Press Release No: 33
Jan 2024

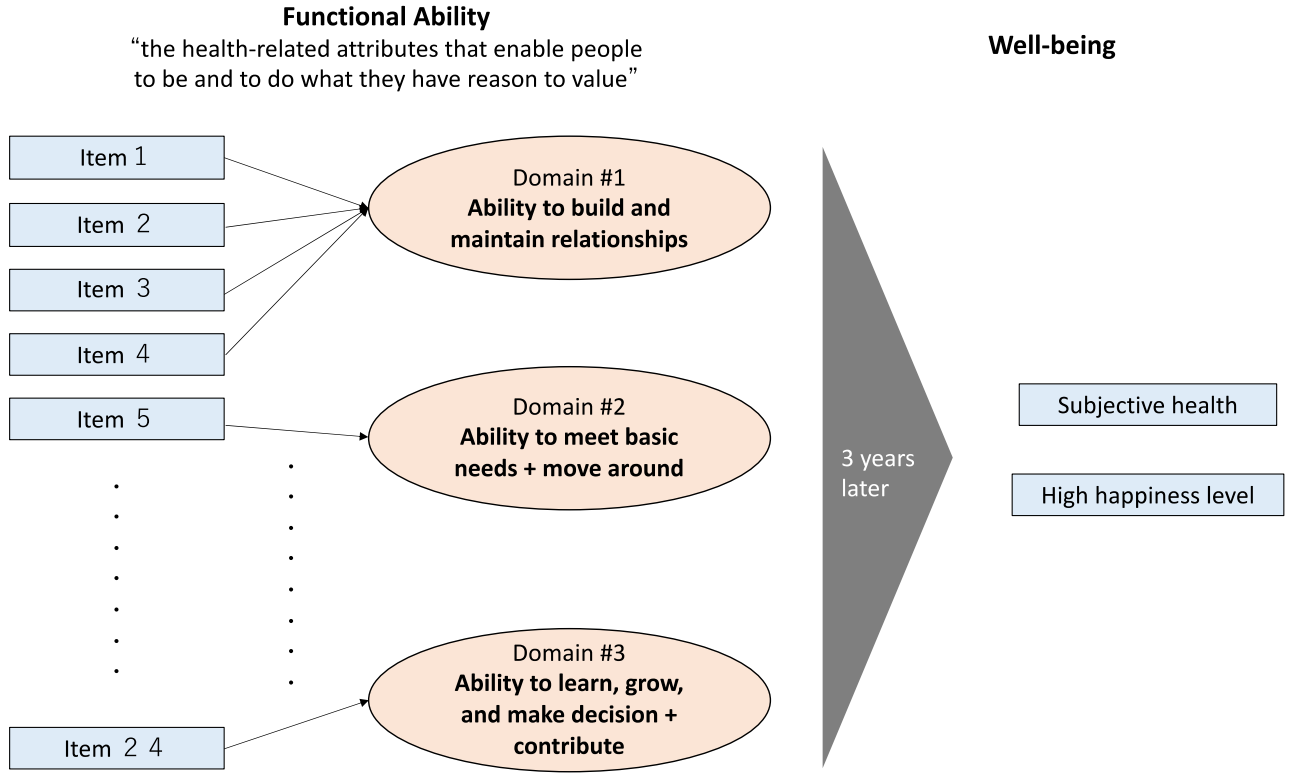
京都大学
KYOTO UNIVERSITY

UN-Proposed Assessment Indicator for Healthy Aging: Development and Validation of "Functional Ability"

Summary
A research team led by Professor Naoki Kondo and PhD student Marisa Nishio from the Graduate School of Medicine at Kyoto University has developed a method to measure Functional Ability, a key indicator of Healthy Aging proposed by the United Nations in its "Decade of Healthy Ageing" initiative. Utilizing data from approximately 35,000 older individuals aged 65 and above in Japan, the team proposed an assessment method based on 24 selected items out of 31 candidates to evaluate Functional Ability. The study demonstrated that the measurement results predict Well-being three years later, as measured by subjective health status and happiness, establishing the empirical validity of Functional Ability for the first time.

This research substantiated the concept of Functional Ability based on data from older populations in Japan, contributing to the promotion of Healthy Aging. Future efforts will involve further validation of the Functional Ability concept using data from other countries, aiming for global dissemination and monitoring.

The findings will be published online in the international academic journal "Age and Ageing."



Contact : Professor Naoki Kondo
Department of Social Epidemiology, Graduate School of Medicine, Kyoto University
kondo.naoki.0s@kyoto-u.ac.jp

＜**Abstract**＞

Background

The United Nations Decade of Healthy Ageing 2020–2030 suggests nations to monitor functional ability as an indicator of healthy ageing progress. Functional ability is the attribute of people to do something they value and consists of five domains. We examined its validity in terms of a construct, cross-validation across multiple waves' data, and predictivity for subsequent well-being.

Methods

Using panel data from 35,093 community-dwelling adults aged ≥65 years from the Japan Gerontological Evaluation Study, we performed factor analyses to explore the construct of functional ability domains in 2013 and 2016, respectively. A modified Poisson regression analysis was employed to test their associations with well-being (subjective health and happiness) in 2019.

Results

The mean age (standard deviation) of participants was 72.1 (5.0) years, and 52% were women. A total of 85% reported good subjective health, and 50.6% reported high happiness levels. Factor analyses with 31 logically checked candidate items from 2016 data suggested three-factor model comprising 24 items, which were compatible with the 2013 data results. Based on the World Health Organization's original domains, we named domains as domain #1: ability to build and maintain relationships; domain #2: ability to meet basic needs + ability to move around; and domain #3: ability to learn, grow, and make decisions + ability to contribute. All three domains predicted both subjective health and happiness in 2019.

Conclusions

Empirical data from Japan supports the functional ability concept among older individuals. Validating this concept with data from other nations is warranted.

Funding

This study, including JAGES, was supported by JSPS KAKENHI, Health Labour Sciences Research Grant, AMED, JST, Sasakawa Sports Foundation, Japan Health Promotion & Fitness Foundation, Chiba Foundation for Health Promotion & Disease Prevention, 8020 Promotion Foundation, National Center for Geriatrics and Gerontology, Meiji, Obirin University, and Niimi University.

＜**Bibliographic information**＞

Title	Measuring functional ability in United Nation's Healthy Ageing: testing its validity using Japanese nationwide longitudinal data
Author	Marisa Nishio, Maho Haseda, Kosuke Inoue, Masashige Saito, Naoki Kondo
Journal	Age & ageing
DOI	doi: 10.1093/ageing/afad224.

＜**Contact**＞

Marisa Nishio, MPH, MSc
Department of Social Epidemiology, Graduate School of Medicine and School of Public Health, Kyoto University
TEL：075-753-4355
FAX：075-753-4599
E-mail：marisa.nishio@gmail.com
Researchmap : https://researchmap.jp/marisa_nishio