

**Table S1.** Psychometric tests' scores for patients with and without FA.

	FA absent				FA present				p <sup>a</sup>	Mann-Whitney U	p <sup>b</sup>
	n	Mean	Median	IQR	n	Mean	Median	IQR			
Activities (YSR)	35	38.20	38.00	10.00	34	39.59	40.00	14.00	<b>0.016</b>	637.00	0.614
Social (YSR)	35	38.80	41.00	19.00	33	41.45	43.00	15.00	<b>0.047</b>	645.50	0.403
Academic Performance (YSR)	6	7.00	2.50	9.00	2	21.50	21.50	0.00	<b>0.001</b>	7.50	0.643
Total Competence (YSR)	35	36.57	35.00	14.00	33	38.24	37.00	16.00	<b>0.042</b>	638.50	0.454
Anxious/Depressed (YSR)	35	60.29	59.00	13.00	34	67.56	65.50	15.00	<b>0.001</b>	873.00	<b>0.001</b>
Withdrawn/Depressed (YSR)	35	59.97	58.00	13.00	34	66.82	66.00	16.00	<b>0.000</b>	838.00	<b>0.003</b>
Somatic Complaints (YSR)	35	55.69	52.00	10.00	34	61.09	61.50	16.00	<b>0.000</b>	793.50	<b>0.017</b>
Social Problems (YSR)	35	56.31	55.00	11.00	34	60.18	58.00	11.00	<b>0.000</b>	769.50	<b>0.035</b>
Thought Problems (YSR)	34	54.91	52.00	6.00	34	61.38	61.00	10.00	<b>0.000</b>	871.00	<b>0.000</b>
Attention Problems (YSR)	35	55.34	52.00	7.00	34	57.56	54.00	11.00	<b>0.000</b>	769.00	<b>0.035</b>
Rule-Breaking Behaviour (YSR)	35	51.89	51.00	2.00	34	53.68	51.00	4.00	<b>0.000</b>	625.50	0.703
Aggressive Behaviour (YSR)	35	53.89	51.00	7.00	34	56.38	57.00	8.00	<b>0.000</b>	763.00	<b>0.041</b>
Internalizing Problems (YSR)	44	56.27	54.00	12.00	43	66.19	67.00	12.00	0.201	1432.50	<b>0.000</b>
Externalizing Problems (YSR)	44	49.66	51.00	12.00	42	53.55	54.00	10.00	0.490	1163.50	<b>0.038</b>
Total Problems (YSR)	44	52.11	51.00	13.00	43	60.28	63.00	10.00	0.067	1394.50	<b>0.000</b>
Affective Problems (YSR)	44	58.73	55.00	12.00	43	67.47	67.00	16.00	<b>0.000</b>	1447.50	<b>0.000</b>
Anxiety Problems (YSR)	44	57.02	52.00	12.00	43	60.65	63.00	13.00	<b>0.000</b>	1240.50	<b>0.012</b>
Somatic Problems (YSR)	44	56.25	54.50	9.00	43	62.12	63.00	16.00	<b>0.000</b>	1247.00	<b>0.010</b>
ADHD Problems (YSR)	44	53.75	51.00	7.00	43	54.91	52.00	6.00	<b>0.000</b>	1169.00	0.052
Oppositional Defiant Problem (YSR)	44	55.20	52.00	4.00	43	57.12	55.00	8.00	<b>0.000</b>	1245.50	<b>0.010</b>
Conduct Problems (YSR)	44	63.11	50.00	3.00	43	52.51	50.00	3.00	<b>0.000</b>	945.00	0.993
Obsessive-Compulsive Problems (YSR)	44	56.84	52.00	9.00	43	65.67	66.00	15.00	<b>0.000</b>	1475.00	<b>0.000</b>
Post-traumatic Stress Problems (YSR)	44	57.55	54.00	10.00	43	65.44	66.00	12.00	<b>0.001</b>	1461.00	<b>0.000</b>
Positive Qualities (YSR)	10	50.10	51.00	20.00	20	42.65	44.00	17.00	0.300	56.50	0.055
Total score (CDI 2)	44	12.11	9.00	12.00	43	20.98	20.00	10.00	<b>0.007</b>	1449.00	<b>0.000</b>
Emotional Problems (CDI 2)	44	5.64	5.00	6.00	43	11.49	12.00	7.00	<b>0.001</b>	1500.50	<b>0.000</b>
Interpersonal Problems (CDI 2)	44	2.50	2.00	5.00	43	3.49	3.00	3.00	<b>0.000</b>	1189.00	<b>0.037</b>
Total Problems (MASC 2)	44	50.64	49.00	17.00	43	59.21	58.00	20.00	0.141	1287.50	<b>0.004</b>
Physical symptoms (MASC 2)	44	51.05	48.00	16.00	43	62.65	62.00	17.00	<b>0.004</b>	1448.50	<b>0.000</b>
Social anxiety (MASC 2)	44	52.23	49.00	16.00	43	58.65	61.00	23.00	<b>0.005</b>	1232.50	<b>0.015</b>

Separation (MASC 2)	44	53.45	52.50	18.00	43	54.56	52.00	24.00	<b>0.001</b>	967.00	0.858
Avoidance (MASC 2)	44	47.27	49.00	14.00	42	48.02	47.00	16.00	0.884	968.50	0.700
EAT-26	42	23.12	19.00	26.00	40	43.63	41.50	29.00	<b>0.039</b>	1343.00	<b>0.000</b>
BUT (mean)	42	3.75	1.35	2.56	40	2.95	3.02	1.75	<b>0.000</b>	1293.00	<b>0.000</b>
Drive for Thinness (EDI-3)	42	11.43	8.00	17.00	39	21.00	23.00	11.00	<b>0.000</b>	1275.00	<b>0.000</b>
Bulimia (EDI-3)	42	2.69	0.05	3.00	39	7.00	4.00	7.00	<b>0.000</b>	1197.00	<b>0.000</b>
Body Dissatisfaction (EDI-3)	42	17.07	17.00	20.00	39	27.05	27.00	10.00	<b>0.013</b>	2010.50	<b>0.000</b>
Low Self-Esteem (EDI-3)	42	7.90	6.50	11.00	40	13.73	16.00	9.00	<b>0.003</b>	1236.50	<b>0.000</b>
Personal Alienation (EDI-3)	42	7.12	4.50	9.00	40	13.53	15.50	11.00	<b>0.001</b>	1272.00	<b>0.000</b>
Interpersonal Insecurity (EDI-3)	42	9.19	10.50	11.00	40	13.78	13.50	8.00	0.064	1157.50	<b>0.003</b>
Interpersonal Alienation (EDI-3)	42	7.38	6.00	9.00	40	11.75	12.50	8.00	<b>0.007</b>	1182.00	<b>0.001</b>
Interceptive Deficits (EDI-3)	42	9.00	5.00	14.00	40	19.30	20.00	14.00	<b>0.001</b>	1360.50	<b>0.000</b>
Emotional Dysregulation (EDI-3)	42	5.00	2.00	9.00	40	11.85	12.50	8.00	<b>0.000</b>	1350.50	<b>0.000</b>
Perfectionism (EDI-3)	42	6.33	6.00	6.00	40	10.78	10.50	11.00	<b>0.003</b>	1205.50	<b>0.001</b>
Ascetism (EDI-3)	42	6.24	5.00	10.00	40	12.25	12.00	13.00	<b>0.000</b>	1255.00	<b>0.000</b>
Maturity Fears (EDI-3)	42	12.50	11.50	9.00	40	16.53	17.50	13.00	<b>0.006</b>	1107.00	<b>0.013</b>
Eating Disorder Risk (EDI-3)	42	31.19	26.50	42.00	40	55.48	57.00	28.00	<b>0.004</b>	1321.00	<b>0.000</b>
Ineffectiveness (EDI-3)	42	15.02	10.50	19.00	40	27.13	29.00	17.00	<b>0.003</b>	1270.50	<b>0.000</b>
Interpersonal Problems (EDI-3)	42	17.52	16.00	22.00	40	25.53	25.50	17.00	<b>0.003</b>	1148.00	<b>0.004</b>
Affective Problems (EDI-3)	42	14.00	8.00	20.00	40	31.15	32.00	22.00	<b>0.003</b>	1374.00	<b>0.000</b>
Overcontrol (EDI-3)	42	12.57	11.00	17.00	40	23.03	21.50	21.00	<b>0.006</b>	1271.50	<b>0.000</b>
General Psychological Maladjustment (EDI-3)	41	70.73	52.00	79.00	40	123.35	125.00	49.00	<b>0.001</b>	1303.00	<b>0.000</b>

Values are expressed as mean, median and IQR (M [IQR]).

<sup>a</sup> The Shapiro-Wilk test was performed to evaluate variables distribution. Variables are considered non-normally distributed for  $p < 0.05$  (in bold).

<sup>b</sup> The Mann-Whitney U test was performed to compare psychometrics tests' scores between the two groups of FA (absent vs present). Statistical significance for  $p < 0.05$  (in bold).

EAT-26, eating attitude test 26; EDI-3, eating disorders inventory 3; CDI 2, child depression inventory 2; FA, Food Addiction; IQR, Interquartile Range; MASC 2, multidimensional anxiety scale for children.

**Table S2.** Psychometric tests' scores for patients with mild, moderate and severe FA.

	FA mild				FA moderate				FA severe				Kruskal-Wallis	p <sup>a</sup>
	n	Mean	Median	IQR	n	Mean	Median	IQR	n	Mean	Median	IQR		
Activities (YSR)	10	38.80	39.00	15.75	10	40.70	40.50	11.00	14	39.36	36.50	16.00	0.614	0.736
Social (YSR)	9	46.33	47.00	20.50	10	39.40	40.00	16.75	14	39.79	39.50	12.00	2.973	0.226
Total Competence (YSR)	10	41.20	38.50	23.00	10	37.20	37.50	11.00	13	36.77	37.00	15.00	0.765	0.682
Anxious/Depressed (YSR)	10	63.80	64.00	14.25	10	70.00	66.50	13.00	14	68.50	67.50	20.00	1.653	0.438
Withdrawn/Depressed (YSR)	10	61.10	58.00	14.75	10	69.20	67.50	17.00	14	69.21	67.50	24.00	4.243	0.120
Somatic Complaints (YSR)	10	64.90	65.00	16.00	10	59.00	61.50	27.50	14	59.86	60.00	16.00	0.356	0.837
Social Problems (YSR)	10	56.90	55.00	10.50	10	62.90	64.00	10.00	14	60.57	59.50	10.00	3.359	0.187
Thought Problems (YSR)	10	58.60	55.00	17.75	10	62.60	63.50	8.75	14	62.50	59.50	11.00	2.160	0.340
Attention Problems (YSR)	10	54.90	52.00	9.25	10	58.30	60.00	9.25	14	58.93	55.50	12.00	3.157	0.206
Rule-Breaking Behaviour (YSR)	10	53.20	51.00	5.25	10	54.30	50.00	7.75	14	53.57	51.00	4.00	0.350	0.839
Aggressive Behaviour (YSR)	10	57.40	59.50	8.50	10	56.60	57.50	12.00	14	55.50	55.00	9.00	0.938	0.626
Internalizing Problems (YSR)	15	63.60	67.00	19.00	12	69.42	68.00	15.00	16	66.19	66.50	10.00	0.902	0.637
Externalizing Problems (YSR)	14	53.64	56.00	10.00	12	55.08	56.50	13.50	16	52.31	53.00	7.00	1.653	0.438
Total Problems (YSR)	15	57.20	57.00	17.00	12	63.75	65.00	4.25	16	60.56	62.50	9.00	2.797	0.247
Affective Problems (YSR)	15	65.33	63.00	16.00	12	68.67	67.00	6.00	16	68.56	68.00	17.00	0.801	0.670
Anxiety Problems (YSR)	15	59.47	63.00	11.00	12	63.75	65.50	13.50	16	59.44	59.00	16.00	2.838	0.242
Somatic Problems (YSR)	15	62.47	60.00	13.00	12	65.75	63.00	16.75	16	59.06	56.50	14.00	3.137	0.208
ADHD Problems (YSR)	15	53.07	52.00	4.00	12	57.92	58.50	7.50	16	54.38	52.00	3.00	5.301	0.071
Oppositional Defiant Problem (YSR)	15	56.33	55.00	8.00	12	58.33	57.50	11.25	16	56.94	55.00	12.00	1.139	0.566
Conduct Problems (YSR)	15	52.00	51.00	1.00	12	52.92	50.50	3.00	16	52.69	50.00	5.00	0.530	0.767
Obsessive-Compulsive Problems (YSR)	15	61.87	63.00	21.00	12	68.00	67.00	11.50	16	67.50	66.00	24.00	2.230	0.328
Post-traumatic Stress Problems (YSR)	15	61.27	63.00	17.00	12	69.42	68.50	11.25	16	66.38	66.00	10.00	4.876	0.087
Positive Qualities (YSR)	3	43.00	44.00	0.00	5	38.80	35.00	16.50	12	44.17	45.00	19.00	1.349	0.509
Total score (CDI 2)	15	18.47	19.00	19.00	12	23.25	21.00	8.00	16	21.63	20.00	9.00	1.788	0.409
Emotional Problems (CDI 2)	15	10.60	10.00	10.00	12	12.83	12.00	6.25	16	11.31	12.00	8.00	0.962	0.618
Interpersonal Problems (CDI 2)	15	3.07	3.00	4.00	12	4.33	4.50	4.25	16	3.25	3.00	3.00	2.170	0.338
Total Problems (MASC 2)	15	55.47	57.00	28.00	12	65.67	67.00	18.75	16	57.88	56.00	25.00	2.297	0.317
Physical symptoms (MASC 2)	15	61.93	56.00	30.00	12	66.00	67.00	19.00	16	60.81	61.00	16.00	1.279	0.528
Social anxiety (MASC 2)	15	55.80	61.00	32.00	12	62.08	60.00	22.00	16	58.75	60.00	20.00	1.670	0.434
Separation (MASC 2)	15	49.53	45.00	17.00	12	57.83	62.50	23.25	16	56.81	53.00	28.00	3.403	0.182
Avoidance (MASC 2)	14	44.07	44.00	25.50	12	53.17	53.00	14.50	16	47.63	48.00	13.00	3.293	0.193

<b>EAT-26</b>	14	38.57	30.00	32.00	11	43.45	49.00	25.00	15	48.47	49.00	26.00	2.396	0.302
<b>BUT (mean)</b>	14	2.66	2.92	2.19	11	3.10	3.00	1.20	15	3.13	3.11	1.98	0.627	0.731
<b>Drive for Thinness (EDI-3)</b>	13	17.08	19.00	18.00	11	23.09	23.00	7.00	15	22.87	25.00	9.00	3.038	0.219
<b>Bulimia (EDI-3)</b>	13	4.31	3.00	7.00	11	4.91	4.00	7.00	15	10.87	8.00	11.00	5.901	0.052
<b>Body Dissatisfaction (EDI-3)</b>	13	25.46	26.00	10.50	11	28.27	27.00	13.00	15	27.53	28.00	10.00	0.837	0.658
<b>Low Self-Esteem (EDI-3)</b>	14	13.14	16.00	11.75	11	13.64	16.00	9.00	15	14.33	14.00	8.00	0.020	0.990
<b>Personal Alienation (EDI-3)</b>	14	12.86	14.50	12.25	11	14.55	16.00	13.00	15	13.40	15.00	10.00	0.259	0.879
<b>Interpersonal Insecurity (EDI-3)</b>	14	12.57	11.00	13.50	11	13.27	12.00	10.00	15	15.27	15.00	6.00	1.687	0.430
<b>Interpersonal Alienation (EDI-3)</b>	14	10.64	11.50	11.75	11	11.64	11.00	7.00	15	12.87	14.00	6.00	0.475	0.788
<b>Interceptive Deficits (EDI-3)</b>	14	16.36	14.50	11.75	11	21.55	23.00	10.00	15	20.40	24.00	21.00	2.466	0.291
<b>Emotional Dysregulation (EDI-3)</b>	14	11.57	11.50	10.75	11	11.91	13.00	7.00	15	12.07	12.00	10.00	0.029	0.985
<b>Perfectionism (EDI-3)</b>	14	8.71	7.50	8.50	11	11.36	11.00	8.00	15	12.27	12.00	8.00	2.595	0.273
<b>Ascetism (EDI-3)</b>	14	10.29	9.00	11.25	11	13.45	12.00	12.00	15	13.20	12.00	17.00	1.514	0.469
<b>Maturity Fears (EDI-3)</b>	14	15.50	13.50	10.75	11	16.09	16.00	15.00	15	17.80	19.00	9.00	0.951	0.622
<b>Eating Disorder Risk (EDI-3)</b>	14	48.79	49.50	38.50	11	56.27	56.00	13.00	15	61.13	61.00	22.00	2.604	0.272
<b>Ineffectiveness (EDI-3)</b>	14	25.64	30.50	23.00	11	28.18	29.00	19.00	15	27.73	27.00	14.00	0.033	0.983
<b>Interpersonal Problems (EDI-3)</b>	14	23.21	24.50	22.00	11	24.91	25.00	17.00	15	28.13	26.00	14.00	1.047	0.592
<b>Affective Problems (EDI-3)</b>	14	27.93	28.00	21.00	11	33.45	33.00	17.00	15	32.47	33.00	27.00	1.180	0.554
<b>Overcontrol (EDI-3)</b>	14	19.00	18.00	13.75	11	24.82	25.00	19.00	15	25.47	26.00	23.00	2.441	0.295
<b>General Psychological Maladjustment (EDI-3)</b>	14	111.29	124.50	77.25	11	127.45	124.00	73.00	15	131.60	127.00	36.00	1.103	0.576

Values are expressed as mean, median and IQR (M [IQR]).

<sup>a</sup> The Kruskal-Wallis test was performed to compare psychometrics tests' scores between the three group of severity of FA (mild, moderate, severe). Statistical significance for  $p < 0.05$  (in bold).

The Academic Performance scale of the YSR questionnaire was not included due to the groups size (n=0 for mild FA, n=1 for moderate and severe FA)

EAT-26, eating attitude test 26; EDI-3, eating disorders inventory 3; CDI 2, child depression inventory 2; FA, Food Addiction; IQR, Interquartile Range; MASC 2, multidimensional anxiety scale for children.

Table S3. Psychometric tests' scores included in the multivariable logistic regression for patients with/without FA.

	FA absent (n=41)			FA present (n=38)			B <sup>a</sup>	95% CI <sup>a</sup>		P <sup>a</sup>	Exp(B) <sup>a</sup>
	Mean	Median	IQR	Mean	Median	IQR		Lower Bound	Upper Bound		
Internalizing Problems (YSR)	56.70	54.00	12.00	66.39	67.00	12.00	0.083	1.039	1.136	<b>0.000</b>	1.087
Externalizing Problems (YSR)	49.20	51.00	12.00	53.71	54.00	10.00	0.066	1.007	1.132	<b>0.027</b>	1.068
Total Problems (YSR)	52.00	51.00	14.00	60.61	63.00	9.00	0.094	1.043	1.156	<b>0.000</b>	1.098
Total score (CDI 2)	12.20	9.00	14.00	21.58	20.50	10.00	0.108	1.055	1.176	<b>0.000</b>	1.114
Emotional Problems (CDI 2)	5.78	5.00	7.00	11.66	12.00	7.00	0.214	1.122	1.368	<b>0.000</b>	1.239
Interpersonal Problems (CDI 2)	2.37	2.00	4.00	3.61	3.00	3.00	0.158	0.985	1.393	0.074	1.171
Total score (MASC 2)	51.20	49.00	18.00	60.21	59.00	25.00	0.043	1.011	1.079	<b>0.009</b>	1.044
Physical symptoms (MASC 2)	51.60	48.00	16.00	62.68	66.00	18.00	0.084	1.042	1.135	<b>0.000</b>	1.088
Social anxiety (MASC 2)	52.50	49.00	16.00	60.00	62.00	22.00	0.043	1.007	1.082	<b>0.020</b>	1.044
EAT-26	22.60	19.00	26.00	43.21	41.50	28.00	0.066	1.036	1.102	<b>0.000</b>	1.068
Drive for Thinness (EDI-3)	11.20	8.00	18.00	21.18	23.00	10.00	0.116	1.061	1.188	<b>0.000</b>	1.123
Bulimia (EDI-3)	2.63	0.00	2.00	7.18	4.00	7.00	0.141	1.043	1.271	<b>0.005</b>	1.151
Body Dissatisfaction (EDI-3)	16.50	17.00	19.00	27.00	27.00	10.00	0.096	1.046	1.159	<b>0.000</b>	1.101
Low Self-Esteem (EDI-3)	8.07	7.00	11.00	13.84	16.00	9.00	0.130	1.059	1.224	<b>0.000</b>	1.138
Personal Alienation (EDI-3)	7.27	5.00	9.00	13.45	15.50	12.00	0.140	1.069	1.238	<b>0.000</b>	1.150
Interpersonal Insecurity (EDI-3)	9.27	11.00	11.00	13.66	13.50	9.00	0.112	1.039	1.205	<b>0.003</b>	1.119
Interpersonal Alienation (EDI-3)	7.44	6.00	9.00	11.39	11.5	8.00	0.122	1.043	1.223	<b>0.003</b>	1.129
Interoceptive Deficits (EDI-3)	8.80	5.00	14.00	19.45	20.00	14.00	0.128	1.072	1.205	<b>0.000</b>	1.136
Emotional Dysregulation (EDI-3)	4.98	2.00	9.00	11.76	12.50	8.00	0.188	1.107	1.316	<b>0.000</b>	1.207
Perfectionism (EDI-3)	6.07	6.00	7.00	10.58	10.50	11.00	0.143	1.056	1.260	<b>0.002</b>	1.153
Ascetism (EDI-3)	6.20	5.00	11.00	12.18	12.00	13.00	0.132	1.060	1.227	<b>0.000</b>	1.141
Maturity Fears (EDI-3)	12.60	12.00	9.00	16.79	18.00	14.00	0.091	1.022	1.174	<b>0.010</b>	1.095
Eating Disorder Risk (EDI-3)	30.40	26.00	42.00	55.32	57.00	27.00	0.052	1.028	1.080	<b>0.000</b>	1.053
Ineffectiveness (EDI-3)	15.30	11.00	19.00	27.16	29.50	18.00	0.077	1.038	1.124	<b>0.000</b>	1.080
Interpersonal Problems (EDI-3)	17.70	17.00	23.00	25.05	25.00	16.00	0.053	1.015	1.096	<b>0.006</b>	1.055
Affective Problems (EDI-3)	13.80	8.00	20.00	31.21	32.00	22.00	0.093	1.053	1.143	<b>0.000</b>	1.097
Overcontrol (EDI-3)	12.30	11.00	17.00	22.76	21.50	44.00	0.086	1.041	1.141	<b>0.000</b>	1.090

<b>General Psychological Maladjustment (EDI-3)</b>	70.70	52.00	79.00	122.97	125.00	53.00	0.026	1.014	1.038	<b>0.000</b>	1.026
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Values are expressed as mean, median and IQR (M [IQR])

<sup>a</sup> Univariable logistic regression was performed to investigate the association between the presence of FA (dependent variable) and psychometric scores (independent variables). Statistical significance for p<0.05 (in bold).

EAT-26, eating attitude test 26; EDI-3, eating disorders inventory 3; CDI 2, child depression inventory 2; CI, confidence interval; IQR, interquartile range; MASC 2, multidimensional anxiety scale for children.