

Supplemental Material

Depression and fatigue six months post-COVID-19 disease are associated with overlapping symptom constellations: A prospective, multi-centre, population-based cohort study

Table S1. Variable names in the NAPKON database, variable description, variable importance values for the depression and fatigue test set and the ranks according to their importance.

variable name	description	depression importance (ROC)	fatigue importance (ROC)	depression importance rank	fatigue importance rank
eq5d5l3	difficulty performing general activities (e.g., work, study, housework, family/leisure activities)	0.83	0.83	1	1
eq5d5lvas1	current state of health (QOL)	0.82	0.82	2	3
cfs5	unrestful sleep	0.80	0.79	3	4
cfs3	impaired concentration	0.79	0.79	4	5
cfs2	chronic exhaustion	0.79	0.83	5	2
eq5d5l4	experience of pain/physical discomfort	0.77	0.77	6	6
cfs4	sleep disturbance	0.75	0.73	7	10
cfs12	depression/anxiety	0.74	0.70	8	15
sym_neurol4_5	thought disorder post-Covid	0.72	0.74	9	8
sym_neurol4_7	mental fatigue post-Covid	0.72	0.75	10	7
sym_neurol4	current neurological abnormalities	0.70	0.71	11	12
sym_neurol4_9	physical fatigability post-Covid	0.70	0.74	12	9
neuro_sym_covid3g	thinking disorder (= disorientation, slow thinking, unfocused, forgetful) pre-Covid	0.69	0.69	13	16
sym_verl_akt0	current symptoms	0.69	0.70	14	14
eq5d5l1	problems walking around	0.67	0.67	15	18
verl_belastb	How long did it take after the first symptoms for you to regain your original physical capacity or resilience?	0.67	0.72	16	11
sym_neurol4_8	physical fatigue post-Covid	0.67	0.71	17	13
cfs7	headache	0.66	0.66	18	19
cfs10	joint pain	0.65	0.64	19	22

neuro_sym_covid3i	mental fatigue pre-Covid	0.65	0.67	20	17
sym_verl_akt___16	shortness of breath	0.64	0.65	21	20
cfs8	muscle pain	0.64	0.65	22	21
cfs6	dizziness	0.63	0.63	23	24
six_ils_emotionscore	emotional loneliness score	0.62	0.62	24	26
gec_ne_depr	previous depressive disorder	0.62	0.56	25	32
neuro_sym_covid3j	physical fatigue pre-Covid	0.61	0.63	26	25
cfs9	sore throat	0.59	0.59	27	28
cfs11	flu-like feeling	0.58	0.64	28	23
gec_gender	gender	0.58	0.58	29	29
verl_beh	treated for Corona disease	0.57	0.56	30	34
sym_verl_akt___4	impaired consciousness	0.57	0.58	31	30
moca_total_score	MOCA total score	0.56	0.57	32	31
six_ils_social_score	social loneliness score	0.55	0.59	33	27
gec_ne_anx	previous anxiety disorder	0.54	0.54	34	37
gec_demo_age	age	0.54	0.55	35	35
eq5d5l2	trouble taking care of oneself, washing or dressing	0.54	0.54	36	36
epi_covid2	symptoms while being infected with the Corona virus	0.54	0.52	37	42
cfs1	fever	0.54	0.53	38	40
familie1	permanent partner	0.53	0.51	39	46
erwerbst5___4	work from home (home office), all or some days	0.53	0.50	40	48
epi_covid3	belonging to the risk group for severe courses of corona virus infection.	0.52	0.56	41	33

erwerbst5__6	dismissal/loss of job	0.51	0.50	42	47
erwerbst5__1	reduction of weekly working hours	0.51	0.52	43	44
erwerbst4	changes in work as an impact of the Corona pandemic	0.51	0.52	44	41
erwerbst5__3	new job (new hiring, return from retirement)	0.51	0.50	45	49
erwerbst__0	currently not employed	0.51	0.51	46	45
sym_verl_akt__17	wheezing breathing	0.51	0.52	47	43
erwerbst5__5	receipt of short-time working allowance	0.51	0.53	48	39
erwerbst5__2	increasing weekly working hours (overtime, increase in working hours)	0.50	0.50	49	50
schulabschl	highest general education degree	0.50	0.53	50	38

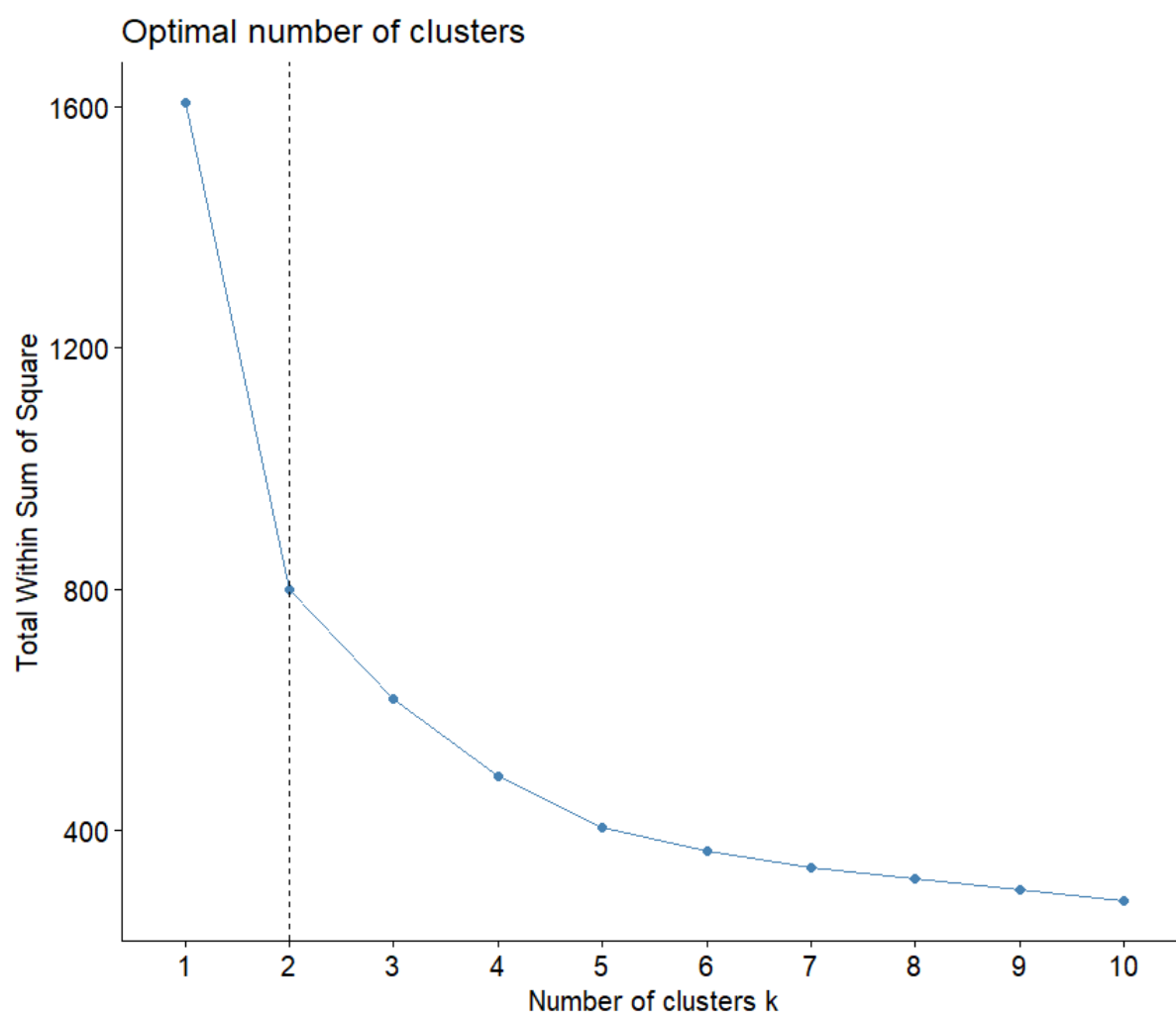


Figure S2. Elbow Plot of Total Within Sum of Squares suggesting two clusters.