

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

Mushfiqul Anwar Siraji^{*}, Rafael Robert Lazar^{*}, Juliëtte van Duijnhoven, Luc Schlangen,
Shamsul Haque, Vineetha Kalavally, Céline Vetter, Gena Glickman, Karin Smolders, &
Manuel Spitschan^{**}

^{*} Joint first authors

^{**} Corresponding author: manuel.spitschan@psy.ox.ac.uk

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

Disclaimer: This is a non-public version of LEBA (dated October 22, 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.

Long Form (23 Items)

F1: Blue-light filters/ Wearing Blue-light Filters

I wear blue-filtering, orange-tinted, and/or red-tinted glasses indoors during the day.

I wear blue-filtering, orange-tinted, and/or red-tinted glasses outdoors during the day.

I wear blue-filtering, orange-tinted, and/or red-tinted glasses within 1 hour before attempting to fall asleep.

F2: Natural light exposure/ Time Outdoors(in Daylight)/ Time Spend Outside

I spend 30 minutes or less per day (in total) outside.

I spend between 1 and 3 hours per day (in total) outside.

I spend between 30 minutes and 1 hour per day (in total) outside.

I spend more than 3 hours per day (in total) outside.

I spend as much time outside as possible.

I go for a walk or exercise outside within 2 hours after waking up.

F3: Use of smartphones and wearables/ Smartwatch and Phone Use in Bed

I use my mobile phone within 1 hour before attempting to fall asleep.

I look at my mobile phone screen immediately after waking up.

I check my phone when I wake up at night.

I look at my smartwatch within 1 hour before attempting to fall asleep.

I look at my smartwatch when I wake up at night.

F4: Light in the sleep environment/Surround Sleep/(Pre)Bedtime Light Use

I dim my mobile phone screen within 1 hour before attempting to fall asleep.

I use a blue-filter app on my computer screen within 1 hour before attempting to fall asleep.

I use as little light as possible when I get up during the night.

I dim my computer screen within 1 hour before attempting to fall asleep.

F5: Electric home light/Morning and daytime light Use

Long Form (23 Items)

I use tunable lights to create a healthy light environment.

I use LEDs to create a healthy light environment.

I use a desk lamp when I do focused work.

I use an alarm with a dawn simulation light.

I turn on the lights immediately after waking up.

Short Form (17 Items)

F1: Blue-light filters

I wear blue-filtering, orange-tinted, and/or red-tinted glasses indoors during the day.

I wear blue-filtering, orange-tinted, and/or red-tinted glasses outdoors during the day.

I wear blue-filtering, orange-tinted, and/or red-tinted glasses within 1 hour before attempting to fall asleep.

F2: Natural light exposure

I spend 30 minutes or less per day (in total) outside.

I spend between 1 and 3 hours per day (in total) outside.

I spend more than 3 hours per day (in total) outside.

I spend as much time outside as possible.

I go for a walk or exercise outside within 2 hours after waking up.

F3: Use of smartphones and wearables

I use my mobile phone within 1 hour before attempting to fall asleep.

I look at my mobile phone screen immediately after waking up.

I check my phone when I wake up at night.

F4: Light in the sleep environment

I dim my mobile phone screen within 1 hour before attempting to fall asleep.

I use a blue-filter app on my computer screen within 1 hour before attempting to fall asleep.

I dim my computer screen within 1 hour before attempting to fall asleep.

F5: Electric home light

I use tunable lights to create a healthy light environment.

I use LEDs to create a healthy light environment.

I use an alarm with a dawn simulation light.
