

【Original Article】

**The Effect of Changes of Physical Activity on Health-related Quality of Life
in Community-dwelling Elderly: Longitudinal Study that Focuses
on Mediation of Exercise Self-efficacy**

Haruna Hirai¹⁾, Shunsuke Murata²⁾, Ryuichi Sawa²⁾, Rei Ono²⁾

Abstract

Objective: The purpose of this longitudinal study was to examine whether exercise self-efficacy (SE) mediated the relationship between the change of physical activity (PA) and health related quality of life (HRQOL) in community-dwelling older adults.

Methods: The sample consisted of 49 non-demented community-dwelling older participants. Participants were assessed at baseline (2006) and 7 years later (2013). PA and SE were calculated each change. HRQOL was assessed using the Medical Outcomes Study 36-Item Short-Form Health Survey (SF-36) instrument at follow up, and calculated physical component summary score (PCS) and mental component summary score (MCS). PA was assessed by pedometers, and SE was assessed by the exercise self-efficacy questionnaire. Mediation analysis followed the approach outlined by Baron and Kenny.

Results: In mediation analysis, the mediating effect of SE on the association PCS and PA was observed. However, SE didn't act as a mediator of the association MCS and PA.

Conclusion: Results of this study suggested that exercise self-efficacy partially mediated the relationship between the change of PA and HRQOL with physical health in community-dwelling older adults.

Key words : community-dwelling older adults, physical activity, exercise self-efficacy, health related quality of life, mediation

1) Keigakukai Minami Osaka Hospital, Osaka, Japan

2) Kobe University Graduate School of Health Sciences, Kobe, Japan