

**Making the EORTC QLQ-C30
interactive:
development of CAT for EORTC
QLQ-C30 dimensions
- project update**

Morten Aa. Petersen & Mogens Groenvold

Aim of the project

- Develop CAT for the QLQ-C30 dimensions (scales)
- CAT: interactive, individually adapted questionnaire
- Advantages include: increased precision, adaptation to each study/person, immediate calculation and presentation of results
- Requires: set of items (item pool) covering the dimension from “poor to good”

Status of the project

Dim	Lit. search, construct items	Expert interviews	Patient interviews	Data collection	IRT analyses
PF	Completed	Completed	Completed	Completed	Completed
FA	Completed	Completed	Completed	Ongoing	Start May
PA	Completed	Completed	Completed	Ongoing	Start May
AP	Completed	Completed	Ongoing		
DY	Completed	Completed	Ongoing		
SL	Completed	Completed	Ongoing		
EF	Completed	Ongoing			
RF	Completed	Ongoing			
SF	Completed	Ongoing			
CO	Completed	Ongoing			
NV	Ongoing				
CF, FI	Ongoing				

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Development of computerised adaptive testing (CAT) for the EORTC QLQ-C30 dimensions – General approach and initial results for physical functioning

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ARTICLE INFO

ABSTRACT

Next paper

- IRT analyses and final item selection for PF
- Draft written and circulated to CAT-group
- Summary of findings:
 - 56 candidate items, sample N=1176 from six countries
 - 22 items did not fit 1-dim model
 - Three items did not fit IRT model
 - Several indications of language and gender DIF but had little practical effect

Conclusion: PF CAT item pool v1 consists of 31 items (incl. C30 PF items)

The 31 items in the PF item pool

Do you need help caring for your feet (e.g. cutting your toenails)?

Do you need help with eating, dressing, washing yourself or using the toilet? (C30)

Do you need help with grooming (e.g. cleaning nails, brushing teeth, combing your hair)?

Do you need help dressing?

Do you need help putting on a shirt?

Do you need help washing your face and hands?

Do you need help undressing?

Do you need help eating?

Do you have any trouble lifting a full cup or glass to your mouth?

Do you have any trouble lifting a box weighing about 10 kg?

Do you have any trouble doing strenuous activities, like carrying a heavy shopping bag or a suitcase? (C30)

Do you have any trouble reaching and getting down an object weighing about 2 kg (such as a bag of flour) from just above your head?

Do you have any trouble bending over to pick up a light object from the floor?

Do you have any trouble carrying a heavy bag upstairs?

Do you have any trouble carrying something weighing about 5 kg?

Do you have any trouble lifting a full teapot/coffee pot?

Do you have any trouble walking 100 m?

Do you have any trouble walking up a flight of stairs?

Do you have any trouble walking for 30 min.?

Do you have any trouble hiking 3 km on uneven surfaces?

Do you have any trouble walking outdoors on flat ground?

Do you have any trouble walking a few steps?

Do you have any trouble running fast?

Do you have any trouble taking a short walk outside of the house? (C30)

Do you have any trouble running 100 m?

Do you have any trouble taking a long walk carrying a heavy pack on your back (e.g. a filled rucksack)?

Do you have any trouble taking a long walk? (C30)

Do you need help to walk about outside (e.g. a walking stick or someone to support you)?

Do you have any trouble running a short distance, such as to catch the bus?

Do you have any trouble carrying something in both hands (e.g. shopping bags) while climbing a flight of stairs?

Do you need to stay in bed or a chair during the day? (C30)

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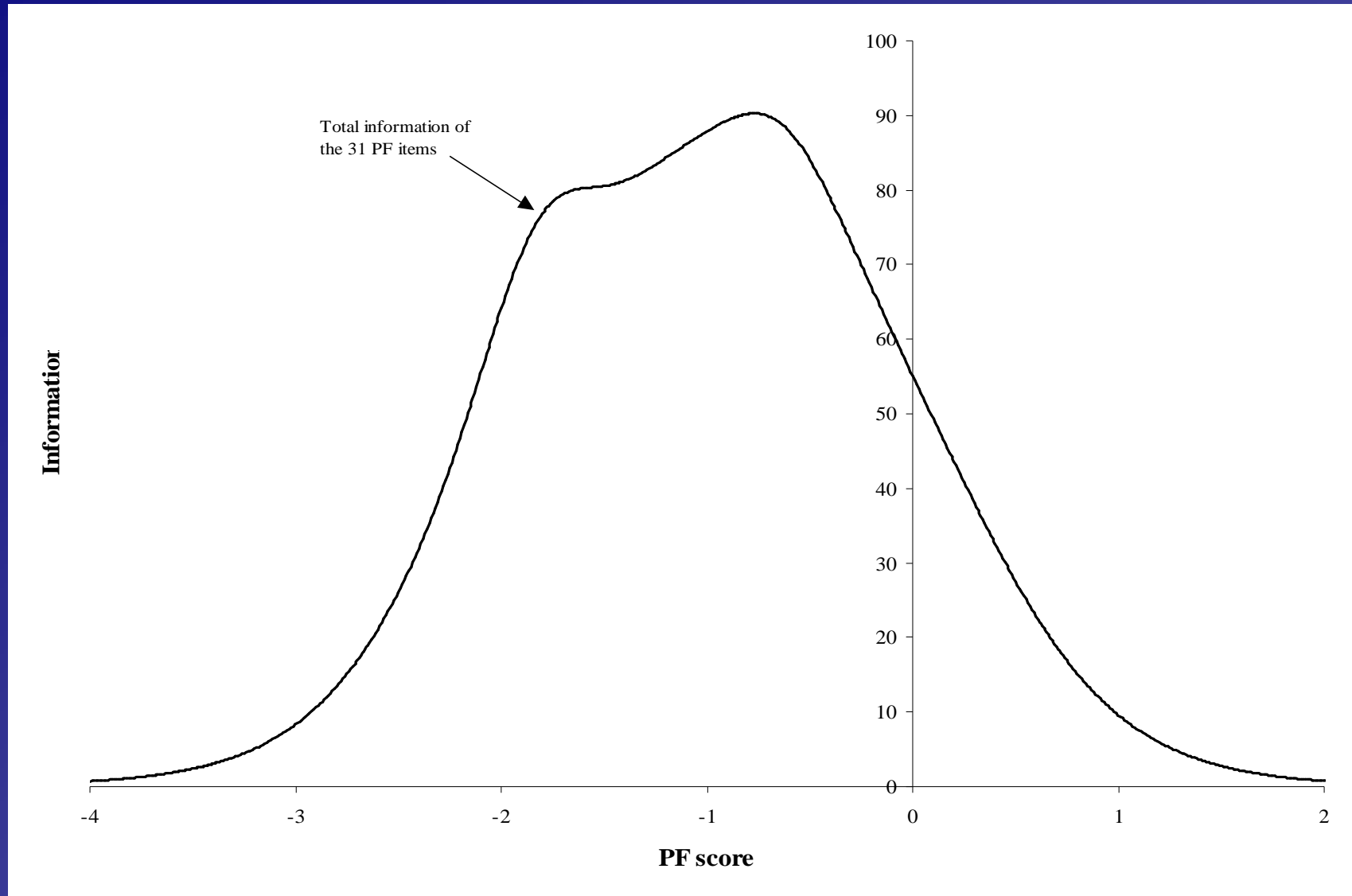
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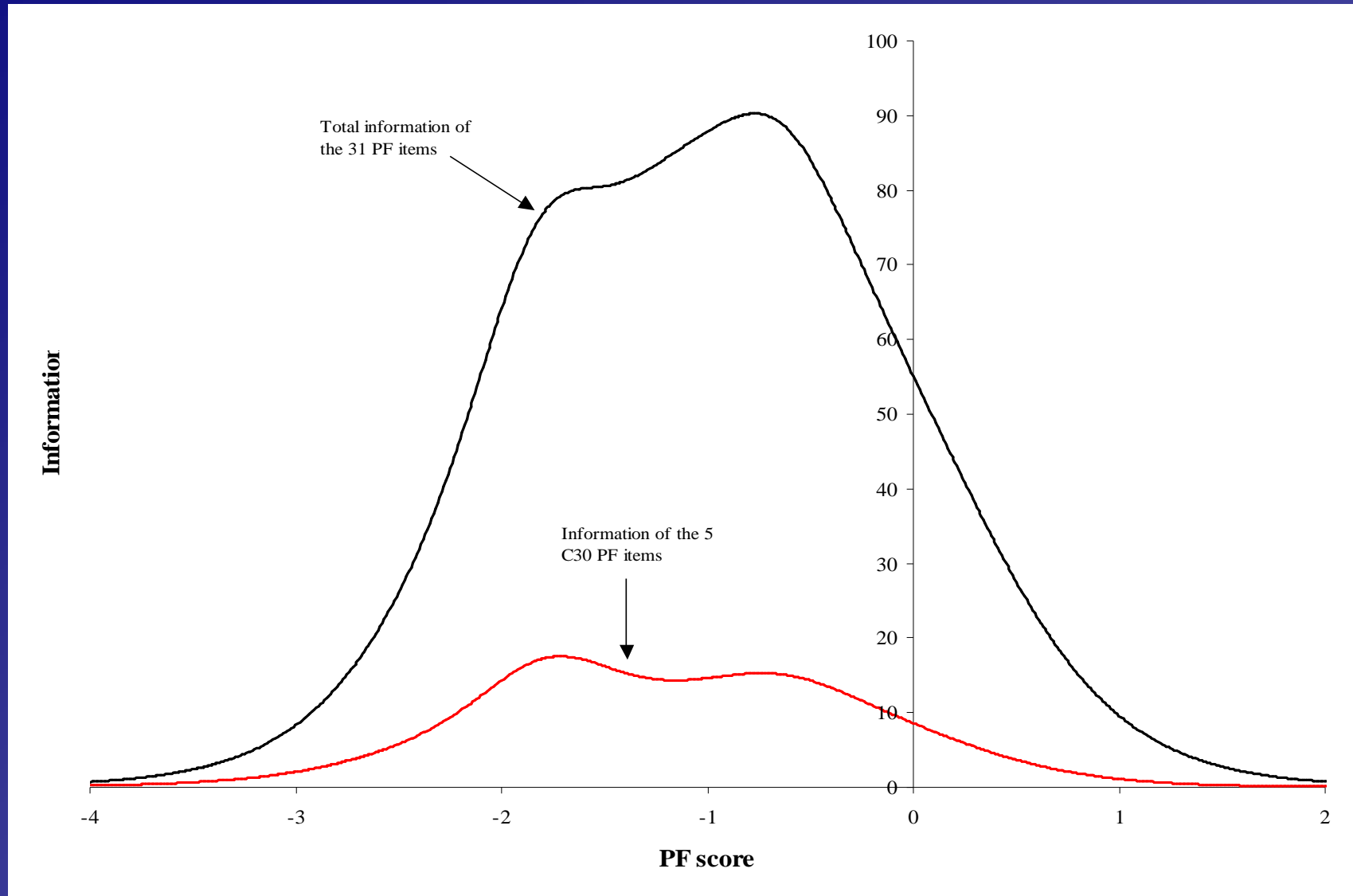
Do you have any trouble carrying something in both hands (e.g. shopping bags) while climbing a flight of stairs?

Do you need to stay in bed or a chair during the day? (C30)

information of the PF item pool



information of the PF item pool



CAT program

- The 31 PF items has been implemented in the first version of the EORTC PF CAT



Do you have any trouble carrying a heavy bag upstairs?

Not at All

A Little

Quite a Bit

Very Much

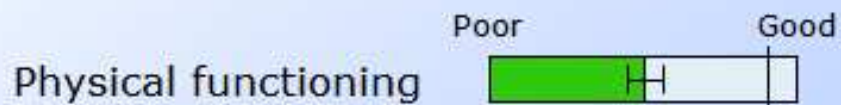


Stop

Help



Summary of your answers:



Note: The vertical lines | indicate the average level of the general population.

Print



Future PF analyses

- Simulation of CAT measurement properties
- Patient input about the CAT program (cognitive interviews)
- Testing CAT in “real-life” data collection

Potential publications

- Description of each of the additional PF analyses (three potential papers)
- Description of the item pool development for each dimension (13 potential papers)
- Presentation and evaluation of final EORTC CAT instrument (one paper)

**Anybody interested in
participating in the project,
please contact us**

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