



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



The Reliability of the QTUG measured over 5 consecutive days

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Background

Timed Up and Go-TUG

commonly used measure of falls risk in older adults

Ceiling effect

motor task



cognitive Task



Quantified TUG – QTUG

uses body worn sensors



Breaks the test into meaningful spatial and temporal parameters



May identify subtle changes – earlier identification of risk



Aim

Walking while carrying cup of water

Motor dual-task

Single Task

Walking alone

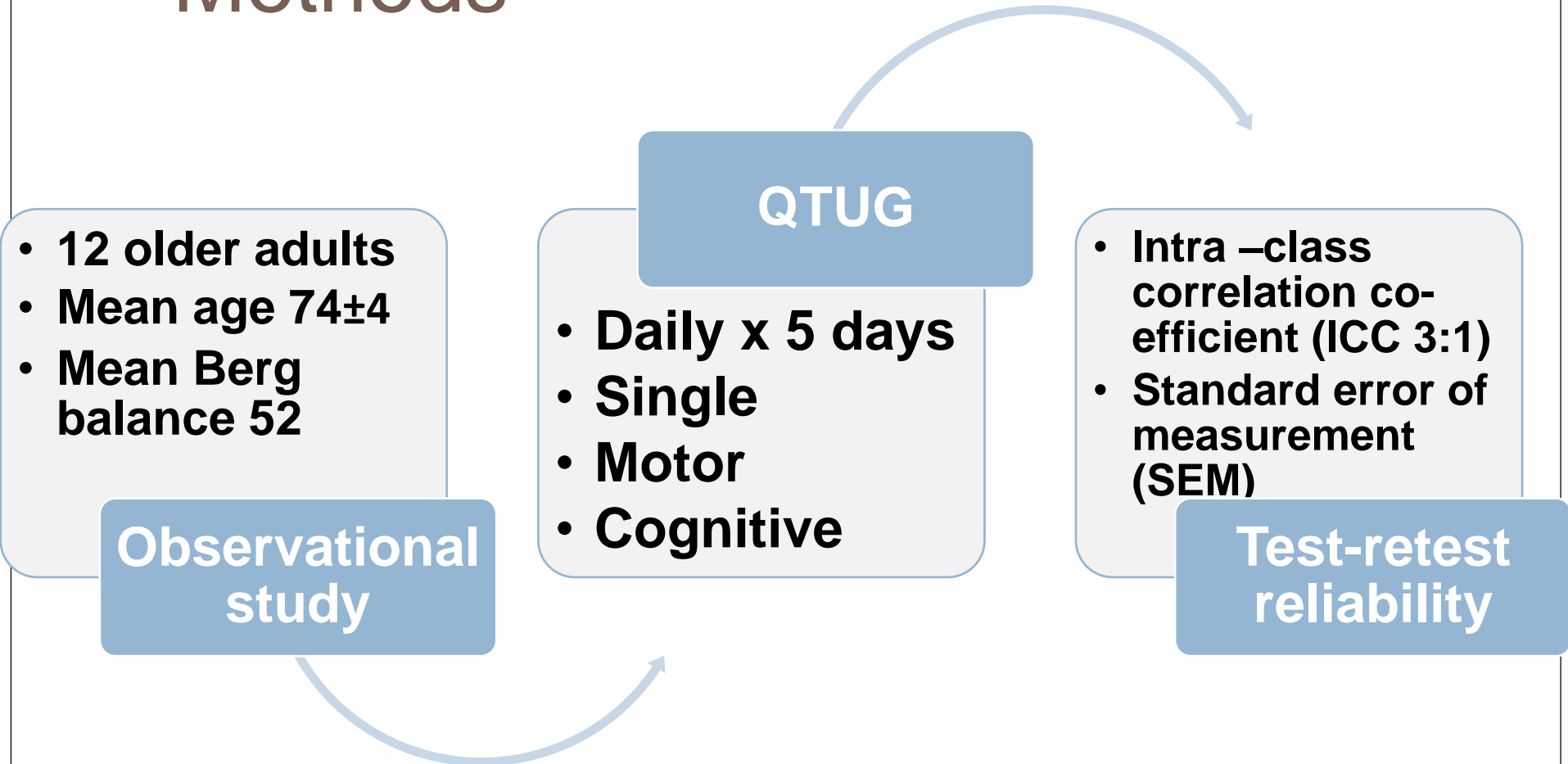
Cognitive dual-task

Walking while performing serial subtractions x3

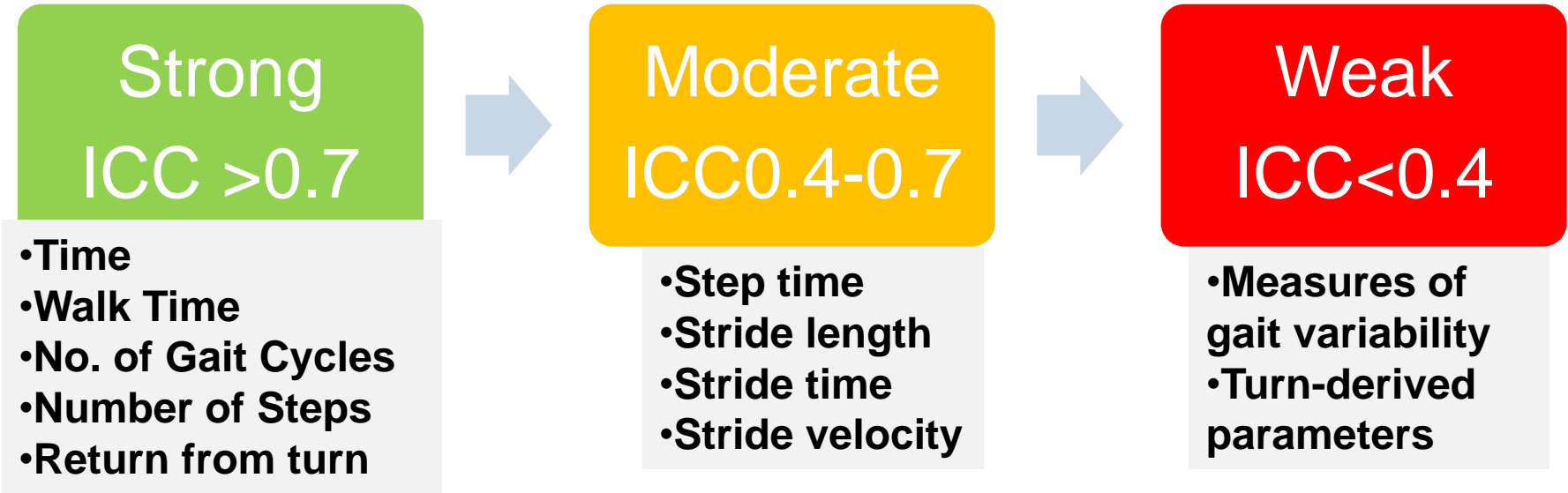
Test-retest reliability of QTUG

Over 5 consecutive days

Methods

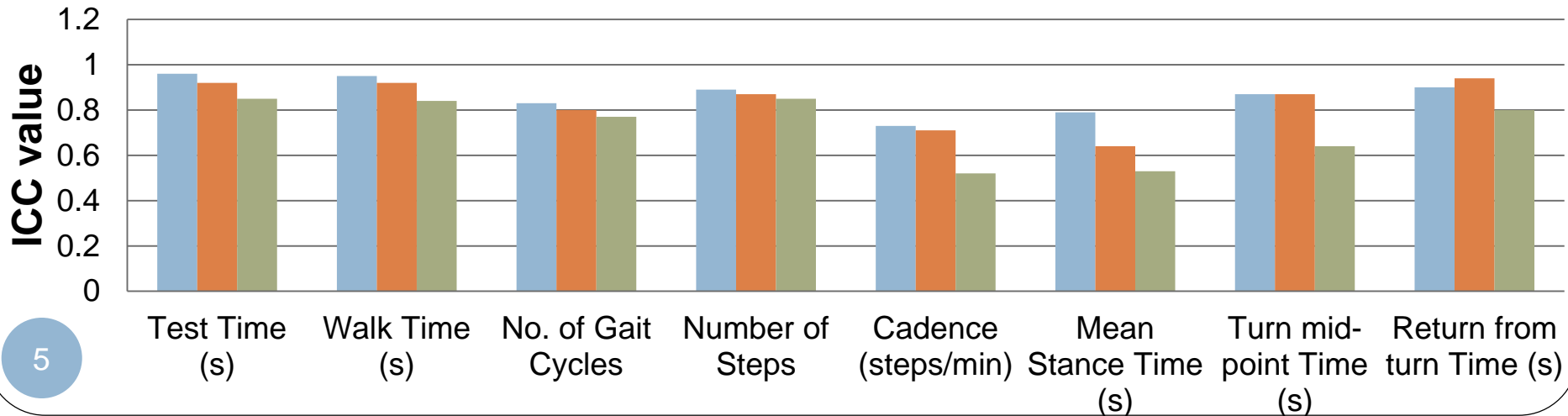


Results



Reliability under all 3 conditions

■ Single Task ■ Motor Task ■ Cognitive Task



Conclusions

Particularly temporal measures

QTUG
Several Parameters reliable

Overall reliability decreases with the addition of cognitive task

QTUG may provide additional resource in assessment of older people

Spatial, variability and turn-derived less reliable

Caution advised , especially under cognitive dual task conditions