UNIVERSITY OF GOTHENBURG

Studying ageing:
experiences, description, variation, prediction and explanation

Bo G Eriksson

Gothenburg Studies in Sociology No 41
University of Gothenburg
2010

Akademisk avhandling för filosofie doktorsexamen i sociologi vid sociologiska institutionen, Göteborgs universitet, som med tillstånd av samhällsvetenskapliga fakultetsnämnden läggs fram fredagen den 26 mars 2010 kl. 10.15 i hörsalen Sappören, Sprängkullsgatan 25, Göteborg.

Bo G Eriksson (2010), *Studying ageing: experiences, description, variation, prediction and explanation.* Department of Sociology, University of Gothenburg • Box 720 • SE-405 30 • Göteborg • Sweden. English text with Swedish summary, 156 pages. ISBN: 978-91-975405-6-8 • ISSN: • 1650-4313 http://hdl.handle.net/2077/21906

Abstract

The study follows a line of experiences, description, variation, prediction and explanation concerning ageing, health promotion and longevity.

The experiences of aging were acquired during my studies of conversations, participation in longitudinal population studies in Gothenburg, and working with the Centre for Development of Home help services. A main interest of mine has been to understand how health and longevity can be promoted during aging. The first paper reports the start of the intervention studies. During these studies I have met an increasing variation between individuals in age cohorts. The other striking phenomenon is the high degree of trainability in higher ages by putting load on human functions. This training by functional load is of increasing importance with increasing age as the reserve capacity of functions generally decline during aging. Thus I am interested in variation in factors related to health, survival and death.

I studied the variation of registered death causes during one year in the United States. I expected an increased variation by increasing age as a result of decreasing functional reserve capacity and thus an increased vulnerability. Contrary to my expectation the variation by age had a bimodal distribution like a camel's back. I interpreted this finding as one example of institutional ageism. In the third report I studied variation in aspects of social participation measured in the longitudinal population studies. In agreement with my expectation the variation increased by increasing age. This is contrasted to the common attitude that the aged are lonely. In that respect I interpret that attitude as one example of ageism. The forth paper reports predictions of 7-year survival studied by a common method, binary logistic regression, compared to a less used method: Artificial neural networks (ANN). Both methods could predict survival. The ANN gave a better prediction when the predictors were medical and health variables but not when social variables were entered as predictors. Conclusions were that ANN could be used 1) as predicting models for outcomes with a multi factor genesis which is not well understood by other methods and 2) that ANN can be used to evaluate results provided by other methods of analyses.

The two last papers reports developments of sociological theories in order to explain how social interaction can promote health and longevity. Durkheim's theories of social facts, nomie and anomie are developed in the fifth paper. I argue that the production of social facts, nomie and anomie promotes health by promoting activities. The social fact production also supports identity and feelings of cohesion. The production of nomie and anomie produce self esteem. The last paper reports health promoting functions of ordinary conversations, especially with confidants: Definition of situation, reducing ordinary anxiety, decision making, training of attention and memory, identity construction, formulation of dreams and maintenance of social networks. By these efforts I hope that I have achieved to report experiences, descriptions, variation, predictions and explanations in studying aging.

Keywords: Sociology, Gerontology, Demography, Longevity, Health promotion, Social facts, Sense of cohesion, Population, Random sample.