

Abstract

**A HLM Approach to the Determinants of ADL
of Chinese Oldest Old at both Individual and Community Levels**

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As a result of the rapid decline of fertility and rising life expectancy, China has experienced a much rapider population ageing during the early 21st century. It is estimated that the percentage of old people aged 60 and above would be more than 12% by 2010. Accompanied by a quicker socio-economic transition, the issue of health for the old has received increasing attention from scientific community, in particular those related to long-term care. Based on the Chinese Longitudinal Healthy Longevity Survey conducted in 2002, this paper uses Hierarchical Linear Model (HLM) to make an approach to the possible determinants of Activities of Daily Living (ADL) of Chinese oldest old (aged 80 and above) by combining both individual and provincial level factors. The descriptive analysis shows that there is a great differential in ADL by province among Chinese oldest old. The findings turn out that there do exist a significant differential in ADL between oldest old and young old, that and there is also a great differential in ADL by province among Chinese oldest old. The HLM demonstrates that comorbidity, age, cognitive impairment, visual impairment, and emotion could be the most important individual factors while natural environment, medical facilities, type of staple food and poverty rate in urban are the most significantly regional determinants of ADL of oldest old. The findings imply that future actions should not only be taken at individual level, but also at regional level in order to achieve the goal of healthy aging in Chinese society.

Keywords: *ADL; HLM; Determinants; oldest old; China*