



香港中文大學
賽馬會老年學研究所
CUHK Jockey Club Institute of Ageing

Report on AgeWatch Index for Hong Kong 2014



香港中文大學
The Chinese University of Hong Kong



香港賽馬會慈善信託基金
The Hong Kong Jockey Club Charities Trust
同心 同步 同進 RIDING HIGH TOGETHER

Report on AgeWatch Index for Hong Kong 2014

Author: CUHK Jockey Club Institute of Ageing
Publisher: The Hong Kong Jockey Club
Tel: 2966-8111
Fax: 2504-2903
Website: <http://www.hkjc.org.hk>

Project Team:

Prof. Jean Woo, Director, CUHK Jockey Club Institute of Ageing
Prof. Wong Hung, Associate Professor, Department of Social Work, CUHK
Dr. Ruby Yu, Research Fellow, CUHK Jockey Club Institute of Ageing
Mr. Anson Chau, Research Assistant, CUHK Jockey Club Institute of Ageing
CUHK Jockey Club Institute of Ageing
The Centre for Quality of Life, Hong Kong Institute of Asia-Pacific Studies, CUHK

ISBN: 978-988-13331-9-3

Published in 2016

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The Chinese University of Hong Kong Jockey Club Institute of Ageing

In support of the Chinese University of Hong Kong's (CUHK) aspiration to overcome the challenges brought by the ageing population to society, CUHK has established The CUHK Jockey Club Institute of Ageing in 2014 with the generous support from The Hong Kong Jockey Club Charities Trust.

Since its establishment, the Institute has embarked collaborative researches in gerontechnology, healthy ageing and community intervention programmes for health promotion and prevention of frailty. Efforts to promote ageing messages have been made through a dedicated series of TV programme; announcing the results of the first multi-dimensional AgeWatch Index of Hong Kong; and launching the "Jockey Club Age-Friendly City Project" led by The Hong Kong Jockey Club Charities Trust. In view of the importance of training and joint learning, the Institute has formed partnership with ACCESS Health International with the shared goal of improving elderly and long term care in Hong Kong.

Building on the University's long-standing efforts of ageing researches and cooperating with charitable organizations, the Institute will continue to build its capacity and serves as a platform of ageing-related researches, training and community outreach programmes.

Vision

To make Hong Kong an age-friendly city in the world.

Mission

To synergize the research personnel and efforts on ageing across disciplines to promote and implement holistic strategies for active ageing through research, policy advice, community outreach and knowledge transfer.

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Preface—The Hong Kong Jockey Club

Hong Kong is facing a rapidly ageing population. It is critical that we recognise and address the multiple challenges and opportunities this will bring to our society. This is why The Hong Kong Jockey Club Charities Trust (“the Trust”) is putting a high priority on helping the city embrace these challenges and opportunities, and on doing more to cater for the needs of the elderly.

As part of this, we have partnered with the CUHK Jockey Club Institute of Ageing to evaluate the well-being of elderly people in Hong Kong, using the same methodology as the Global AgeWatch Index, a multi-dimensional tool compiled by HelpAge International which assesses the social and economic well-being of elderly populations across the world. An AgeWatch Index developed specifically for Hong Kong will enable the quality of life of our older people to be compared with the situation internationally, and provide a means for tracking progress in age-related initiatives. The findings can also help us plan better for elderly projects, particularly in the areas of physical and mental wellness, employment and volunteering, and social well-being.

The Trust has been a long-standing supporter of initiatives that address the needs of the elderly. For example, not long ago we celebrated the 15th Anniversary of the Jockey Club Centre for Positive Ageing, a pioneering initiative established to meet the diverse needs of elderly people with dementia. In 2006, we launched the CADENZA project to explore and pioneer new approaches to elderly care. And last year we funded the establishment of the CUHK Jockey Club Institute of Ageing.

It is our belief that an age-friendly community benefits people of all ages, not just for the elderly. Ageing is a normal and natural process that everyone must undergo, and the Trust would like to help make the journey more fulfilling and colourful. We also want to shift the perception of older people as “recipients” to “participants”, in which the society can benefit from their experience, especially given the increase in their education levels. The Trust will continue to work collaboratively with Government departments, non-governmental organisations, academia and businesses for innovative solutions to build an age-friendly Hong Kong.

I would like to take this opportunity to thank the CUHK Jockey Club Institute of Ageing for the invaluable efforts that are contributing to this survey. I hope the findings can be widely shared with concerned parties, so that together, we can develop initiatives that will establish Hong Kong as an age-friendly city and bring long-term benefits to our community as a whole.

Mr Leong Cheung
Executive Director, Charities and Community
The Hong Kong Jockey Club



Preface— CUHK Jockey Club Institute of Ageing

Ageing well is an important theme in both academic and policy areas. Its significance is more pressing than ever in the rapidly ageing population in Hong Kong. Its complexity is evident by the multi-faceted dimensions of ageing well at individual and population level, the vast research literature in the subject and the spectrum of government bureaux and departments involved in implementing age-friendly policies.

The Global AgeWatch Index presents a framework and methodology to grasp the subject in a succinct manner. On one hand, the Index highlights areas for suitable policies through comparison with other countries in the world. On the other hand, it reveals research areas on the well-being of elders, in particular the inter-relatedness of indicators in the Global AgeWatch Index.

This report marks the first step of this journey. Our next step is to develop an Index for Hong Kong to measure how well our senior citizens are over the years. It also complements the district-based work of the age-friendly city project led by The Hong Kong Jockey Club in collaboration with key stakeholders including academia, District Councils, government departments and NGOs.

I wish to express my gratitude to the generous support to this project by The Hong Kong Jockey Club Charities Trust. It is hoped that the project could raise awareness of the subject to all sectors of the community and lay the foundation for long-term results in understanding and improving the well-being of our senior citizens.

Prof. Jean Woo, MD, FRCP, FRACP
Director, CUHK Jockey Club Institute of Ageing
The Chinese University of Hong Kong

Executive summary 行政摘要

Ageing population in Hong Kong poses an unprecedented challenge to the society. The population of the elderly has been booming, causing wide-ranging effects on the local economy, society, and health systems. There is a pressing need to assess the well-being of the local elderly which assists to devise effective policies to address the socio-demographic change in Hong Kong in foreseeable future.

Commencing in 2013 and updated annually, the Global AgeWatch Index assesses the economic and social well-being of the elderly in more than 90 countries/ territories. It consists of 13 indicators in 4 domains (i.e. income security, health status, capability and enabling environment). It highlights the key aspects of older people's well-being and provides a standard for comparisons among countries. As Hong Kong has not yet been included, the Chinese University of Hong Kong Jockey Club Institute of Ageing ("IoA"), with funding support from The Hong Kong Jockey Club Charities Trust, has applied the methodology used by the Global AgeWatch Index to rank Hong Kong among other countries or territories in the Index in 2014.

The result showed that Hong Kong ranked 24th among 97 countries or territories in 2014. In terms of the 4 domains, Hong Kong ranked 75th in income security, 9th in health status, 33rd in capability, and 4th in enabling environment. Overall, Hong Kong performed quite well in maintaining health of the local elderly, establishing an enabling environment for the elderly, and supporting employment and education among the elderly. However, areas in income security, psychological well-being and social connectedness of the elderly required considerable improvement.

This report presented the findings of AgeWatch Index for Hong Kong 2014 and discussed the performance of Hong Kong in each of the domain. It serves as a reference for those who would like to understand the well-being of the elderly in Hong Kong. It is hoped that this report can arouse public awareness on the well-being of elderly in Hong Kong and provide a useful resource to consider effective age-friendly policies in future.

人口老化為香港帶來一個前所未有的挑戰。社會人口急劇老化對本地經濟、社會及醫療制度產生廣泛的影響。因此，香港必須盡快評估本地長者的生活質素，以協助制定有效政策以應付未來社會人口的轉變。

於 2013 年起，「全球長者生活關注指數」每年評估 90 多個國家 / 地區老年人口在經濟和社會方面的福祉。「全球長者生活關注指數」由 13 個指標組成，主要分為收入保障、健康狀況、能力和有利環境四個領域，以量度各國長者於不同範疇的福祉，並為比較各國長者福祉提供基礎。然而，目前香港並未納入「全球長者生活關注指數」的排名內。有見及此，香港賽馬會慈善信託基金委託香港中文大學（中大）賽馬會老年學研究所，按照「全球長者生活關注指數」的計算方法，計算出香港在 2014 年「全球長者生活關注指數」中的排名。

經中大賽馬會老年學研究所計算後，香港在 2014 年於全球 97 個國家及地區中排行 24。香港在「全球長者生活關注指數」中四個領域分別排第 75（收入保障）、9（健康狀況）33（能力）及 4 位（有利環境）。整體而言，香港在維持長者健康狀況、建立有利環境及支援長者工作和教育三方面上表現不俗。不過，香港在長者收入保障、心理健康及社會關係上仍有改善空間。

本報告旨在發表「香港長者生活關注指數 2014」的結果及探討香港在其中各領域的表現，有助相關人士了解香港長者福祉的議題。本報告盼能提高大眾對本地長者生活狀況的認識，並作為未來制定長者友善政策的一份具參考價值的文獻。

Chapter 1

Introduction



Chapter 1: Introduction

1.1 Background

Ageing population is a pervasive global issue. Owing to the declining fertility rates and dramatic increase in life expectancy, there will be more older people in the world. The World Health Organization (2014) estimated that, from 2000 to 2050, the proportion of the world's population over 60 years old will double from around 11% to 22%. Meanwhile, the number of people aged 60 years or above is expected to increase from 605 million to 2 billion.

Hong Kong's population is no exception to ageing. The projection by the Census and Statistics Department of the Hong Kong Special Administrative Region Government (2015b) suggested that the proportion of the population aged 65 or above will rise remarkably from 15% in 2014 to 33% in 2064 (Figure 1.1), while the proportion of population aged under 15 will drop continuously from 11% in 2014 to 9% in 2064. Although ageing is usually regarded as a distant and non-pressing issue, it has already been noticed that the local population will age at a faster pace than had previously expected (Secretariat of the Steering Committee on Population Policy of Hong Kong Special Administrative Region Government, 2014). Expectedly, an ageing population comes with a dwindling labour force to support the elderly, while at the same time poses a heavy burden on public finance.

In view of the rapid pace of population ageing, critical review of existing policies is required to respond effectively to the challenges posed. There is a pressing need to evaluate the financial security, health status, and social well-being of the elderly in Hong Kong and plan in advance to prepare for the possible demographic and socioeconomic changes in the foreseeable future. A reliable and valid measure of multi-dimensional well-being of the elderly in Hong Kong would be essential to assess their well-being and needs. This measure also provides a benchmark which helps planning and optimization of age-friendly policies in Hong Kong. In view of the above, the development of an objective measure of well-being of the local elderly is of utmost importance to this ageing community.

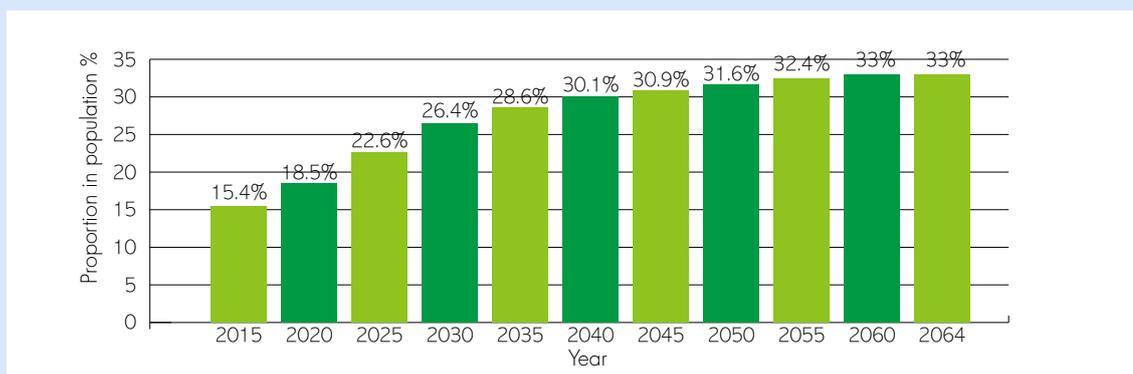


Figure 1.1 Proportion of population aged 65 and above in Hong Kong, projected 2015-2064.

(Source: Census and Statistics Department of Hong Kong Special Administrative Region Government. (2015b). *Hong Kong Population Projection: 2015-2064*. Hong Kong: Government Logistics Department.)

1.2 Global AgeWatch Index

The Global AgeWatch Index (<http://www.helpage.org/global-agewatch/>), developed and constructed by HelpAge International, is the first analytical framework that assesses key aspects of the health, economic and psychosocial well-being of the elderly. It is a multidimensional index providing



a global picture of performance of various countries in supporting the well-being of older people. The Index is compiled by using the latest comparative and quantitative data available internationally. Specifically, the sources of data are obtained from (a) databases in international bodies such as World Bank, Organization for Economic Co-operation and Development and International Labor Organization; (b) Gallup WorldView survey; and (c) large scale international studies. The Index consists of 13 indicators grouped into 4 key domains: income security, health status, capability, and enabling environment.

The Global AgeWatch Index highlights the key aspects of older people's well-being in a country and compare how it has performed among other countries. It provides a basis for policy-makers to identify effective strategies to improve the well-being of older people. Starting from 2013, HelpAge International published an annual report on the Index covering more than 90 countries to present the ranking of the well-being of older people in these countries. The 2014 Index ranked 96 countries representing 91% of people aged over 60 across the world. Norway ranked the top among the 96 countries, followed by Sweden and Switzerland. The latest Index 2015 has also been released in early September this year. Yet, HelpAge International has not included Hong Kong's data for global comparison so far. This leaves a room for compilation of this Index for Hong Kong and the current project (see below) aims to accomplish this goal.

1.3 Significance of the AgeWatch Index for Hong Kong

The absence of Hong Kong from the Index renders no objective and comprehensive assessment of health, economic and psychosocial well-being of older people in Hong Kong. There is a strong need to calculate the Index for Hong Kong to evaluate and plan for policies accommodating the needs of the local ageing community. In light of this, The Hong Kong Jockey Club Charities Trust funded The Chinese University of Hong Kong Jockey Club Institute of Ageing ("IoA") to compile and publish the findings of the AgeWatch Index for Hong Kong ("Index") based on the methodology of the Global AgeWatch Index. With the assistance from the Hong Kong Institute of Asia-Pacific Studies ("HKIAPS") of The Chinese University of Hong Kong, the Institute has collected data for some indicators in calculating the ranking of Hong Kong. The compilation of AgeWatch Index for Hong Kong is instrumental in the following aspects:

1. Holistic policy evaluation

The Index allows a comprehensive assessment of various dimensions of well-being of older people such as pensions, social welfare, health and employment. It provides objective data to evaluate the strength and weakness of different aspects of life of older people in Hong Kong. The multi-dimensional approach highlights the need for cooperation among multiple parties, including different bureaux and departments in the Government, NGOs, research institutions and universities, and, certainly, the elderly themselves, to design an age-friendly community via joint effort.

2. Future policy planning

The Index provides useful data on the overall trend of improvement or deterioration in various aspects of well-being of the local elderly over time. It facilitates policy makers to appraise and revise existing policies, and to consider implementation of future policies.

3. Inter-country/ territory comparisons

The score in the Index enables comparisons with other countries/ regions. It allows policy makers to make reference with the performance and experience of other countries in formulating effective age-friendly policies.

Chapter 2

Methodology



Chapter 2: Methodology

2.1 Index components

The Global AgeWatch Index captures the multidimensional nature of well-being of older people. Following the framework of the Index, the AgeWatch Index for Hong Kong is compiled based on the same four domains and 13 indicators. These four domains, with their respective indicators inside the bracket that follows and shown in Figure 2.1, are: income security (pension income coverage, poverty rate in old age, relative welfare of older people, and GDP per capita), health status (life expectancy at 60, healthy life expectancy at 60, and psychological well-being), capability (employment of older people, and educational status of older people) and enabling environment (social connections, physical safety, civic freedom, and access to public transport). Details of rationales of selecting these indicators can be found in *Global AgeWatch Index 2013: Purpose, Methodology and Result* (HelpAge International, 2013).

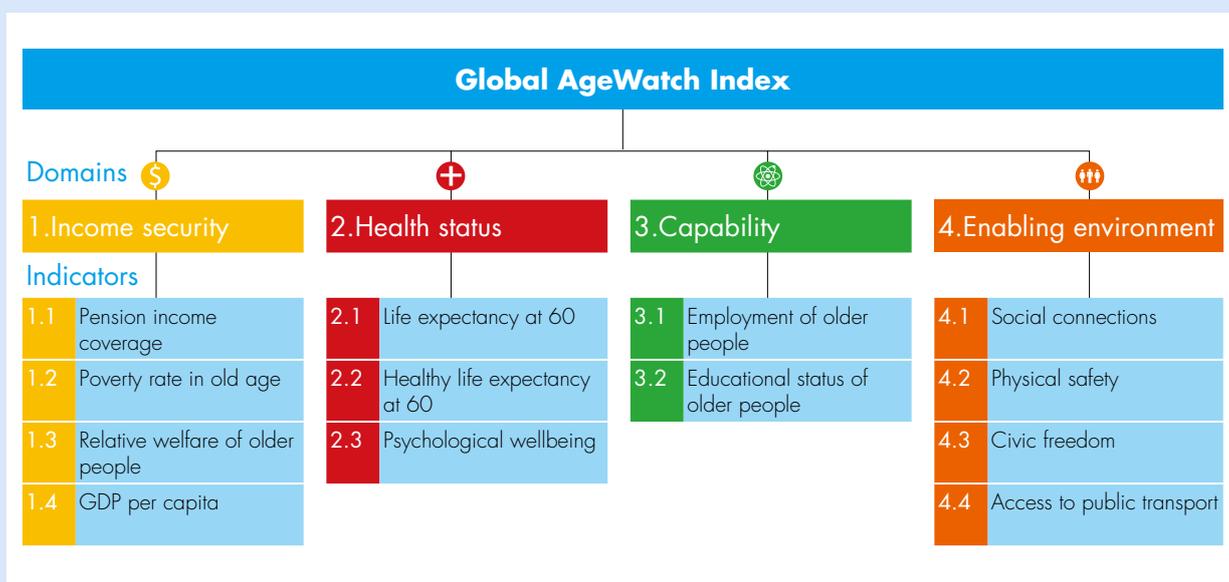


Figure 2.1 Domains and indicators of the Global AgeWatch Index (Adapted from *Global AgeWatch Index 2014: Insight Report* (HelpAge International, 2014a))

2.2 Definition of indicators

Definitions and sources of data used in each indicator for compiling the Global AgeWatch Index can be found in *Global AgeWatch Index 2014: Methodology Update* (HelpAge International, 2014b). Data from international database is used wherever possible by HelpAge International to ensure consistency and comparison among countries. Nevertheless, the data collected in each country or territory may be different based on its ingenious circumstances. In compiling the Index for Hong Kong, the definitions and sources of the indicators set out by HelpAge International are followed wherever possible. For some indicators where data of Hong Kong has not been included in the source information, objective data from government departments were used.



Domain 1: Income Security

Indicator 1.1: Pension Income Coverage

It refers to the percentage of people over 65 receiving a pension. The pension here adopts a broader meaning and refers to the fixed sum of Government Assistance or Allowance to be paid regularly to the elderly, including Comprehensive Social Security Assistance (CSSA), Old Age Allowance (OAA), and Old Age Living Allowance (OALA). The objective of setting this indicator is to measure the existence and coverage of the pension system in Hong Kong.

Indicator 1.2: Poverty rate in old age

It refers to the percentage of people aged 60 or above in households where the equivalised income is below the poverty line threshold of 50 percent of the equivalised median income (equivalising factor is the square root of household size). The indicator measures the poverty of older people in Hong Kong, using the relative poverty definition.

Indicator 1.3: Relative welfare of older people

It refers to the average income of people aged 60 or above as a share of average income for the rest of society. The indicator is to measure the income situation of older people in relation to the rest of the population in Hong Kong.

Indicator 1.4: GDP per capita

It refers to the gross domestic product (GDP) per capita in Hong Kong converted to international dollars using purchasing power parity rates. The indicator serves as a proxy for the standard of living of people in Hong Kong. It can be comparable across countries or regions and complement the age-sensitive indicator, relative welfare of older people. The use of GDP per capita indicator implies that all citizens, old and young, would benefit equally from increased economic production.

Domain 2: Health Status

Indicator 2.1: Life expectancy at 60

It refers to the average number of years a person aged 60 can expect to live if they pass through life exposed to the sex- and age-specific death rates prevailing at the time they are aged 60, for a specific year, in Hong Kong.

Indicator 2.2: Healthy life expectancy at 60

It refers to the average number of years a person aged 60 can expect to live in good health in Hong Kong. The indicator is to estimate how many years can expect to live in good physical health after 60.

Indicator 2.3: Relative psychological well-being

It refers to the percentage of positive answer by people aged 50 or above to the question "Do you feel your life has an important purpose or meaning" divided by the percentage of positive answer by people aged from 35 to 49. Psychological wellbeing is a critical factor in measuring the quality of life in later life. This indicator is to measure self-assessed mental wellbeing and supplements the healthy life expectancy indicator which relies on physical health only.

Domain 3: Capability

Indicator 3.1: Labour market engagement of older people

It refers to the percentage of the population aged 55-64 that are employed in Hong Kong. The indicator is to measure older people's access to the labour market (both formal and informal employment) and therefore their ability to supplement pension income with wages, and their access to work related support networks. Thus, employment rate is used as a proxy for the economic empowerment of older people.

Indicator 3.2: Educational attainment of older people

It refers to the percentage of population aged 60 or above with secondary or higher education in Hong Kong. Key competencies in the form of knowledge, skills and attitudes improve quality of life in older age. The indicator serves as a proxy for lifelong accumulation of skills and competencies that shows the social and human capital potential inherent in older people.

Domain 4: Enabling Environment

Indicator 4.1: Social connections

It refers to the percentage of people aged 50 or above given positive answers to the question "If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?" The indicator is to measure the support available from relatives or friends.

Indicator 4.2: Physical safety

It refers to the percentage of people aged 50 or above given positive answers to the question "Do you feel safe walking alone at night in the city or area where you live?" The indicator is to measure how safe people feel in their neighborhoods.

Indicator 4.3: Civic freedom

It refers to the percentage of people aged 50 or above given positive answers to the question "In Hong Kong, are you satisfied with your freedom to choose what you do with your life?" The indicator is to measure how much control older people feel they have over their life.

Indicator 4.4: Access to public transport

It refers to the percentage of people aged 50 or above given positive answers to the question "Are you satisfied with the public transportation system in Hong Kong?" This indicator is to measure access to and quality of public transport which is key to older people's quality of life, enabling them to access services (such as healthcare and shops), friends and family.

2.3 Source of Data for Indicators

The sources of the indicators of the AgeWatch Index for Hong Kong 2014 are the most relevant, reliable, and latest available data from recognized sources (Table 2.1). For objective indicators (i.e. Indicators 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 3.1 & 3.2), data were obtained from Social Welfare Department and Census and Statistics Department of HKSAR Government. For subjective indicators (i.e. Indicator 2.3, 4.1, 4.2, 4.3, & 4.4), Gallup's data were used since it is the only available source for global comparison.



Domain	Indicators	Sources
1. Income Security	1.1 Pension Income Coverage	Social Welfare Department, HKSAR Government
	1.2 Poverty Rate in Old Age	Census and Statistics Department, HKSAR Government
	1.3 Relative Welfare of Older People	Social Welfare Department & Census and Statistics Department, HKSAR Government
	1.4 GDP per Capita	World Bank (http://data.worldbank.org/country/hong-kong-sar-china)
2. Health Status	2.1 Life Expectancy at 60	Census and Statistics Department, HKSAR Government
	2.2 Healthy Life Expectancy at 60	Projection based on the methodology used by Law & Yip (2003)
	2.3 Psychological Well-being	Gallup data used by HelpAge International
3. Capability	3.1 Employment of Older People	Census and Statistics Department, HKSAR Government
	3.2 Educational Status of Older People	Census and Statistics Department, HKSAR Government
4. Enabling Environment	4.1 Social Connections	Gallup data used by HelpAge International
	4.2 Physical Safety	
	4.3 Civic Freedom	
	4.4 Access to Public Transport	

Table 2.1 Source of information of indicators in the AgeWatch Index for Hong Kong 2014

For indicator 2.2: Healthy Life Expectancy of Hong Kong, HelpAge International used the data from *Global Burden of Disease Study 2010* published by the Institute of Health Metrics and Evaluation (2010) to compile this indicator in the Index 2014. The report did not have data for Hong Kong. Such data was not available by the HKSAR Government or found in published reports of NGOs or other organisations. Therefore, this indicator was calculated by linear regression modelling using the life expectancy at 60 and healthy life expectancy at 60 data of the 96 countries in the official Index 2014. This method has been used in a previous study by Law and Yip (2003).

The method used in the aggregation of indicators to the domain-specific indexes and then to the overall Index for Hong Kong is adopted from the method used by the official Global AgeWatch Index. All four domains carried equal weight in compiling the AgeWatch Index for Hong Kong. A brief description of the methodology is described in Section 2 Aggregation methodology of *Global AgeWatch Index 2013: Purpose, Methodology and Results* (HelpAge International, 2013). Details of the methodology can be found in the statistical annex of the *Human Development Report 2013, The Rise of the South: Human Progress in a Diverse World* (United Nation Development Project, 2013).

Chapter 3 Results



Chapter 3 Results

3.1 Overall Results

Hong Kong was ranked 24th among 97 territories in 2014 (Table 3.1). Specifically, Hong Kong ranked 75th in the domain of income security, 9th in the domain of health status, 33rd in the domain of capability, and 4th in the domain of enabling environment. Hong Kong was ranked 2nd among Asian countries, after Japan. Overall, Hong Kong performed quite well, especially in the domain of health status and enabling environment. However, Hong Kong needs significant improvement in the domain of income security.

Ranking	Country/Territory
1	Norway
2	Sweden
3	Switzerland
4	Canada
5	Germany
...	
22	Chile
23	Hungary
24	Hong Kong
25	Panama
26	Czech Republic
...	
93	Tanzania,United Republic of
94	Malawi
95	West Bank and Gaza
96	Mozambique
97	Afghanistan

Table 3.1 Overall Ranking of Hong Kong in Global AgeWatch Index 2014 (Adapted from the official data of Global AgeWatch Index 2014)

The rankings of Hong Kong for each of the indicator are shown on Figure 3.2. The value and ranking of each indicator for Hong Kong will be listed below. For indicators which used data directly from Gallup, only the rankings will be given.

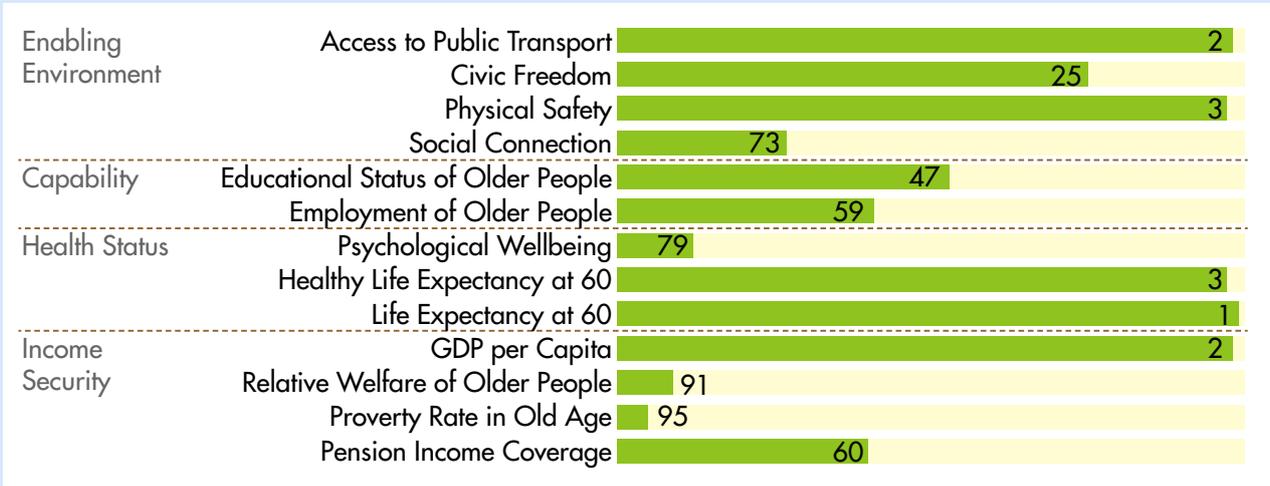


Figure 3.2 Rankings of Hong Kong amongst 13 indicators of the Global AgeWatch Index 2014 (out of 97 countries/ territories)

3.2 Domain 1: Income Security

Overall Performance

Among all other countries, Hong Kong's ranking in the domain of income security domain was 75, falling behind of many developed countries such as France (2nd), United Kingdom (11th), and United States (22nd). Hong Kong's performance was below quite a number of Asian countries, including Japan (31st), Thailand (58th), Colombia (68th), and Philippines (73rd). As indicated by its high GDP per capita, Hong Kong has plentiful economic resources to provide better financial support to the elderly. Inadequate pension income coverage, high poverty rate in old age and relatively little relative welfare of older people call for need of critical review in these areas by the Government.

Indicator 1.1: Pension Income Coverage

In 2013, OAA, OALA and CSSA were received by 18%, 39%, and 15% of the Hong Kong people aged 65 or above. As a result, a total of 72% of the local elderly received pension in 2013, which corresponded to a ranking of 60. Compared with the data of other developed countries such as United Kingdom (100%; 1st), Japan (98.4%; 22nd) and South Korea (77.6%; 52nd), Hong Kong underperformed in this indicator.

Indicator 1.2: Poverty Risk in Old Age

The poverty rate in old age was 42.8% in 2013. The ranking of Hong Kong was 95, which was only above South Korea (47.2%; 96th; data is unavailable for Latvia). Alarmingly, Hong Kong's poverty risk in old age was more than a double of the figure at the lower quartile of 19%, implying that the poverty problem of the local elderly is quite severe.

Indicator 1.3: Relative Welfare of Older People

In 2013, the adjusted average monthly income in people aged under 60 and above 60 were \$13,815 and \$9,668 respectively. As a result, the relative welfare of older people in Hong Kong was 69.98%, ranked 91st among other countries. Noted that the figure at the lower quartile (83.53%) was far higher than Hong Kong's figure, it revealed that income available for the local elderly's consumption is far from comparable to that in most of the countries.

Indicator 1.4: GDP per Capita

The average standard of living in Hong Kong is very impressive due to its outstanding economic development. The GDP per capita for Hong Kong in 2013 was \$51,509 (after converting to the international dollars using purchasing power parity rates (PPP) in 2011) and was ranked the second among other countries, after Luxembourg (\$67,515.5; 1st).

3.3 Domain 2: Health Status

Overall Performance

Hong Kong was ranked 9th in this domain. The health status of the elderly in Hong Kong is higher than those in United States (26th), United Kingdom (28th) and Korea (43rd), but lower than those in Switzerland (1st), Canada (4th) and Australia (5th). Hong Kong was ranked 2nd after Japan among other Asian countries. In spite of its excellent performance in maintaining long life expectancy in the local elderly, their poor psychological health deserves more attention in the community.

Indicator 2.1: Life Expectancy at 60

Hong Kong ranked the top in this indicator among all other countries: life expectancy at 60 was 26.1 years in 2013. Specifically, the life expectancy for male and female in 2013 were 23.78 years and 28.43 years respectively.

Indicator 2.2: Healthy Life Expectancy at 60

The healthy life expectancy at 60 was estimated to be 19 years in 2013, which was ranked the third after Japan (20.32 years; 1st) and Switzerland (19.04 years; 2nd).

Indicator 2.3: Psychological Well-being

The psychological well-being of the local elderly was estimated to be 83.60% in 2013, ranked 79th among other countries. Hong Kong's figure did not fare up to that of other developed countries, such as United States (97.87%, 21st), Japan (87.80%, 68th) and United Kingdom (86.90%, 71st).

3.4 Domain 3: Capability

Overall Performance

In the domain of capability, the ranking of Hong Kong was 33, lagging behind of other developed countries like United States (4th), Canada (8th), Switzerland (10th), and United Kingdom (23rd). Among other Asian countries, Hong Kong was behind Japan (12th), Philippines



(18th), Korea (19th), Kyrgyzstan (31st) and Sri Lanka (32nd). It is predicted the elderly in the next generation will be more educated and more willing to contribute to the labor market.

Indicator 3.1: Labour Market Engagement of Older People

51.1% of the population aged 55-64 was employed in 2013. It was ranked 59th, slightly below the median of 57.7%. Compared with the figure of other developed countries such as Australia (67.36%; 23rd), Japan (65.40%; 26th), and Korea (63.10%; 30th), Hong Kong's figure suggested that the local elderly have space for further participation in the labor market.

Indicator 3.2: Education Attainment of Older People

42.6% of the population aged 60 or above received secondary or higher education in 2013. It was ranked 47th. The figure of Hong Kong is still below that of other developed countries such as United States (95.61%; 2nd), Canada (83.89%; 10th), and United Kingdom (53.4%; 36th), suggesting that the elderly in Hong Kong are less educated.

3.5 Domain 4: Enabling Environment

Overall Performance

In the domain of enabling environment, the Hong Kong is ranked 4th, after Switzerland (1st), Austria (2nd) and United Kingdom (3rd). Hong Kong was ranked the top among other Asian countries. Hong Kong's performance is satisfactory in physical safety, civic freedom, and access to public transport, but the elderly have difficulties to find support from relatives or friends when needed. It suggested a pressing need to identify and establish social networks for the local elderly.

Indicator 4.1: Social Connections

Hong Kong was ranked 73rd, which was near the lower quartile. Hong Kong had the poorest performance in this indicator within this domain. The social connections in other developed countries, such as United Kingdom (3rd), Australia (10th), and Japan (22nd), are much stronger than in Hong Kong. It highlighted the relatively weak social support to the local elderly.

Indicator 4.2: Physical Safety

Being one of the safest cities in the world, Hong Kong was ranked the third in 2013 after Jordan (1st) and Indonesia (2nd). Among all other countries, a large proportion of the local elderly feels safe in their neighborhood.

Indicator 4.3: Civic Freedom

Hong Kong was ranked 25th in civic freedom in 2013, suggesting that the elderly in Hong Kong feel they have high control over their life. Although some developed countries like Australia (5th) and United Kingdom (15th) performed better in this indicator, Hong Kong's civic freedom was still greater than in United States (32nd) and Japan (40th).

Indicator 4.4: Access to Public Transport

In 2013, Hong Kong was ranked the second among other countries after Georgia and outperformed other developed countries like United Kingdom (9th), Korea (14th) and United States (37th). It showed that the public transportation system in Hong Kong is highly accessible.

Chapter 4 Discussion



Chapter 4 Discussion

4.1 Overall results

Hong Kong was ranked 24th among 97 countries and territories in the Global AgeWatch Index 2014. In general, the basic infrastructures in Hong Kong are excellent in accommodating an age-friendly community. On the one hand, Hong Kong's performance is outstanding in maintaining physical health of the elderly, upholding safety and civic freedom of the city, and developing an efficient transportation system. On the other hand, there is room for improvement in pension coverage, psychological well-being and social support for elders. The following sections will discuss Hong Kong's performance in the four key domains of "AgeWatch Index for Hong Kong 2014" in further details. Recommendations will also be provided for the public's reference.

4.1.1 Income security

The performance of income security of the elders in Hong Kong is not satisfactory when compared with other developed countries using the indicators by Global AgeWatch Index. Except the indicator on GDP per capita, other indicators in Hong Kong have lower than the median ranking of other countries.

Social Security System for elders

Hong Kong has developed a multiple layer social security system since 1971. The first layer, Comprehensive Social Security Assistance (CSSA) Scheme, provides income support for those poor people who cannot support themselves. A single elderly person (age 60 or above) were eligible to receive CSSA if his/her asset lower than \$43,500 and his/her monthly income less than \$3,200. The majority cases of CSSA are Old Age cases (cases with family member of aged 60 or above), comprising 59.4% of Old Age cases among the total 247,103 CSSA cases in September 2015 (Social Welfare Department, HKSAR Government, 2015). Currently, the standard rate of CSSA for a single able-bodied elderly was \$3,200 per month and the rent allowance for a single member household was \$1,640 per month. The second layer is the Old Age Living Allowance (OALA), which was set up in 2013 to supplement the living expenses of elderly people aged 65 or above who are in need of financial support. The asset limit was \$210,000 and the monthly income limit was \$7,340 for single elderly people. The monthly amount of OALA was \$2,390. The third layer is the Old Age Allowance (OAA), whose aim is to meet special needs of elderly people (aged 70 or above) arising from old age. There is no asset and income test for OAA. The monthly amount of OAA was \$1,235.

It is observed that the social security protection to the elderly does not effectively lift recipients out of poverty due to the labelling effect of CSSA which prevents eligible elderly people to apply for CSSA and the relatively low amount of OALA and/or OAA. To better understand Hong Kong's poverty situation and to improve effectiveness of poverty alleviation policies, HKSAR Government reinstated the Commission on Poverty (CoP) in 2012. The commission has set up the official poverty line in Hong Kong which was first announced in September 2013. Since then, the CoP updated the poverty line and monitored the poverty situations in the Hong Kong Poverty Situation Report, which was published annually. There has been a rising trend for poverty line of 3-person or above households. Nevertheless, the increase of the poverty line for 2-person and 1-person household are less significant. The trend of poverty line can be found in Figure 4.1.

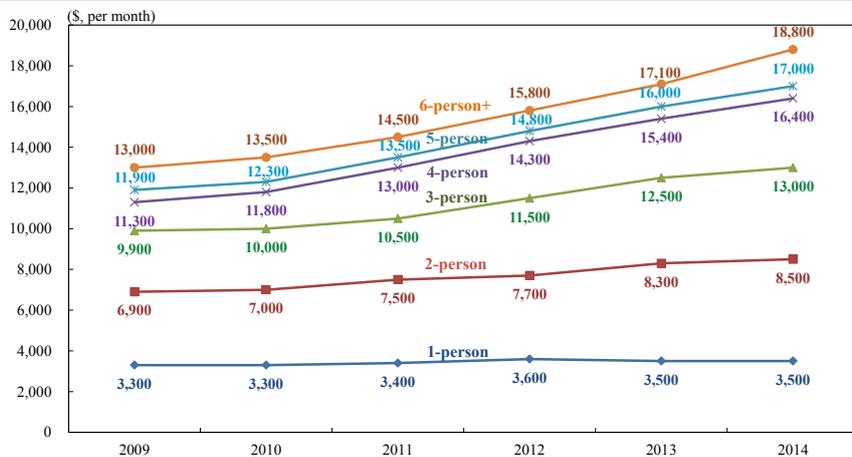


Figure 4.1 The poverty line by household size, 2009-2014 (Source: Commission on Poverty, Hong Kong Special Administrative Region Government (2015). *Hong Kong Poverty Situation Report 2014*, p.14)

The trend of poor population and poverty rate from 2009 to 2014 is shown in Figure 4.2. Based on the official poverty line, the poverty situation in Hong Kong in 2009 was characterized by 541,100 poor households or 1,348,400 persons (20.6 per cent of the population) before policy intervention (CoP, HKSAR Government, 2013). After cash transfer of the social security schemes, the number of poor households and persons decreased to 406,300 and 1,043,400 (16.0 per cent of the population), respectively. In 2014, before policy intervention, the number of poor household was 555,200 and the size of the poor population was 1,324,800 (19.6 per cent of the population) (CoP, HKSAR Government, 2015). After policy intervention (recurrent cash), the corresponding figures were 382,600 households, 962,100 persons (14.3 per cent of the population). Over the years, the poverty situation has been stable and the effectiveness of the poverty alleviation policy has improved.

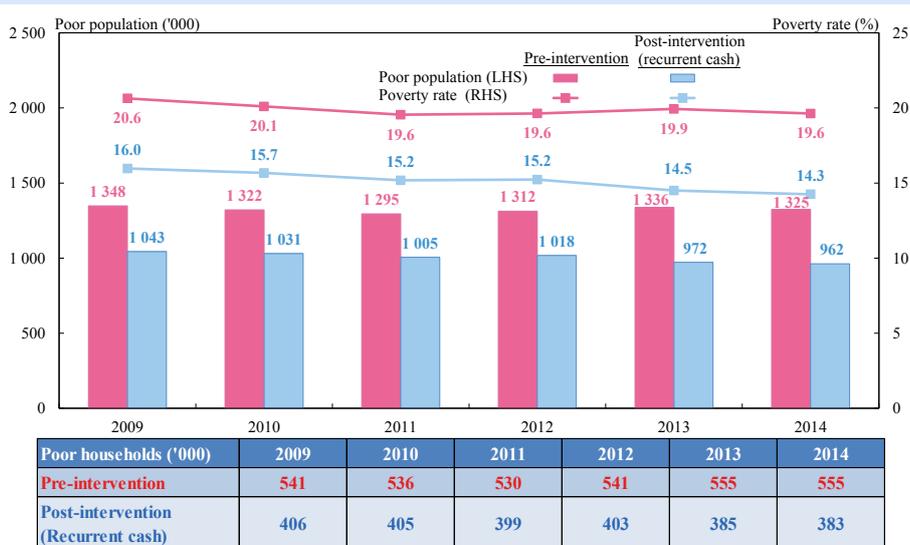


Figure 4.2 Poor population and poverty rate, 2009-2014 (Source: Commission on Poverty, Hong Kong Special Administrative Region Government (2015). *Hong Kong Poverty Situation Report 2014*, p.15)

Poverty Situation in Hong Kong's elders

The poverty rate in elders is higher than that in other age groups (Figure 4.3). For elderly poverty situation, the number of poor elders increased from 366,000 in 2009 to 436,400 in 2014. In considering the effect of policy intervention, the implementation of OALA in 2013 has greatest impact on improving poverty situation of the elderly. Breakdown of statistics on poor population and poverty rate by age showed that for elders aged 65 and above, the number of poor elders and elderly poverty rate after policy intervention in 2012 were 296,600 and 33.3% while in 2013, the corresponding figures were 285,500 and 30.5% (CoP, HKSAR Government, 2013). Due to its widest coverage compared with CSSA and OAA, OALA in 2013 lifted 69,000 elders above the poverty line and decreases the elderly poverty rate by 7.4%, 31.5% more effective than CSSA (CoP, HKSAR Government, 2013). Nevertheless, the elder poverty rate in Hong Kong was still high. In 2014, three elders in ten were still living in poor after receiving the cash transfer from government (CoP, HKSAR Government, 2014).

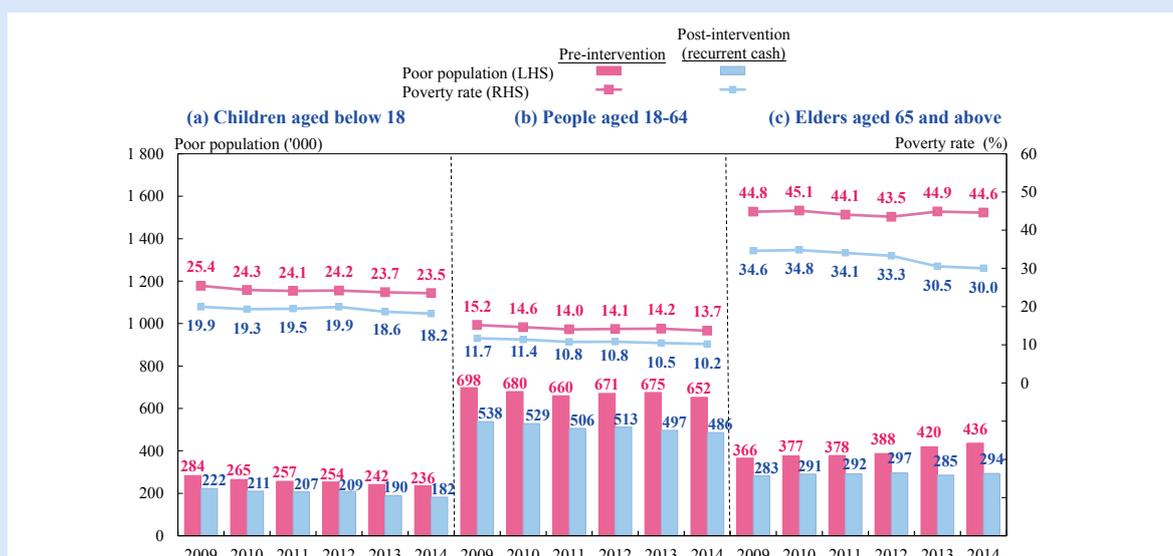


Figure 4.3 Poor population and poverty rate by age, 2009-2014 (Source: Commission on Poverty, Hong Kong Special Administrative Region Government (2015). *Hong Kong Poverty Situation Report 2014*, p.32)

Apart from aging population, the method of setting up the official poverty line by different household size may also contribute to higher poverty rate of elders. The growth of the poverty line for 1-person and 2-person were less significant than those of the households of greater size (Fig 4.1). As more elders can be found in 1-person and 2-person households, the median of household income growth of these households did not increase as the same speed of larger households. The impact is that most elders fail to enjoy the rise of living standard of the younger population found in households of larger size.

Latest Developments

Facing the escalating elderly poverty problem, various NGOs, civil societies and political parties have been advocating different universal retirement protection schemes for the elderly. The common goal of these schemes is to provide a basic pension to elderly of aged 65 and over so as to provide regular and reliable income for elderly to support their living. The business sector



and the government have expressed concerns about the burden of contribution and the economic sustainability of universal pension.

In order to provide in-depth study of existing social security system and the related retired protection measures in Hong Kong, the Government had commissioned Prof. Nelson Chow to conduct research about the impact of various options of retired protection measures to the society. The report, which has been completed in August 2014, concluded that MPF and existing social security system cannot provide comprehensive coverage and adequate protection for the elderly. After assessing the adequacy, sustainability, affordability and robustness of six options proposed by civil groups, union and political parties, the report suggested setting up a demo-grant of \$3,000 per month without means test, which is a universal pension scheme (Department of Social Work and Social Administration, The University of Hong Kong, 2014). The CoP has discussed the report and started a public consultation on retirement protection starting from 22 December 2015 for six months.

With foregoing development, it is hoped that there will be policies on retirement protection for elders in the coming years. Such policies would improve the income security of elderly in Hong Kong which will subsequently be reflected by an increase of the indicators in the income security domain of the Index.

Elderly needs to work because of no retirement protection: The case of Mr. Au

Poor retirement protection makes elders work to earn their living and disrupts their retirement plan. Mr. Au is a 65 years old man working as a watchman at a private building at Cheung Sha Wan. Mr. Au was born in Mainland and moved to Hong Kong in 1957. He worked in the garment and became unemployed after the factories relocated to Mainland since 1989. He finally got his current job in which he needs to work 6 days a week, and from eight o'clock in the morning till seven o'clock in the evening. His monthly wage is \$8,600, and his hourly rate is \$33 just \$0.5 over the statutory minimum wage.

"I know the pay is low, however I need this job to earn my living. If I don't work, I cannot feed myself. I don't have saving and also don't have much reserve in my Mandatory Provident Fund account. You can't rely on Government, I will definitely not apply CSSA."

4.1.2 Health Status

Life expectancy and healthy life expectancy

Longer life expectancy is a global phenomenon. To investigate into the causes of longer life in the elderly, The Lancet has published an article entitled "Causes of international increases in older age life expectancy" (Mathers, 2015) in a series on ageing articles in 2014. It explained some of the causes of the sharp decrease in mortality in older age groups over the past three decades, such as improvement in effectiveness and coverage of health care, and reduction in exposure to risk factors like blood pressure and tobacco. Hong Kong is no exception to this global trend. It is one of the territories in which its citizens have the longest life expectancy. The latest projection by the Census and Statistics Department of HKSAR Government (2015b) predicted that the expectation of life at birth is expected to increase by 5.8 years for males and 5.6 years for females over the next 50 years.

In step with ageing, diseases burden from age-dependent chronic disease is expected to rise in future. Chronic diseases, which are of slow progression and long duration, are prevalent in the elderly. In Hong Kong, the Census and Statistics Department of HKSAR Government (2013c) found that 73.7% of the people aged 65 and above had chronic health conditions such as hypertension (46.0%), diabetes mellitus (20.0%) and heart diseases (9.8%). Also, comorbidity of chronic disease is common in the elderly. Another Thematic Household Survey (Census and Statistics Department, HKSAR Government, 2009) estimated that 29.8 % and 19.5% of the elderly had one and two chronic diseases respectively, while 21.0% had three or more. To estimate the impact of various chronic diseases on the local ageing community, the “CADENZA: A Jockey Club Initiative for Senior” project has examined the issue and published a report series from 2009 to 2012 entitled “Challenges of Population Ageing on Diseases Trends and Burden”. The series serve as a valuable reference for planning for the healthcare system to accommodate the impact of burden of chronic diseases in the local ageing population.

Longer life expectancy of elders in Hong Kong poses challenges to maintaining their healthy life expectancy, which in turn underpins the significance of a more robust health care system to cater for their medical need in order that they could enjoy a better quality of life in their later years. Nevertheless, the heavy burden of chronic diseases in the elderly population has exerted great pressure in the primary healthcare system, especially the public hospitals. In Hong Kong, Population Health Survey 2003/2004 (2005) found that around 94% of the population aged 65 and above who has been hospitalized in the 12 months preceding the survey conducted in 2003-2004 had been admitted to a public hospital; while 17.7% and 6.8% had been admitted to private hospital or both respectively. Compared with New York and London, Hong Kong has higher hospital utilization rate of the older people (Chau et al., 2013). To tackle the issue, the Government has implemented the Elderly Health Care Voucher Scheme since 2009 which provides financial incentive for the elderly to select private healthcare services best suit their needs. It alleviates the pressure of public hospitals while encouraging patients to establish a closer relationship with their family doctors. The interim review of the scheme (Department of Health, HKSAR Government, 2011) revealed that 57% of the eligible elderly people have registered with the scheme by the end of 2010, in which 34% of those have used up the vouchers they were entitled to.

Apart from a disease-based perspective of health in the elderly, the concept of frailty has been receiving attention increasingly from the public and healthcare sector. Frailty is a clinically recognized physiological state of increased vulnerability under ageing, which may be divided into physical frailty represented by sarcopenia (a loss of skeletal muscle mass and strength) and cognitive frailty represented by some degree of cognitive impairment (either the diagnosis of mild cognitive impairment or dementia). The concept is a significant one as it predicts many adverse health outcomes such as falls, mortality, and hospitalization (Rockwood et al., 1999; Speechley & Tinetti, 1991). Most importantly, frailty is not an inevitable consequence of ageing: several possible interventions are found to have some efficacy in managing frailty. For example, multi-component exercise programme performed three times per week was found to increase mobility, balance, cardiorespiratory function, muscle function and flexibility (Theou et al., 2011). In addition, improving nutritional states for protein and other micronutrients (e.g. carotenoid and vitamin D) and specific diets like Mediterranean diet rich in anti-oxidants may reduce the risk of frailty (Bonney et al., 2015). Also, cognitive training is also effective in improving memory, reasoning and speed of processing (Willis et al., 2006). Current evidence supported a combined interdisciplinary intervention in reducing frailty in older people (Cameron et al., 2013). To provide timely intervention to pre-frail or frail older people, screening is of utmost importance. In Hong Kong, a frailty screening in community was conducted in 2014 by jointly The Chinese University of Hong Kong and Jockey Club CADENZA Hub. The study revealed that the prevalence of pre-frailty and frailty were 52.4% and 12.5% respectively (Woo et al., 2015), compared against the prevalence of frailty of 22.7% in Canada (Song et al., 2010). Similarly, a systematic review of the literature reported the prevalence of



frailty to be 10.7% (Collard et al., 2012). This frailty screening also found that the prevalence of frailty increased with age from 5.1% for people aged 65-69 to 16.8% for those aged 75 and above (Woo et al., 2015). This study also revealed that the frail elders, compared with the pre-frail ones, were less physically active, had higher number of chronic diseases, were taking more sleeping pills, reported more fall, and had higher prevalence of mild cognitive impairment and depressive symptoms. Thus, early identification and prevention of frailty are important in delaying progressive decline in health status in the ageing Hong Kong.

Psychological well-being

In spite of long life expectancy in Hong Kong, poor psychological well-being in the local elderly needs more public's attention. According to the ranking of relative psychological well-being (indicator 2.3), only a relatively small proportion of the local elderly found their life meaningful or purposeful. Finding a meaning or purpose in life, or eudemonic well-being (Ryff et al., 2004), is one of the dimensions of psychological well-being (Ryff, 1989a, 1989b) (see below) . According to this dimension, a person with high psychological well-being has a strong sense of directedness and intentions, set objectives for living, holds beliefs that give life purposes and contribute to feelings of integration and meaningfulness about his/ her life (Ryff, 1989a, 1989b). Higher eudemonic well-being has been found to link with better physical health, such as more stable level of salivary cortisol, higher level of high-density lipoprotein (HDL) cholesterol ("good cholesterol"), lower waist-hip ratio and less body movement during sleep in a sample of American ageing women (Ryff et al., 2004). A systematic review even found evidence of association between higher general psychological well-being and lower mortality in both healthy and diseased populations (Chida & Steptoe, 2008).

What is Psychological Well-being?

According to Ryff (1989a, 1989b), there are six dimensions of psychological well-being (Figure 4.4). These dimensions are important aspects of positive psychological functioning. Ryff (1989a; 1995) found that when one ages, environmental mastery increased, but purpose in life and personal growth declined. No age differences were found in self-acceptance in these two studies. For autonomy and positive relations with others, the results were inconclusive.

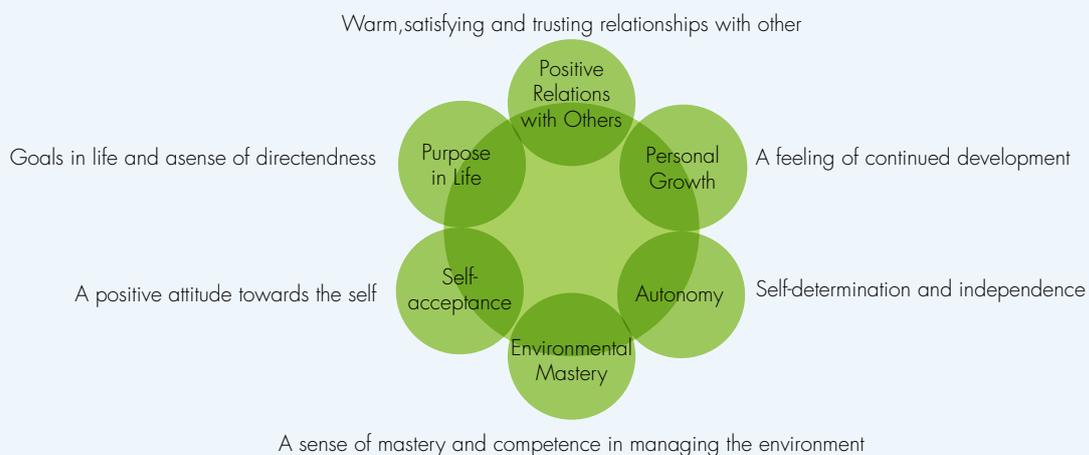


Figure 4.4 Dimensions of psychological well-being

Eudemonic well-being is also viewed as one of the aspects of subjective well-being, the others being evaluative well-being (i.e. evaluation of life satisfaction) and hedonic well-being (i.e. feelings and moods)

(Stephoe et al., 2015). Another article in the series on ageing in *The Lancet* entitled “Subjective well-being, health, and ageing” (Stephoe et al., 2015) highlighted the bi-directional relation between physical health and subjective well-being. It is found that elders with chronic diseases show lower eudemonic well-being and higher depressed mood. At the same time, subjective well-being is also a protective factor for physical health.

Promoting psychological well-being in the elderly is essential since life may become less purposeful and less meaningful as one enters from middle age to older age (Ryff, 1989b, 1995). Purpose in life is believed to be an important dimension of psychological well-being in elders, since they may lose several earlier roles over time (e.g. retirement and widowhood) (Rosow, 1974). Expectedly, poor psychological well-being is related to depression. A study by Chan et al (2012) found that 7.1% and 7.6% of local men and women aged 65 and above were defined as depressed. Other similar studies even found higher prevalence rate of depression in local older people (Chan et al., 2012; Chi et al., 2005; Chou & Chi, 2005). It is also found that the prevalence of depression increased significantly with age (Chou & Chi, 2005). More worryingly, depressive symptoms is one of the major risk factors predicting suicidal risk, with evidence from local studies (Sun et al., 2012; Yip et al., 2003). According to the statistics from Hong Kong Jockey Club Centre for Suicide Research and Prevention (2015), people aged 65 and above had the highest suicide rate among other age groups at 23.8 per 100,000 in 2014, which was around two times the population average of 12.3 per 100,000.

One of the attempts in screening of and providing early interventions to elderly with depression is the CADENZA Community project “Cherish our life: Enhancing psychological well-being of elders”. The project, targeting the elderly living alone in the Wong Tai Sin District, aimed to reduce elders’ depressive symptoms and prevent them to commit suicide through early detection, support service, treatment programme and referrals. The promising results showed that more effort in larger scale is necessary to enhance the psychological well-being of the local elderly in the future. Since purpose in life is an important dimension of psychological well-being in elders, assisting local elders to building their resilience against depression and suicidal ideation by empowering them to find their purpose in life may be considered as an effective strategy to pursue.

4.1.3 Capability

Employment

Hong Kong has a tight labour market with only 3.3 – 3.4% unemployment rate from 2010 to 2013. Greying population will have great impact on the workforce. The latest 10-year manpower projection by the Government using 2012 as base year shows that there will be an overall shortage of 117,900 in 2022, with shortfall concentrated at educational level of upper secondary and below (Labour and Welfare Bureau, SAR Government, 2015). A study by HSBC Insurance and Group Retirement Business section in 2008 (as cited in Bauhimia Foundation Research Centre, 2009) found that over 70% of the healthy retired elders are willing to work voluntarily during retirement, highlighting their willingness to participate in the labour market after retirement. Elders in Hong Kong, if they would be engaged in labour market, will be a source of labour force among others to ameliorate the gap.

From an individual point of view, employment would generate income for elders which would enhance their financial capability, in particular to those from lower class. Nevertheless, work often means more than a paycheck to elderly persons. Work after retirement brings elders with psychosocial benefits such as sense of worth, feeling active, gaining life experience and establishing social networks (e.g. Aday & Kehoe, 2008; Dendinger et al., 2005; Kim & Feldman, 2000; Smyer & Pitt-Catsouphes, 2007). They were less likely to be diagnosed with ageing-related diseases such as diabetes, hypertension, stroke, and



functional decline (Zhan et al., 2009). Recent studies have also found that continued employment help maintain cognitive and physical functioning (Fujiwara et al., 2015; Schwingel et al., 2009). Employment for the elderly was viewed by the European Commission a key element for economic and social inclusion as it could promote social participation and personal development (European Commission, 2005), well-being and was considered as a significant element of active ageing (Hartlapp & Schmid, 2008).

It is necessary to create a conducive environment in order to tap the workforce by elders. A study by AXA (2008) revealed that the average retirement age of Hong Kong is the third youngest after Singapore and China. In Singapore, the minimum retirement age is 62 years and employers have to offer re-employment to those who turn 62 up to 65 years (Minister of Manpower of Singapore, 2015). In UK, the default retirement age of 65 years has been phased out and most people can now work for as long as they want to (GOV.UK, 2014). While there is no statutory retirement age in Hong Kong, the normal retirement age for most organizations is 60, and 55 for some pensionable civil servants and disciplined services staff. In recognition of this, the Government has decided to raise the retirement age of the new recruits of civil servants to 65. The Hospital Authority has raised the retirement age of new recruits on or after 1 June 2015 to 65 years old. Although these measures may set a positive role model for the private sector to follow suit, it would pose difficulties for organizations, especially the need for career advancement by younger cohorts.

Clearly, there are other employment options open to elders after retirement. Studies of age-friendly employment practices had been conducted in Hong Kong (Bauhinia Foundation Research Centre, 2009). In practice, the Hong Kong Society for the Aged had implemented the Elder-Friendly Employment Practice project (funded by The Hong Kong Jockey Club Charities Trust) to provide career counselling services, training programmes and volunteer services to empower those aged 50 or above to re-enter the job market or serve the community. Last year, it has implemented an online platform (www.e72.hk) for job matching between employers and retired professionals. More research on options of employment for elders after retirement and dedicated job search programmes taking into account the needs and preferences of elders could be examined.

In addition to formal labour force, there are also options for informal labour force such as voluntary work and care-giving as stated in the report by the Bauhinia Foundation Research Centre above. In fact, work engagement has meaning to elders beyond monetary value. It can build and enhance their social network. In UK, the concept of “time bank” has been advocated (Timebanking UK, n.d.). While such practice is not prevalent in Hong Kong, elders could contribute to the society through various kinds of voluntary work. However, volunteering participation in Hong Kong is not high compared with countries (Charities Aid Foundation, 2013). Possible reasons may be due to lack for means to look for

Options to Full-time Employment: The case of Ms. Lung

What options do our senior citizens have apart from full-time employment? Aged 60, Ms. Lung lost her job near her retirement age when the company she worked for closed down. She felt helpless but did not give up. Through an online job search platform, Ms. Lung finally found the job of a part-time accounting clerk. She only needs to get documents from the company 1-2 times a week and complete her tasks at home. The option gives Ms. Lung flexibility, and makes her life more colorful and vivid.

“I do tai-chi every day after I wake up, and then have my breakfast. Afterwards, I can work at my own pace at home. At other times, I can join some interest classes and do voluntary work.”



opportunities that fit with personal preferences are reasons for not volunteering. Innovative ideas such as online matching platform could be developed to bridge the gap to benefit the elders and community.

Education

In Hong Kong, most of the current generation of elders came from the Mainland due to the war. It was not easy for persons in that generation to receive high level of education in Hong Kong during the World War II. As a result, the educational level of the current elders who have received secondary or higher education is relatively low (46.4% of elders aged 65-69 and 14.1% of elderly aged 85 and above) (Census and Statistics Department, HKSAR Government, 2013a).

Opportunities for education in Hong Kong became more prevalent in subsequent decades, in particular with the introduction of the 9-year free and compulsory education in 1978. The educational level of Hong Kong people has been on the rising trend, as shown by the increase of percentage of people aged 65 and above with educational attainment of secondary or higher from 18.4% in 2001 to 31% in 2011 (Census and Statistics Department, HKSAR Government, 2013a). The transition of Hong Kong into a knowledge-based society has urged citizens to upgrade their knowledge and skills through education to meet the needs of workplace, and an expansion to the tertiary education. The number of students enrolled in tertiary institutions funded by the University Grants Committee has been doubled from 85,600 in 2002-03 to 196,300 in 2012-13 (Census and Statistics Department, HKSAR Government, 2013b). Such increase in accessibility to formal education will probably be reflected in the results of the indicator of education in future.

Apart from formal education, it is noteworthy to point out that the Government and community has introduced various forms of “informal education” to enhance the knowledge and skills of elders. It ranges from classes organized by various NGOs, radio broadcasting on programmes targeted to elders by RTHK5 to courses offered by the Elder Academy launched under the Elderly Commission to promote life-long learning. In the 2014-2015 academic year, there were 121 elder academies covering primary, secondary and tertiary education institutions. These efforts have enhanced the educational level of elders which were not and could not be reflected under the formal education system. However, such lifelong learning initiatives would be beneficial to the well-being of elders in giving them meanings and a sense of accomplishment in their life (Harris & Cole, 1980).

4.1.4 Enabling Environment

Apart from income security, health status and capability, the living environment constitutes one major factor affecting the well-being of the elderly. The Index covers both the hardware and software of an enabling environment that are identified as important by older people. These are social connections, physical safety, civic freedom, and access to public transport. These distinctive features of the neighborhood benefit everyone in the neighborhood. However, elders usually stay for longer periods in their neighborhoods, especially the frail and functionally immobile ones, so the “neighborhood effect” brings stronger impact on their well-being (Glass & Balfour, 2003) and requires further investigation.

Social connections

Social connectedness refers to the degree of how people have contact and interact with others. It takes into account of relationships with family, friends, neighbors, as well as connections people make through voluntary work or community service. These relationships can bring benefits to the



individuals as well as to society. Social connection is vital in sustaining interpersonal relationships in a community. Numerous studies have demonstrated associations of social connectedness (or social support) with physical health (e.g., Cohen & Janicki-Deverts, 2009) and mental health (e.g., Kawachi & Berkman, 2001) in Western and Chinese (including Hong Kong) older populations (Bowling & Grundy, 1998; Chi & Chou, 2001; Wong et al., 2007). Establishing social connections improves physical and mental health via several possible mechanisms, such as boosting self-esteem, gaining a sense of control or mastery, and enhancing perceived social support (see Thoits, 2011, a review).

In Hong Kong, the poor social connection among the local elderly, indicated by the low ranking of indicator 4.1 among other countries, is worrying. Although being excluded from social network affects all ages, social exclusion can be notably intense to the elders as highlighted in a report conducted by The Social Exclusion Unit of the United Kingdom (2006). The report explains that people who are socially excluded in mid-life usually suffer from further exclusion when they age. In addition, key transition in later life (such as retirement and widowhood), together with age-based discrimination inherent in the community can lead to social isolation in elders. A longitudinal study in United Kingdom (Barnes et al., 2006) found that elders who lived alone, retired, reported having poorer health, and had lower income were more likely to be excluded from social relationship with family members and friends. Similarly, local elders with these characteristics may be more likely to be socially excluded and needs additional social support.

The living arrangement of the elders affects their social connections. Living with family members definitely provides intimate social support to the elders. The effect of family support on psychological health is well established (e.g. Blazer et al., 1992; Chi & Choi, 2001; Siu & Philips, 2002). In Hong Kong, where majority of the citizens are Chinese, old-age support from family members is commonly observed (Liu et al., 1995). However, the rise of nuclear family might create barriers to provide sufficient social support to older family members in modern Hong Kong. In 2011, 66.3% of the domestic households were classified as nuclear family household (i.e., household composed of couple, couple and unmarried children, or lone parent and unmarried children) (Census and Statistics Department, HKSAR Government, 2012). Social connections within a family might be weakened over time in this process with decreasing size of household since 1980s (Census and Statistics Department, HKSAR Government, 2015a).

Another trend is the increase of elders living alone as reflected in the increase from 11% in 2001 to 13% in 2011 (Census and Statistics Department, HKSAR Government, 2013). Lai (2013) found that compared with elderly in Guangzhou and Taipei, elderly in Hong Kong was more likely to live alone and reported lower level of social support. Compared with other age groups, elders tend more to live alone, and it is one of the risk factors leading to them being socially excluded or “hidden” (see Barnes et al., 2006). Hidden elderly are “disengaged from the community and disadvantaged yet not helped by the available services and support” (Commission on Poverty, HKSAR, 2006, p.1). Despite the intrinsic difficulty to ascertain the number of hidden elderly in Hong Kong, a study had estimated that about 70,000 – 90,000 elders were classified as hidden (Asia-Pacific Institute of Ageing Studies, Lingnan University, & Hong Kong Sheng Kung Hui Welfare Council, 2009). The study found that 75% of hidden elderly welcomed being contacted, highlighting the feasibility of interventions to help them build up social networks.

While family provides care and social support to the elderly, people living in the neighborhood can be a part of the social network. Older people are more likely than younger generations to spend time in their neighborhood of residence and have stronger social networks in the community (Cabinet Office of Japan, 2007; Oh, 2015). Neighborhood social cohesion, defined as the capacity of residents to achieve social control over the environment and to engage in collective action for the

common good (Sampson, 2003; Sampson et al., 1997) has been associated with self-rated health (Cagney et al., 2005), frailty (Cramm & Nieboer, 2013), stroke risk (Clark et al., 2011; Kim et al., 2013), and mortality (Inoue et al., 2011) in elders. A number of studies have also demonstrated the role of neighborhood cohesion in mental health (e.g., depressive mood), suggesting that neighborhood cohesion can act as a buffer against sources of stress related to mental health (e.g. Catell, 2001; Fone et al., 2007; Robinette et al., 2013), and this role has been observed in a study of Japanese elders (Muruyama et al., 2015a). A review also reported a protective effect of social interaction between neighbors against depressive mood (Mair et al., 2008).

Despite its importance, studies in neighborhood social cohesion in Hong Kong are scarce. One study by La Grange (2011) found that participants living in a public housing in Shatin engaged in higher level of neighbouring (i.e. actual interaction of people with their neighbors) compared with those living in an up-market private housing estate on Hong Kong Island or living in inner-city area of Shamshuipo. This finding suggests that environmental factors such as public housing estate in Hong Kong may help cultivate neighborhood social cohesion. More extensive district-based studies of neighborhood social cohesion would be useful to identify factors to enhance the social connectedness of elders and their well-being.

Volunteering has been suggested to be a way for elders to extend their social network beyond immediate family. It helps strengthen informal social networks and social support system (Mutchler et al., 2003), enhance life satisfaction and perceived health (van Willigen, 2000), reduce mortality (Musick et al., 1999), benefits mental health and reduce depressive symptoms by giving a sense of meaning and purpose life (Wethington et al., 2000; Li & Ferraro, 2005), and helps offset role losses and relieve stress such as widowhood and retirement (e.g. Rietschlin, 1998). In particular, participation in intergenerational programs (e.g., volunteer programs in which elderly adults provide support to school) may help elderly people developing a sense of coherence in life (Murayama et al., 2015b). Volunteering in old age, being an important expression of active social engagement, is one of the components of successful ageing (Rowe & Kahn, 1998).

Voluntary work participation rate among elders in Hong Kong is low compared with other countries (Chau & Woo, 2008), suggesting the need for efforts of promotion. Currently, the Neighbourhood Active-Ageing Project (NAAP) launched by the Elderly Commission invites various organizations in the neighborhood to recruit volunteers, support volunteering works and organizing activities. In district level, the CADENZA Community Project: Linkage, launched jointly by CANDZA and the Aberdeen Kai-Fong Welfare Association, promotes volunteering and fosters intergeneration communication and understanding. It could be viewed as a useful reference for implementing intergenerational activities in other areas in future.

Physical safety

Physical safety of elders is an increasing area of concern in neighborhoods, since they are more vulnerable to urban hazards like traffic accidents and outdoor falls (Li et al., 2006; Romero-Ortuno et al., 2010). Feeling safe to walk alone at night enhances physical safety and subsequently well-being of elders. In Hong Kong, elders generally feel safe to walk at night as reflected in the top ranking of indicator 4.2 and other related indexes such as The Safe Cities Index 2015 (ranked 11th out of 50 cities) (Economist Intelligence Unit, 2015) and The 2015 Legatum Prosperity Index (ranked first out of 71 countries and territories in the "Safe & Security" sub-index) (Legatum Institute, 2015).



It may not be surprising given the low crime rate in Hong Kong coupled with its well-established criminal justice system. Research shows that elders were more concerned about personal crime and walking alone in their area at night (Chivite-Matthews & Maggs, 2002), and fear of crime is associated with reduced physical functioning, poorer mental health and lower quality of life (Stafford et al., 2007). The overall recorded crime rate per 100,000 in Hong Kong was 1,245.57, which is lower than other countries such as Italy (4,177.09), France (6,401.72), Canada (8,634.42), England and Wales (10,581.49) and South Korea (3,727.02) in a cross-country survey on crime trend report in 2004 (United Nations Office on Drugs and Crime, 2007). In addition, Hong Kong has higher police force vis-a-vis other countries as measured by the per capita ratio of police force in 2013 (Hong Kong: 446.0 per 100,000; Philippines: 151.7; Singapore: 162.2 ; United States: 195.9 ; England and Wales: 224.6; and France: 172.4) (United Nations Office on Drugs and Crime, 2015).

Design and quality of roads and buildings also affects physical safety of elders at outdoor space. Many outdoor falls cases usually occurred on sidewalks, curbs, and streets; and were caused by environmental features like uneven or wet surfaces and tripping or slipping on objects (Li et al., 2006). Poor street condition, inadequate lighting, noisy traffic, hills in the nearby environment correlated with fear of moving outdoors in the elders, which predicted development of difficulty in walking (Rantakokko et al., 2009). Improvement in these environmental features in the neighborhoods can reduce injury among elders and encourages them to be physically active. The importance of this environmental factor corroborates with the concept of outdoor space and buildings which is one of the eight domains in defining the age-friendliness of a city by World Health Organization (WHO) (2007). A checklist item in this domain related to safety states that “public safety in all open spaces and buildings is a priority and is promoted by, for example, measures to reduce the risk from natural disasters, good street lighting, police patrols, enforcement of by-laws, and support for community and personal safety initiatives” (WHO, 2007, p.19). In Hong Kong, a comparative study on the views of elders in Sha Tin and Tuen Mun districts found that they rate favorably towards the statement “outdoor safety is promoted by good street lighting and police patrols” in their districts (Sha Tin: M= 4.61; Tuen Mun: M= 4.44) under a 6-point Likert scale (1= “strongly disagree”; 6 = “strongly agree”) (Wong et al., 2015). Difference of ratings by elders in the two districts was statistically significant, hinting that difference may be possible through concerted action in districts.

Civic freedom

The indicator reflects the extent of freedom to choose among a variety of options in life. The freedom is measured by perceived enactment of autonomy, which is “a state of sensing and recognising the ability to freely choose behaviors and courses of action on one’s own behalf and in accordance with one’s own needs and goals” (Hertz, 1996, p. 269). Research found that perceived enactment of autonomy is associated with life satisfaction, self-care knowledge concepts of perceived control, health indicators of morale and participation in social activities in community-dwelling elders (Hertz & Anschutz, 2002). Personal autonomy is important to quality of life in elders (Mowad, 2004) and is related with their empowerment and well-being (Heathcote, 1997).

In Hong Kong, all residents, including elders, enjoy high degree of civic freedom under the Basic Law, including freedom of speech (Article 27), freedom of assembly (Article 27), freedom to travel (Article 31), freedom of conscience (Article 32) and freedom of choice of occupation (Article 33). However, older people may face more constraints in making life choices compared with other age groups due to their health conditions, financial security (indicator 4.1 refers) or stereotypes by employers in seeking jobs. Changes in social environment may also impact on the level of freedom

enjoyed by citizens. It is worthy to consider these factors in analyzing changes of the result in this indicator in future.

Access to public transport

In general, physical mobility help generate benefits of exercise, cultivate a sense of autonomy and independence, build social relationships, promote mental and emotional well-being, and maintain continuity of self and identity (Metz, 2000; Ziegler & Schwanen, 2011). A study in Japan found that frequency of travel by motor vehicles and bicycle was associated with higher physical activity, increased social function and better mental health (Tsunoda et al., 2015). Maintaining mobility of the elders also benefits the community directly through spending on the economy, employment, and voluntary work (Mackett, 2015).

The transportation system in Hong Kong is reputable. According to the ranking of the indicator 4.4, local elderly were very satisfied with transportation in Hong Kong. The merits of transportation facilities Hong Kong is also evidenced by the top ranking among 84 cities in the Urban Mobility Index 2.0 (Arthur D. Little & The International Association of Public Transportation, 2014), in recognition of highly efficient public transport network and low number of vehicles registered per capita. Hong Kong transportation network is efficient, accessible, and well-equipped with a variety of accessible transport options for passengers to various destinations in town. It uses mass transport by railways as backbone aligned with franchised buses, minibus, taxis and ferries.

Hong Kong transportation is also affordable for most elders. In 2012, the Government launched the Public Transport Fare Concession Scheme for the Elderly and Eligible Persons with Disabilities. Elderly people and eligible persons with disabilities could travel on designated public transport modes and services any time at a concessionary fare of \$2 per trip. The Scheme was later extended to include green minibus from 29 March 2015. The transport modes include MTR, franchised buses, ferries, and green minibuses. The policy benefits elder people in Hong Kong and encourages them to go travelling around the city for work or entertainment.

Nevertheless, disabled or frail elders face transport service problems to attend medical consultations or rehabilitation services. They find difficulty to utilize the existing public transport facilities and taxis may ignore their request for rides. Currently, there are dedicated services to these people such as Rehabu provided the Hong Kong Society for Rehabilitation. Nevertheless, booking for such service is difficult as its demand has far outpaced the provision of service. Diamond cab, provided by a social enterprise, offers point-to-point transportation services with wheelchair storage, but it is relatively expensive which may pose difficulty for many elders. It is a challenge and business opportunity to provide more affordable and accessible transport for them.

Creating enabling environment: Experience in Japan

Facing the ageing population, it is important for Hong Kong to build a more enabling environment to the elders. Other countries, such as Japan (see Figure 4.5), have been active in planning and redesigning community for the ageing population. It can be a valuable experience to Hong Kong in designing the age-friendly communities.



Redesigning community for aged society: A social experiment in Kashiwa

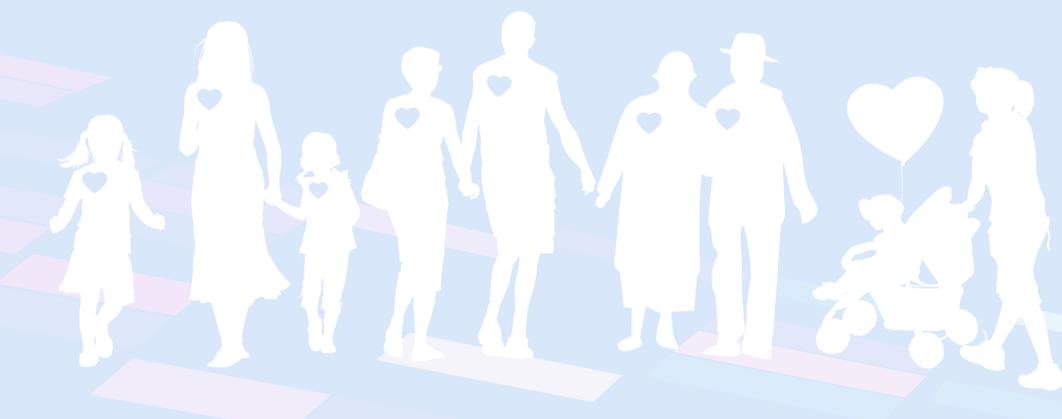
Japan is also facing an ageing population. Under the theme of “redesigning communities so that residents can age in place”, the Institute of Gerontology of the University of Tokyo has started a large-scale social experiment on the design of communities conducive to a long-lived society in Toyoshikidai district of Kashiwa City, Chiba Prefecture.



Figure 4.5 The design of an age-friendly community in Kashiwa
 (Adapted from <http://www.u-tokyo.ac.jp/en/utokyo-research/feature-stories/toward-active-living-by-a-centenarian-generation/>)

Chapter 5

Way Forward



Chapter 5 Way Forward

This is the first report of the AgeWatch Index for Hong Kong. To track the trend of the well-being of the elders in Hong Kong among other countries, the Institute will follow the methodology of the Global AgeWatch Index to calculate and publish the ranking of AgeWatch Index for Hong Kong in subsequent years. While maintaining the dialogue with HelpAge International for the latter to incorporate Hong Kong into the Index, the Institute will further develop the Index along the following directions:

5.1 Attending to the latest development of the Global AgeWatch Index

The Institute will monitor the changes to the Global AgeWatch Index and adopt them in calculating the Index for Hong Kong to ensure comparability and better measurement of well-being of elders. For instance, we note that the Index 2015 report has used Gross National Income (GNI) per capita to replace GDP per capita (indicator 1.4) for more accurate measure of standard of living of residents in a country (HelpAge International, 2015). Such update will be reflected in the AgeWatch Index for Hong Kong next year.

5.2 Domain-specific analysis of well-being of elders in Hong Kong

The Index provides a broad outlook on the well-being of elders in Hong Kong under different domains. In-depth analyses could supplement the figures and rankings to understand the environment and major issues faced by Hong Kong elders in each domain. The Global AgeWatch Index report has featured such thematic discussion on pension in its 2014 report (HelpAge International, 2014a). In order to gain insights in the local context, the Institute will research and publish topical reports for Hong Kong based on the four domains for the next four years.

5.3 Development of an Index for Hong Kong

As a special administrative region of China, Hong Kong has its own economic and sociodemographic profile. In order to capture the local characteristics and enable trend analysis of the well-being of elders in Hong Kong over time, the Institute plans to develop a dedicated index to measure the well-being of the local elderly. The Institute will collaborate with the Hong Kong Institute of Asia-Pacific Studies (HKIAPS) to ascertain the details of the Index in 2016, and to tap the views of elders by a telephone survey conducted by HKIAPS instead of Gallup used in the Global AgeWatch Index.

From AgeWatch Index to Age-Friendly City

The AgeWatch Index for Hong Kong depicts a territory-wide sketch of the well-being of Hong Kong's elders. To address the concrete needs of elders, it is necessary to examine the district and community they are living. With varying cross-district differences in Hong Kong, the result of the Index can shed light on broad areas to look out while district-based assessment could identify issues which can improve the quality of life of elders in greater depth. The "Jockey Club Age-friendly City Project" led by The Hong Kong Jockey Club Charities Trust in collaboration with ageing institutes and centres in four universities provides a timely opportunity to achieve this purpose. With district-based assessment, programmes and publicity, it is hoped that the well-being of elders would be improved as Hong Kong is becoming an age-friendly city.

References

- Aday, R. H., & Kehoe, G. (2008). Working in old age: Benefits of participation in the senior community service employment program. *Journal of Workplace Behavioral Health*, 23(1-2), 125–145.
- Arthur D. Little, & The International Association of Public Transportation. (2014). *Future of Urban Mobility 2.0*. Retrieved from http://www.adlittle.com/downloads/tx_adlreports/Arthur D. Little UITP Future of Urban Mobility 2_0.pdf
- Asia-Pacific Institute of Ageing Studies, Lingnan University, & Hong Kong Sheng Kung Hui Welfare Council. (2009). *Hidden Elderly Service Research*. Hong Kong: Hong Kong Sheng Kung Hui Welfare Council.
- AXA. (2007). *AXA Retirement Scope 2007: Retirement, a new life after work? Results for Hong Kong with International Comparison: Wave 3*. Retrieved from http://www.axa.com/lib/axa/uploads/etudes/barometreretraite/2007/AXA_Retirement_Scope_HongKong_2007_en.pdf
- Barnes, M., Blom, A., Cox, K., Lessof, C., & Walker, A. (2006). *The Social Exclusion of Older People: Evidence from the First Wave of the English Longitudinal Study of Ageing: Final Report*. London: National Centre for Social Research, University of Sheffield.
- Bauhinia Foundation Research Centre. (2009). *Optional Retirement: Better Choice*. Hong Kong: The Research Team of Asia Pacific Institute of Ageing Studies, Lingnan University.
- Blazer, D. G., Huges, D. C., & George, L. K. (1992). Age and impaired subjective support: Predictors of depressive symptoms at one year follow-up. *The Journal of Nervous and Mental Disease*, 180(3), 172–178.
- Bonnefoy, M., Berrut, G., Lesourd, B., Ferry, M., Gilbert, T., Guerin, O., . . . Rolland, Y. (2015). Frailty and nutrition: Searching for evidence. *Journal of Nutrition, Health and Ageing*, 19(3), 250-257.
- Bowling, A., & Grundy, E. (1998). The association between social networks and mortality in later life. *Reviews in Clinical Gerontology*, 8, 353–361.
- Cabinet Office of Japan. (2007). *White Paper on the National Lifestyle 2007*. Tokyo: Jiji Gahosha.
- Cagney, K. A., Browning, C. R., & Wen, M. (2005). Racial disparities in self-rated health at older ages: What difference does the neighborhood make? *Journal of Gerontology: Social Science*, 60(4), S181-S190.
- Cameron, I. D., Fairhall, N., Langron, C., Lockwood, K., Monaghan, N., Aggar, C., . . . Kurrle, S. E. (2013). A multifactorial interdisciplinary intervention reduces frailty in older people: Randomized trial. *BMC Medicine*, 11, 65.

- Cattell, V. (2001). Poor people, poor places, and poor health: The mediating role of social networks and social capital. *Social Science and Medicine*, 52(10), 1501–1516.
- Census and Statistic Department of Hong Kong Special Administrative Region Government. (2009). *Thematic Household Survey Report No. 40*. Hong Kong: Government Logistics Department.
- Census and Statistic Department of Hong Kong Special Administrative Region Government. (2012). *2011 Population Census: Summary results*. Hong Kong: Government Logistics Department.
- Census and Statistic Department of Hong Kong Special Administrative Region Government. (2013a). *2011 Population Census- Thematic Report: Older persons*. Hong Kong: Government Logistics Department.
- Census and Statistic Department of Hong Kong Special Administrative Region Government. (2013b). *Human resources with post-secondary education or working as professionals/ associated professionals*. Hong Kong: Government Logistics Department.
- Census and Statistic Department of Hong Kong Special Administrative Region Government. (2013c). *The Profile of the Population in One-person Households in 2011*. Hong Kong: Government Logistics Department.
- Census and Statistic Department of Hong Kong Special Administrative Region Government. (2013d). *Thematic Household Survey Report No. 50*. Hong Kong: Government Logistics Department.
- Census and Statistic Department of Hong Kong Special Administrative Region. (2015a). *2011 Table005: Statistics on Domestic Households*. Hong Kong: Government Logistics Department. Retrieved from <http://www.censtatd.gov.hk/showtableexcel2.jsp?tableID=005>
- Census and Statistic Department of Hong Kong Special Administrative Region Government. (2015b). *Hong Kong Population Projection: 2015-2064*. Hong Kong: Government Logistics Department.
- Chan, D., Kwok, A., Leung, J., Yuen, K., Choy, D., & Leung, P. C. (2012). Association between life events and change in depressive symptoms in Hong Kong Chinese elderly. *Journal of Affective Disorder*, 126, 963-970.
- Charities Aid Foundation. (2013). *World Giving Index 2013*. Retrieved from https://www.cafonline.org/docs/default-source/about-us-publications/worldgivingindex2013_1374aweb.pdf?sfvrsn=4.
- Chau, P. H., & Woo, J. (2008). *How Well are Seniors in Hong Kong Doing? An International Comparison*. Hong Kong: Hong Kong Jockey Club Charities Trust.



- Chau, P. H., Woo., J., Gusmano, M. K., & Rodwin, V. G. (2013). Hong Kong and other world cities. In J. Woo (Ed.), *Aging in Hong Kong: A Comparative Perspective* (pp. 5-30). New York, NY: Springer.
- Chi, I., Chiu, H. F. K., Chan, K. S., & Conwell, Y. (2005). Prevalence of depression and its correlates in Hong Kong's Chinese older adults. *The American Journal of Geriatric Psychiatry, 13*(5), 409-416.
- Chi, I., & Chou, K. L. (2001). Social support and depression among elderly Chinese people in Hong Kong. *International Journal of Aging and Human Development, 52*, 231–252.
- Chida, Y., & Steptoe, A. (2008). Positive psychological well-being and mortality: A quantitative review of prospective observational studies. *Psychosomatic Medicine, 70*, 741-756.
- Chivite-Matthews, N., & Maggs, P. (2002). *Crime, Policing and Justice: The Experience of Older People*. Retrieved from <http://webarchive.nationalarchives.gov.uk/20110218135832/rds.homeoffice.gov.uk/rds/pdfs2/hosb802.pdf>
- Chou, K., & Chi, I. (2005). Prevalence and correlates of depression in Chinese oldest-old. *International Journal of Geriatric Psychiatry, 20*, 41-50.
- Clark, C. J., Guo, H., Lunos, S., Aggarwai, N. T., Beck, T., Evans, D. A., . . . Everson-Rose, S. A. (2011) Neighborhood cohesion is associated with reduced risk of stroke mortality. *Stroke, 42*(5), 1212-1217.
- Cohen, S., & Janicki-Deverts, D. (2009). Can we improve our physical health by altering our social networks? *Perspectives on Psychological Science, 4* (4), 375-378.
- Collard, R. M., Boter, H., Schoevers, R. A., & Oude Voshaar, R. C. (2012). Prevalence of frailty in community-dwelling older persons: A systematic review. *Journal of the American Geriatrics Society, 60*(8), 1487-1492.
- Commission on Poverty of Hong Kong Special Administrative Region Government. (2006). *Assisting the "Hidden Elderly"*. Retrieved from http://www.povertyrelief.gov.hk/archive/2007/eng/pdf/EP_Paper4_2006eng.pdf
- Commission of Poverty of Hong Kong Special Administrative Region Government. (2013). *Hong Kong Poverty Situation Report 2012*. Retrieved from http://www.povertyrelief.gov.hk/pdf/2012_Poverty_Situation_Eng.pdf
- Commission of Poverty of Hong Kong Special Administrative Region Government. (2014). *Hong Kong Poverty Situation Report 2013*. Retrieved from http://www.povertyrelief.gov.hk/eng/pdf/poverty_report13_rev2.pdf

- Commission of Poverty of Hong Kong Special Administrative Region Government (2015). *Hong Kong Poverty Situation Report 2014*. Retrieved from http://www.povertyrelief.gov.hk/pdf/poverty_report_2014_e.pdf
- Cramm, J. M., & Nieboer, A. P. (2013). Relationships between frailty, neighborhood security, social cohesion and sense of belonging among community-dwelling older people. *Geriatrics and Gerontology International*, 13(3), 759-763.
- Dendinger, V. M., Adams, G. A., & Jacobson, J. D. (2005). Reasons for working and their relationship to retirement attitudes, job satisfaction and occupational self-efficacy of bridge employees. *International Journal of Aging & Human Development*, 61(1), 21–35.
- Department of Health of Hong Kong Special Administrative Region Government, & Department of Community Medicine of the University of Hong Kong. (2005). *Population Health Survey 2003/2004*. Hong Kong: Department of Health.
- Department of Health of Hong Kong Special Administrative Region Government. (2011). *Interim Review of Elderly Health Care Voucher Pilot Scheme*. Hong Kong: Department of Health.
- Department of Social Work and Social Administration, The University of Hong Kong. (2014). *Research Report on Future Development of Retirement Protection in Hong Kong- Executive Summary*. Retrieved from http://www.cpu.gov.hk/doc/en/research_reports/Future_Development_of_Retirement_Protection_in_HK_english_executive_summary.pdf
- Economic Intelligence Unit. (2015). *The Safe Cities Index 2015- Assessing Urban Security in the Digital Age*. Retrieved from http://safecities.economist.com/wp-content/uploads/2015/01/EIU_Safe_Cities_Index_2015_white_paper-20.02.15.pdf
- European Commission. (2005). *Joint Report on Social Protection and Social Inclusion 2005*. Brussels: European Commission.
- Fone, D., Dunstan, F., Lloyd, K., Williams, G., Watkins, J., & Palmer, S. (2007). Does social cohesion modify the association between area income deprivation and mental health? A multilevel analysis. *International Journal of Epidemiology*, 36(2), 338–345.
- Fujiwara, Y., Shinkai, S., Kobayashi, E., Minami, U., Suzuki, H., Yoshida, H., . . . Suzuki, T. (2015). Engagement in paid work as a protective predictor of basic activities of daily living disability in Japanese urban and rural community-dwelling elderly residents: An 8-year prospective study. *Geriatrics and Gerontology International*. doi: 10.1111/ggi.12441
- Glass, T. A., & Balfour, J. L. (2003). Neighborhoods, aging, and functional limitations. In I. Kawachi and L. Berkman (Eds.), *Neighborhoods and Health* (pp. 303-334). New York, NY: Oxford University Press.



- GOV.UK. (2014). *Retirement age*. Retrieved from <https://www.gov.uk/retirement-age>
- Harris, D. K., & Cole, W. (1980). *Sociology of Ageing*. Boston: Houghton Mifflin.
- Hartlapp, M., & Schmid, G. (2008). Labour market policy for 'active aging' in Europe: Expanding the options for retirement transitions. *Journal of Social Policy*, 37(3), 409–431.
- Heathcote, G. (1997). Autonomy, health and ageing: Transactional perspectives. *Health Education Research*, 15(1), 13-24.
- HelpAge International. (2013). *Global AgeWatch Index 2013: Purpose, Methodology and Results*. Retrieved from <http://www.helpage.org/download/54130249503f9>
- HelpAge International. (2014a). *Global AgeWatch Index 2014: Insight Report*. Retrieved from <http://www.helpage.org/download/542b0adfb65fb>
- HelpAge International. (2014b). *Global AgeWatch Index 2014: Methodological Update*. Retrieved from <http://www.helpage.org/download/542b0c4e2ea16>
- HelpAge International. (2015). *Global AgeWatch Index 2015: Insight Report*. Retrieved from <http://reports.helpage.org/global-agewatch-index-2015-insight-report.pdf>
- Hertz, J. E. (1996). Conceptualization of perceived enactment of autonomy in the elderly. *Issues in Mental Health Nursing*, 17, 261-273.
- Hertz, J. E., & Anschutz, C. A. (2002). Relationships among perceived enactment of autonomy, self-care, and holistic health in community-dwelling older adults. *Journal of Holistic Nursing*, 20(2), 166-186.
- Hong Kong Jockey Club Centre for Suicide Research and Prevention. (2015). *Statistics*. Retrieved from <http://csr.p.hku.hk/statistics/>
- HSBC. (2008). *The Future of Retirement: Investing in Later Life*. Retrieved from <http://www.apapr.ro/images/BIBLIOTECA/reformageneralitati/hsbc%20future%20retirement%202008.pdf> (as cited in Bauhinia Foundation Research Centre, 2009)
- Inoue, S., Yorifuji, T., Takao, S., Doi, H., & Kawachi, I. (2013). Social cohesion and mortality: A survival analysis of older adults in Japan. *American Journal of Public Health*, 103(12), e60-e66.
- Institute for Health Metrics and Evaluation. (2010). *Global Burden of Disease Study 2010*. Retrieved from <http://ghdx.healthmetricsandevaluation.org/record/global-burden-disease-study-2010-gbd-2010-healthy-life-expectancy-1990-2010>
- Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban Health*, 78(3), 458-467.

- Kim, E. S., Park, N., & Peterson, C. (2013). Perceived neighborhood social cohesion and stroke. *Social Science and Medicine*, *97*, 49-55.
- Kim, S., & Feldman, D. C. (2000). Working in retirement: the antecedents of bridge employment and its consequences for quality of life in retirement. *Academy of Management Journal*, *43*(5), 1195-1210.
- La Grange, A. (2011). Neighbourhood and class: A study of three neighbourhoods in Hong Kong. *Urban Studies*, *48*(6), 1181-1200.
- Labour and Welfare Bureau of Hong Kong Special Administrative Region Government. (2015). *Report on Manpower Projection to 2022*. Hong Kong: Government Logistics Department.
- Lai, D. W. L. (2013). Support and care for Aging Chinese: A comparison of Guangzhou, Hong Kong and Taipei. In K. Chan (Ed.), *International Handbook of Chinese Families* (pp. 289-303). New York, NY: Springer.
- Law, C. K., & Yip, P. S. F. (2003). Healthy life expectancy in Hong Kong Special Administrative Region of China. *Bulletin of the World Health Organization*, *81*(1), 43-47.
- Legatum Institute. (2015). *The 2015 Legatum Prosperity Index*. Retrieved from http://media.prosperity.com/2015/pdf/publications/PI2015Brochure_WEB.pdf
- Li, W., Keegan, T. H. M., Sternfeld, B., Sidney, S., Quesenberry, C. P., & Kelsey, J. L. (2006). Outdoor falls among middle-aged and older adults: A neglected public health problem. *American Journal of Public Health*, *96*(7), 1192-1200.
- Li, Y., & Ferraro, K. F. (2005). Volunteering and depression in later life: Social benefit or selection processes? *Journal of Health and Social Behavior*, *46*, 68-84.
- Liu, X., Liang, J., & Gu, S. (1995). Flows of social support and health status among older persons in China. *Social Science and Medicine*, *41*(8), 1175-1184.
- Mackett, R. (2015). Improving accessibility for older people- Investing in a valuable asset. *Journal of Transport and Health*, *2*, 5-13.
- Mair, C. F., Roux, A. V. D., & Galea, S. (2008). Are neighbourhood characteristics associated with depressive symptoms? A critical review. *Journal of Epidemiology and Community Health*, *62*(11), 940-946.
- Mathers, C. D. (2015). Causes of international increases in older age life expectancy. *The Lancet*, *385*(9967), 540-541.
- Metz, D. (2000). Mobility of older people and their quality of life. *Transport Policy*, *7*(2), 149-152.
- Murayama, H., Nishi, M., Nofuji, Y., Matsuo, E., Taniguchi, Y., Amano, H., . . . Shinkai, S. (2015a).



Longitudinal association between neighborhood cohesion and depressive mood in old age: A Japanese prospective study. *Health and Place*, 34, 270-278.

Marayama, Y., Ohba, H., Yasunaga, M., Nonaka, K., Takeuchi, R., . . . Fujiwara, Y. (2015b). The effect of intergenerational programs on the mental health of elderly adults. *Ageing and Mental Health*, 19(4), 306-314.

Minister of Manpower, Singapore. (2015). *Re-employment*. Retrieved from <http://www.mom.gov.sg/employment-practices/re-employment>

Mowad, L. (2004). Correlates of quality of life in older adult veterans. *Western Journal of Nursing Research*, 26(3), 293-306.

Musick, M., Herzog, A., & House, J. (1999). Volunteering and mortality among older adults: Findings from a national sample. *Journals of Gerontology*, 54B(3), S173-S180.

Mutchler, J., Burr, J., & Caro, F. (2003). From paid worker to volunteer: Leaving the paid workforce and volunteering in later life. *Social Forces*, 81, 1267-1293.

Oh, J. (2003). Assessing the social bonds of elderly neighbors: The roles of length of residence, crime victimization, and perceived disorder. *Sociological Inquiry*, 73(4), 490-510.

Rantakokko, M., Mänty, M., Iwarsson, S., Törmäkangas, T., Leinonen, R., Heikkinen, E., & Rantanen, T. (2009). Fear of moving outdoors and development of outdoor walking difficulty in older people. *Journal of American Geriatrics Society*, 57(4), 634-640.

Rietschlin, J. (1998). Voluntary association membership and psychological distress. *Journal of Health and Social Behavior*, 39, 348-355.

Robinette, J. W., Charles, S. T., Mogle, J. A., & Almeida, D. M. (2013). Neighborhood cohesion and daily well-being: Results from a diary study. *Social Science and Medicine*, 96, 174-182.

Rockwood, K., Stadnyk, K., MacKnight, C., McDowell, I., Hebert, R., & Hogan, D. B. (1999). A brief clinical instrument to classify frailty in elderly people. *Lancet*, 353, 205-206.

Romero-Ortuno, R., Cogan, L., Cunningham, C. U., & Kenny, R. A. (2010). Do older pedestrians have enough time to cross roads in Dublin? A critique of the Traffic Management Guideline based on clinical research findings. *Age and Ageing*, 39(1), 80-86.

Rosow, I. (1974). *Socialization to Old Age*. Berkeley: University of California Press.

Rowe, J. W., & Kahn, R. L. (1998). *Successful Aging*. New York, NY: Pantheon/Random House.

Ryff, C. D. (1989a). Beyond Ponce de Leon and life satisfaction: New directions in quest of successful ageing. *International Journal of Behavioral Development*, 12(1), 35-55.

- Ryff, C. D. (1989b). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069-1081.
- Ryff, C. D. (1995). The structure of psychological well-being revisited. *The Journal of Personality and Social Psychology*, 69(4), 719-727.
- Ryff, C. D., Singer, B. H., & Love, G. D. (2004). Positive health: Connecting well-being with biology. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 359, 1383-1394.
- Sampson, R. J. (2003). The neighborhood context of well-being. *Perspectives in Biology and Medicine*, 46(3), S53-S64.
- Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918-924.
- Schwengel, A., Niti, M. M., Tang, C., & Ng, T. P. (2009). Continued work employment and volunteerism and mental well-being of older adults: Singapore longitudinal ageing studies. *Age and Ageing*, 38(5), 531-537.
- Secretariat of the Steering Committee on Population Policy of Hong Kong Special Administrative Region Government. (2014). *Thoughts for Hong Kong: Public Engagement Exercise on Population Policy*. Hong Kong: Chief Secretary for Administration's Office.
- Siu, O. L., & Phillips, D. R. (2002). A study of family support, friendship, and psychological well-being among older women in Hong Kong. *International Journal of Aging and Human Development*, 55, 295-315.
- Smyer, M. A., & Pitt-Catsouphes, M. (2007). The meanings of work for older workers. *Generations*, 31, 23-30.
- Social Exclusion Unit, Office of the Deputy Prime Minister, United Kingdom. (2006). *A Sure Start to Later Life: Ending Inequalities for Older People*. Retrieved from http://www.cpa.org.uk/cpa/seu_final_report.pdf
- Social Welfare Department of Hong Kong Special Administrative Region Government. (2015). *Statistics and Figures on Social Security*. Retrieved from http://www.swd.gov.hk/en/index/site_pubsvc/page_socsecu/sub_statistics/
- Song, X., Mitnitski, A., & Rockwood, K. (2010). Prevalence and 10-year outcomes of frailty in older adults in relation to deficit accumulation. *Journal of the American Geriatrics Society*, 58(4), 681-687.
- Speechley, M., & Tinetti, M. (1991). Falls and injuries in frail and vigorous community elderly persons. *Journal of the American Geriatrics Society*, 39, 46-52.



- Stafford, M., Chandola, T., & Marmot, M. (2007). Association between fear of crime and mental health and physical functioning. *American Journal of Public Health, 97*, 2076–2081.
- Stephoe, A., Deaton, A., & Stone, A. A. (2015). Subjective wellbeing, health, and ageing. *Lancet, 385*, 640-648.
- Sun, W. J., Xu, L., Chan, W. M., Lam, T. H., & Schooling, M. (2012). Depressive symptoms and suicide in 56,000 older Chinese: A Hong Kong cohort study. *Social Psychiatry and Psychiatric Epidemiology, 46*(4), 505-514.
- Theou, O., Stathokostas, L., Roland, K. P., Jakobi, J. M., Patterson, C., Vandervoort, A. A., & Jones, G. R. (2011). The effectiveness of exercise interventions for the management of frailty: A systematic review. *Journal of Ageing Research, 2011*, 19. doi: 10.4061/2011/569194
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior, 52*(2), 145-161.
- Timebanking UK. (n.d.). *What is Timebanking*. Retrieved from <http://www.timebanking.org/what-is-timebanking/>
- Tsunoda, K, Kitano, N., Kai, Y., Tsuji, T., Soma, Y., Jindo, T., . . . Okura, T. (2015). Transportation mode usage and physical, mental and social functions in older Japanese adults. *Journal of Transport and Health, 2*, 44-49.
- United Nation Development Project. (2013). *Human Development Report 2013, The Rise of the South: Human progress in a diverse word*. Retrieved from http://hdr.undp.org/sites/default/files/reports/14/hdr2013_en_complete.pdf
- United Nations Office on Drugs and Crime. (2007). *Responses by Country to: Questionnaire for the Ninth United Nations Survey of Crime Trends and Operations of Criminal Justice Systems, Covering the Period 2003-2004*. Retrieved from https://www.unodc.org/documents/data-and-analysis/CTS9_by_country.pdf
- United Nations Office on Drugs and Crime . (2015). *Statistics on Crime*. Retrieved from <https://data.unodc.org/>
- Van Willigen, M. (2000). Differential benefits of volunteering across the life course. *Journal of Gerontology, 55*(5), S308-S318.
- Wethington, E., Moen, P., Glasgow, N., & Pillemer, N. (2000). Multiple Roles, Social Integration, and Health. In K. Pillemer, P. Moen, E. Wethington, & N. Glasgow (Eds.), *Social Integration in the Second Half of Life* (pp. 48-71). Baltimore, MD: Johns Hopkins University Press.

- Willis, S. L., Tennstedt, S. L., Marsiske, M., Ball, K., Elias, J., Koepke, K. M., . . . Wright, E. (2006). Long-term effects of cognitive training on everyday functional outcomes in older adults. *Journal of the American Medical Association*, *296*(23), 2805-2814.
- Wong, M., Chau, P. H., Cheung, F., Phillips, D. R., & Woo, J. (2015). Comparing the age-friendliness of different neighbourhoods using district surveys: An example from Hong Kong. *PLoS ONE*, *10*(7), e0131526. Unpublished raw data.
- Wong, S. T., Yoo, G. J., & Stewart, A. L. (2007). An empirical evaluation of social support and psychological well-being in older Chinese and Korean immigrants. *Ethnicity and Health*, *12*, 43-67.
- Woo, J., Yu, R., Wong, M., Yeung, F., Wong, M., & Lum, C. (2015). Frailty screening in the community using the FRAIL scale. *Journal of the American Medical Directors Association*, *16*(5), 412-419.
- World Bank. (2015). *Hong Kong SAR, China*. Retrieved from <http://data.worldbank.org/country/hong-kong-sar-china>
- World Health Organization. (2007). *Global Age-friendly Cities: A Guide*. Retrieved from http://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf
- World Health Organization. (2014). *Facts about ageing*. Retrieved from <http://www.who.int/ageing/about/facts/en/>
- Yip, P. S. F., Chi, I., Chiu, H., Wai, K. C., Conwell, Y., & Caine, E. (2003). A prevalence study of suicide ideation among older adults in Hong Kong SAR. *International Journal of Geriatric Psychiatry*, *18*(11), 1056-1062.
- Zhan, Y., Wang, M., Liu, S., & Shultz, K. S. (2009). Bridge employment and retirees' health: A longitudinal investigation. *Journal of Occupational Health Psychology*, *14*(4), 374-389.
- Ziegler, F., & Schwanen, T. (2011). "I like to go out to be energised by different people": An exploratory analysis of mobility and wellbeing in later life. *Ageing and Society*, *31*, 758-781.



**The Chinese University of Hong Kong
CUHK Jockey Club Institute of Ageing**

Tel:+852 3943 9450 Email:ioa@cuhk.edu.hk
Website:<http://www.ioa.cuhk.edu.hk>

ISBN 978-988-13331-9-3



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