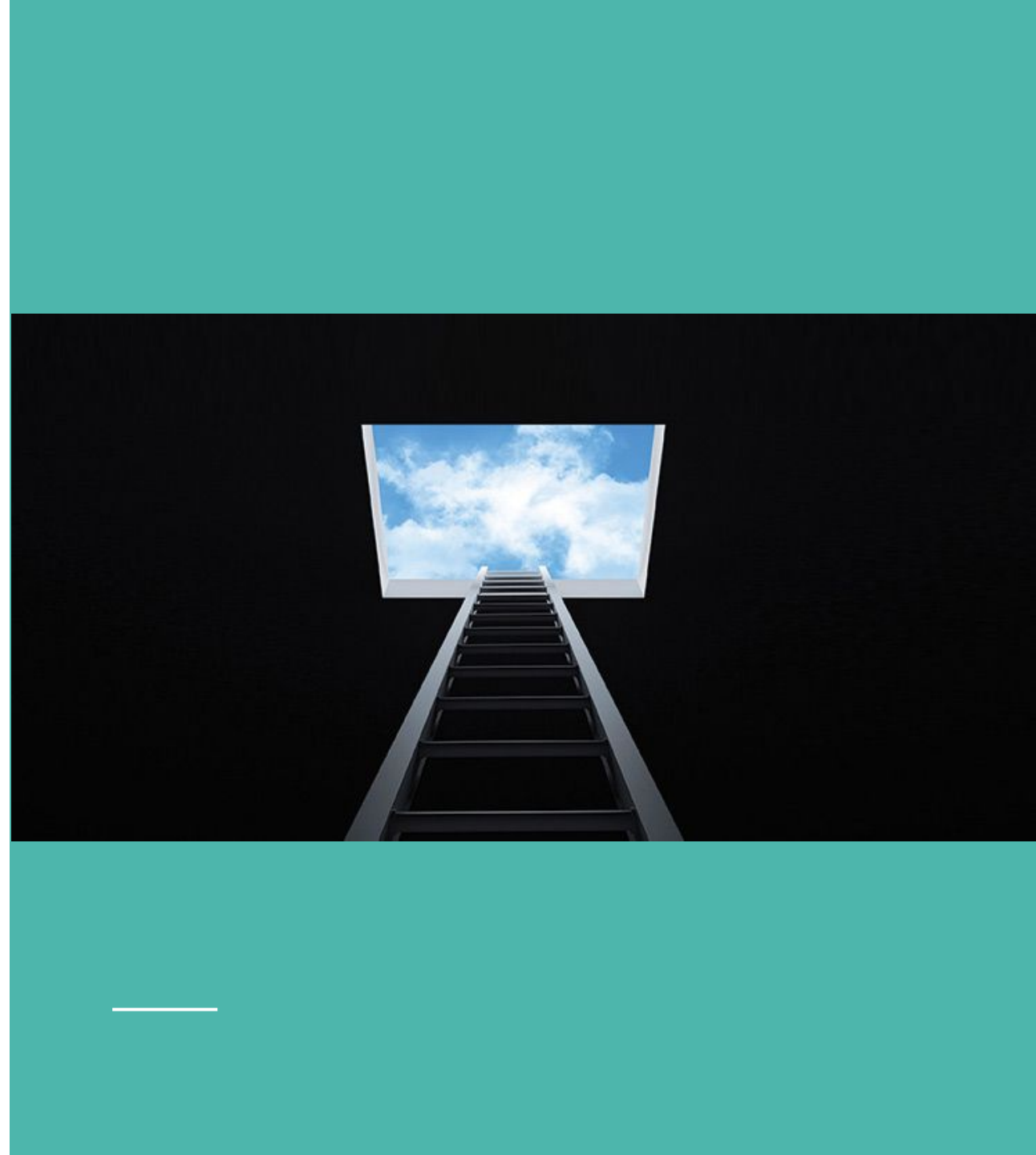


压力和韧性

在灾难中生存，学习，和成长



Stress in the reopening stage of COVID-19

新冠复工过程中的压力

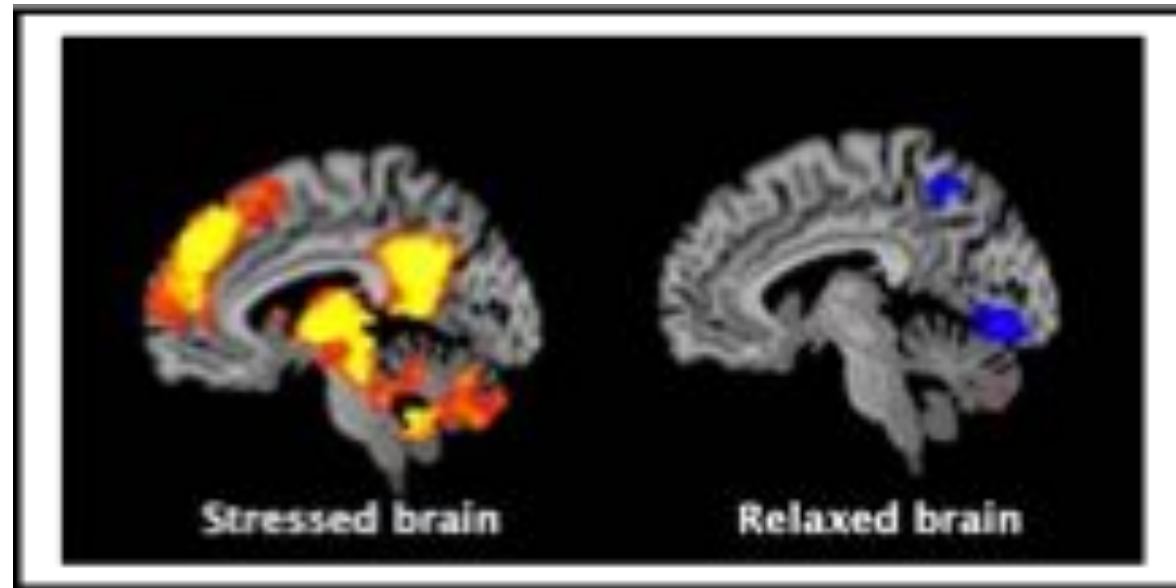
- Uncertainty of reopening: time, phase, recurrent wave of COVID-19
- Financial challenges: job, salary, retirement
- Discrimination and social unrest
- Prolonged stay-in-home isolation
- Marital or parent-children stress
- Home schooling
- Changes of sleep and diet
- Feeling of helpless
- 复工的不确定性：时间，阶段，疫情反复
- 财务压力：工作，收入，退休金
- 歧视及社会的不稳定性
- 在家隔离带来的孤独感
- 夫妻或亲子关系的压力
- 在家学习
- 睡眠及饮食的改变
- 觉得无助

Common signs of distress 忧虑的信号

- Feelings of numbness, disbelief, anxiety or fear.
- Changes in appetite, energy, and activity levels.
- Difficulty concentrating.
- Difficulty sleeping or nightmares and upsetting thoughts and images.
- Physical reactions, such as headaches, body pains, stomach problems, and skin rashes.
- Worsening of chronic health problems.
- Anger or short-temper.
- Increased use of alcohol, tobacco, or other drugs.
- 感到麻木、怀疑、焦虑或者恐惧
- 胃口、活力、活动能力有所改变
- 难以专注
- 出现睡眠问题, 如难以入睡、噩梦、脑海中出现沮丧的想法或场景
- 生理反应, 如头疼、身体痛、肠胃问题、皮疹
- 慢性疾病加重
- 易怒
- 增加酒精、烟草或成瘾药物的使用

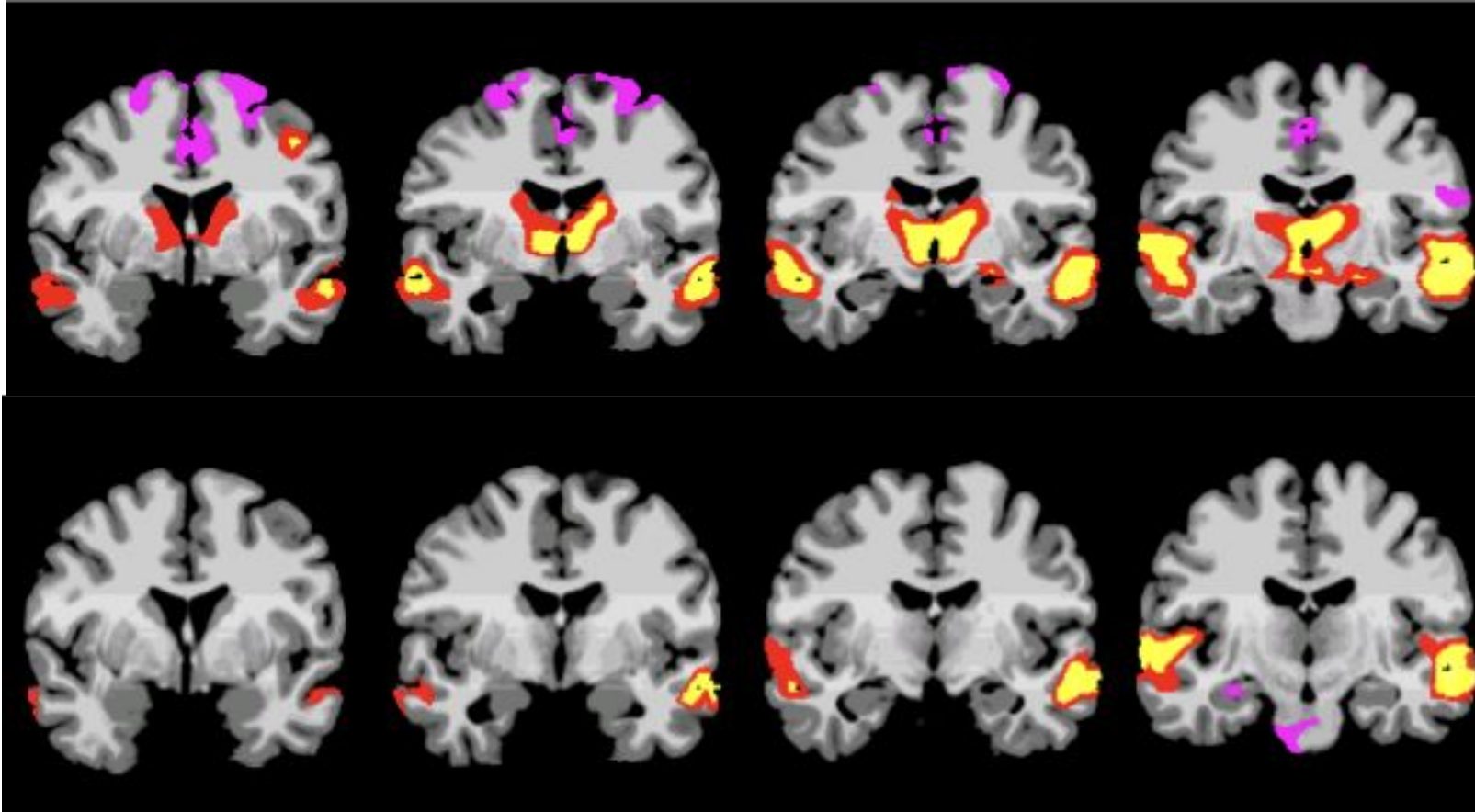
Stress impacts on brain - Adult

压力对大脑的影响 -- 成人



Stress impacts on brain - Adolescence

压力对大脑的影响 - 青少年



Stressed on Adolescence brain

Non-Stressed on Adolescence brain

Self-care strategies 自我关爱的方式

In *The Anti-Depressant Book* (2016), Towery defines the “three pillars of self-care” (自我关爱的三要素)

- Getting adequate sleep (7-8 hours for most adults)
- 保证充足的睡眠(成人7-8小时每天)
- Engaging in vigorous physical activity multiple times per week
- 每周多次、大量运动
- Developing a daily meditation practice
- 每日保持冥想(沉思)的习惯

Physical health 生理健康

- Eating a healthy, well-balanced diet.
 - 7-8 hours of sleep each night.
 - Exercise every day.
 - Take deep breaths and stretch often.
 - Avoid risky or destructive behaviors, alcohol or drugs, excessive gambling or ignoring public health recommendations.
 - Spend time outside
- 保持健康、平衡的饮食
 - 每晚睡7-8小时
 - 每日锻炼
 - 深呼吸、经常拉伸
 - 避免危险的、有伤害性的行为, 如喝酒、使用毒品、赌博、忽视公共健康建议
 - 在室外待一些时间

Environmental Epigenetics in Humans

环境与表观遗传对人的影响

Genome-wide studies

Tobacco smoking 吸烟

Snuff 鼻烟

Diet 饮食

Stress 压力

酒精 Alcohol consumption

Exercise 锻炼

Pathogen infection 传染病

UV radiation 紫外线

Sunlight 日晒



Candidate-gene studies

Air pollution 空气污染

Lead & arsenic 铅砷中毒

Pesticides 杀虫剂

Benzene 苯

PAHs 多环性芳香化合物

Organic chemicals 有机化学物质

Season of conception 受孕季节

...



¹ Nat Rev Genet 13:97 (2011); Nat Rev Genet 8: 253 (2007); Many recent references (2014)

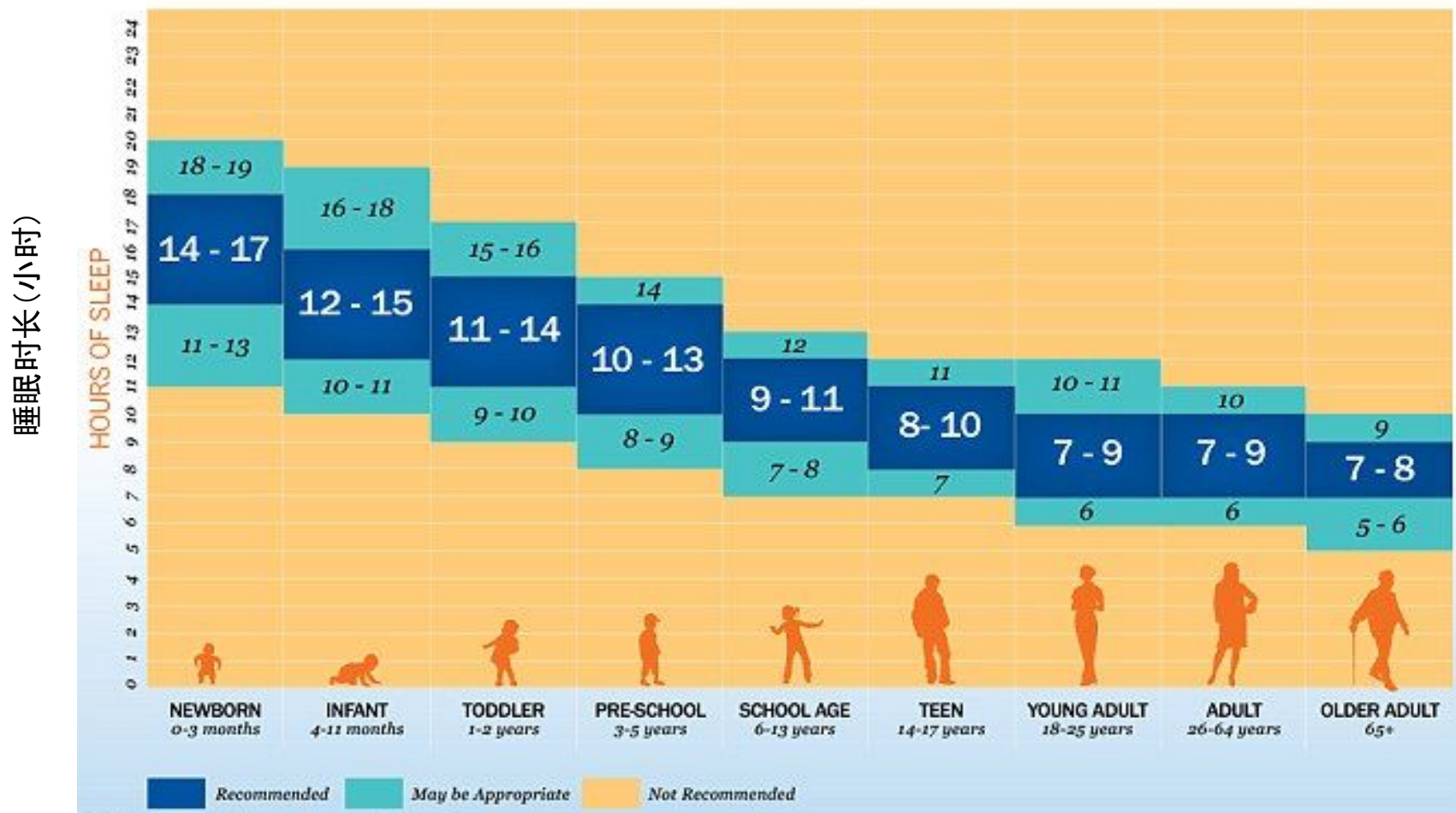
Mental health 精神健康

- Set and maintain a routine at home.
 - Focus on things you can control.
 - Social connections with physical distance. Consider a regular check-in schedule.
 - Focus your thoughts on the present.
 - Listen to music or read books.
 - Avoid media that sensationalizes emotions.
 - Help your community.
 - Be grateful.
- 在家保持日常规律
 - 关注你可以掌控的事情
 - 保持距离地进行社交, 可以考虑日常定时交流的计划
 - 关注当下
 - 听音乐或者看书
 - 避免过度感情化的媒体报道
 - 帮助你的社区
 - 感恩的心

Sleep in COVID-19 疫情期间的睡眠

- Sleep less:
 - Low energy
 - Poor concentration and focus impacts cognitive function
 - Decrease appetite
 - low libido
- Sleep more: increase the risk of [obesity](#), headache, back pain, and heart disease.
 - Change of metabolism.
- 睡眠减少则容易：
 - 活力减少
 - 注意力不集中
 - 影响大脑认知功能
 - 降低食欲
 - 降低性冲动
- 睡得过多则容易：
 - 增加肥胖、头疼、背痛及心脏病的风险
 - 改变新陈代谢

National Sleep Foundation 国家睡眠基金会



Tips 小贴士

- Stick to a sleep schedule, even on weekends.
- Practice a relaxing bedtime ritual.
- Exercise daily.
- Evaluate your bedroom to ensure ideal temperature, sound and light.
- Sleep on a comfortable mattress and pillows.
- Beware of hidden sleep stealers, like alcohol and caffeine.
- Turn off electronics before bed.
- 保持睡眠规律, 周末亦是
- 设定一个睡眠的仪式
- 每日锻炼
- 评估你的卧室环境, 找到最佳温度、声音、光的位置
- 在一个舒适的枕头和床垫上睡觉
- 注意摄入的影响睡眠的物质, 如酒精和咖啡
- 睡前关掉电子设备

<https://www.sleepfoundation.org/articles/nsf-tool-get-right-amount-sleep>

Sleep schedule 睡眠计划

- Be Consistent. 坚持、持久
- Make Gradual Adjustments. 逐渐适应
- See the Morning Light. 早上起来让自己看见晨光
- Dim the Nightlights. 睡前调暗灯光
- Food 饮食安排

Relax ritual 放松仪式

- Take Five Breaths. 呼吸五次
- Tune in to Your Senses. 将注意力转向自己
- Tense Your Toes. 脚趾绷紧

Sleep Diary 睡眠日记

Sleep Diary: Morning

NATIONAL SLEEP FOUNDATION

Complete in Morning

Start date: __/__/__	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Day of week:							
I went to bed last night at:	PM / AM	PM / AM	PM / AM	PM / AM	PM / AM	PM / AM	PM / AM
I got out of bed this morning at:	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM	AM / PM
Last night I fell asleep:							
Easily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
After some time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With difficulty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I woke up during the night:							
# of times							
# of minutes							
Last night I slept a total of:	Hours	Hours	Hours	Hours	Hours	Hours	Hours
My sleep was disturbed by:							
List mental or physical factors including noise, lights, pets, allergies, temperature, discomfort, stress, etc.							
When I woke up for the day, I felt:							
Refreshed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Somewhat refreshed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fatigued	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes:							
Record any other factors that may affect your sleep (i.e. hours of work shift, or monthly cycle for women).							

Complete at the End of Day

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Day of week:							
I consumed caffeinated drinks in the: (Morning, Afternoon, Evening, N/A)							
M / A / E / NA							
How many?							
I exercised at least 20 minutes in the: (Morning, Afternoon, Evening, N/A)							
Medications I took today:							
Took a nap? (circle one)	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
If Yes, for how long?							
During the day, how likely was I to doze off while performing daily activities: No chance, Slight chance, Moderate chance, High chance							
Throughout the day, my mood was... Very pleasant, Pleasant, Unpleasant, Very unpleasant							
Approximately 2-3 hours before going to bed, I consumed:							
Alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A heavy meal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Caffeine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not applicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In the hour before going to sleep, my bedtime routine included: List activities including reading a book, using electronics, taking a bath, doing relaxation exercises, etc.							

Sleep Diary: End of Day

反思、问题、讨论 Questions and Reflections