Supplementary Table 6

Item discrimination, response category difficulty thresholds and fit statistics of the 18 items in short LEBA (n=690)

| Items | a | b1 | b2 | b3 | b4 | Signed | df | RMSEA | p |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **F1: Wearing blue light ﬁlters** | | | | | |  |  |  |  |
| Item 16 | 28.13 | 0.78 | 0.90 | 1.06 | 1.40 | 2.02 | 6.00 | 0.00 | 0.92 |
| Item 36 | 4.49 | 0.94 | 1.08 | 1.23 | 1.40 | 39.07 | 13.00 | 0.05 | 0.00 |
| Item 17 | 2.81 | 0.97 | 1.11 | 1.38 | 1.62 | 25.58 | 13.00 | 0.04 | 0.02 |
| **F2: Spending time outdoors** | | | | | |  |  |  |  |
| Item 11 | 3.27 | -0.79 | 0.65 | 1.54 | 2.31 | 55.03 | 27.00 | 0.04 | 0.00 |
| Item 10 | 3.07 | -1.27 | -0.09 | 0.82 | 2.00 | 53.19 | 30.00 | 0.03 | 0.01 |
| Item 12 | 1.72 | -0.67 | 0.44 | 1.28 | 2.11 | 34.39 | 42.00 | 0.00 | 0.79 |
| Item 07 | 1.09 | -0.50 | 0.73 | 1.63 | 2.97 | 67.45 | 46.00 | 0.03 | 0.02 |
| Item 08 | 1.19 | -2.26 | -0.48 | 0.64 | 1.91 | 140.90 | 46.00 | 0.05 | 0.00 |
| Item 09 | 0.91 | -2.63 | -0.96 | 1.11 | 3.49 | 131.19 | 45.00 | 0.05 | 0.00 |
| **F3: Using phone and smartwatch in bed** | | | | | |  |  |  |  |
| Item 27 | 2.12 | -1.91 | -1.21 | -0.74 | 0.31 | 16.41 | 11.00 | 0.03 | 0.13 |
| Item 03 | 3.24 | -1.22 | -0.76 | -0.20 | 0.65 | 15.09 | 11.00 | 0.02 | 0.18 |
| Item 40 | 1.57 | -0.50 | 0.45 | 1.30 | 2.20 | 9.92 | 9.00 | 0.01 | 0.36 |
| F4: Using light before bedtime | | | | | |  |  |  |  |
| Item 32 | 1.60 | -1.04 | -0.79 | -0.42 | 0.16 | 41.33 | 15.00 | 0.05 | 0.00 |
| Item 35 | 1.34 | -1.10 | -0.99 | -0.76 | -0.41 | 41.71 | 14.00 | 0.05 | 0.00 |
| Item 33 | 15.66 | -0.66 | -0.48 | -0.24 | 0.13 | 46.89 | 14.00 | 0.06 | 0.00 |
| F5: Using light in the morning and during daytime | | | | | |  |  |  |  |
| Item 46 | 2.34 | 0.66 | 0.88 | 1.36 | 2.12 | 19.00 | 15.00 | 0.02 | 0.21 |
| Item 45 | 1.51 | 0.30 | 0.55 | 1.17 | 1.91 | 15.05 | 15.00 | 0.00 | 0.45 |
| Item 25 | 0.49 | -1.45 | -0.04 | 1.99 | 4.46 | 31.60 | 15.00 | 0.04 | 0.01 |

*Note.* a = item discrimination parameter; b(1-4) = response category difficulty parameter