

## Light Exposure Behaviour Assessment (LEBA): Short Form

**Disclaimer:** This is still a work in progress. (Dated March 9, 2022)

### Participant's Instruction

Please indicate how often you performed the following behaviours in the **past four weeks**

|    | 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.<br>(Reverse-scored)                                      |       |        |           |       |        |
| 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.   |       |        |           |       |        |
| 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.                   |       |        |           |       |        |
| 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.   |       |        |           |       |        |
| 22 | I use an alarm with a dawn simulation light.  |       |        |           |       |        |

## Psychometric Properties

LEBA short form contains a 5-factor latent structure with 18 items.

| Factor Name                                       | Items      |
|---|------------|
| F1: Wearing blue light filters                    | 01-03      |
| F2: Spending time outdoors                        | 04-09      |
| F3: Using phone and smartwatch in bed             | 10-12      |
| F4: Using light before bedtime                    | 15,16,18   |
| F5: Using light in the morning and during daytime | 19, 20, 22 |

## Scoring

(Note: R = reverse-scored item)

LEBA captures light exposure-related behaviours on a 5-point Likert type scale ranging from 1 to 5 (1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5 = always; for reversed-scored item: 1 = always; 2 = often; 3 = sometimes; 4 = rarely; 5 = never). The score of each factor is calculated by the summation of scores of items belonging to the corresponding factor.

| Factor Name                                       | Score                |
|---|----------------------|
| F1: Wearing blue light filters                    | 01+02+03             |
| F2: Spending time outdoors                        | 04(R)+05+06+07+08+09 |
| F3: Using phone and smartwatch in bed             | 10+11+12             |
| F4: Using light before bedtime                    | 15+16+18             |
| F5: Using light in the morning and during daytime | 19+20+22             |

## Link

PDF and templates for Qualtrics and REDCap are available at <https://leba-instrument.org>

## Citation

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