

Light Exposure Behaviour Assessment: Long Form

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Disclaimer: This is a non-public version of Light Exposure Behaviour Assessment (LEBA): Long Form (dated February 28, 2022) and still a work in progress.

LEBA captures light exposure-related behaviours on a 5 point Likert type scale ranging from 1 to 5 (Never = 1; Rarely = 2; Sometimes = 3; Often = 4; Always = 5). The score of each factor is calculated by the summation of scores of items belonging to the corresponding factor.

Instruction:

“Please indicate how often you performed the following behaviours in the **past 4 weeks.**”

Table 1

LEBA Long Form (23 Items)

Items	Never	Rarely	Sometimes	Often	Always
01. I wear blue-filtering, orange-tinted, and/or red-tinted glasses indoors during the day.					
02. I wear blue-filtering, orange-tinted, and/or red-tinted glasses outdoors during the day.					
03. I wear blue-filtering, orange-tinted, and/or red-tinted glasses within 1 hour before attempting to fall asleep.					
04. I spend 30 minutes or less per day (in total) outside.					
05. I spend between 30 minutes and 1 hour per day (in total) outside.					
06. I spend between 1 and 3 hours per day (in total) outside.					
07. I spend more than 3 hours per day (in total) outside.					
08. I spend as much time outside as possible.					
09. I go for a walk or exercise outside within 2 hours after waking up.					
10. I use my mobile phone within 1 hour before attempting to fall asleep.					
11. I look at my mobile phone screen immediately after waking up.					
12. I check my phone when I wake up at night.					
13. I look at my smartwatch within 1 hour before attempting to fall asleep					
14. I look at my smartwatch when I wake up at night.					
15. I dim my mobile phone screen within 1 hour before attempting to fall asleep.					
16. I use a blue-filter app on my computer screen within 1 hour before attempting to fall asleep.					
17. I use as little light as possible when I get up during the night.					
18. I dim my computer screen within 1 hour before attempting to fall asleep.					
19. I use tunable lights to create a healthy light environment.					
20. I use LEDs to create a healthy light environment.					
21. I use a desk lamp when I do focused work.					
22. I use an alarm with a dawn simulation light.					
23. I turn on the lights immediately after waking up.					

Table 2

LEBA Long Form (23 Items):Latent Structure and Reliability

Factor names	Items	Reliability Coefficients
F1: Wearing blue light filters	01-03	0.96
F2: Spending time outdoors	4-9 (Item 4 is reversed)	0.83
F3: Using phone and smartwatch in bed	10-14	0.7
F4: Using light before bedtime	15-18	0.69
F5: Using light in the morning and during daytime	19-23	0.52
McDonald's Omega coefficient for the total scale		0.73

Citation:

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