> sleep.	N	0	S	Q	F	Α
7	use a bedtime routine (for example: bathing, brushing teeth, reading).	N	0	S	Q	F	Α
8	use my bed for things <b>other than sleep</b> (for example: talking on the telephone, watching TV, playing video games, doing homework).	N	О	S	Q	F	А
29	check my clock several times during the night.	N	0	S	Q	F	Α
	i de la companya de						and the

	Always (100%)						
	Frequently, if not Always (80%)						
		Q	uite C	Often	(60%)		
	S	omet	imes	(40%)			
	Once in a v	vhile	(20%)				
	Never	r (0%)					
Dui	ring the school week, I						
1	stay up <i>more than 1 hour</i> past my <i>usual</i> <u>bedtime</u> . My <u>usual</u> <i>school night</i> bedtime is am pm	N	0	S	Q	F	А
ı	" sleep in" <i>more than 1 hour</i> past my <i>usual</i> <u>wake time</u> . My <u>usual</u> <i>school day</i> wake time is am pm	N	0	S	Q	F	А
On	weekends, I						
	stay up <i>more than 1 hour</i> past my <i>usual</i> <u>bedtime</u> . My <u>usual</u> <i>weekend</i> bedtime is am pm	N	0	S	Q	F	А
l	" sleep in" <i>more than 1 hour</i> past my <i>usual</i> wake time. My <u>usual</u> weekend wake time isam / pm	N	0	S	Q	F	А

 End	

### **ASHS Scoresheet**

1	Never – has not happened
2	Once in a while – happened 20% of the time
3	Sometimes – happened 40% of the time
4	Quite Often – happened 60% of the time
5	Frequently, if not always – happened 80% of the time
6	Always – happened 100% of the time

Transfer your scores into the respective item-number boxes below. For example, if your response for Q3 is 'Quite Often / Q', your numerical score is therefore 4. Add up each table's scores, before dividing them by a specific number.

### A. Physiological

Q3	Q10	Q12	Q18	Q19	TOTAL

### **B.** Behavioural Arousal

Q11	Q13	Q28	TOTAL

### C. Cognitive/Emotional

<u>C.</u>	. Cognitive/Linotional								
	Q9	Q14	Q15	Q16	Q17	Q29	TOTAL		
	Divide TOTAL by 6								

### D. Sleep Environment

Q20	Q21	Q22	Q23	Q24	TOTAL

E. Sleep Stability

Q11	Q13	Q28	TOTAL

F. Daytime Sleep

Q1	Q4	TOTAL					
	Divide TOTAL by 2						

G. Substances

Q6	Q7	TOTAL

Reverse score *Item 27* (*Bedtime Routine*) according to the conversion table below; so, if the original score is 1, reverse score it as a 6:

9	
1 → 6	4 → 3
2 → 5	5 → 2
3 → 4	6 → 1

To obtain the **Total Sleep Hygiene score**, add the total scores for A – G and the **reverse score item 27**.

Α	В	С	D	E	F	G	Item 27	TOTAL

<sup>\*\*</sup> de Bruin, E.J., van Kampen,R.K.A, van Kooten, T. & Meijer, A.M. (2014). Psychometric properties and clinical relevance of the Adolescent Sleep Hygiene Scale in Dutch adolescents. *Sleep Medicine 15*(7), 789–97. 10.1016/j.sleep.2014.03.015 – PubMed.

### Adolescent Sleep -Wake Scale\*\*: Short version

### **Directions:**

Using the choices below, circle <u>how often</u> the following things have happened <u>during the past</u> month.

Never

Once in Awhile

Sometimes

Quite Often

Frequently, if not always

Always

Que	stions 1 - 3 only concern you Going to Bed.						
						Αl	ways
		Fre	quent	tly, if ı	not Al	ways	
			С	uite (	Often		
		9	Somet	imes	]		
	Once	e in A	while				
	N	lever	]				
Whe	n it's time to go to bed, I						
1	want to stay up and do other things	N	0	S	Q	F	Α
2	are ready for bed at bedtime	N	0	S	Q	F	Α
3	try to "put off" or delay going to bed	N	0	S	Q	F	Α
Ques	stions 4 - 8 only concern you Falling Asleep & Reinstating Sleep.						
Whe	n it's time to go to sleep (lights-out), I						
4	have trouble settling down	N	0	S	Q	F	Α
5	need help getting to sleep (for example: you need to listen to	N	0	S	Q	F	Α
	music, watch TV, take medication, or have someone else in bed with						
	you)						
After	waking up during the night, I						
6	have trouble going back to sleep	N	0	S	Q	F	Α
7	have trouble getting comfortable	N	0	S	Q	F	Α
8	need help to go back to sleep (for example: you need to watch TV,	N	0	S	Q	F	Α
	read, or sleep with another person)						
	Write in how long it usually takes you to fall asleep: minutes						
	Write in how many times do you usually awaken during the night:	tim	nes				
	Write in how long it takes you to go back to sleep after arousing/awakening:min						

Questions 9 - 10 only concern you Waking in the Morning							
Alv	ways						
Fre	quently, if not Always						
Qu	ite Often				_		
Sor	metimes						
Once	e in Awhile		_				
Nev	ver	_					
In th	e morning, I wake up						
9	and feel ready to get up for the day	N	0	S	Q	F	Α
10	feeling rested and alert	N	0	S	Q	F	Α
	Write in how long it takes you to become alert in the morning:						
	minutes						

### Adolescent Sleep Wake Scale - short version (ASWS) \*\* Scoring

- The ASWS provides 3 subscale scores and an overall sleep quality score.
- Higher scores indicate better success on each of the dimensions (or sleep quality).
- Response options are scored in some of the items.

Never (1 point)
Once in Awhile (2 points)
Sometimes (3 points)
Quite Often (4 points)
Frequently (5 points)
Always (6 points)

Write down your scores for each question in the tables below. Some items may require reverse scoring and are indicated with a \*. So, this means for a score of 1, reverse-scoring equals a 6. Next, add up the scores for questions within each table, before dividing the total sum by the specific number in each table. Adolescents may use their phone calculator.

### A. Going to bed

Q1*	Q2	Q3*	TOTAL		
Divide TOTAL by 3					

### B. Falling Asleep and Reinitiating Sleep

Q4*	Q5*	Q6*	Q7*	Q8*	TOTAL
Divide TOTAL by 5					

### C. Returning to Wakefulness

Q9	Q10	TOTAL
	Divide TOTAL by 2	

To obtain your **Total Sleep Quality score**, sum up the Total scores of A, B, and C.

Α	В	С	GRAND TOTAL

<sup>\*\*</sup> Sufrinko, A.M., Valrie, C.R., Lanzo, L., Bond, K.E., Trout, K.L., Ladd, R.E. & Everhart, E. (2015). Empirical validation of a short version of the Adolescent Sleep–Wake Scale using a sample of ethnically diverse adolescents from an economically disadvantage community. Sleep Medicine, 16 (10), 1204-1206.

### PANAS – Adolescent version\*\* (Positive Affect Negative Affect Schedule)

This scale consists of several words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way for the <u>past two weeks</u>.

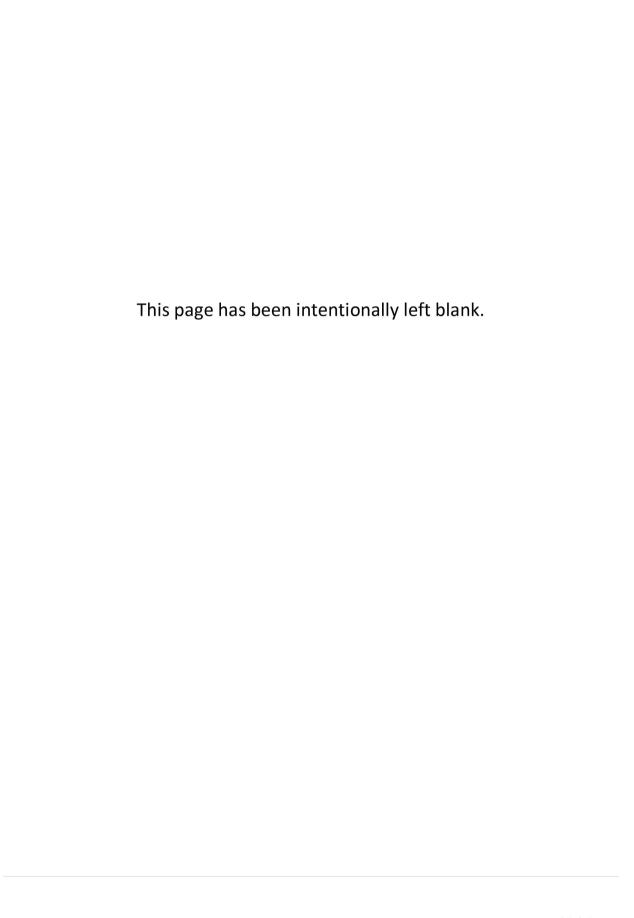
Use the following scale to record your answers. At the end, please total your scores for each column.

orannii.				
1 Very Slightly or Not at all	2 A Little	3 Moderately	4 Quite a Bit	5 Extremely
	Interested		Irrital	ole
	Alert		Distre	essed
	Excited		Ashai	med
	Inspired		Upse	t
	Strong		Nervo	ous
	Determined		Guilty	/
	Attentive		Scare	d
	Active		Jitter	У
	Enthusiastic		Hosti	le
	Proud		Afraid	b
	TOTAL		TOTA	ı
	IOIAL		101A	\L

<sup>\*\*</sup> Allan, N. P., Lonigan, C. J., & Phillips, B. M. (2015). Examining the Factor Structure and Structural Invariance of the PANAS Across Children, Adolescents, and Young Adults. *Journal of Personality Assessment*, 97(6), 616–625.

### Terminology

Bedtime procrastination	Procrastinating or delaying bedtime in favour of activities, watching TV, social media, playing video games, homework, etc. It involves <i>delaying</i> the act of getting into bed.
Sleep procrastination	Refers to <i>being in bed but</i> engaging in behaviours of delaying the time to fall asleep once in bed, e.g., associated with rising rates of electronic devices use in bed.
	Both the above results in reducing a good night's sleep.
Revenge bedtime	Refers to the decision to delay sleep in response to a lack of free time
procrastination	earlier in the day, so individuals sacrifice sleep for personal time.
Circadian rhythm	Circadian rhythms are multiple physical changes that occur in the body
	at consistent times over the 24-hour clock. It regulates the sleep-wake
	cycle, driven by light exposure and other environmental cues.
Sedatives	Medications like diazepam or lorazepam that promote sleep but can
	lead to dependence and tolerance.
Stimulants	Stimulants that increase activity in the brain and can enhance alertness,
	concentration, and energy levels. Common examples of stimulants
	include Energy drinks, cola, caffeine.
Over-the Counter	Antihistamines like diphenhydramine (Benadryl) that induce drowsiness
Sleep Aids	but may have side effects.
Melatonin	Hormonal supplements that help regulate sleep-wake cycles, often used
supplements	for jet lag or shift work.
Restorative Function	Sleep is critical for physical and mental restoration, including memory consolidation, emotional regulation, and immune function.
Insomnia	A Sleep disorder characterized by difficulty falling asleep, staying asleep,
	or waking up too early and not being able to return to sleep. Often
	accompanied by daytime fatigue.
Sleep Cycle	A typical night's sleep includes several cycles of stages, each lasting
	about 90 minutes.
Deep Sleep (NREM,	It is the most restful state; where your body undergoes physical
non-rapid eye	restoration, growth, and immune function. Occurs earlier in the sleep
movement)	cycle, and you are difficult to wake up from this stage.
REM (Rapid Eye	This stage of sleep is important for brain development, learning and
Movement) Sleep	memory – where your brain consolidates memories and prepares you
	for the challenges of next day.



### Session 1: Understanding Sleep and its Importance

Duration: 1 hour

Welcome the participants.

### **Provide an Overview of the Programme**

This four-session intervention programme is designed to help adolescents understand their sleep schedule and overcome sleep procrastination. Each session is one hour long and focuses on interactive discussions, activities, and practical strategies. With the aim to inform and practice specific strategies for improving sleep, and to focus on *knowledge-transfer to action*.

This programme **IS** practical and focused; helps you to help the student to:

- train their bodies for sleep "Body sleeps, the mind follows"
- establish their pre-conditions for sleep "Habit formation"
- *increase control* of their sleep patterns
- raise awareness of sleep procrastination and its effects

### **Session 1 Objectives:**

- 1. **Body sleeps, the mind follows** To educate participants about sleep fundamentals (stages and sleep procrastination)
- 2. Screen for Right fit, Right time administer the sleep measures
- 3. Identifying adolescent's personal sleep habits and schedule
- 4. Developing rationale and their motivation to change

### **Materials Needed:**

- Projector/Screen/Speakers for video presentations
- Sleep screening measures (4 measures)
- Sleep diary handouts
- Tipsheets
- 2 video links (internet links available on next page)

### **Session Structure:**

- 1. Introduction (5 minutes)
  - Icebreaker: Share one thing about yourself and one thing about sleep.

- Administer the sleep screening measures (15 minutes) this helps adolescents to selfassess and enable them to reflect on their sleep patterns and procrastination triggers. It also screens severity of adolescent's sleep difficulties or lack thereof.
  - ✓ Adolescent to score their measures upon completion.
  - ✓ Collect all the measures.

### 2. Understanding Sleep (15 minutes)

 Stages of Sleep and Why it Matters (for physical restoration and growth, attention and memory consolidation and emotion regulation).



Play video – Sleep Cycles (6 minutes)
Produced by Headspace, available on:
https://www.youtube.com/watch?v=iqjGf9AmVWQ

- Discuss the effects of sleep deprivation on mood, cognitive function, and health.
- Play the video What happens if you didn't sleep? (4 minutes)

### Available on Ted Talk:

https://www.ted.com/talks/claudia\_aguirre\_what\_would\_happen\_if\_you\_didn\_t\_sleep ?subtitle=en

### Consequences of Insufficient Sleep

Bedtime procrastination leads to insufficient sleep, and inadequate sleep leads to poorer health and performance. In their literature review, Medic et al. (2017) detailed the short-term consequences of sleep disruption for healthy individuals. They included an increased likelihood of:

- poorer cognition
- poorer memory
- poorer school performance
- behaviour problems
- heightened stress response (including depression and anxiety)
- increased pain

### Not getting enough sleep can lead to:



Having trouble paying attention, concentrating, learning and solving problems.



Doing poorly at school, impairment in sports performance or other hobbies, too little energy to spend quality time with friends or family.



Increased risk of injury.



Increased risk of mental health problems.



Increased risk of physical health problems.



Irritability, aggression, difficulty dealing with stress, outbursts towards friends or family.

### Sleep Science: The fundamentals

### **Distribute ALL About Sleep Handouts and Tipsheets**

- How much sleep do you need?
- Common reasons why people don't get enough sleep?
- Good sleep habits What you can do to improve sleep?





Invite adolescents to share their **current sleep habits and challenges** (10 minutes).

Ask = How satisfied are they with their level of sleep? What have they tried to improve? How long did they stick to their plan?

- 3. Identifying Sleep Procrastination (15 minutes)
  - Definition of Sleep Procrastination
    - **Sleep procrastination** refers to the habit of delaying going to sleep, despite knowing that it is necessary for one's health and well-being. It's a form of procrastination where a person stays up later than planned, often engaging in activities such as browsing the internet, watching TV, working on schoolwork, using their phone, even though they are aware that they need rest.
  - Discuss common reasons for sleep procrastination (e.g., screen time, anxiety over schoolwork, social pressures, etc).
  - Group discussion: Participants share their experiences with sleep procrastination (further examples from their sleep measures).
- 4. Wrap-Up and Homework
  - Summarize key points



**Triage the cohort** – check the Insomnia Severity Index tool

- ✓ Participants with a **low score of 7 and below** (on the ISI, Insomnia Severity Index screening tool) **to exit** at the end of session 1. There is no need to complete the Sleep diary for the low scorers.
- ✓ Participants with a **high score of 15 and above** are advised to seek more targeted professional assistance for Tier 3 and 4 interventions. There is no need to complete this universal programme.



**Tier 2**: Participants with scores of **8 to 14 on the ISI** <u>continue</u> with the programme (Session 2 and beyond).

Distribute the Sleep Diary Handout.

### Know your Sleep Habits and Schedule

**Distribute the Handout: My Sleep Diary** 

**Homework task:** Introduce the Sleep Diary - to record their daily sleep patterns over the next

week.

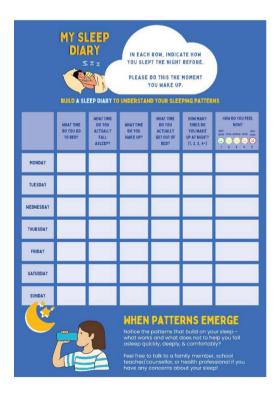
Instructions: HOW OFTEN and WHEN to fill it out?

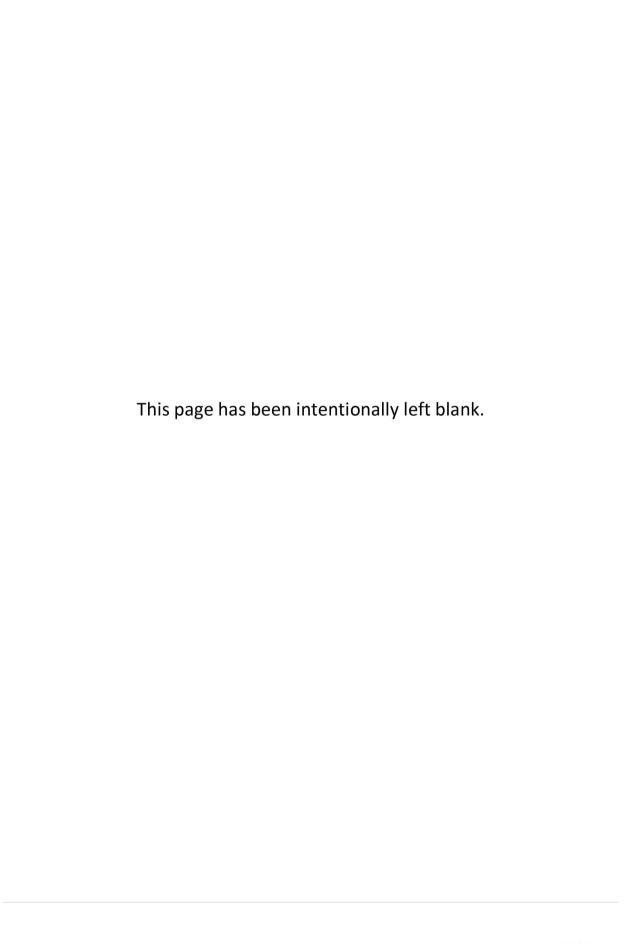
It is important to **complete your sleep log every day**. Ideally, it should be completed **within one hour of getting out of bed** in the morning.

What should I do if I miss a day?

If you forget to fill in the log or are unable to finish it, leave the log blank for that day.

What if something unusual affects my sleep or how I feel in the daytime? If your sleep or daytime functioning is affected by some unusual event (such as an illness, or an emergency) you may make brief notes on your log.





### Session 2: Identifying Barriers and Setting Goals

### **Objectives:**

- 1. Attempting to change improving sleep schedule
- 2. Overcoming challenges to sleep (reinforcing sleep hygiene practices, circadian rhythm, behaviour chaining)
- 3. Set achievable sleep goals

### Materials needed:

- Audio Visual Projector to play video
- Adolescent's completed Sleep Hygiene measure from previous session
- Barriers and Difficulties Worksheet
- Impactful Sleep hygiene strategies handout
- Lots of paper clips, pens and little sticky notes (for behaviour chaining activity)
- SMART goals worksheet
- Sleep Diary (clean copy, available in Session 1)
- Video (YouTube) on "Can you reset your Circadian Rhythm?"

### **Session Structure:**

- 1. Review Sleep Diary (5 mins)
  - In small groups, participants share insights from their sleep logs
  - Discuss and review any difficulties in last week's homework
  - Distribute new set of Sleep Diary

### Introduce the Circadian Rhythm and its importance



The Circadian Rhythm is the body's biological clock that regulates the timing of sleepiness and alertness each day. It roughly follows a 24-hour cycle and is determined by certain cues to keep the body in synchrony.



### Play the video:

"Can you reset your Circadian Rhythm?" (3 minutes) produced by The Sleep Foundation, Australia: https://youtu.be/A198Tdrknsc

### How to synch with our Body's clock? What cues help?

Discuss what activities or behaviours cue the Body Clock to work. By keeping regular sleep-wake cycles it allows the body to get used to the regular sleep and rise times. Below are some examples:

- Exposure to natural light first thing in the morning
- Eating at regular times having regular meal
- Do not have caffeine or alcohol in afternoon or evening
- Do not take naps in the day
- Dim lighting as night approaches

### Discussion of personalised findings of Adolescent Sleep Hygiene Scale – 20 minutes

Refer to the participant's Adolescent Sleep Hygiene Scale (ASHS) from Session 1 to identify problematic sleep hygiene behaviours.

### Distribute the Barriers and Difficulties Worksheets.



### Worksheet Activity: Identify personal barriers to attaining good sleep

Next, provide a worksheet for the adolescent to circle their barriers and rate the levels of difficulty to make the change. Then Target one or two behaviours to commit to change, starting with the least difficult items. They are to action the chosen change behaviour for the whole week. Below are added examples for prompts, to be used to illustrate with the participants what the list of barriers may be.

### Attempting to change – Pros and Cons

### Barriers to Sleep

 Using the categories below, first get the adolescents to generate a List of Barriers to sleep. A comprehensive list of common barriers is listed below:

### **Technology Use**

- Excessive screen time before bed (phones, tablets, computers).
- Blue light exposure disrupting melatonin production.

### Stress and Anxiety

- Academic pressure and performance anxiety.
- Personal issues or relationship challenges.

### Irregular Sleep Schedule

- Inconsistent bedtimes and wake-up times.
- Changes due to social activities or weekend schedules.

### **Environmental Factors**

- Noisy surroundings (traffic, siblings, etc.).
- Uncomfortable room temperature or bedding.
- Use your bed for sleeping only.

### Caffeine and Diet

- Consumption of caffeinated beverages (soda, energy drinks) in the afternoon or evening.
- Heavy meals close to bedtime.

### **Physical Activity**

- Lack of exercise in the day leading to decreased sleep quality.
- Exercising too close to bedtime energizes rather than relaxes, interrupting sleep drive

### Mental Health Issues

- Depression, anxiety disorders, or other mental health conditions affecting sleep patterns.

### Substance Use

- Alcohol, nicotine, or recreational drug use impacting sleep quality and duration.

### Sleep Disorders

- Conditions like insomnia, sleep apnoea, or restless leg syndrome that interfere with sleep.

### **Social Pressures**

- FOMO (fear of missing out) leading to late nights.
- Peer pressure to engage in social activities consequently resulting in oversleeping.



Identifying the barriers can help adolescents develop targeted strategies to improve sleep hygiene and overall well-being.

### What is Behaviour Chaining?



Behaviour Chaining involves breaking down a complex behaviour into smaller, manageable steps that are learned and linked together in sequence to achieve a final goal.

In the context of sleep, behaviour chaining can be used to help establish a consistent bedtime routine, promoting better sleep hygiene and facilitating a smooth transition from wakefulness to sleep.

Each activity is a **link** in the chain that prepares the body and mind for sleep. As you consistently follow this sequence each afternoon, your body learns to recognize the patterns and signals that indicate it is time to wind down, improving sleep hygiene and promoting better sleep at night.

By establishing a solid afternoon routine with these small but impactful steps, you lay the groundwork for a more restful sleep, improving overall sleep quality. **Distribute the Handout**: Things You Can Do to Train Your Body & Mind for Sleep.





### **Behaviour Chaining Activity** (10 minutes)

Using Impactful sleep strategies, adolescents write an action activity on a

small piece of sticky note, then another activity that links with the earlier identified activity, creating a chain of actions, all with the aim of achieving a healthy sleep routine.

### Positive and Impactful Sleep Strategies

It is important you know that when creating new sleep habits, it can be achieved by building in systematic steps – e.g., it is like a link chain, where one action is paired with another to increase success rate.

Developing new habits is more than just exercising self-control. This motivational strategy encourages you to manage the beneficial bedtime behaviours, enabling you to act from a position of understanding rather than feeling any external pressure. Self-control is more than just trying to resist one more thumb scrolling of a social media website or Netflix episode – It is about creating micro-behaviours that become good habits.



\*\* Lindberg, S. (2023, January 17). Sleep and Dreaming: What Is Sleep Hygiene? Verywell Mind. https://www.verywellmind.com/what-is-sleep-hygiene-5085887

In the next exercise we will work on setting up goals and behaviours to reduce sleep procrastination.

"Body sleeps, the mind follows" (15 mins) Train the body for sleep.

Our **Sleep Drive** is regulated by our brain based on how long we have been awake. The longer we are awake, the more "sleep drive" we build up and the sleepier we get. Sleeping in the next day – no matter how late you went to bed the night before or on weekends (to "catch-up on sleep") or napping in the day – decreases your sleep drive and **makes it harder to sleep that night.** You may have noticed this sleep pattern already, that is, a few bad or late nights of sleep is followed by a good night's sleep.

Certain habits cause our body and our mind to have automatic responses. In other words, behaviours become associated with bodily reactions. This is usually called "*The mind-body* relationship". So, for the next exercise we will be setting goals to train our body. Distribute My SMART Goals Worksheet and Sleep Diary

#### My SMART Goal for Sleep

SMART GOAL		
BENEFITS		
ACTION AND TIMELINE	ACTION STEPS	TIMELINE
Remember to break these goals into doable steps. Make sure you consider the SMART goal	1.	1.
criteria: Specific Measurable Attainable Realistic	2.	2.
Timely	3.	3.
SUPPORT NETWORK		
OBSTACLES		

Introduce SMART goals (Specific, Measurable, Achievable, Relevant, Time-bound).

**Specific:** The goal should be clear and specific, answering questions like who, what, where, when, and why. For example, instead of saying "I want to sleep better," you might say, "I want to go to bed by 10pm on school nights."

**Measurable:** You should be able to track your progress. This means including criteria that allows you to measure your success. For example, "I will track my sleep for five nights a week using a sleep diary."

**Achievable:** The goal should be realistic and attainable, considering your current situation and resources. For example, setting a goal to increase sleep from 6 hours to 8 hours a night may be unrealistic if you are currently away on holidays or school camp.

**Relevant:** The goal should matter to you and align with your broader objectives or values, i.e. what is important to your health and well-being. For instance, a relevant goal might be, "I want to improve my sleep to feel more energized for school and sports."

**Time-bound:** Set a deadline for your goal to create a sense of urgency and focus. For example, "I will start my new bedtime routine for one month and then assess how it is working."

# **Example of a SMART Goal:**

"I will not take an afternoon nap in the day and will go to bed by 10.30pm every night; and tracking my sleep with a diary to see if I feel more rested and focused during the day." This goal is specific, measurable, achievable, relevant, and time bound. Each participant sets their goal and ensure they have a couple of chained behaviours to support the goal.

What barriers that may get in the way of their change behaviour? On a scale of 1-10, how easy will it be to put it into action? On a scale of 1-10, how successful will their plan be?

## My SMART Goal for Sleep - EXAMPLE

SMART GOAL	I will go to bed by 10pm every night	
BENEFITS	Good skin, more energy, stronger immunity	
ACTION AND TIMELINE	ACTION STEPS	TIMELINE
Remember to break these goals into doable steps. Make sure you consider the SMART goal criteria:	SPECIFIC - By 9.30pm, I will start winding down for bed  MEASURABLE — I will execute this goal for 6 nights out of 7  ATTAINABLE — By 10pm, I shall be in bed  REALISTIC — When I am not having school holidays, not at school camps  TIMELY — Set a phone alarm to put phones away and start winding down for sleep	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>
Specific Measurable Attainable Realistic Timely	1. 2. 3.	
SUPPORT NETWORK		
OBSTACLES		
ADJUSTMENTS		

Good dental hygiene is important in determining the health of your teeth and gums. Similarly, good sleep hygiene is important in determining the quality and quantity of your sleep. Review the tips below and choose the ones you think you might wish to enhance.



"SLEEP HYGIENE DESCRIBES GOOD SLEEP HABITS AND ROUTINES"

# 1 GET REGULAR



Go to bed and get up at the same time everyday, even on weekends! The bed is only for sleep. Don't avoid activities if you are tired.

#### **3 AVOID CAFFEINE & NICOTINE**

Avoid drugs and caffeinated drinks 4-6 hours before bed. These will keep you wide awake.



# **5 EXERCISE**



Don't exercise 4 hours before bed. Morning walks leave you feeling refreshed!

# **7 NO CLOCK WATCHING**



Checking the clock during the night wakes you up causing anxiety.

#### **INSOMNIA**

To be unable to sleep; Can be linked with sleep apnea, depression, and anxiety



#### **2 SLEEP WHEN SLEEPY**



Sleep when tired. If you have to nap, make it less than an hour and take the nap before 3pm.

#### **4 SLEEP RITUALS**



Relax 15 minutes before bed, drink caffeine-free tea, or take a hot bath 1-2 hours before bed.

#### **6 EAT RIGHT**



Eat a healthy, balanced diet. Don't sleep on an empty stomach. No heavy meals before bed.

# **8 RIGHT SPACE**



Bedroom should be quiet and comfortable. Cool room (18-22)degrees Celsius) with blankets, curtains to block sun, and ear plugs for noise.

Wrap-Up the Session and set Homework (10 mins)

Recap the session and emphasize the importance of habit formation with goal setting. Train the body for sleep and the mind follows.

Homework: Work on their sleep SMART goal and continue to track Sleep Diary.

#### Below are additional facts for the Facilitator:

# Screen time: Turn off TV, computers, tablets, and smart phones 1 hour Before Bedtime

• The short waves of blue light (emitted from the screens of TVs, laptops, iPads, smart phones, etc.) mimic daylight. Thinking it is daytime, your brain suppresses melatonin and becomes more alert because we have evolved to see this type of light only during the day. What is more, the overall stimulation we get from these devices serves to keep us more alert. If TV is your relaxing activity, try to move it up a bit earlier in the evening.



# Caffeine found in energy drinks, teas, and coffees. Avoid Caffeine 6-8 Hours Before Bedtime

- Caffeine disturbs sleep, even in people who do not think they experience a stimulation effect.
- Individuals with insomnia are often more sensitive to mild stimulants than are normal sleepers.
- Caffeine is found in items such as coffee, tea, soda, chocolate, and many over-the-counter medications (e.g., Excedrin)
- Caffeine should be avoided in the afternoon and evening, preferably by 1pm. You might consider a trial period of no caffeine at all.

## **Nicotine: Avoid Nicotine Before Bedtime**

- Although some smokers claim that smoking helps them relax, nicotine is a stimulant.
- The initial relaxing effects occur with the initial entry of the nicotine, but as the nicotine builds in the system it produces an effect like caffeine.
- Nicotine should be avoided near bedtime and during the night. Don't smoke to get yourself back to sleep.

#### **Regular Exercise**

- Exercise has been shown to aid sleep, although the positive effect often takes several weeks to become noticeable.
- Get regular exercise, preferably at least 20 minutes each day of an activity that causes sweating; but NOT within 2 hours of bedtime as it may elevate nervous system activity and interfere with sleep onset.

## Bedroom Environment: Moderate Temperature, Quiet, and Dark

- Extremes of heat or cold can disrupt sleep.
- Noises can be masked with background white noise (such as the noise of a fan) or with earplugs.
- Bedrooms may be darkened with black-out shades or sleep masks can be worn.
- Position clocks out-of-sight since clock-watching can increase worry about the effects of lack of sleep.

#### **Eating**

- Avoid heavy or spicy meals before bedtime and any caffeinated foods (e.g., chocolate).
- Do not go to bed too hungry or too full.

# Avoid/Reduce Naps

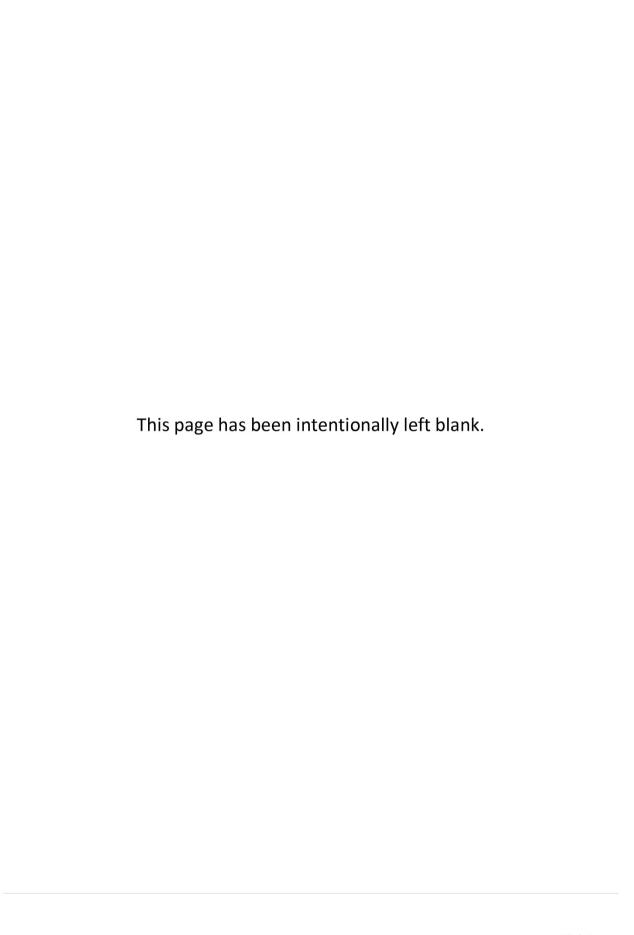
- The sleep you obtain during the day takes away from your sleep need that night resulting in lighter, more restless sleep, difficulty falling asleep, and/or early morning awakening.
- Avoid naps. If you must nap, keep it brief. It is best to set an alarm to ensure you don't sleep more than 15 minutes.

#### **Limit Your Time in Bed**

- Restrict your sleep period to the average number of hours you have slept per night during the preceding week. Quality of sleep is important. Too much time in bed can decrease the quality on subsequent night and contribute to the maintenance of existing sleep problems. Do not lie in bed for extended times when you cannot fall asleep. If you aren't asleep in about 15-20 minutes go ahead and get up. Do something outside the bedroom that is relaxing. When you feel sleepy (i.e., yawning, head bobbing, eyes closing, concentration decreasing), then return to bed. **Do not confuse tiredness with sleepiness, they are different. Tiredness does not lead to sleep, only sleepiness does**.
- Getting exposure to sunlight in the morning can help you sleep at night because it helps reset your body's inner "sleep clock." Light is an important cue for your body's sleep cycle.

# **Regular Sleep Schedule**

• Keep a regular time each day, 7 days a week, to get out of bed. Keeping a regular awaking time helps set your circadian rhythm so that your body learns to sleep at the desired time.



# Session 3: Building and Maintaining Healthy Sleep Habits and Schedule

# **Objective:**

- 1. Homework review Sleep Diary and SMART goal/s
- 2. Fine-tuning Personal Sleep Plan
- 3. Visualising success
- 4. Managing a Slip When you get out of synch
- 5. Introduce Mindfulness Bedtime Meditation

#### Materials needed:

- Adolescent's completed Sleep Diary and SMART goal (homework) from previous session
- Laminated Cards for the game
- Adolescent's mobile phone for recording of Mindfulness Bedtime Meditation
- Sleep Diary (clean copy available in Session 1)

#### **Session Structure**

# Check-In and reviewing on homework – Sleep Diary and Sleep Goals (10 mins)

- Participants share progress on their sleep goals.
- Discuss successes, positive changes, and challenges.

# **Reinforcing Healthy Sleep Habits (25 mins)**



Play the card sorting game: Using the laminated cards to reinforce sleep hygiene practices (consistent sleep schedule, relaxation techniques, screen time management), learnt from previous sessions.

Depending on the numbers of adolescents in the group, divide them equally into 2 groups.

Distribute the cards equally to each group. They are to sort the cards into categories of Day-time vs Night-time pro-sleep behaviours / actions.

- Reminder of Training the body for sleep behaviours (daylight in the morning, consistent and regular times for meals, avoid heavy dinner before sleep, avoid caffeine and late exercise before bedtime, dim the lights, wind down routine)
- Next, participants are to use the laminated cards to Create a personalized bedtime routine.

# Self-control does not just happen, and it is not just Will Power.

It is cultivated. In last week's session, we discussed Behaviour Chaining. This is the strategy which helps us to form habits.

For sleep, this means practicing the actions that sets up and lead to development of good sleep habits.

Acting upon our intentions is a great way to establish habits.



For example, in the morning, you have decided to set your bedtime for the rest of week for 10.30pm each night. How are you going to hold to this intention?

Before this, there are steps taken to ensure success of holding to the set time. This may include you doing a list of behaviours or actions that enable you closer to holding to the set time.

Can you think of any steps? Okay, let's work backwards.

For example, 30 minutes before Bedtime: Brush teeth, read a book, relax, pack school bag, listen to music, etc.

One hour before Bedtime: the timer/alarm rings to remind you to turn off electronic devices and park electronic devices further away from the bed. This makes access to electronic devices harder. Two hours before Bedtime: Restrict water intake, stop exercises, Do not have heavy meal, etc.

These are goals with action plans that specify the day, time, and location where certain behaviours will occur. For instance, *I will go to bed at 10.30 pm in my bedroom each night*.

When life interrupts these implementation intentions, an if-then formula can be used:

If I did not go to bed by 10.30 pm last night, I won't touch my phone for two hours before bed at 10.30pm tonight.



To help adolescents reflect on their habits, **identify their motivations**, **and create actionable plans for positive change.** 

Below is a list of helpful prompts to guide adolescents in forming good sleep habits, these may be utilised to further strengthen their efforts for behavioural change:

# 1. Tie in with their SMART goals from previous session.

- What specific sleep delay or good sleep habits do you want to develop or change?
- Why are these habits important to you?
- How do you envision your life changing once you adopt these new behaviours or habits?

#### 2. Self-Reflection

- What are some habits you currently have that support your sleep goals?
- Are there any habits that you feel are holding you back? Why?
- How do you feel when you engage in positive habits versus negative ones?

#### 3. Motivation and Barriers

- What motivates you so far to make these changes?
- What challenges do you anticipate in forming these new habits?
- How have you successfully changed a habit in the past?

# 4. Continuation of the little steps on Action Planning

- What small steps you have taken to start developing good sleep habits?
- How will you track your progress?
- What can you do if you encounter setbacks?

# 5. Support Systems

- Who can you reach out to for support as you work on these habits?
- How can friends or family help you stay accountable?

#### 6. Visualization and Reflection

- Can you visualize what your day would look like with this new habit in place?
- How do you think you will feel after successfully establishing this habit?

Visualizing going to bed early can be a powerful tool for encouraging positive sleep habits. Here is a guided visualization exercise on going to bed early to help illustrate this:



Visualizing going to bed early – Activity (5 minutes); read the script at a slow, calm pace. Invite adolescents to close their eyes if they are comfortable to do so.

## Find a Comfortable Space

Take a deep breath in... and slowly breathe out. (Repeat a couple of times). Next, let your body settle into a comfortable position, and gently close your eyes. With each breath, feel yourself becoming calmer, more peaceful, and relaxed.

Picture yourself standing in front of a cozy bedroom. The lights are dimmed, and the room feels cool and inviting. Everything is just how you like it—a calm, quiet space where you can rest.

Now, see yourself getting ready for bed—maybe brushing your teeth, changing into your favourite pyjamas, and turning off the lights. Feel the day slipping away as you make the choice to relax and recharge. Climbing into bed. Your pillow is soft, and the blankets feel just right. You settle in, feeling completely comfortable. Your body starts to relax, and you feel the tension of the day melt away.

As you close your eyes, imagine your room — your bed is your personal space. The lights are low, everything is quiet, and it is just right. This is Your time to chill and recharge - think about how wonderful it is to go to bed early. Your body is thankful for the chance to rest, and you know that

tomorrow will be better because of the sleep you are giving yourself; allowing your body and mind time to rest now.

Getting ready for bed doesn't have to be a drag. Brush your teeth, throw on those comfy PJs you love, and start winding down. Feel the stress of the day just... melt away. Seriously, your bed is calling your name. When you slide under the covers, take a moment to enjoy how good this feels? Your body is totally thanking you right now. This is self-care. Breathing in slowly, and then out again. Do this a few times (PAUSE).

Now, closing your eyes isn't about missing out – it is about giving yourself a serious upgrade. Sleep is like a secret weapon for teenagers. You want to be more focused in class? Nail it in sports? Have better moods? Re-charge your skin; Yes, sleep is your superhero, and those random worries from today? Well, they can wait. Right now, it is just you and this amazing moment of rest.

Breathe in calm, breathe out stress. (PAUSE & REPEAT breathing). Your mind is getting a total reset. Say this to yourself: "I'm choosing to take care of myself. I am getting stronger and more awesome with every minute of sleep." Getting good sleep is how you level up. You are literally giving your brain and body the ultimate power-up while you rest. How cool is that? Now just let go of any thoughts, and just feel the whole body and muscles relaxed. As you breathe in slowly and deeply, you say to yourself – "A good sleep is important to help me face tomorrow, I will be clear-headed, strong, and focused. Going to bed early is helping me to feel my best." Sleep well.

## 7. Adjustments and Flexibility

- If something isn't working, how might you adjust your approach?
- What alternatives can you consider if you find it hard to stick to your plan?

# 8. Rewarding Progress

- How will you celebrate your successes, no matter how small?
- What does success look like for you in this journey?

#### 9. Mindset and Attitude

- What beliefs do you hold about yourself that might affect your ability to change?
- How can you shift negative thoughts into more positive ones regarding your habit formation?

## 10. Long-Term Vision

- How do you see these habits impacting your future?
- What kind of person do you want to become through these changes?

# What to do in the event your routine gets out of synch?



So, we have established a Consistent Sleep Schedule by setting a regular bedtime and wake-up time every day, including weekends. Consistency helps regulate your body's internal clock (circadian rhythm), making it easier to fall asleep when it is time.

We have identified personal barriers and difficulties and addressed ways to change one goal at a time using SMART goal(s) and developing a wind-down routine or activities to signal to your brain it is time to rest and avoid stimulating activities (including exposure to screens) or avoid physical exercises 60

minutes before bed, as these actions interfere with the production of the sleep hormone melatonin (refer to sessions 1 and 2).

If you slip into procrastination and stay up later than planned, avoid criticizing yourself. Guilt or frustration can make it harder to break the bad habit. Practice being Kind to yourself and Avoid Self-Criticism – e.g., What the heck thinking and behaving such as "I have failed to stick to my bedtime plan last night, why bother now?"

Instead, focus on the small steps toward improvement and celebrate your successes, no matter how small. Self-encouragement and positive attitude go a long way in changing the frame of thinking. Watch the slippery slope and reset by ".... Oh yes, at least I have noticed the slip and what can I do now to reset my Body for sleep and the Mind follows?"

Avoid "All-or-Nothing" Thinking: Don't expect perfection. If you don't fall asleep exactly at the time you planned, don't give up on the entire process entirely. Instead, focus on the immediate small steps. Developing good habits takes consistent effort.

Relax and Reset for sleep – a mindfulness practice Sleep Mindfulness Meditation



- Allow participants to audio record the meditation
- Introduce mindfulness bedtime (see below for the script)
- Practice it together in session, participants are encouraged to record it and to play it before climbing into bed. Read it in a slow pace.

As you lie in bed, notice the stillness of the night. Sometimes, when sleep feels elusive, your mind becomes a whirlwind of thoughts - echoes of the day's experiences, whispers of future stress and anxieties. Perhaps you are replaying conversations, anticipating challenges, or wrestling with unresolved emotions or worries. These mental currents can feel overwhelming, creating a barrier between you and the peaceful rest you deserve.

Invite yourself to find a position of comfort and surrender. There is no single "perfect" way to rest - only the way that feels most nurturing to you in this moment. Perhaps you will lie

on your back, arms slightly away from your body, palms turned upward in a gesture of openness; Or you might curl on your side, allowing your body to find its natural alignment.

Observe your thoughts with a compassionate, non-judgmental awareness. Imagine them as clouds drifting across the vast sky of your consciousness - some light and wispy, others dense and heavy. You are not these thoughts. You are aware you are witnessing them from a distance.

Now, gently draw your attention to the rhythm of your breath - a natural meditation, a constant flow of life moving through you. Notice the subtle rise and fall of your belly, the gentle expansion and contraction of your chest. Each breath is an invitation to release, to let go, to return to the present moment.

When your mind inevitably wanders - and it will, with the creativity of a teenage brain - simply notice. There is no failure in distraction, only an opportunity to practice compassionate return. Like a kind friend, softly guide your attention back to the breath. No self-criticism, just gentle redirection; bring your attention back to your breathing.

Breathe in possibility. Breathe out tension. Breathe in calm. Breathe out worry.

You are creating a sanctuary of peace within yourself. Each breath is a reminder of your innate capacity for stillness, for healing, for restoration. Sleep is not something to be conquered, but a natural state to be welcomed. Your body knows how to rest. Your mind knows how to quiet. Trust in this inherent wisdom. You are supported. You are exactly where you need to be.

As thoughts continue to drift like clouds, allow yourself to sink deeper into the mattress. Feel the gentle weight of relaxation moving through your body - from the top of your head, the softness of your facial muscles, down through your neck and shoulders, your arms, your torso, legs, to the tips of your toes.

Silently repeat to yourself:

"I am calm. I welcome rest, the sweet embrace of sleep awaits me."

## Wrap-Up and Homework (10 mins)

- Encourage participants to implement their bedtime routines and predict any relapses
- Homework: Practice their personalized bedtime routine for one week.

# Session 4: Review, Reflection, Reset

## **Objective:**

- 1. Review progress
- 2. Reflect on changes
- 3. Plan for sustaining healthy sleep habits

#### Materials needed

- Copies of Sleep Measures (same suite used in Session 1)
- Treats or prizes for the Quiz game (if budget allows)
- Copies of "Where to seek help?" Handouts

#### **Session Structure**

# Check-In on Homework - Bedtime Routines (15 mins)

- o Participants share their experiences with their bedtime routines.
- o Discuss any adjustments made and their effects on sleep quality.
- o Discuss what else requires finetuning?
- o What was successful?
- o The use of Mindfulness Bedtime Meditation and Visualisation

# Reflecting on the Journey (15 mins)

- o Group discussion: What have you learned about sleep and yourself?
- Share stories of improvement and ongoing challenges.

## **Future Planning**

Continue to practice mindfulness

# Sustaining Healthy Sleep Habits (15 mins)

- Discuss strategies for maintaining healthy hygienic sleep habits in the long term.
- o Introduce the idea of a support network (friends, family) who share the same philosophy of prioritising sleep.

# Activity: Play Quiz; Truth or Myth Game (20 mins)



Depending on the size of the group, organise the cohort of adolescents into 2 groups/teams for a mini competition. Below is a list of statements for the quiz. Teams are to answer either *Truth or Myth*. Correct answer gets a point, and a further bonus point for a correct explanation offered. Toss a coin to see which team begins first.

1. Sleep deprivation can impair your ability to think clearly.

Answer: Truth.

Lack of sleep affects cognitive functions such as memory, attention, and problem-solving.

2. Adolescents need at least 9 hours of sleep each night for optimal health.

Answer: Truth

Adolescents need 8 – 10 hours of sleep for optimal health.

3. Drinking caffeine e.g. found in Energy drinks in the evening doesn't affect your sleep if you're used to it.

Answer: Myth.

Even if you are accustomed to caffeine, it can still interfere with sleep quality, especially if consumed late in the day.

4. Everyone dreams every night, even if they don't remember it.

Answer: Truth.

Most people experience dreams during REM sleep, even if they don't remember them.

5. Sleepwalking is dangerous and should be avoided at all costs.

Answer: Myth.

While sleepwalking can be risky, many cases are harmless. However, safety precautions are necessary to prevent injury.

6. It is okay to catch up on sleep during weekends after a week of poor sleep.

Answer: Myth.

While sleeping in on weekends may help you feel better temporarily, it doesn't fully make up for sleep debt accumulated during the week.

7. People with chronic insomnia need medication to improve their sleep.

Answer: Myth.

While medication can help in the short term, psychological therapy for insomnia (i.e., CBT-I) is often more effective for long-term relief.

8. Exercising before bed can help you sleep better.

Answer: Myth.

Vigorous exercise close to bedtime can increase adrenaline and heart rate, making it harder to fall asleep. Moderate exercise, however, may help.

9. Sleep cycles last about 90 minutes, and you go through several of them each night.

Answer: Truth.

Sleep cycles generally last around 90 minutes, and adults typically go through 4-6 cycles per night.

10. You can get used to needing less sleep as you get older.

Answer: Myth.

While sleep patterns may change with age, older adults still need about 7-8 hours of sleep to function optimally.

11. A warm bath before bed can help you sleep better.

Answer: Truth.

A warm bath can relax muscles and raise body temperature, which, when it cools afterward, can signal to the body that it is time to sleep.

12. Snoring is always a sign of sleep apnoea (sleep disorder).

Answer: Myth.

Snoring is common, but not everyone who snores has sleep apnoea. It can also occur without any underlying health issues.

13. Using electronic devices before bed disrupts your sleep.

Answer: Truth.

The blue light emitted by screens suppresses melatonin production, making it harder to fall asleep.

14. People can learn to control their dreams through a technique called lucid dreaming. Answer: Truth.

Lucid dreaming is a practice where you become aware of and can sometimes control your dreams.

15. Taking naps during the day will always make it harder to fall asleep at night.

Answer: Myth.

Short naps (20-30 minutes) can improve alertness without significantly affecting nighttime sleep. However, long naps can interfere with sleep later.

16. Sleep helps your body recover from illness and repair muscles.

Answer: Truth.

Sleep plays a crucial role in immune function and muscle repair through processes like cell regeneration and protein synthesis.

17. The position in which you sleep can affect the quality of your rest.

Answer: Truth.

Sleep positions can affect factors like spinal alignment, breathing, and the risk of snoring or acid reflux.

18. Alcohol helps you fall asleep faster but disrupts the quality of your sleep.

Answer: Truth.

While alcohol may help you fall asleep, it reduces REM sleep and causes disturbances later in the night.

19. Sleep can affect your emotional well-being and mental health.

Answer: Truth.

Poor sleep is linked to mood disorders, including depression and anxiety, as it affects the brain's regulation of emotions.

20. You need to sleep in complete darkness for the best quality of sleep.

Answer: Truth.

Exposure to light during sleep, especially blue light, can disrupt the production of melatonin and impact sleep quality.

#### Where to from here?

## Re-administer the four Sleep measures

- When completed, check the scores of your participants.
- Note those who may require further tailored interventions (e.g., Tier 3 or 4 interventions), and consider discussions with their parents and refer them.
- Provide them with the Tip Sheet: When and Where to Seek Help?

# Wrap-Up and Celebration (10 mins)

- Ask individually what is the one thing they have learnt?
- What improvements or positive sleep behaviours will they stick with?

# When to seek further help?

If you find that your sleep problems are ongoing, causing significant daytime sleepiness, or notice new sleep-related problems, please contact your doctor, who can determine if you are affected by a sleep disorder and may refer you to sleep specialists.

## Such problems can include:

- loud snoring
- stopping breathing, breathing pauses, gasping or snorting during sleep
- falling asleep unintentionally/dozing during the day
- a creepy-crawly sensation in your lower legs in the evening along with an irresistible urge to move your legs to get rid the sensation
- very frequent leg jerking during your sleep
- walking or the urge to walk while asleep
- excessive weight gain or loss
- chronic repeating nightmares
- feelings of panic disrupting your sleep

# **Sleep Specialists**

Changi General Hospital	Institute of Mental Health, Clinic B
Department of Sleep Medicine, Surgery & Science	10 Buangkok View
Sleep & Assisted Ventilation Centre	Buangkok Green Medical Park,
Medical Centre, Level 2	Singapore 539747
2 Simei Street 3, Singapore 529889	(+65) 6389 2000
(+65) 6850 3333	
Institute of Mental Health	KK Women's and Children's Hospital
Sayang Wellness Clinic (SWC)	Sleep Disorder Clinic
10 Buangkok View	Children's Tower, Level 1
Buangkok Green Medical Park,	Clinic K, Clinic M
Singapore 539747	100 Bukit Timah Road, Singapore 229899
(+65) 6389 2000	(+65) 6225 5554
National Dental Centre	National Neuroscience Institute
Sleep Clinic	Sleep Disorder Clinic
5 Second Hospital Avenue, Singapore 168938	Tan Tock Seng Hospital
(+65) 6324 8798	11 Jalan Tan Tock Seng, Singapore 308433
	(+65) 6357 7095
Sengkang General Hospital	SGH Sleep Centre @ Singhealth Tower (Outram
Sleep Medicine Clinic	Community Hospital), Level 3
110 Sengkang East Way, Singapore 544886	10 Hospital Boulevard, Singapore 168582
(+65) 6472 2000	(+65) 6321 4377

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#### References

- Allan, N. P., Lonigan, C. J., & Phillips, B. M. (2015). Examining the Factor Structure and Structural Invariance of the PANAS Across Children, Adolescents, and Young Adults. *Journal of Personality Assessment*, *97*(6), 616–625.
- Bastien, H., Vallieres, A. & Mori, C.M. (2001). Validation of the Insomnia Severity Index as an outcome measure for insomnia research. *Sleep Medicine* 2(4), 297-307.
- de Bruin, E.J., van Kampen,R.K.A, van Kooten, T. & Meijer, A.M. (2014). Psychometric properties and clinical relevance of the Adolescent Sleep Hygiene Scale in Dutch adolescents. *Sleep Medicine* 15(7), 789–97. 10.1016/j.sleep.2014.03.015 PubMed.
- Kadzikowska-Wrzosek. (2020). Insufficient Sleep among Adolescents: The Role of Bedtime Procrastination, Chronotype and Autonomous vs. Controlled Motivational Regulations. *Current Psychology, 39*, 1031–1040.
- Kroese, F.M, Evers, C. & de Ridder, D. (2014). Bedtime procrastination: A self-regulation perspective on sleep insufficiency in the general population. *Journal of Health Psychology, 21*(5), https://doi.org/10.1177/1359105314540014.
- Kuhnel, J, Syrek, C.J., & Dreher, A. (2018). Why Don't You Go to Bed on Time? A Daily Diary Study on the Relationships between Chronotype, Self-Control Resources and the Phenomenon of Bedtime Procrastination. Frontiers in Psychology, 9. https://doi.org/10.3389/fpsyg.2018.00077.
- Paruthi, S., Brooks, L. J., D'Ambrosio, C., Hall, W. A., Kotagal, S., Llyod, R. M., Malow, B. A., Maski, K., Nichols, C., Quan, S. F., Rosen, C. L., Troester, M. M., & Wise, M. S. (2016). Consensus Statement of the American Academy of Sleep Medicine on the Recommended Amount of Sleep for Healthy Children: Methodology and Discussion. *Journal of Clinical Sleep Medicine*, 12(11), 1549-1561. https://doi.org/10.5664/jcsm.6288
- Scribd. (n.d.). *Sleep Hygiene*. <a href="https://www.scribd.com/document/344425227/sleep-hygiene-handout-new">https://www.scribd.com/document/344425227/sleep-hygiene-handout-new</a>
- Sufrinko, A.M., Valrie, C.R., Lanzo, L., Bond, K.E., Trout, K.L., Ladd, R.E. & Everhart, E. (2015). Empirical validation of a short version of the Adolescent Sleep—Wake Scale using a sample of ethnically diverse adolescents from an economically disadvantage community. *Sleep Medicine*, 16 (10), 1204-1206.
- U.S. Centers For Disease Control And Prevention. (2024). *Sleep.* https://www.cdc.gov/sleep/about/index.html
- Vidal, H. & Shochat, T. (2023). Sleep in adolescents. Academic Press.

# Appendices

All materials for each session as follow

Tour maine.	Your	Name:
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Age:

Date:

# ISI (Insomnia Severity Index)

Please read the statements below and circle the number most appropriate to you in the LAST 2 WEEKS only.

omy.					
Sleep Problem	None	Mild	Moderate	Severe	Very Severe
1. Difficulty falling asleep	0	1	2	3	4
2. Difficulty staying asleep	0	1	2	3	4
3. Problems waking up too early	0	1	2	3	4

4. How SATISFIED/DISSATISFIED are you with your CURRENT sleep pattern?

Very Satisfied Satisfied Moderately Satisfied Dissatisfied Very Dissatisfied 0 1 2 3 4

5. How **NOTICEABLE** <u>to others</u> do you think your sleep problem is in terms of impairing the quality of your life?

Not at all

Noticeable	A Little	Somewhat	Much	Very Much Noticeable
0	1	2	3	4

6. How **WORRIED/DISTRESSED** are you about your current sleep problem?

Not at all

Worried	A Little	Somewhat	Much	Very Much Worried
0	1	2	3	4

7. To what extent do you consider your sleep problem to **INTERFERE** with your daily functioning (e.g. daytime fatigue, mood, ability to function at work/daily chores, concentration, memory, mood, etc.) **CURRENTLY**?

Not at all

Interfering	A Little	Somewhat	Much	Very Much Interfering
0	1	2	3	4

# **Guidelines for Scoring/Interpretation:**

Add the scores (questions 1 + 2 + 3 + 4 + 5 + 6 + 7) = \_\_\_\_\_your total score

Total score categories:

0-7 = No clinically significant insomnia

8-14 = Sub-threshold insomnia

15–21 = Clinical insomnia (moderate severity)

22-28 = Clinical insomnia (severe)

# (ASHS) Adolescent Sleep Hygiene Scale

**Directions:** Using the choices below, circle **how often** the following things have happened **during the past month**.

Never – has not happened
Once in a while – happened 20% of the time
Sometimes – happened 40% of the time
Quite Often – happened 60% of the time
Frequently, if not always – happened 80% of the time
Always – happened 100% of the time

					Alwa	ays (1	00%)
	Fred	quent	tly, if	not A	Always	(80%)	
		C	uite	Ofter	າ (60%) -		
				(40%	5)		
	Once in a w	hile	(20%	5)			
	Neve	r (0%	6)				
Durii	ng the day						
1.	I take a nap that lasts <i>more than</i> 1 hour.	N	0	S	Q	F	Α
2.	I play or exercise for <i>more than</i> 20 minutes.	N	0	S	Q	F	А
Afte	r 6:00 in the evening						
3.	I have drinks with caffeine (for example: cola, root beer, iced tea, coffee).	N	0	S	Q	F	A
4.	I take a nap.	N	0	S	Q	F	Α
5.	I do some kind of physical activity (for example: exercise, play sports).	N	0	S	Q	F	Α
6.	I smoke or chew tobacco.	N	0	S	Q	F	Α
7.	l drink beer (or some other drinks with alcohol).	N	0	S	Q	F	Α
Durii	ng the 1 hour before bedtime						
8.	I do things that make me feel <i>calm or relaxed</i> (for example: taking a hot bath/shower, listening to soft music, reading).	N	0	S	Q	F	A
9.	things happen that make me feel <b>strong emotions</b> (sadness, anger, excitement).	N	0	S	Q	F	А
10	I am <i>very active</i> (for example: playing outside, running, wrestling).	N	0	S	Q	F	Α
11	I do things that make me feel <i>very awake</i> (for example: playing video games, watching TV, talking on the telephone).	N	0	S	Q	F	A

12I drink <i>more than</i> 4 glasses of water (or some other liquid).	N	0	S	Q	F	А
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					Alv	vays	(100%)
	Fre	quent	ly, if ı	not Al	ways	(80%	.)
		Q	uite C	Often	(60%)		
		omet	imes	(40%)			
	Once in a	while	(20%)				
	Neve	r (0%)					
l go	to bed						
	and do things in my bed that keep me awake (for example: watching TV, reading).	N	0	S	Q	F	A
14	and think about things I <i>need</i> to do.	N	0	S	Q	F	А
15	feeling upset.	N	0	S	Q	F	А
16	and replay the day's events over and over in my mind.	N	0	S	Q	F	А
17	and worry about things happening at home or at school.	N	0	S	Q	F	А
18	with a stomachache.	N	0	S	Q	F	А
19	feeling hungry.	N	0	S	Q	F	А
I fa	II asleep						
20	while listening to loud music.	N	0	S	Q	F	А
21	while watching TV.	N	0	S	Q	F	А
22	in a <i>brightly</i> lit room (for example: the overhead light is on).	N	0	S	Q	F	А
23	in <i>one place</i> and then move to <i>another place</i> during the night.	N	0	S	Q	F	А
24	in a room that feels <b>too hot</b> or <b>too cold</b> .	N	0	S	Q	F	А
I sle	eep						
25	in a home where someone smokes cigarettes, cigars, or a pipe.	N	0	S	Q	F	А
I							
26	get <b>too little</b> sleep.	N	0	S	Q	F	A
27	use a bedtime routine (for example: bathing, brushing teeth, reading).	N	0	S	Q	F	A
	use my bed for things <b>other than sleep</b> (for example: talking on the telephone, watching TV, playing video games, doing homework).	N	0	S	Q	F	А

	Sometimes (40%)  Once in a while (20%)  Never (0%)  No or sometimes (40%)  No or sometim	check my clock several times during the night.	N	0	S	Q	F	Α				
Prequently, if not Always (80%   Quite Often (60%)	Frequently, if not Always (80%)  Quite Often (60%)  Sometimes (40%)  Once in a while (20%)  Never (0%)  Once in a while (20%)  Never (0%)  Never (0%)  Never (0%)  No S Q F A  My usual school night bedtime is am pm  No S Q F A  My usual school day wake time is am pm  On weekends, I  22stay up more than 1 hour past my usual bedtime.  My usual weekend bedtime is am pm  No S Q F A  My usual weekend bedtime is am pm											
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weekend wake time isam / pm		weekend wake time isam / pm										
		End										
			Once in a  Nevering the school week, I stay up more than 1 hour past my usual bedtime.  My usual school night bedtime is am pm " sleep in" more than 1 hour past my usual wake time.  My usual school day wake time is am pm  weekends, I stay up more than 1 hour past my usual bedtime.  My usual weekend bedtime is am pm " sleep in" more than 1 hour past my usual wake time. My usual weekend wake time is am pm	Frequent  Conce in a while  Never (0%)  Ting the school week, I stay up more than 1 hour past my usual bedtime.  My usual school night bedtime is am pm " sleep in" more than 1 hour past my usual wake time.  My usual school day wake time is am pm  weekends, I stay up more than 1 hour past my usual bedtime.  My usual weekend bedtime is am pm " sleep in" more than 1 hour past my usual wake time. My usual weekend wake time is am pm " sleep in" more than 1 hour past my usual wake time. My usual weekend wake time is am / pm	Frequently, if r  Quite C  Sometimes  Once in a while (20%)  Never (0%)  ring the school week, I stay up more than 1 hour past my usual bedtime.  My usual school night bedtime is am pm " sleep in" more than 1 hour past my usual wake time.  My usual school day wake time is am pm  weekends, I stay up more than 1 hour past my usual bedtime.  My usual weekend bedtime is am pm " sleep in" more than 1 hour past my usual wake time. My usual weekend wake time is am pm " sleep in" more than 1 hour past my usual wake time. My usual N  O weekend wake time is am / pm	Frequently, if not Alta Quite Often  Sometimes (40%)  Once in a while (20%)  Never (0%)  In a while (20%)  Never (0%)  Never (	Alw  Frequently, if not Always  Quite Often (60%)  Sometimes (40%)  Once in a while (20%)  Never (0%)  Never (0%)	Always (3  Frequently, if not Always (80%)  Quite Often (60%)  Sometimes (40%)  Once in a while (20%)  Never (0%)  Never (0%)				

# **ASHS Scoresheet**

Transfer your scores into the respective item-number boxes below. For example, if your response for Q3 is 'Quite Often / Q', your numerical score is therefore 4. Add up each table's scores, before dividing them by a specific number.

1	Never – has not happened
2	Once in a while – happened 20% of the time
3	Sometimes – happened 40% of the time
4	Quite Often – happened 60% of the time
5	Frequently, if not always – happened 80% of the time
6	Always – happened 100% of the time

# A. Physiological

Q3	Q10	Q12	Q18	Q19	TOTAL

# **B.** Behavioural Arousal

Q11	Q13	Q28	TOTAL

# C. Cognitive/Emotional

Q9	Q14	Q15	Q16	Q17	Q29	TOTAL	
Divide TOTAL by 6							

# D. Sleep Environment

Q20	Q21	Q22	Q23	Q24	TOTAL

E. Sleep Stability

Q11	Q13	Q28	TOTAL
		Divide TOTAL by 3	

F. Daytime Sleep

Q1	Q4	TOTAL
Divide TOTAL by 2		

G. Substances

Q6	Q7	TOTAL
	Divide TOTAL by 2	

Reverse score *Item 27* (*Bedtime Routine*) according to the conversion table below; so, if the original score is 1, reverse score it is a 6:

30010 13 1) 1010130 30010 10 13 4 01					
1 → 6	4 → 3				
2 → 5	5 <b>→</b> 2				
3 → 4	6 → 1				

To obtain the **Total Sleep Hygiene score**, add the total scores for A – G and the **reverse score item 27**.

Α	В	С	D	E	F	G	Item 27	TOTAL

# Adolescent Sleep -Wake Scale\*\*: Short version

# **Directions:**

Using the choices below, circle <u>how often</u> the following things have happened <u>during the past</u> month.

Never

Once in Awhile

Sometimes

Quite Often

Frequently, if not always

Always

Que	stions 1 - 3 only concern you Going to Bed.							
						Αl	ways	
		Fre	quent	ly, if ı	not Al	ways		
			a	uite (	Often			
		9	Somet	imes	]			
	Once	e in Av	while					
	N	lever						
Whe	n it's time to go to bed, I							
1	want to stay up and do other things	N	0	S	Q	F	Α	
2	are ready for bed at bedtime	Ν	0	S	Q	F	Α	
3	try to "put off" or delay going to bed	N	0	S	Q	F	Α	
Questions 4 - 8 only concern you Falling Asleep & Reinstating Sleep.								
Whe	n it's time to go to sleep (lights-out), I							
4	have trouble settling down	N	0	S	Q	F	Α	
5	need help getting to sleep (for example: you need to listen to	N	0	S	Q	F	Α	
	music, watch TV, take medication, or have someone else in bed with you)							
After	After waking up during the night, I							
6	have trouble going back to sleep	N	0	S	Q	F	Α	
7	have trouble getting comfortable	N	0	S	Q	F	Α	
8	need help to go back to sleep (for example: you need to watch TV,	N	0	S	Q	F	Α	
	read, or sleep with another person)							
	Write in how long it usually takes you to fall asleep: minutes							
	Write in how many times do you usually awaken during the night:	tim	ies					
	Write in how long it takes you to go back to sleep after arousing/awak	ening	:	_min				

Questions 9 - 10 only concern you Waking in the Morning								
Αl	Always							
Fre	equently, if not Always							
Qu	ite Often				_			
Soi	Sometimes							
Once	Once in Awhile							
Nev	Never							
In th	e morning, I wake up							
9	and feel ready to get up for the day	N	0	S	Q	F	Α	
10	feeling rested and alert	N	0	S	Q	F	Α	
	Write in how long it takes you to become alert in the morning:							
	minutes							

# Adolescent Sleep Wake Scale - short version (ASWS) \*\* Scoring

- The ASWS provides 3 subscale scores and an overall sleep quality score.
- Higher scores indicate better success on each of the dimensions (or sleep quality).
- Write down your scores for each question in the tables below.

Never = 1 point
Once in Awhile = 2 points
Sometimes = 3 points
Quite Often = 4 points
Frequently = 5 points
Always = 6 points

However, some items will require reverse scoring and are indicated with a \*. So, this means for a score of 1, reverse scoring gives a 6. Then add up the scores for questions in each table. Finally, divide the sum of the total obtained by a specific number.

D. Going to bed

Q1*	Q2	Q3*	TOTAL (Q1+2+3)
		Divide TOTAL by 3	

E. Falling Asleep and Reinitiating Sleep

Q4*	Q5*	Q6*	Q7*	Q8*	TOTAL

F. Returning to Wakefulness

Q9	Q10	TOTAL
	Divide TOTAL by 2	

To obtain your **Total Sleep Quality score**, sum up the Total scores of A, B, and C.

Α	В	С	GRAND TOTAL

# PANAS – Adolescent version\*\* (Positive Affect Negative Affect Schedule)

This scale consists of several words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way for the past two weeks.

Use the following scale to record your answers. At the end, please total your scores for each column.

1 Very Slightly or Not at all	2 A Little	3 Moderately	4 Quite a Bit	5 Extremely		
	Interested		Irrital	ble		
	Alert		Distressed			
	Excited		Ashamed			
	Inspired		Upset			
	Strong		Nervous			
	Determined		Guilty			
	Attentive		Scared			
	Active		Jittery			
	Enthusiastic		Hostile			
	Proud		Afraid	d		
	ΤΟΤΑΙ		TOTA	.1		

# Not getting enough sleep can lead to:



Having trouble paying attention, concentrating, learning and solving problems.



Doing poorly at school, impairment in sports performance or other hobbies, too little energy to spend quality time with friends or family.



Increased risk of injury.



Increased risk of mental health problems.



Increased risk of physical health problems.



Irritability, aggression, difficulty dealing with stress, outbursts towards friends or family.



American Academy of Sleep Medicine on the Recommended Amount of Sleep for Healthy Children

# Things that get in the way of good sleep: Common reasons why people don't get enough sleep





























# Good sleep habits: What can you do to improve sleep?





























# MY SLEEP



IN EACH ROW, INDICATE HOW YOU SLEPT THE NIGHT BEFORE.

PLEASE DO THIS THE MOMENT YOU WAKE UP.

# **BUILD A SLEEP DIARY TO UNDERSTAND YOUR SLEEPING PATTERNS**

	WHAT TIME DO YOU GO TO BED?	WHAT TIME DO YOU ACTUALLY FALL ASLEEP?	WHAT TIME DO YOU WAKE UP?	WHAT TIME DO YOU ACTUALLY GET OUT OF BED?	HOW MANY TIMES DO YOU WAKE UP AT NIGHT? (1, 2, 3, 4+)	HOW DO YOU FEEL NOW?  VERY GOOD GOOD NEUTRAL POOR POOR  1 2 3 4 5
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY						
SATURDAY						
SUNDAY						



Notice the patterns that build on your sleep -what works and what does not to help you fall asleep quickly, deeply, & comfortably?

Feel free to talk to a family member, school teacher/counsellor, or health professional if you have any concerns about your sleep!

## **Barriers and Difficulties Worksheet**

**Instructions:** Below are activities and foods/drinks which get in the way of good sleep. Please circle the ones that apply to you. Next, in the orange boxes rate how easy it is for you to change - 1 (easy) to 10 (very difficult to change).



# **Behavioural Chaining Handout**

Things You Can Do To Train Your Body & Mind For Sleep



# **Impactful sleep Hygiene Strategies Handout**



# EEP HYGIEN

"SLEEP HYGIENE DESCRIBES GOOD SLEEP HABITS AND ROUTINES"

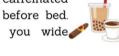
# 1 GET REGULAR



Go to bed and get up at the same time everyday, even on weekends! The bed is only for sleep. Don't avoid activities if you are tired.

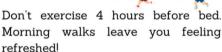
#### 3 AVOID CAFFEINE & NICOTINE

Avoid drugs and caffeinated drinks 4-6 hours before bed. These will keep you wide awake.



# **5 EXERCISE**





# **7 NO CLOCK WATCHING**



Checking the clock during the night wakes you up causing anxiety.

#### **INSOMNIA**

To be unable to sleep; Can be linked with sleep apnea, depression, and anxiety



# **2 SLEEP WHEN SLEEPY**



Sleep when tired. If you have to nap, make it less than an hour and take the nap before 3pm.

# **4 SLEEP RITUALS**



Relax 15 minutes before bed, drink caffeine-free tea, or take a hot bath 1-2 hours before bed.

#### **6 EAT RIGHT**



Eat a healthy, balanced diet. Don't sleep on an empty stomach. No heavy meals before bed.

#### **8 RIGHT SPACE**



Bedroom should quiet and Cool (18-22)comfortable. room degrees Celsius) with blankets, curtains to block sun, and ear plugs for noise.

Adapted from:

Scribd. (n.d.). Sleep Hygiene. https://www.scribd.com/document/344425227/sleep-hygiene-handout-new

# My SMART Goal for Sleep Handout & Example

# My SMART Goal for Sleep

Wy SWART God for Sicep						
SMART GOAL						
BENEFITS						
ACTION AND TIMELINE	ACTION STEPS	TIMELINE				
Remember to break these goals into doable steps. Make sure you consider the SMART goal	1.	1.				
criteria: Specific Measurable Attainable Realistic	2.	2.				
Timely	3.	3.				
SUPPORT NETWORK						
OBSTACLES						

### My SMART Goal for Sleep - EXAMPLE

	Wy SWAKT Goul for Sleep - EXAMPLE	
SMART GOAL	I will go to bed by 10pm every night	
BENEFITS	Good skin, more energy, stronger immunity	
ACTION AND TIMELINE	ACTION STEPS	TIMELINE
Remember to break these goals into doable steps. Make sure you consider the SMART goal criteria:	SPECIFIC - By 9.30pm, I will start winding down for bed  MEASURABLE – I will execute this goal for 6 nights out of 7  ATTAINABLE – By 10pm, I shall be in bed  REALISTIC – When I am not having school holidays, not at school camps  TIMELY – Set a phone alarm to put phones away and start winding down for sleep	<ol> <li>2.</li> <li>3.</li> </ol>
Specific Measurable Attainable Realistic Timely	1. 2. 3.	
SUPPORT NETWORK		
OBSTACLES		
ADJUSTMENTS		

# Reinforcing Healthy Sleep Habits – Card Game

NB\* for Facilitator's use (cut and laminate) for the game

















































# WIND DOWN TIPS

These tips may be used in two ways:

a.Cut out individual pictures and laminate them for an in-seminar game. Here, you may divide the adolescents into groups and ask them to decide if the picture depicts activities for improving sleep, relaxation, sleep drive, or if it is a daytime or nighttime activity. The group with the most correct answers win.

b. Print these out as tipsheets for the adolescents.













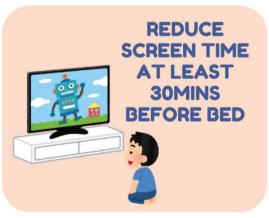


























# When to seek further help?

If you find that your sleep problems are ongoing, causing significant daytime sleepiness, or notice new sleep-related problems, please contact your doctor, who can determine if you are affected by a sleep disorder and may refer you to sleep specialists.

### Such problems can include:

- loud snoring
- stopping breathing, breathing pauses, gasping or snorting during sleep
- falling asleep unintentionally/dozing during the day
- a creepy-crawly sensation in your lower legs in the evening along with an irresistible urge to move your legs to get rid the sensation
- very frequent leg jerking during your sleep
- walking or the urge to walk while asleep
- excessive weight gain or loss
- chronic repeating nightmares
- feelings of panic disrupting your sleep

## **Sleep Specialists**

Changi General Hospital	Institute of Mental Health, Clinic B		
Department of Sleep Medicine, Surgery & Science	10 Buangkok View		
Sleep & Assisted Ventilation Centre	Buangkok Green Medical Park,		
Medical Centre, Level 2	Singapore 539747		
2 Simei Street 3, Singapore 529889	(+65) 6389 2000		
(+65) 6850 3333			
Institute of Mental Health	KK Women's and Children's Hospital		
Sayang Wellness Clinic (SWC)	Sleep Disorder Clinic		
10 Buangkok View	Children's Tower, Level 1		
Buangkok Green Medical Park,	Clinic K, Clinic M		
Singapore 539747	100 Bukit Timah Road, Singapore 229899		
(+65) 6389 2000	(+65) 6225 5554		
National Dental Centre	National Neuroscience Institute		
Sleep Clinic	Sleep Disorder Clinic		
5 Second Hospital Avenue, Singapore 168938	Tan Tock Seng Hospital		
(+65) 6324 8798	11 Jalan Tan Tock Seng, Singapore 308433		
	(+65) 6357 7095		
Sengkang General Hospital	SGH Sleep Centre @ Singhealth Tower (Outram		
Sleep Medicine Clinic	Community Hospital), Level 3		
110 Sengkang East Way, Singapore 544886	10 Hospital Boulevard, Singapore 168582		
(+65) 6472 2000	(+65) 6321 4377		

# Temasek Foundation Youth Connect

# An initiative by





In partnership with



This Skills Manual addresses the common issue of sleep delays in adolescents. It explains why teens often put off going to bed, including distractions like screen time, social media, and homework. The manual highlights how poor sleep affects mood, focus, and health.

Offering practical tips, the manual helps counsellors guide teens in setting better sleep habits, limiting screen use, and sticking to a bedtime routine. It also gives strategies for parents and educators to support teens in overcoming sleep procrastination, ultimately improving sleep quality and overall well-being.