

The EUonQoL-kit static version

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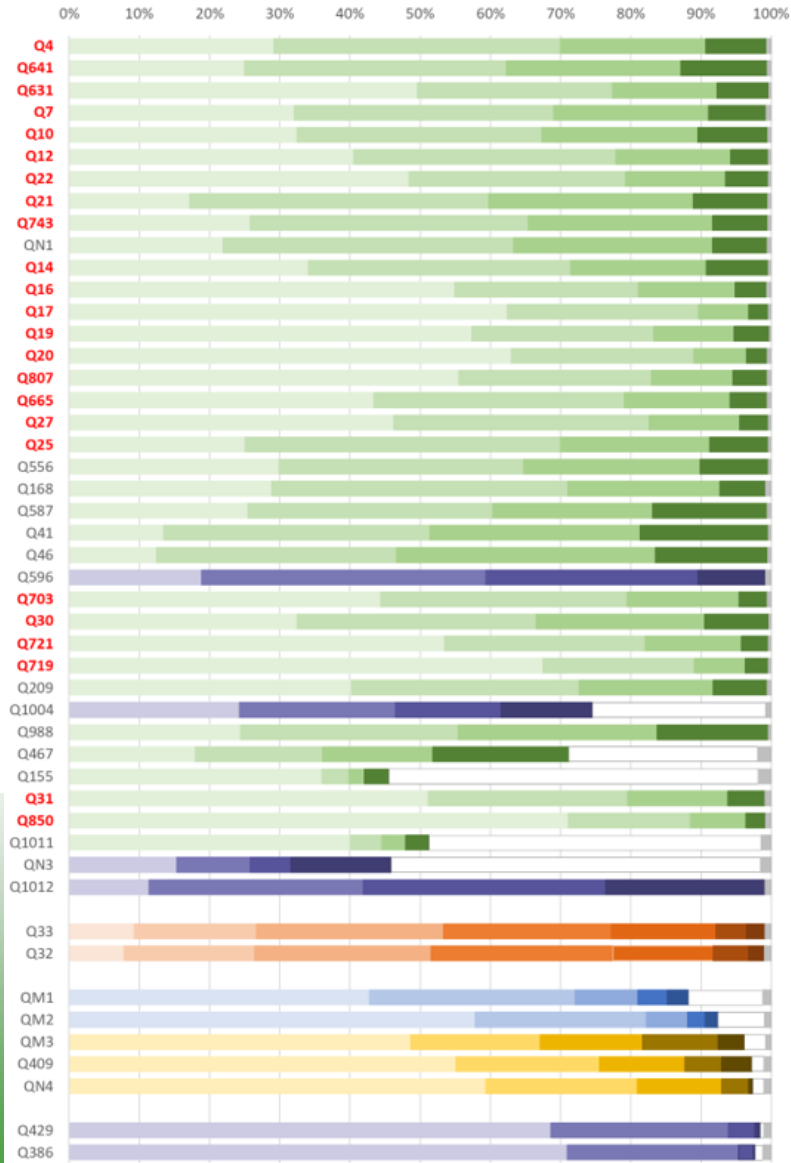
Distribution of items' responses

IRT-scored items in red / Traditionally scored items in grey

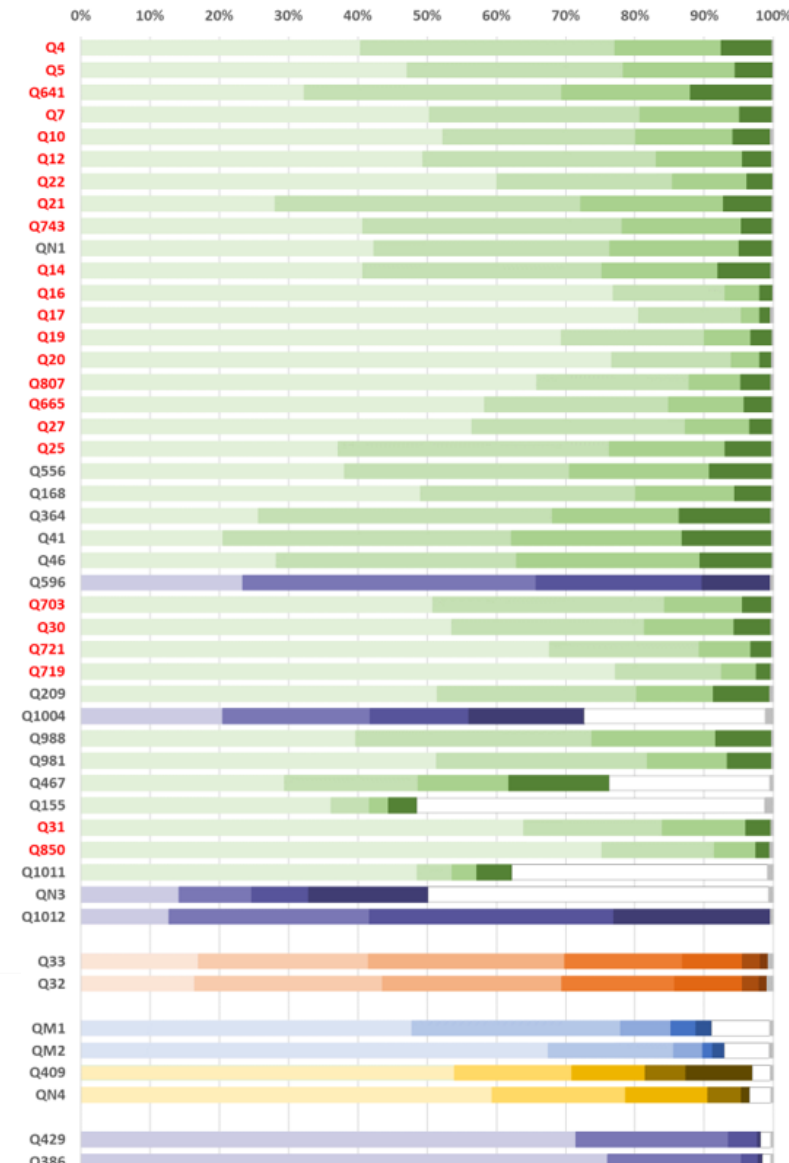
Not applicable
Missing values

Not at all A little Quite a bit Very much
Very much Quite a bit A little Not at all
7-Excellent 6 5 4 3 2 1-Very poor
Never Sometimes Usually Almost Always Always
Always Almost Always Usually Sometimes Never

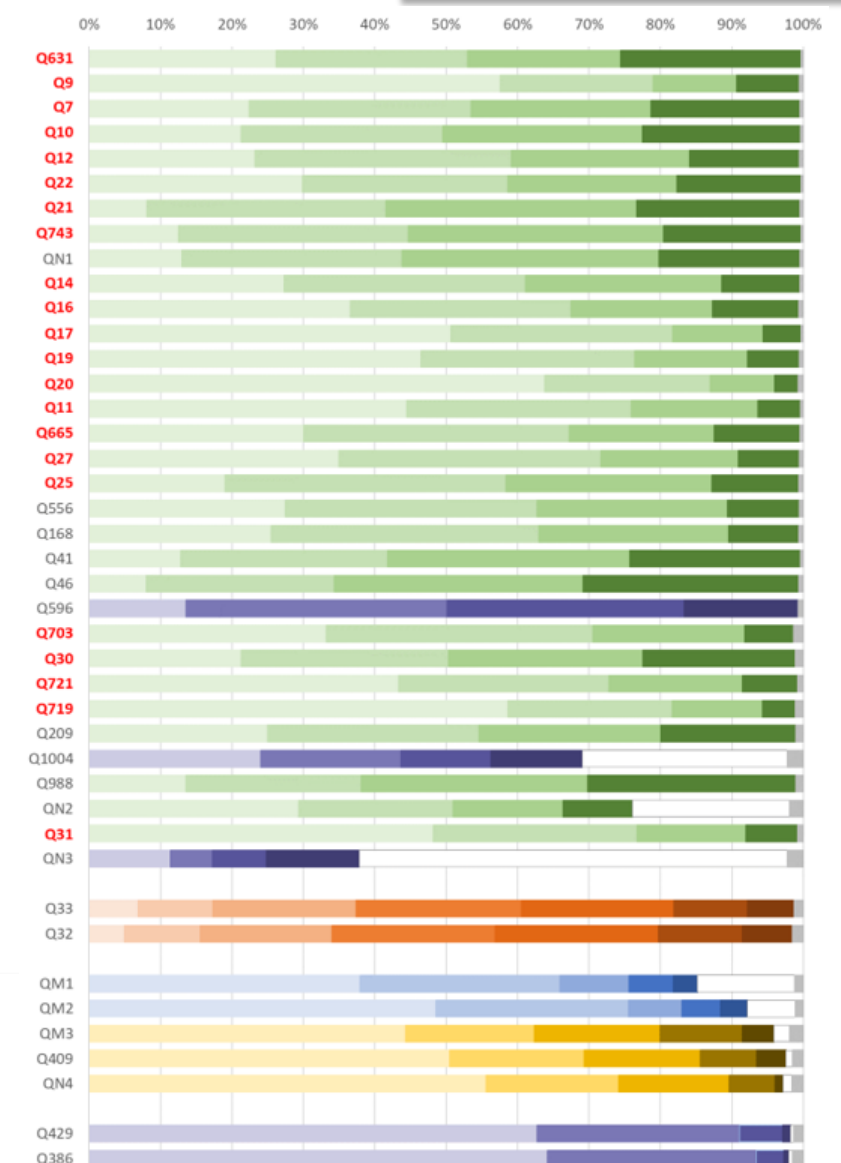
In Active Treatment



Survivors



In Need of Palliative Care



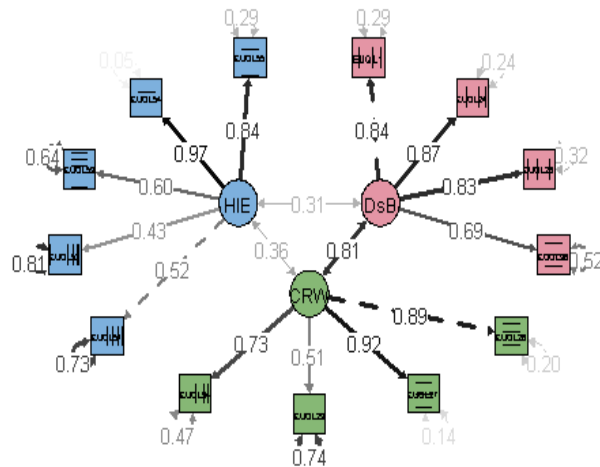
Factor Analyses for traditionally scored items

After excluding the items with >10% of patients responding 'Not Applicable'

The factors that emerged in one half the sample, were confirmed by goodness of fit indices in the other half.

In Active Treatment

Disease burden
Cancer related worries
Healthcare experience



WLSMV

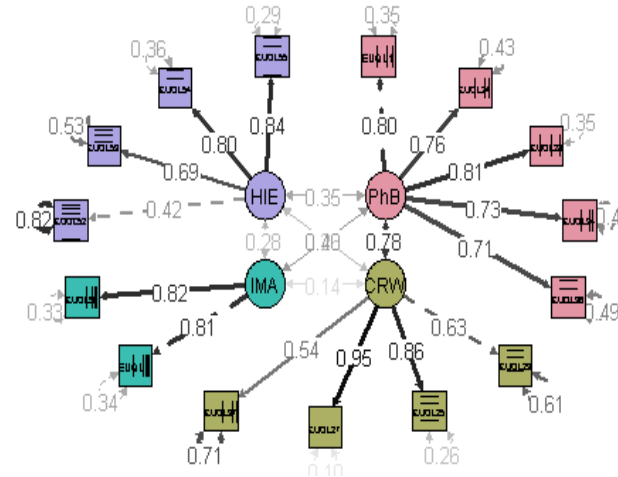
CFI
TLI
RMSEA
95% IC RMSEA

Active Treatment

0.988
0.985
0.078
0.064 – 0.093

Survivors

Disease burden
Cancer related worries
Impact of medical appointments
Healthcare experience

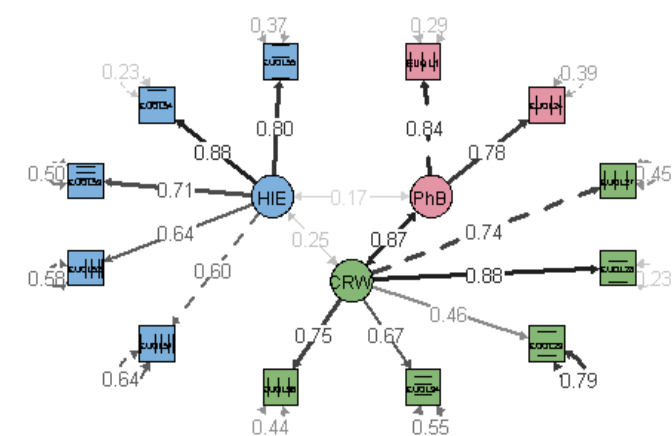


Survivors

0.988
0.985
0.060
0.049 – 0.072

In Need of Palliative Care

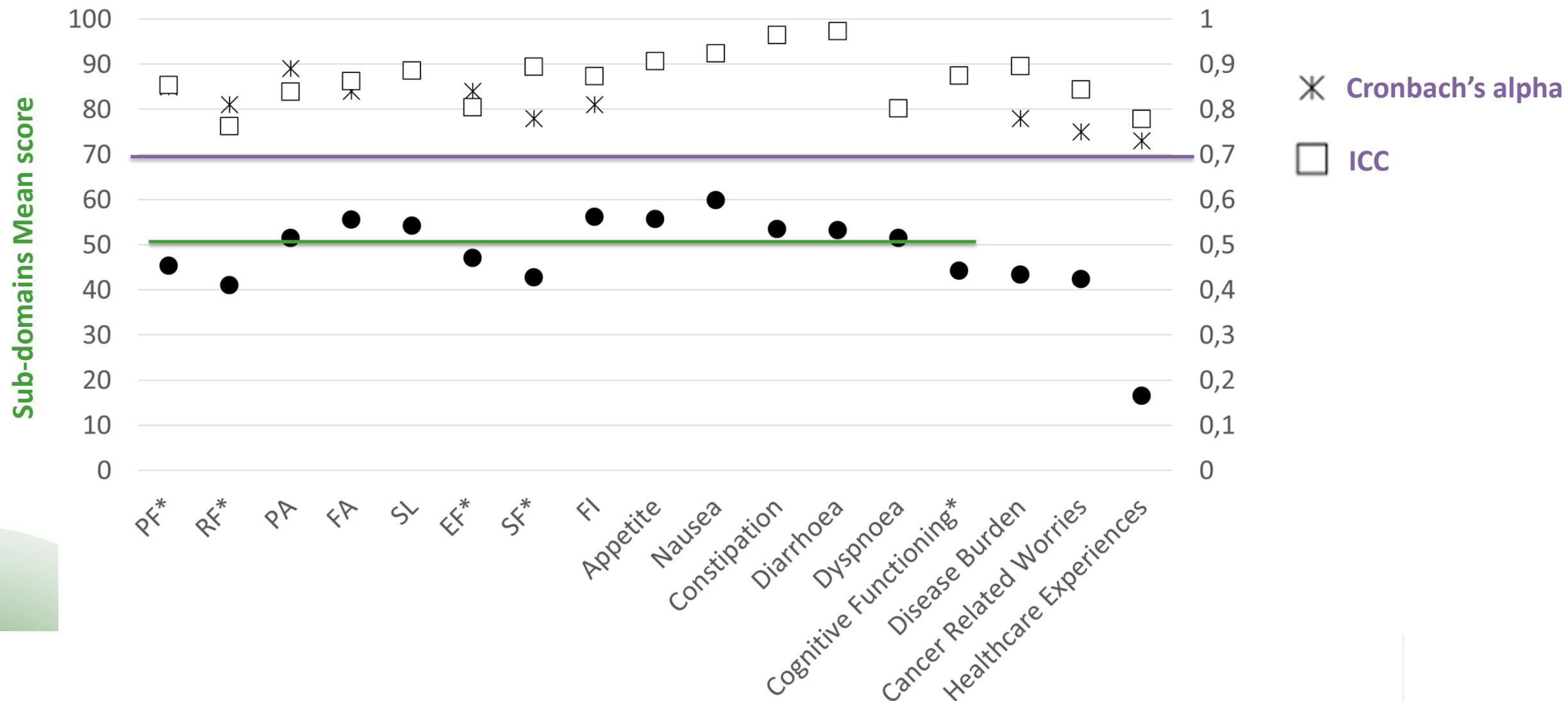
Disease burden
Cancer related worries
Healthcare experience



Palliative Care

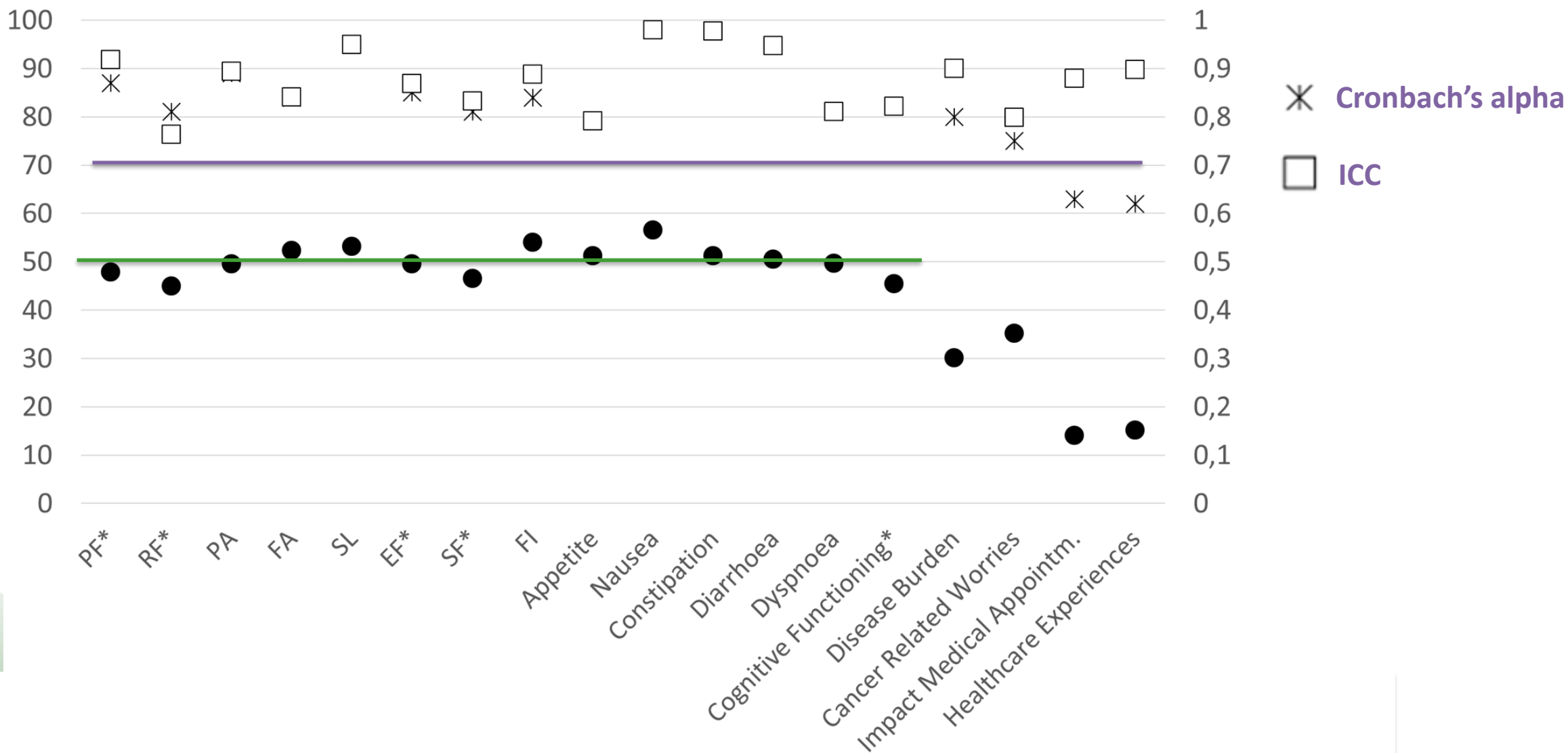
0.982
0.977
0.082
0.070 – 0.094

Distribution and Reliability of the sub-domains scores – IN ACTIVE TREATMENT

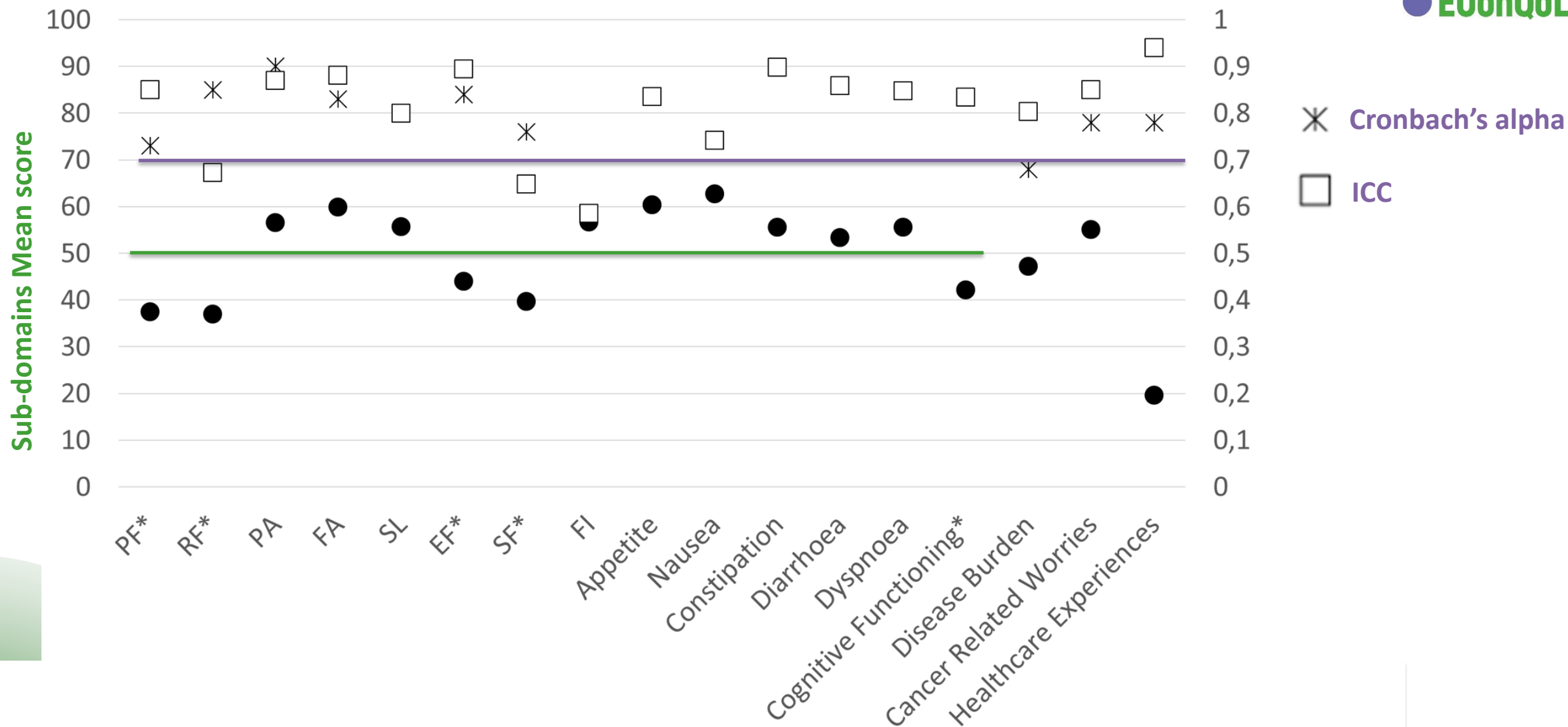


Distribution and Reliability of the sub-domains scores – SURVIVORS

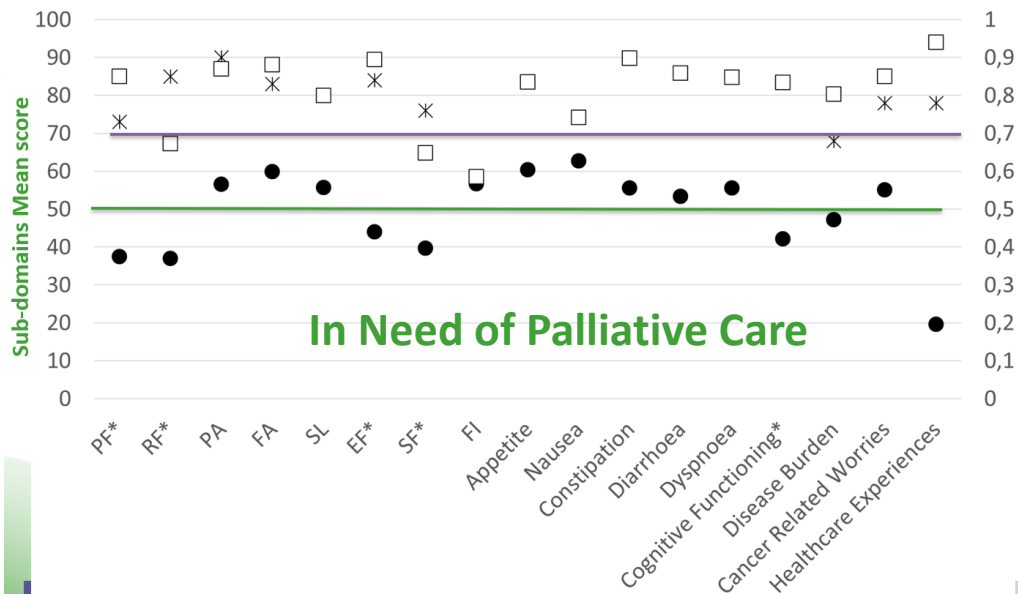
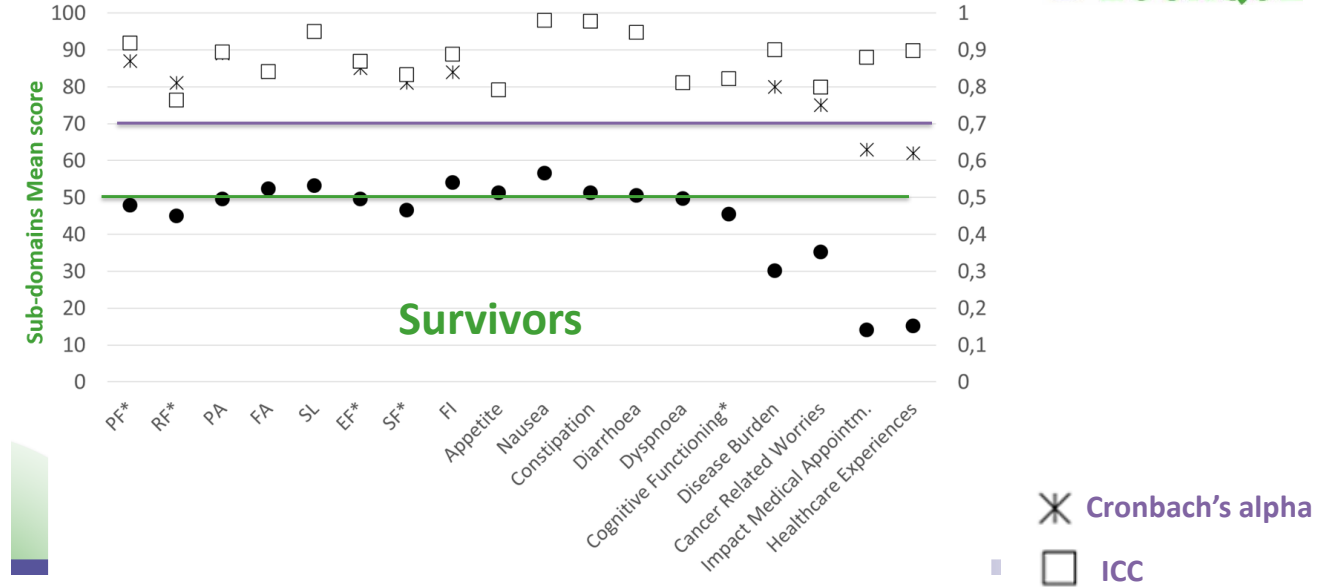
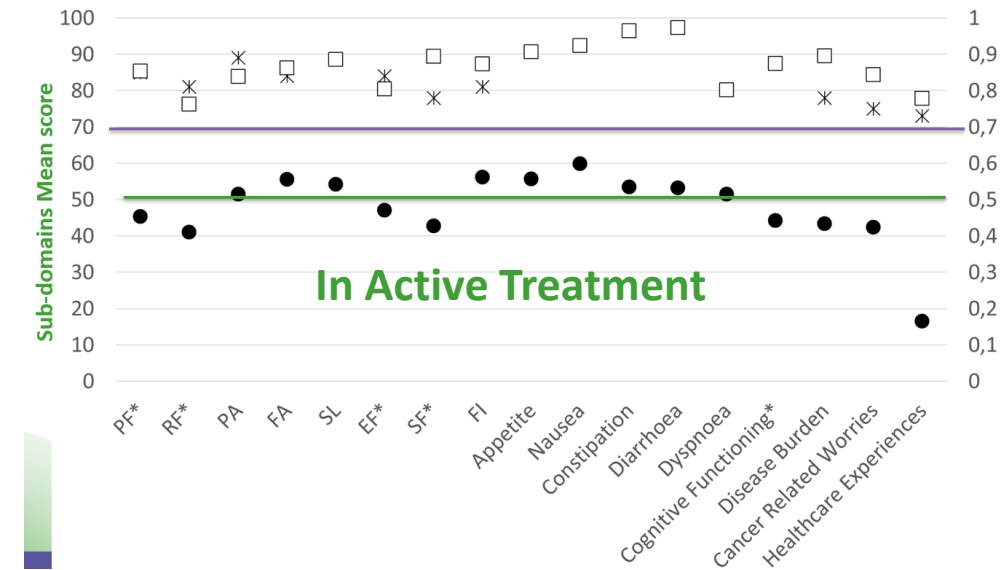
Sub-domains Mean score



Distribution and Reliability of the sub-domains scores – IN NEED OF PALLIATIVE CARE



Sub-domains scores' distribution and reliability (internal consistency and reproducibility)



Good reliability of the EUonQoL-Kit was observed in terms of:

- Internal consistency, with Cronbach's alpha coefficients, and
- Test-retest reproducibility, with ICC,

Both over the recommended cut-off of 0.7 in almost all the sub-domains, except for ICC among patients in need of palliative care.

Concurrent Validity MTMM – IN ACTIVE TREATMENT

	EQ_5D_5L Spain *	FACT-G Physical Well-being	FACT-G Social Well-being	FACT-G Emotional Well-being	FACT-G Functional Well-being	FACT-G General
In Active treatment						
Physical Functioning	0.605	0.590	0.129	0.240	0.340	0.455
Role Functioning	0.481	0.623	0.111	0.189	0.405	0.485
Pain	-0.465	-0.493	-0.026	-0.269	-0.267	-0.359
Fatigue	-0.472	-0.605	-0.149	-0.238	-0.415	-0.499
Sleeping Problems	-0.239	-0.307	-0.013	-0.242	-0.287	-0.283
Emotional Functioning	0.565	0.556	0.221	0.597	0.453	0.593
Social Functioning	0.451	0.605	0.260	0.458	0.430	0.609
Financial	-0.369	-0.371	-0.104	-0.261	-0.216	-0.325
Appetite	-0.263	-0.396	-0.132	-0.298	-0.383	-0.429
Nauseated	-0.257	-0.425	-0.180	-0.317	-0.354	-0.443
Constipated	-0.169	-0.127	-0.206	-0.211	-0.155	-0.226
Diarrhoea	-0.103	-0.286	0.045	-0.108	-0.196	-0.196
Dyspnoea	-0.409	-0.459	-0.206	-0.196	-0.407	-0.452
Cognitive Functioning	0.345	0.492	0.197	0.368	0.421	0.524
Disease Burden	-0.534	-0.708	-0.203	-0.503	-0.475	-0.649
Cancer Related Worries	-0.481	-0.483	-0.146	-0.742	-0.394	-0.559
Healthcare Experiences	-0.187	-0.215	-0.142	-0.278	-0.202	-0.258

* EQ-5D-5L Utility Index estimated using Spanish preferences (Goñi et al. Value Health. 2018 May;21(5):596-604)

Traditionally scored items in grey

Concurrent Validity MTMM – SURVIVORS

	EQ_5D_5L Spain *	FACT-G Physical Well-being	FACT-G Social Well-being	FACT-G Emotional Well-being	FACT-G Functional Well-being	FACT-G General
Survivors						
Physical Functioning	0.610	0.614	0.077	0.333	0.434	0.444
Role Functioning	0.457	0.523	0.054	0.232	0.315	0.339
Pain	-0.547	-0.620	-0.108	-0.277	-0.365	-0.427
Fatigue	-0.569	-0.665	-0.131	-0.358	-0.327	-0.453
Sleeping Problems	-0.481	-0.477	-0.295	-0.370	-0.421	-0.477
Emotional Functioning	0.590	0.617	0.355	0.586	0.534	0.642
Social Functioning	0.497	0.591	0.307	0.438	0.436	0.540
Financial	-0.372	-0.374	-0.260	-0.393	-0.312	-0.409
Appetite	-0.311	-0.347	-0.109	-0.368	-0.405	-0.359
Nauseated	-0.295	-0.393	-0.161	-0.315	-0.319	-0.343
Constipated	-0.321	-0.257	-0.164	-0.314	-0.286	-0.297
Diarrhoea	-0.202	-0.304	-0.193	-0.080	-0.161	-0.216
Dyspnoea	-0.508	-0.478	-0.202	-0.287	-0.316	-0.389
Cognitive Functioning	0.348	0.516	0.272	0.436	0.360	0.491
Disease Burden	-0.525	-0.599	-0.273	-0.560	-0.464	-0.574
Cancer Related Worries	-0.291	-0.317	-0.157	-0.457	-0.221	-0.334
Impact of Medical Appointments	-0.180	-0.215	-0.141	-0.278	-0.205	-0.264
Healthcare Experiences	-0.282	-0.266	-0.256	-0.141	-0.198	-0.287

* EQ-5D-5L Utility Index estimated using Spanish preferences (Goñi et al. Value Health. 2018 May;21(5):596-604)

Traditionally scored items in grey

Concurrent Validity MTMM – IN NEED OF PALLIATIVE CARE

	EQ_5D_5L Spain *	FACT-G Physical Well-being	FACT-G Social Well-being	FACT-G Emotional Well-being	FACT-G Functional Well-being	FACT-G General
Palliative Care						
Physical Functioning	0.738	0.675	0.025	0.299	0.615	0.623
Role Functioning	0.683	0.690	0.067	0.322	0.575	0.616
Pain	-0.666	-0.673	-0.080	-0.373	-0.545	-0.600
Fatigue	-0.756	-0.790	-0.078	-0.463	-0.670	-0.744
Sleeping Problems	-0.403	-0.484	0.001	-0.328	-0.396	-0.439
Emotional Functioning	0.599	0.635	0.115	0.653	0.600	0.695
Social Functioning	0.581	0.633	0.224	0.407	0.551	0.650
Financial	-0.167	-0.217	-0.034	-0.229	-0.234	-0.241
Appetite	-0.443	-0.575	0.044	-0.406	-0.455	-0.541
Nauseated	-0.318	-0.464	0.001	-0.337	-0.425	-0.418
Constipated	-0.389	-0.420	0.042	-0.202	-0.319	-0.325
Diarrhoea	-0.068	-0.070	-0.062	-0.082	-0.144	-0.108
Dyspnoea	-0.326	-0.395	-0.072	-0.211	-0.309	-0.351
Cognitive Functioning	0.428	0.452	0.155	0.317	0.320	0.435
Disease Burden	-0.670	-0.766	0.020	-0.587	-0.548	-0.690
Cancer Related Worries	-0.661	-0.720	-0.121	-0.674	-0.592	-0.735
Healthcare Experiences	-0.201	-0.144	-0.144	-0.191	-0.234	-0.237

* EQ-5D-5L Utility Index estimated using Spanish preferences (Goñi et al. Value Health. 2018 May;21(5):596-604)
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Concurrent Validity MTMM (Multi Trait Multi Method) Matrix

In Active Treatment	EQ_5D_5L Spain *	FACT-G Physical Well-being	FACT-G Social Well-being	FACT-G Emotional Well-being	FACT-G Functional Well-being	FACT-G General
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In Need of Palliative Care	EQ_5D_5L Spain *	FACT-G Physical Well-being	FACT-G Social Well-being	FACT-G Emotional Well-being	FACT-G Functional Well-being	FACT-G General
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Financial	-0.167	-0.217	-0.034	-0.229	-0.234	-0.241
Appetite	-0.443	-0.575	0.044	-0.406	-0.455	-0.541
Nauseated	-0.318	-0.464	0.001	-0.337	-0.425	-0.418
Constipated	-0.389	-0.420	0.042	-0.202	-0.319	-0.325
Diarrhoea	-0.068	-0.070	-0.062	-0.082	-0.144	-0.108
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Survivors	EQ_5D_5L Spain *	FACT-G Physical Well-being	FACT-G Social Well-being	FACT-G Emotional Well-being	FACT-G Functional Well-being	FACT-G General
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Healthcare Experiences	-0.282	-0.266	-0.256	-0.141	-0.198	-0.287

The hypothesis previously stated for concurrent validity assessment between the EUonQoL Kit and the FACT-G and the EQ-5D were confirmed, except for the relation between:

- EUonQoL-Social Functioning and
- FACT-Social Well-being

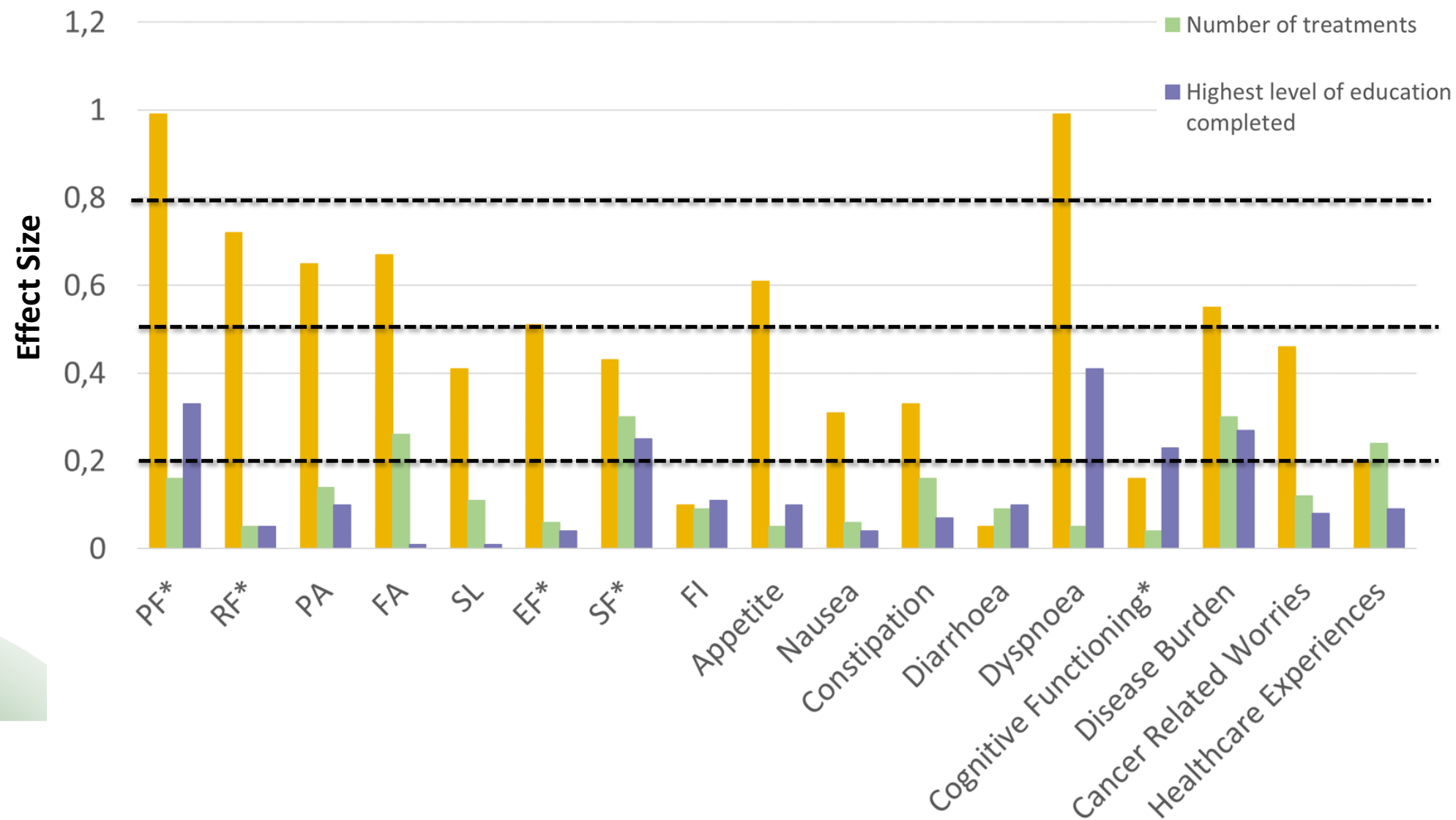
These results were consistent in the three populations.

Construct Validity based on Known groups– IN ACTIVE TREATMENT

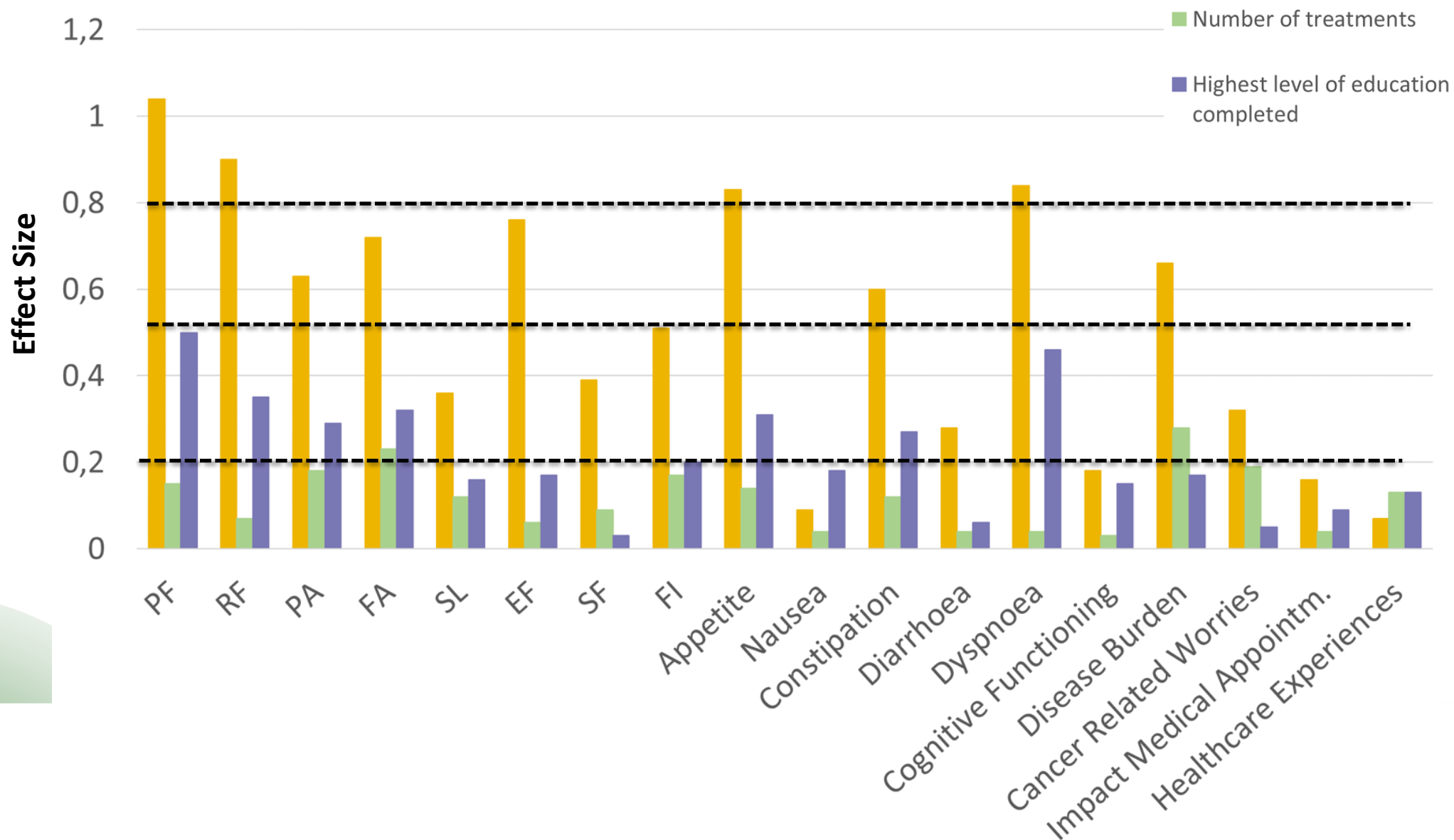
■ ECOG

■ Number of treatments

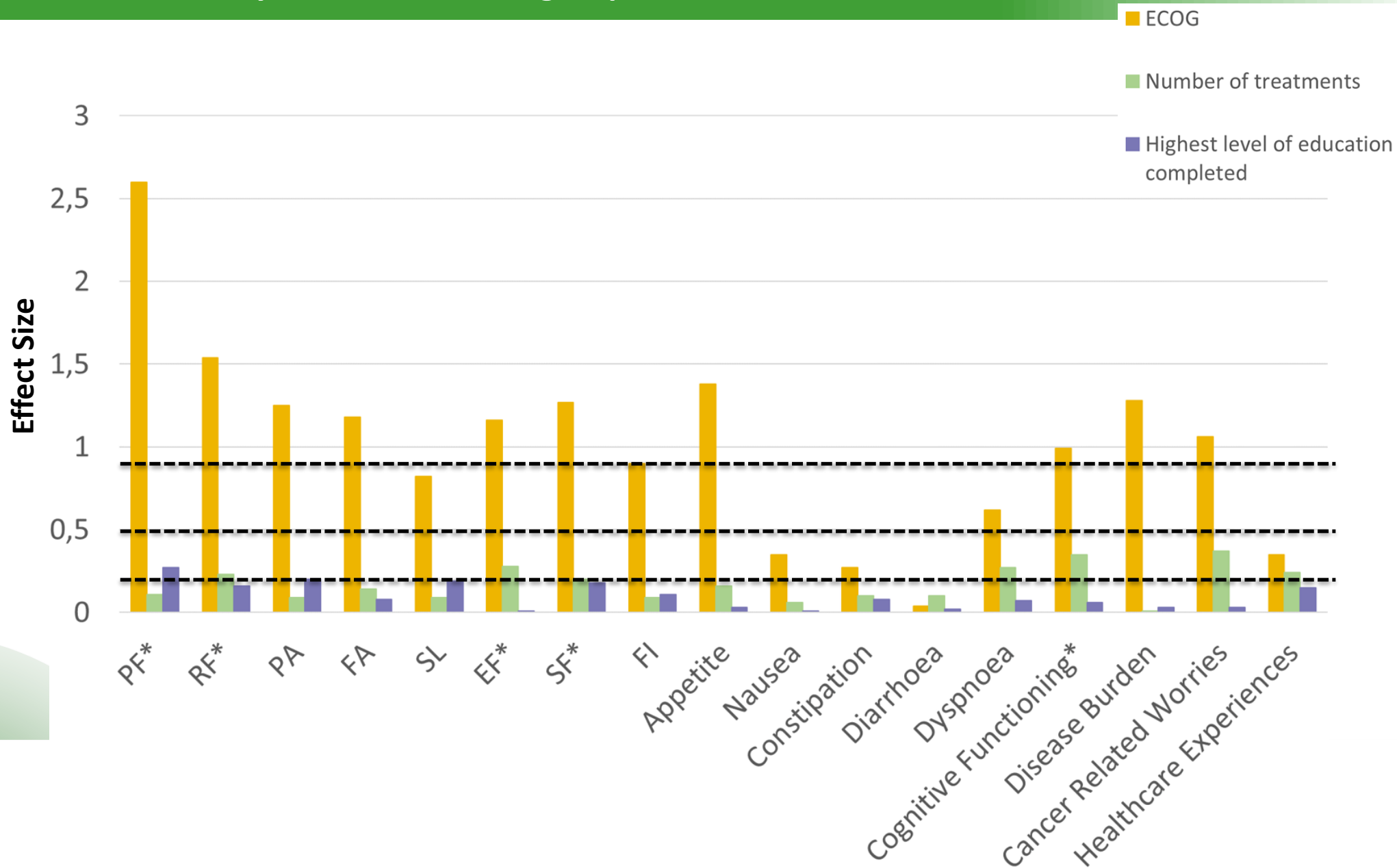
■ Highest level of education completed



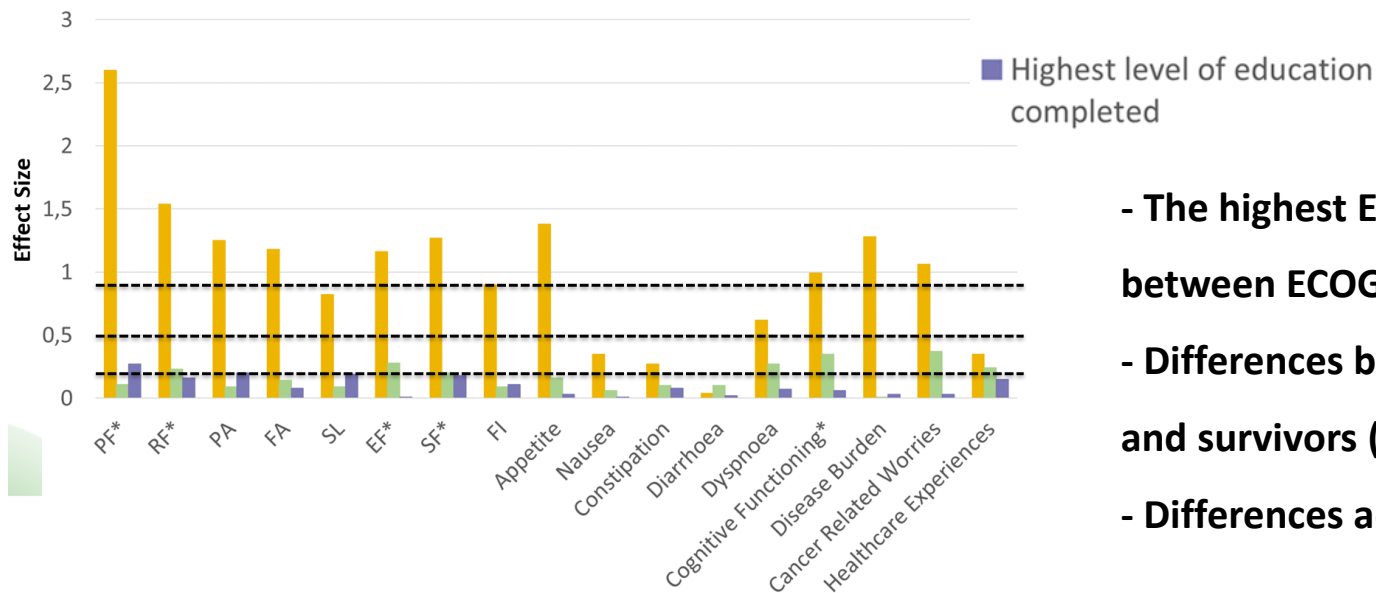
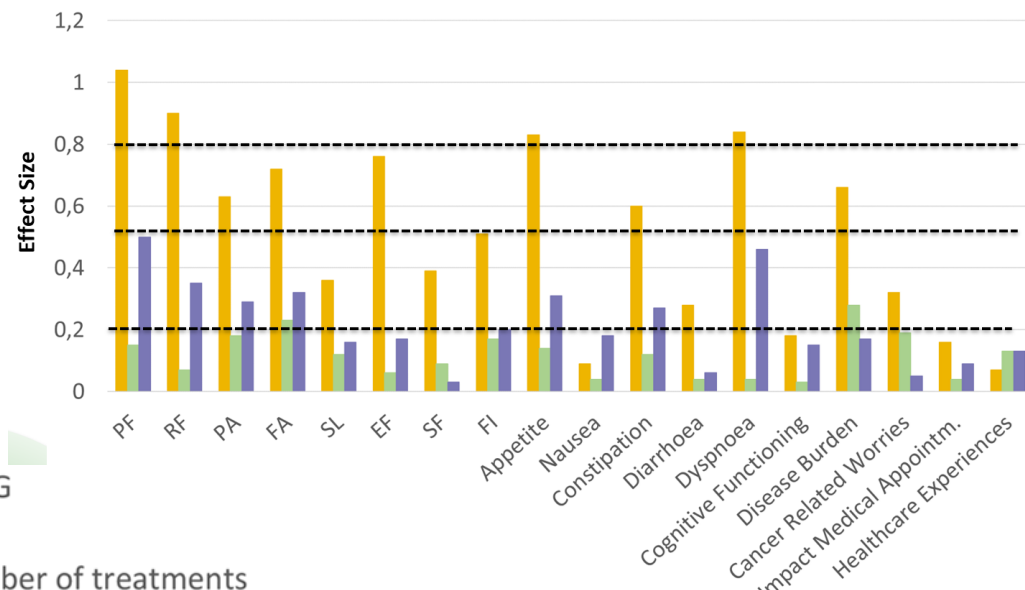
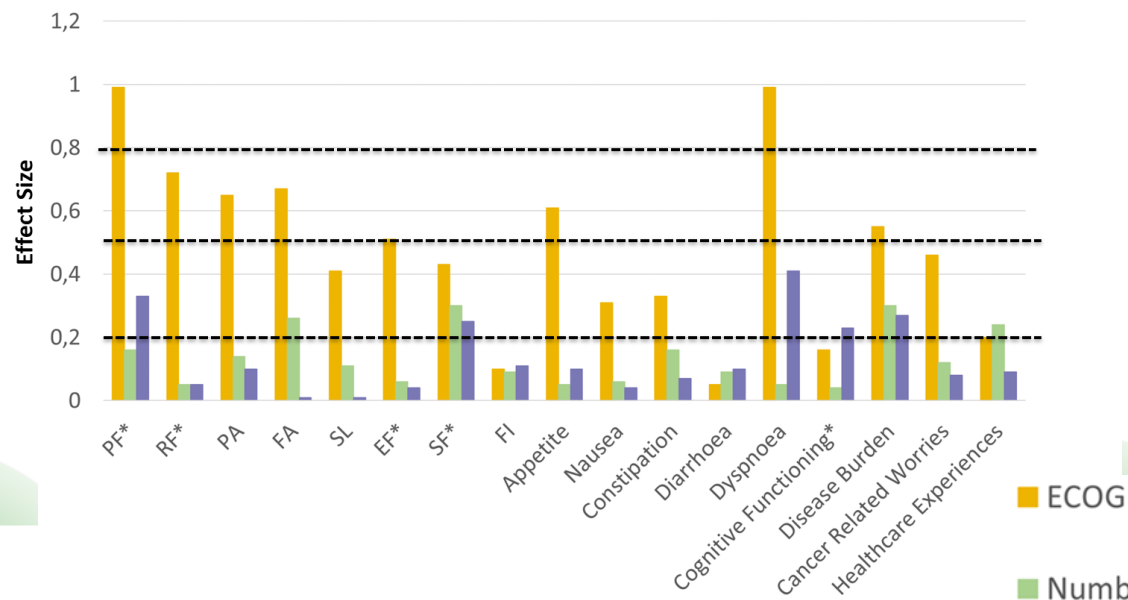
Construct Validity based on Known groups– SURVIVORS



Construct Validity based on Known groups– IN NEED OF PALLIATIVE CARE



Construct Validity based on Known groups



- The highest Effect Sizes (ES) between known groups were found between ECOG 0 and 4 (most ES>0.5) in the 3 populations .
- Differences by education level were confirmed in active treatment and survivors (ES >0.2 for 5 or more sub-domains).
- Differences according to the number of treatments were negligible.

The static versions of the **EUonQoL-Kit** showed satisfactory psychometric properties, in terms of reliability and validity, in oncological patients in active treatment, survivors and in patients in need of palliative care.

Regardless of some limitations related to test-retest design, results support the EUonQoL-Kit use as a standardised tool for the assessment of “quality of life in oncology” across Europe.