

Supplementary files

S1. NEO-PI-R: short description of the 5 domains (the ‘big five’ personality traits) and their division into 6 facets each [28].

Neuroticism: tendency to psychological distress: N1. Anxiety (level of free floating anxiety); N2. Angry hostility (tendency to experience anger and related states such as frustration and bitterness); N3. Depression (tendency to experience feelings of guilt, sadness, and loneliness); N4. Self-consciousness (shyness or social anxiety); N5. Impulsiveness (tendency to act on cravings and urges rather than mastering them and delaying gratification); N6. Vulnerability (general susceptibility to stress)

Extraversion: quantity and intensity of energy directed outwards into the social world. E1. Warmth (interest in and friendliness towards others); E2. Gregariousness (preference for the company of others); E3. Assertiveness (social ascendancy and forcefulness of expression); E4. Activity (pace of living); E5. Excitement seeking (need for environmental stimulation); E6. Positive emotions (tendency to experience positive emotions)

Openness to experience: the active seeking and appreciation of experiences for their own sake. O1. Fantasy (receptivity to the inner world of imagination); O2. Aesthetics (appreciation of art and beauty); O3. Feelings (openness to inner feelings and emotions); O4. Actions (openness to new experiences on a practical level); O5. Ideas (intellectual curiosity); O6. Values (readiness to re-examine own values and those of authority figures)

Agreeableness: the kinds of interactions an individual prefers from compassion to tough mindedness. A1. Trust (belief in the sincerity and good intentions of others); A2. Straightforwardness (frankness in expression); A3. Altruism (active concern for the welfare of others); A4. Compliance (response to interpersonal conflict); A5. Modesty (tendency to play down own achievements and be humble); A6. Tender-mindedness (attitude of sympathy for others)

Conscientiousness: degree of organisation, persistence, control and motivation in goal directed behavior. C1. Competence (belief in own self efficacy); C2. Order (personal organization); C3. Dutifulness (emphasis placed on importance of fulfilling moral obligations); C4. Achievement striving (need for personal achievement and sense of direction); C5. Self-discipline (capacity to begin tasks and follow through

to completion despite boredom or distractions); C6. Deliberation (tendency to think things through before acting or speaking)

S2. The 5 domains, 5x6 facets and 240 item numbers of the NEO-PI-R, [28] selections by health care providers (HCPs) and statistical significance*.

Domain	Facet	Item numbers
Neuroticism N	Anxiety N1	<u>r1,31,r61,91,r121,151,r181,211</u>
	Angry hostility N2	<u>6,r36,66,r96,126,r156,186,216</u>
	Depression N3	<u>r11,41,r71,101,131,161,191,221</u>
	Self-consciousness N4	<u>16,r46,76,r106,136,r166,196,226</u>
	Impulsiveness N5	r21,51,r81,111,r141,171,201,r231
	Vulnerability N6	<u>26,r56,86,r116,146,r176,r206,r236</u>
Extraversion E	Warmth E1	2,r32,62,r92,122,152,182,212
	Gregariousness E2	r7,37,r67,97,r127,157,r187,217
	Assertiveness E3	12,r42,72,r102,132,r162,192,r222
	Activity E4	r17, 47 ,r77, 107,r137,167,197,227
	Excitement seeking E5	22,r52,82,r112,142,172,202,232
	Positive emotions E6	r27,57,r87,117,r147,177,r207,237
Openness O	Fantasy O1	3,r33,63,r93,123,r153,r183, r213
	Aesthetics O2	r8,38,r68,98,r128,158,188,218
	Feelings O3	13, r43,73,r103,133,r163,193,223
	Actions O4	r18,48,r78,108,r138,168,r198,r228
	Ideas O5	23,r53,83,r113,143,r173,203,233
	Values O6	r28,58,r88,118, r148,178,r208,r238
Agreeableness A	Trust A1	r4,34,r64, 94 ,r124,154,184,214
	Straightforwardness A2	9,r39,69,r99,129,r159,r189,r219
	Altruism A3	r14,44,r74, 104 ,r134,164, 194,224
	Compliance A4	19,r49, 79 ,r109,139,r169,r199,r229
	Modesty A5	r24, 54 ,r84,114,r144,174, 204,r234
	Tender-mindedness A6	29, r59,89 ,r119,149, 179,209,239
Conscientiousness C	Competence C1	5,r35,65,r95,125,r155,185,215
	Order C2	r10,40,r70,100,r130,160,r190,r220
	Dutifulness C3	15,r45,75,r105,135,165,195,225
	Achievement striving C4	r20,50, r80,110,r140,170,200,230
	Self-discipline C5	25, r55,85,r115,145,r175,r205,235
	Deliberation C6	r30,60, r90,120,r150,180,210,240

*Each item of the NEO-PI-R is scored from 0 (totally disagree) to 4 (totally agree). Scores of the respective items are summed to get the facet score and those of the respective facets are summed to get the specific domain scores.

The scores of the items preceded by “r” have to be recalculated, because the item is formulated in the opposite direction of the facet. The recalculation: new score = 4 – original score.

The underlined items were selected by ≥ 1 HCP and their scores were statistically significantly different between the FM group and control group; the italicized items were not selected by ≥ 1 HCP, but their scores were statistically significantly different between the FM group and control group; the bold items were selected by ≥ 1 HCP, but their scores were not statistically significantly different between the FM group and control group; all others not selected nor statistically significantly different.

S3. Agreement analysis of items chosen by health care providers; each of the 8 health care providers chose 20 items out of the 240 questionnaire items*.

	Coefficient	SE	95% C.I.	p-value	Interpretation**
Conger's kappa	0.18	0.18	-0.17 to 0.53	0.3	poor
Gwet's AC1	0.85	0.02	0.82 to 0.89	<0.000	almost perfect
Fleiss' kappa	0.18	0.06	0.07 to 0.30	0.001	slight
Krippendorff's alpha	0.18	0.06	0.06 to 0.31	0.004	slight
Brenann-Prediger's kappa	0.75	0.03	0.70 to 0.81	<0.000	substantial
Percent agreement	86	1.42	85 to 90	<0.000	almost perfect

*analysis of eight 20-item sets chosen from 240 items; SE: standard error; 95%CI: 95 percent confidence interval of the coefficient.

Conger's kappa: generalized kappa, Gwet's AC1: Gwet for chance adjusted first-order agreement coefficient, Fleiss' kappa: generalized Pi of Scott, Krippendorff's alpha: agreement coefficient based on observed and expected disagreement, Brenann-Prediger: free-marginal kappa of Brennan and Prediger (30).

**interpretation: Landis-Koch interpretation of the agreement coefficients, benchmarking unweighted agreement coefficients using cumulative membership probabilities, resulting in 6 classes of agreement: poor, slight, fair, moderate, substantial and almost perfect agreement, respectively (30, 31).

S4. Weighted agreement analysis of the estimated probability of having fibromyalgia for 256 individuals, as scored by the 8 health care providers*.

	Coefficient	SE	95% C.I.	p-value	Interpretation**
Conger's kappa	0.18	0.03	0.12 to 0.25	< 0.000	slight
Gwet's AC2	0.28	0.05	0.19 to 0.37	< 0.000	fair
Fleiss' kappa	0.17	0.04	0.11 to 0.25	< 0.000	slight
Krippendorff's alpha	0.18	0.03	0.11 to 0.24	< 0.000	slight
Brenann-Prediger's kappa	0.27	0.04	0.18 to 0.36	< 0.000	fair
Percent agreement	48	3.11	42 to 54	< 0.000	moderate

*analysis based the estimated probability of having fibromyalgia for each of 256 individuals, scored by each health care provider on a scale of 0-10 when evaluating each individual's score on the 20 items selected in an earlier phase by each of the investigators. Weighted analysis with custom weights: 0 points difference between scores: weight=1; 1 point difference: weight=0.7; 2 points difference: weight=0.4; 3 points difference: weight=0.2; 4 or more points difference: weight=0.

Conger's kappa: generalized kappa, Gwet's AC1: Gwet for chance adjusted first-order agreement coefficient, Fleiss' kappa: generalized Pi of Scott, Krippendorff's alpha: agreement coefficient based on observed and expected disagreement, Brenann-Prediger: free-marginal kappa of Brennan and Prediger (30). SE: standard error; 95% CI: 95% confidence interval of the coefficient.

**interpretation: Landis-Koch interpretation of the agreement coefficients, benchmarking weighted agreement coefficients using cumulative membership probabilities, resulting in 6 classes of agreement: poor, slight, fair, moderate, substantial and almost perfect agreement, respectively (30, 31).

S5. Areas under the receiver operating characteristic curves, plotted for each of the 20 item sets selected by each of the 8 health care providers (HCPs).

