

睡眠對兒童情緒的影響

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一、睡眠的功能

- 睡眠的生理功能

睡眠有助於身體的修復 (肌肉、體力、傷口)

睡眠不足和心臟病、肥胖、糖尿病、免疫系統下降、癌症息息相關

- 睡眠的認知功能

睡眠和學術表現：睡眠時數和質量可以預測學術表現 (Wong, Lau et al., 2013)

睡眠和記憶：小睡有助中學生的文字記憶 (Lau & McAteer, 2012)

睡眠和工作記憶：小睡過後，工作記憶會得到改善。改善的程度和快速眼動睡眠的總量有關 (Lau et al., 2015)

- 睡眠的情緒功能

睡眠在不同精神疾病中的重要角色

(Diagnostic and Statistical Manual of Mental Disorders, 5th Ed, 2015)



失眠和抑鬱的雙向關係:

失眠患者患抑鬱症的風險增加兩倍; 失眠治療可以減少抑鬱症的風險

(Baglioni et al, 2011)



睡眠與焦慮/抑鬱 (Wong, Lau & Wing, 2015):

1: 睡眠質素欠佳增加患焦慮症和抑鬱症的風險

睡眠質素欠佳增加患焦慮症的風險 3 倍！

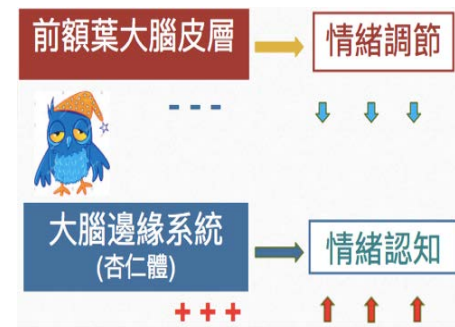
睡眠質素欠佳增加患抑鬱症的風險 1.5 倍！

2 焦慮組和抑鬱組的睡覺時間比參照組不穩定

睡眠時數、質量和規律性對於
焦慮及抑鬱徵狀有重要影響

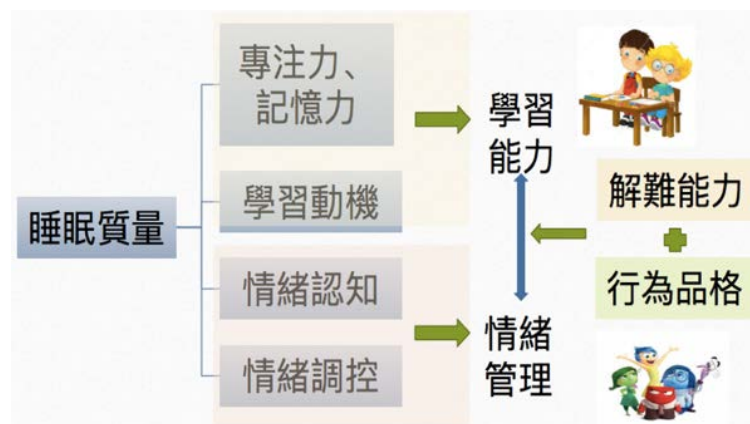
二、睡眠如何影響情緒

- 缺乏睡眠使**血清素**受體變得不敏感，從而導致情緒問題，甚至抑鬱症
(Román, Walstra, Luiten, & Meerlo, 2005)
- 睡眠和自尊心：睡眠時數不穩定可以預測**自尊心的下降**
(Wong, Lau et al., 2013)
- 睡眠影響**處理情緒的思考過程**：(Lau et al, 2017)
 - 更留意負面事物
 - 對負面刺激反應更強烈
 - 正面記憶削弱
- 睡眠欠佳可嚴重影響情緒(Shapiro et al., 2016)



兒童的睡眠和情緒調節預測焦慮和抑鬱徵狀

- 睡眠剝奪引致兒童的**解難能力及學習動機**下降
- 睡眠對兒童**情緒發展**有決定性的影響(Li, Hui, & Lau, 2014; Berger et al., 2012)



三、提高睡眠質素的小貼士

- 睡眠時數建議

美國睡眠醫學會 (AASM) 建議 :

嬰兒 4-8 個月 : 12-16 小時 (包括小睡)

1-2 歲 : 11-14 小時 (包括小睡)

3-5 歲 : 10-13 小時 (包括小睡)

6-12 歲 : 9-12 小時每晚

青少年 13-18 歲 : 8-10 小時每晚

Bedtime Calculator

Children, teens and adults can use this calculator to identify an appropriate bedtime. Simply select your age and choose your wake time to see the results. You also can use the slider to see how a change in your wake time affects your bedtime.

SELECT YOUR AGE

14 years old

CHOOSE YOUR WAKE TIME

8:00 AM

Your bedtime should be between
10:00 p.m. and 12:00 a.m.

提高兒童睡眠質素的建議
(American Academy of
Pediatrics & AASM)



- 睡覺時的避免事項 (National Sleep Foundation)

- 於下午四時後午睡
- 在床上作無關睡眠的活動---床只用來睡覺
- 下午以後喝含有咖啡因的飲料
- 晚上做劇烈運動
- 半夜看鐘
- 晚上喝過多液體
- 過度努力入睡

給家長老師們的建議 : 關注自己的睡眠質素(Boergers et al., 2007)

- 孩子睡眠問題越多 , 家長日間越疲憊
- 在相同的睡眠時長下 , 媽媽比爸爸更容易感到疲憊

關注兒童睡眠, 質和量皆重要;

睡得好, 身心靈更健壯!



參考文獻

1. American Academy of Pediatrics. Retrieved from: <https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/American-Academy-of-Pediatrics-Supports-Childhood-Sleep-Guidelines.aspx>
2. American Academy of Sleep Medicine. Retrieved from: <http://www.sleepeducation.org/healthysleep/Make-Time-2-Sleep-Bedtime-Calculator>
3. Baglioni, C., Battagliese, G., Feige, B., Spiegelhalder, K., Nissen, C., Voderholzer, U., ... & Riemann, D. (2011). Insomnia as a predictor of depression: a meta-analytic evaluation of longitudinal epidemiological studies. *Journal of affective disorders*, 135(1), 10-19.
4. Berger, R., Miller, A., Seifer, R., Cares, S., & Lebourgeois, M. (2012). Acute sleep restriction effects on emotion responses in 30- to 36-month-old children. *Journal of Sleep Research*, 21(3), 235-246.
5. Boergers, J., Hart, C., Owens, J., Streisand, R., Spirito, A., Kazak, Anne E., . . . Dahl, Ronald E. (2007). Child Sleep Disorders: Associations With Parental Sleep Duration and Daytime Sleepiness. *Journal of Family Psychology*, 21(1), 88-94.
6. Buysse, D. J., Angst, J., Gamma, A., Ajdacic, V., Eich, D., & Rossler, W. (2008). Prevalence, course, and comorbidity of insomnia and depression in young adults. *Sleep*, 31(4), 473.
7. Chang, P. P., Ford, D. E., Mead, L. A., Cooper-Patrick, L., & Klag, M. J. (1997). Insomnia in young men and subsequent depression: the Johns Hopkins precursors study. *American Journal of Epidemiology*, 146(2), 105-114.
8. Dattilo, M., Antunes, H. K. M., Medeiros, A., Neto, M. M., Souza, H. S., Tufik, S., & De Mello, M. T. (2011). Sleep and muscle recovery: endocrinological and molecular basis for a new and promising hypothesis. *Medical Hypotheses*, 77(2), 220-222.
9. DSM-5 (Diagnostic and Statistical Manual of Mental Disorder, 5th edition)
10. Ford, D. E., & Kamerow, D. B. (1989). Epidemiologic study of sleep disturbances and psychiatric disorders: an opportunity for prevention?. *The Journal of the American Medical Association*, 262(11), 1479-1484.
11. GÜMÜSTEKİN, K., Seven, B., Karabulut, N., Aktas, Ö., Gürsan, N., Aslan, S., ... & Dane, S. (2004). Effects of sleep deprivation, nicotine, and selenium on wound healing in rats. *International Journal of Neuroscience*, 114(11), 1433-1442.
12. Lau, E. Y. Y.*, Wong, M.L., Lau, K.N.T., Hui, F.W.Y., & Tseng, C.H. (2015). Rapid-eye-movement-sleep (REM) associated enhancement of working memory performance after a daytime nap. *PLOS ONE*, 10, e0125752.
13. Lau, E. Y. Y., & McAteer, S. M. E. (2012, June). Sleep dependent memory consolidation during a daytime nap in adolescents. Poster presented at the SLEEP 2012 26th Annual Meeting of the Associated Professional Sleep Society, LLC (APSS), Boston, Massachusetts.
14. Lau, E. Y. Y., Lau, K. N. T., Chan, C.S., Tseng, C. H., Chung, K. F., Wing, Y. K. (2017, October). Effects of sleep on disrupted affective cognition in individuals with depression. In C. M. Shapiro (Chair), Suicide, sleep and circadian rhythms in adolescents. Symposium conducted at World Sleep 2017 Congress, Prague, Czech Republic.
15. Lau, E. Y. Y., Wing, Y. K., Wong, M. L. (2017 June). Poor Sleep Quality in Adolescence: A Pathway to Depressive Disorders through Inhibitory Control. Poster presented at The Health Research Symposium 2017, Hong Kong.
16. Lau, K. N. T., Chan, C. S., Tseng, C. H., Chung, K. F., Wing, Y. K., & Lau, E. Y. Y. (2017, October). Napping Reduces Attentional Biases for Negative Interpersonal Stimuli in Clinical Depression. Abstract presented at World Sleep 2017 Congress, Prague, Czech Republic.

17. Li, V. C. L., Hui, C. L. L. & Lau, E. Y. Y. (2014) The Influence of Sleep and Emotional Development on Children's Emotional Functioning (Master thesis submitted)
18. Román, V., Walstra, I., Luiten, P. G., & Meerlo, P. (2005). Too little sleep gradually desensitizes the serotonin 1A receptor system. *Sleep-New York Then Westchester*, 28(12), 1505.
19. Shapiro et al. (2016) IPSA conference, Symposium 5: Sleep mood and suicide in adolescent – link between sleep and psychiatry
20. South China Morning Post. Retrieved from:
<http://www.scmp.com/comment/insightopinion/article/1888985/hong-kong-parents-allow-your-children-time-rest-and-play-if>
21. Stephanie M. Greer, Andrea N. Goldstein, & Matthew P. Walker. (2013). The impact of sleep deprivation on food desire in the human brain. *Nature Communications*, 4, 2259.
22. Thase, M. E., Rush, A. J., Manber, R., Kornstein, S. G., Klein, D. N., Markowitz, J. C., ... Borian, F. E. (2002). Differential effects of nefazodone and cognitive behavioral analysis system of psychotherapy on insomnia associated with chronic forms of major depression. *The Journal of Clinical Psychiatry*. 63, 493–500.
23. Van Londen, L., Molenaar, R. P. G., Goekoop, J. G., Zwinderman, A. H., & Rooijmans, H. G. M. (1998). Three-to 5-year prospective follow-up of outcome in major depression. *Psychological medicine*, 28(03), 731-735.
24. Van Der Helm, E. (2009). Overnight therapy? The role of sleep in emotional brain processing. *Psychological Bulletin*, 135(5), 731.
25. Walker, M. P., & Van Der Helm, E. (2009). Overnight therapy? The role of sleep in emotional brain processing. *Psychological Bulletin*, 135(5), 731.
26. Wong, Lau, Wan, Cheung, Hui, & Mok. (2012). The interplay between sleep and mood in predicting academic functioning, physical health and psychological health: A longitudinal study. *Journal of Psychosomatic Research*
27. Wong, M. L., Lau, E. Y. Y., & Wing, Y. K. (2015, June). What makes poor sleepers anxious and depressed? An exploration on psychological mechanism underlying the effect of poor sleep on negative mood symptoms. Poster presented at the 29th Annual Meeting of the Associated Professional Sleep Societies, Seattle, USA.