Light Exposure Behavior Assessment (LEBA): Long and Short Form

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Light Exposure Behavior Assessment (LEBA): Long and Short Form

Disclaimer: This is a non-public version of LEBA (dated November 16, 2021) and still a work in progress. Please do not distribute!

LEBA captures light exposure-related behaviours on a 5 point Likert type scale ranging from 1 to 5 (Never/Does not apply/I don't know = 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. The following instruction is given before displaying the items: "Please indicate how often you performed the following behaviours in the past 4 weeks."

LEBA Long Form (23 Items)

Latent Structure, Reliability and Structural Validity

The long form of LEBA consists 23 items with five factors.

LEBA -long form showed satisfactory structural validity (CFI =.97; TLI = .96; RMSEA = .05

$$.04 - .06, 90$$

; SRMR = .09).

How to cite:

LEBA Short Form (17 Items)

Latent Structure, Reliability and Structural Validity

The short form of LEBA consists 23 items with five factors.

How to cite:

	Items	Never/Does not apply/I don't know	Rarely	Sometimes	Often	Always
1	I wear blue-filtering, orange-tinted, and/or red-tinted glasses indoors during the day.					
2	I wear blue-filtering, orange-tinted, and/or red-tinted glasses outdoors during the day.					
3	I wear blue-filtering, orange-tinted, and/or red-tinted glasses within 1 hour before attempting to fall asleep.					
4	I spend 30 minutes or less per day (in total) outside.					
5	I spend between 1 and 3 hours per day (in total) outside.					

	Items	Never/Does not apply/I don't know	Rarely	Sometimes	Often	Always
6	I spend between 30 minutes and 1 hour per day (in total) outside.					
7	I spend more than 3 hours per day (in total) outside.					
8	I spend as much time outside as possible.					
9	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.					

Items	Never/Does not apply/I don't know	Rarely	Sometimes	Often	Always
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.				

	Items	Never/Does not apply/I don't know	Rarely	Sometimes	Often	Always
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.					

Factor names	Items	Reliability Coefficients: o
F1: Wearing blue light filters	1-3	.96
F2: Spending time outdoors	4-9 (Item 4 is reversed)	.83
F3: Using phone and smartwatch in bed	10-14	.70
F4: Using light before bedtime	15-18	.69
F5: Using light in the morning and during daytime	19-23	.52
McDonald's Omega coefficient for the total scale		.73(Total scale)

	Short Form (17 Items)	Never/Does not apply/I don't know	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 1 and 3 hours per day (in total) outside.					

	Short Form (17 Items)	Never/Does not apply/I don't know	Rarely	Sometimes	Often	Always
06	I spend more than 3 hours per day (in total) outside.					
07	I spend as much time outside as possible.					
08	I go for a walk or exercise outside within 2 hours after waking up.					
09	I use my mobile phone within 1 hour before attempting to fall asleep.					
10	I look at my mobile phone screen immediately after waking up.					
11	I check my phone when I wake up at night.					

	Short Form (17 Items)	Never/Does not apply/I don't know	Rarely	Sometimes	Often	Always
12	I dim my mobile phone screen within 1 hour before attempting to fall asleep.					
13	I use a blue-filter app on my computer screen within 1 hour before attempting to fall asleep.					
14	I dim my computer screen within 1 hour before attempting to fall asleep.					
15	I use tunable lights to create a healthy light environment.					
16	I use LEDs to create a healthy light environment.					
17	I use an alarm with a dawn simulation light.					

Factor names	Items
F1: Wearing blue light filters	1-3
F2: Spending time outdoors	4-8 (Item 4 is reversed)
F3: Using phone and smart-watch in bed	9-11
F4: Using light before bedtime	12-14
F5: Using light in the morning and during daytime	15-17