Appendix B

Team LEBA

10/22/2021

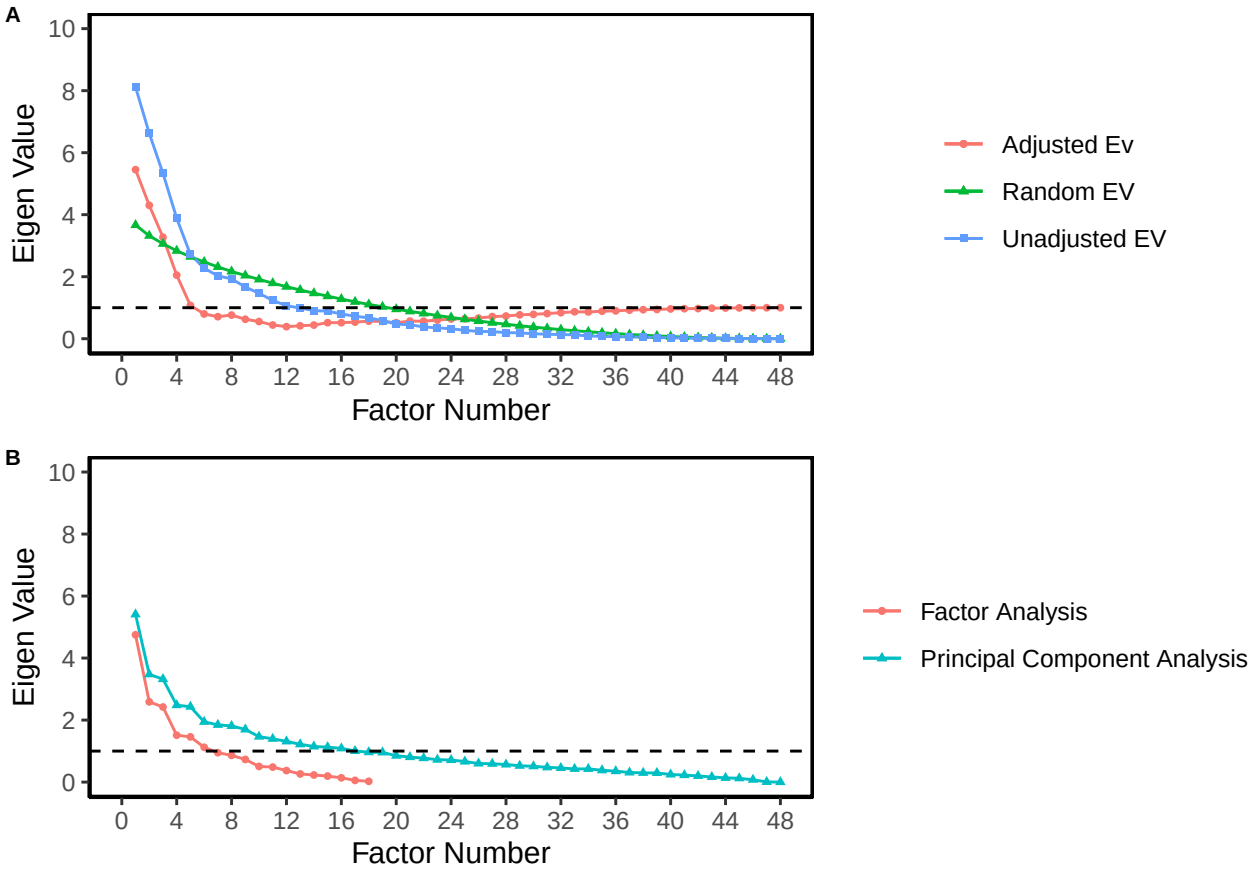

Figure 1: Factor Identification (A) Parallel analysis (B) Scree Plot

Horn's parallel analysis with 500 iterations indicated a five-factor solution. However, Scree plot and the MAP method suggested 6-factor solution. five-factor solution (Figure @ref(fig:AfacIdFig)). As a result, we tested both five-factor and six-factor solutions.

Five Factor Solution[Unmerged Responses] (24 Items)

F1
I use light therapy applying a blue light box.
I use light therapy applying a light visor.
I use light therapy applying a white light box.
I use light therapy applying another form of light device.

Five Factor Solution[Unmerged Responses] (24 Items)

I use an alarm with a dawn simulation light.

F2

I spend more than 3 hours per day (in total) outside.
I spend between 1 and 3 hours per day (in total) outside.
I spend as much time outside as possible.
I spend 30 minutes or less per day (in total) outside.
I go for a walk or exercise outside within 2 hours after waking up.
I spend between 30 minutes and 1 hour per day (in total) outside.

F3

I look at my mobile phone screen immediately after waking up.
I use my mobile phone within 1 hour before attempting to fall asleep.
I check my phone when I wake up at night.

F4

I use a blue-filter app on my computer screen within 1 hour before attempting to fall asleep.
I seek out knowledge on how to improve my light exposure.
I dim my computer screen within 1 hour before attempting to fall asleep.
I discuss the effects of light on my body with other people.
I modify my light environment to match my current needs.
I dim my room light within 1 hour before attempting to fall asleep.
I use as little light as possible when I get up during the night.

F5

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.

Table 1: Descriptive Statistics for Unmerged response options

	Mean	SD	Skew	Kurtosis	Shapiro-Wilk Statistics	Item-Total Correlation
Item1	2.16	1.51	0.49	-0.86	0.90*	.21
Item2	2.76	1.75	-0.10	-1.42	0.88*	.20
Item3	3.34	1.43	-0.58	-0.77	0.88*	.18
Item4	1.30	1.31	1.93	2.92	0.62*	.32
Item5	3.95	1.56	-1.42	0.75	0.70*	.19
Item6	2.70	1.66	0.02	-1.33	0.90*	.18
Item7	2.23	1.28	0.60	-0.59	0.89*	.18
Item8	2.95	1.24	-0.19	-0.70	0.93*	-.07
Item9	2.92	1.09	-0.37	0.11	0.91*	.14
Item10	2.73	1.07	-0.03	-0.52	0.92*	.27
Item11	2.17	0.93	0.44	0.20	0.89*	.25
Item12	2.34	1.26	0.46	-0.58	0.91*	.24
Item13	2.71	1.49	0.14	-1.29	0.89*	.28
Item14	2.11	1.34	0.68	-0.78	0.84*	.24
Item15	3.26	1.11	-0.34	-0.21	0.91*	.11
Item16	1.46	1.31	1.71	1.90	0.65*	.33
Item17	1.43	1.30	1.76	2.12	0.64*	.30
Item18	0.92	0.67	2.00	9.41	0.62*	.32
Item19	0.85	0.56	1.71	10.74	0.55*	.34
Item20	0.83	0.54	1.76	13.92	0.53*	.31
Item21	0.94	0.75	2.46	10.66	0.58*	.27
Item22	3.57	1.08	-0.72	0.08	0.88*	.19
Item23	2.53	1.31	0.22	-0.91	0.92*	.11
Item24	4.13	1.01	-1.39	2.01	0.78*	.19
Item25	2.57	1.43	0.22	-1.23	0.88*	.17
Item26	2.23	1.30	0.59	-0.63	0.88*	.16
Item27	3.78	1.34	-1.01	0.08	0.82*	.18
Item28	3.75	1.16	-0.78	-0.10	0.86*	.01
Item29	2.38	1.40	0.20	-1.04	0.92*	.11
Item30	0.94	1.42	1.66	1.69	0.68*	.24
Item31	2.91	1.76	-0.24	-1.41	0.87*	.45
Item32	3.49	1.76	-0.71	-1.06	0.78*	.43
Item33	3.56	1.75	-0.79	-0.95	0.77*	.32
Item34	3.30	2.00	-0.54	-1.50	0.74*	.34
Item35	3.80	1.79	-1.07	-0.59	0.67*	.24
Item36	1.36	1.38	1.75	2.05	0.65*	.38
Item37	1.30	0.94	2.79	7.65	0.48*	-.01
Item38	4.27	1.18	-2.07	4.01	0.65*	.23
Item39	1.94	1.01	0.85	0.61	0.86*	.05
Item40	2.13	1.24	0.56	-0.54	0.89*	.16
Item41	0.87	1.08	1.68	2.74	0.73*	.21
Item42	3.90	1.55	-1.15	-0.12	0.72*	.17
Item43	1.59	1.23	1.59	1.70	0.69*	.22
Item44	3.46	1.41	-0.92	-0.01	0.86*	.38
Item45	2.04	1.66	0.46	-1.12	0.87*	.29
Item46	1.57	1.40	0.97	-0.07	0.82*	.38
Item47	2.07	1.23	0.59	-0.42	0.89*	.34
Item48	2.57	1.30	0.14	-0.74	0.93*	.31

Note. *p<.001

Table 2: Factor loadings and communality of the retained items [Unmerged Responses]

item	PA1	PA2	PA5	PA3	PA4	Communality	Uniqueness	Complexity
item19	0.99					1.01	-0.01	1.06
item20	0.91					0.87	0.13	1.11
item18	0.82					0.71	0.29	1.12
item21	0.8					0.68	0.32	1.16
item4	0.47					0.25	0.75	1.30
item11		0.83				0.69	0.31	1.01
item10		0.81				0.67	0.33	1.03
item12		0.56				0.37	0.63	1.37
item8		-0.44				0.21	0.79	1.11
item7		0.42				0.23	0.77	1.61
item9		0.33				0.12	0.88	1.10
item16			0.95			0.95	0.05	1.10
item17			0.74			0.60	0.41	1.17
item36	0.3		0.73			0.65	0.35	1.43
item3				0.85		0.75	0.25	1.05
item27				0.78		0.62	0.38	1.03
item40				0.71		0.51	0.49	1.05
item35					0.58	0.35	0.65	1.09
item48					0.57	0.35	0.65	1.14
item33					0.55	0.32	0.68	1.08
item47					0.52	0.29	0.71	1.19
item44					0.45	0.22	0.78	1.15
item31					0.41	0.21	0.79	1.48
item38					0.33	0.13	0.87	1.32
% of Variance	0.15	0.09	0.09	0.08	0.08	NA	NA	NA

Note. Only loading higher than .30 is reported