

PHYSICAL ACTIVITY QUESTIONNAIRE DEVELOPMENT AND TESTING AMONG

Vanida Visuthipanich¹, Yupapin Sirapo-ngam², Porntip Malathum³,
Kallaya Kijboonchoo⁴, Thavatchai Vorapongsathorn⁵
Kerri M. Winters-Stone⁶

1Candidate, Department of Nursing, Ramathibodi Hospital, Faculty of Medicine, Mahidol University

2Associate Professor, Department of Nursing, Ramathibodi Hospital, Faculty of Medicine, Mahidol University

3Assistant Professor, Department of Nursing, Ramathibodi Hospital, Faculty of Medicine, Mahidol University

4 Associate Professor, Institute of Nutrition, Mahidol University

5 Associate Professor, Faculty of Public Health, Mahidol University

6 Associate Professor, School of Nursing, Oregon Health & Science University

Keywords: elderly thais, physical activity, questionnaire

Abstract : This descriptive cross-sectional research aimed to develop and test a self-report physical activity questionnaire (SPAQ) among elderly community-dwelling Thais. The study involved two phases. Phase I, questionnaire development, consisted of six steps: 1) defining the concept; 2) generating an item pool; 3) defining the choices of responses to items; 4) reviewing items; 5) conducting a pilot study; and, 6) selecting items for analyses. Inter-rater agreement and item-level for content validity index for the first draft of the SPAQ (47 items) were .99 and .89, respectively. Face validity was conducted with the second draft of the SPAQ (48 items). A pilot study, based on the dimensions, household, occupation, leisure time, and transportation, was conducted with the third draft (77 items). To obtain the final draft of the instrument (55 items), content categorization of activities was conducted with the third draft of the SPAQ, based on the literature's descriptions of the dimensions of physical activity and the deletion of items participants, in the pilot study, did not perform.

Phase II, psychometric property evaluation, used Pearson's correlation coefficient to analyze the concurrent validity, predictive validity and test-retest reliability. An acceptable concurrent validity coefficient was obtained by examining a relationship between the SPAQ and Actigraph readings. The SPAQ presented good predictive validity, as indicated by its correlation with the six minute walk test. However, a non-significant correlation between the SPAQ and both physical function and body fat was found. The 7-day test-retest reliability coefficient of the SPAQ indicated good reliability. Although the concurrent validity presented a modest coefficient, the SPAQ was shown to be relatively convenient, simple and suitable for administration. These results were similar to those found among Western populations.