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Projecting sustainable living environment for an ageing society: The case of Hong Kong

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Abstract

In 2030, 22% of Hong Kong's total population will be aged 60 or older. In order to advocate Active Ageing¹ in a qualified and sustainable environment, our research team has continuously investigated the habitable urban living environment for elderly people in Hong Kong. In 2009, we have completed a research on the practice of everyday life of an active group of elderly people. This research aimed to firstly understand how people aged 60 or above live actively in an urban environment; and secondly, to see if they are leading a quality life in Hong Kong. With this conceptual framework in mind, we wished to relate the environmental context to the ageing society. We organized the findings of this research into a conceptual framework to assess the use of urban space in Hong Kong. We wished to find out whether the use of it was fit for providing a qualified life for the older people. We find that while Hong Kong is a liveable city offering a vibrant city life, it is at the same time a 'dual city' where the high spending 'nouveau riches' is gradually expelling the poorer citizens not only from the downtown area, but also from maintaining an affordable quality of living. Our findings strongly suggested that *ageing* is not a barrier to an active social life. In reality, *poverty* is the major factor that creates both helpless and hopeless feelings among the elderly people. In order to construct a sustainable environment which is 'growing old', the Hong Kong Government should integrate the concern of the older citizens into urban planning and design policies. The most important issue is to make the city life more affordable to all.

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¹ Active ageing is 'the purpose of optimising opportunities for health, participation and security in order to enhance quality of life as people age' (WHO 2002)

1. Introduction

This year, Filippo Lovato has won the Economist Intelligence Unit (EIU)'s worldwide livability ranking competition [1]. Lovato has ranked Hong Kong as the most livable city in the world. However, while appreciating the vibrancy of the city life, Lovato's assessment criteria have neglected two crucial questions: who lives in Hong Kong? Did the citizens feel the same as Lovato? According to the most recent statistics and projection, 22% of the total population of Hong Kong will be aged 60 or older by 2030. In this respect, Lovato should include one more criterion for his assessment: is Hong Kong a livable city for the elderly people?

When considering the on-going demographic shift, a prominent researcher employs the concept of 'longevity and disease burden' [2] to reveal the problems of our ageing society. We find that this bio-medical approach is based on the conventional association of old age with disease and passivity. Such description also entails the image of 'a linear progression of needs in a static city' [4]. We also remark that the Hong Kong government has remained passive in responding to the new challenges presented by its ageing population. In respect to the discussion and planning of a habitable (physical, social and cultural) environment for the ageing society, the Policy Address of 2011/12 issued by the Office of the Chief Executive only focused on the context of 'ageing-in-place', thus, restricting solution merely in accordance to the increase in the number of places for elderly home with and without care.

The livability of a city can only be truly experienced by its citizens. In order to offer a new definition of the relationship between the city and its elderly citizens, our research team conducted a study (2007-2009) on the lifestyle patterns of an active group of elderly people in Hong Kong. While reporting on the findings of our research, this paper also examines the conditions under which people can age well and remain as an active part of the society. Furthermore, this paper reveals that while being the most livable city in the world, Hong Kong is also a 'dual city' which is continuously suffering from worsening wealth disparity [5]. Regarding to this issue, we compare the findings of our research on the lifestyles of older people with adequate resources with those of a survey research on the daily life of the poorer older people². Such comparison reveals that *age* is not a barrier to an active social life. In reality, *poverty* is the major factor that pushes people to become passive, dependent and desperate. In this context, we wish to urge the policy makers to consider the urban environment in terms of the 'possibility of life' for an ageing population.

2. Objectives of the Research Project: the city and the everyday life of active elderly people

2.1. Research Design

In this research we tried to answer the following questions:

- What do the everyday life patterns of the informants tell us? What does living a quality lifestyle mean to the informants?
- Territorial and mobility needs: Where do they go everyday? How far will they travel away from home? How long will they spend time away from home? How is the accessibility of public spaces by the public transportation system? Can they afford the travel expenses?
- Use of public space and services: How do the informants use the public spaces, facilities and services? Are they satisfied with the facilities? Can they afford to pay for the facilities and services?

² In 2009, a major political party in Hong Kong, Democratic Alliance for the Betterment and Progress of Hong Kong (DAB), conducted a telephone survey (with 681 informants living independently and aged 60 or older) to investigate the standards of living amongst Hong Kong's elderly community.

- The quality of the urban environment: Is the existing living environment (physical and social) able to offer a quality lifestyle to all elderly citizens?
- *Policy proposal to the government*: How to improve the environmental resources in order to enable the elderly citizens to lead an independent and active life?

2.2. *Methods*:

In this research, we have conducted semi-structured interviews with 50 informants aged 60 to 79. The purpose of this research was to understand the everyday life patterns of these elderly citizens. From their responses, we were able to understand the use of public spaces, the mobility of elderly people and the accessibility of the places within the city. The informants commented freely on the quality of life and the degree of age-friendliness inside the city. We invited our informants based on the following qualifications: (1) aged 60 or older; (2) in good physical and psychological health conditions; and (3) had attained at least a junior high school education. We recruited the informants who were the frequent users of community centers and members of churches in Hong Kong. There were 36 female and 14 male among our informants.

We designed the specific questions in order to investigate the everyday living patterns of the informants and we had also organized the interviews to elicit the participants' everyday living patterns in a schematic manner. We recorded their daily schedules and itineraries, the activities they were engaged in and the locations where they regularly visited. Almost 95% of the questions in this research were open questions, which offered the participants sufficient freedom to talk and reflect on the theme of the project: 'the everyday life of active elderly people and their living environments'. Whenever the participants brought up issues that were important to them, we asked follow-up questions to attain further details from their responses. In the last section of the interview, we invited informants to comment on the existing living environment in Hong Kong and to propose their suggestions for sustaining an 'age-friendly' environment.

Each interview lasted for about 2 hours. We asked for our informants' consents to record the entire process prior to the initiation of our interviews.

2.3. *Characteristics of the Sample*

In addition to the qualitative (textual) data, we also recorded the informants' personal characteristics including: age, gender, self-rating of health condition, education, former or current occupation and financial situation (Please refer to Table 1).

Table 1. Sample characteristics

Characteristics	Number of participants	
(a) Gender:	Female	36
	Male	14
(b) Age:	60–64 years old	17
	65–69 years old	16
	70–74 years old	6
	75–79 years old	5
	80 years old or over (The eldest informant is 86 years old)	6
(c) Education:	College degree or greater	20
	High School	14
	Junior High School	13
	Primary School (to the sixth grade)	2
	Without formal school education (Acquired junior high school level through self-learning)	1
(d) Occupation:	Working	7
	Retired	43
(e) Financial Situation:	Financially Independent	50
	Financially Dependent	0

Most informants had attained a higher level of education³ when they were young. Since higher education level was indeed a rare capital between 1960s and 1970s, most of them managed to have a good job before retirement (while some of them were still working). Most informants are, therefore, able to be economically independent after their retirements. Some of them live in the older districts of the inner city, while others reside in the developed new towns in Hong Kong. Only two informants live in the periphery of the city.

We recruited these informants with the above characteristics because we wished to measure the level of activities of the older people who were free from financial constraints. In addition, these informants were also able to use technology to communicate with the outside world. The informants with such characteristics could provide us with useful insights into the everyday life patterns of the future generation of elderly people. The future cohort of older people will certainly be better educated. They will probably be more skilful to use the computer to connect to the outside world. Our hypothesis from this research suggested that if the living environment becomes more affordable, supportive and ‘age-friendly’ in Hong Kong, the future elderly will be more pro-active and capable of leading an active social life.

2.4. Findings

Staying Active

All of the informants stay active and incorporate a great variety of activities into their everyday life. They all took part in different activities outside of their home. All informants spent an average time of 9.5 hours on weekdays and 11.5 hours on weekends away from home. The informants were highly mobile as all of them undertook cross-district activities nearly every day. Apart from walking, the informants used different forms of transportation to get around the city including: bus (31 informants), railway (21 informants), private vehicle (8 informants), mini-bus (4 informants), tram (2 informants), ferry (2 informants) and taxi (2 informants). Many informants travelled regularly to other places outside of Hong

³ According to the 2006 Population By-census, published by the Hong Kong Census and Statistic Department, among the population of elderly people older than 65 (852,796), the percentage of which having attained secondary or higher education level is only 25. In respect to our informants, 20 out of 50 had attained tertiary level of education; 27 had attained secondary school education level; 2 primary school level and one person was an autodidact.

Kong. While Mainland China was the most preferred destination (44 informants), many informants had also travelled overseas (38 informants) to visit family members or just for tourism.

Activities at Home

All informants engaged in different activities at home in which we had categorized as homemaking, entertainment, arts and crafts and culture.

Homemaking: All informants participated in general home cleaning (50 informants), cooking, at home (33 informants). Some informants were the principal caretakers for their family members, who looked after their parents (3 informants) or grandchildren (5 informants).

Entertainment: All informants watched TV on daily basis. Some informants spent time listening to the radio (23 informants), record music (21 informants) or surfed on Internet (9 informants).

Arts and Crafts: Many female informants spent time arranging flowers (23 informants) and doing needlework (22 informants). Some played musical instruments regularly (17 informants). Others painted (5 informants) and practiced Chinese calligraphy (4 informants). 4 informants taught piano, Chinese painting and calligraphy.

Cultural Activities: Nearly all informants enjoyed reading magazines and books (48 informants); some liked reading classic literature, philosophy or religious texts (5 informants) or in keeping a diary (2 informants).

Social Activities: Some informants invited friends or relatives to their home on a regular basis. They played Mahjong (8 informants), card games (2 informants), electronic games (2 informants) and chess (1 informant) together with friends.

Connecting to the World: All informants read newspaper daily. Almost one fifth of the informants (9 informants) spent time reading the most up-to-date news and information online.

Activities Outside Home

The informants were also eager to go outside and enjoyed the city life everyday. All informants took part in different activities away from home everyday. We had categorized these activities as self-employment/paid jobs/ volunteer activities, physical exercise, cultural activities and leisure and shopping.

Self-Employment/Paid Jobs/Volunteer Activities: During the time of our research, 8 informants were still working; they were either self-employed (5 informants) or working as an employee (3 informants). Most informants took part in voluntary community services (43 informants).

Physical Exercise: Most of the informants engaged in physical exercise regularly, usually in the morning. Some would practice strenuous exercises that require vigorous energy consumption. The exercises practiced by the informants included Tai-Chi (29 informants), social dancing (24 informants), swimming (22 informants), hiking (16 informants), gymnastics (10 informants), ball games (9 informants), jogging (7 informants), martial arts (2 informants), yoga (1 informant), cycling (1 informant), fishing (1 informant) and walking (10 informants). Some informants would take part in more than one type of physical exercise on weekly basis.

Cultural Activities: Most informants visited cultural venues or participated in cultural activities and were usually accompanied by friends or family members. They went to the libraries (28 informants), art exhibitions (26 informants) and museums (25 informants); some listened to classical music concerts (21 informants), traditional Chinese opera (21 informants), popular music concerts (19 informants) or watched movies in cinemas (20 informants). A few others enjoyed watching drama (3 informants), circuses (2 informants), Chinese dancing (1 informant) or ballet (1 informant).

Leisure and Shopping: Nearly all informants enjoyed dining out with friends and relatives especially during the weekends. Some informants enjoyed shopping with families, relatives or friends on the weekends. These informants would regularly visit bookstores (28 informants), fashion boutiques (21 informants), music stores (11 informants), flower shops (13 informants), computer and accessories shops (5 informants), pet shops (3 informants) and supermarkets (3 informants). Some would go to photography supplies stores (2 informants), beauty products shops (2 informants), painting supplies stores (1 informant), martial arts supplies shops (1 informant), grocery stores (1 informant) and dried seafood shops (1 informant).

Family and Social Relations: For many of the informants, contacts with children and other relatives remained important to them. Nearly all informants had regular contact with their friends and family, either face to face or by phone. Many of them would get together frequently with relatives (42 informants) and all of them had regular contact with friends (50 informants).

Social activities: All informants participated frequently in activities organized by the welfare organizations. The informants were able to make new friends and developed extensive social networks by participating in these social activities.

Learning: Most informants were eager to learn new skills and knowledge by taking a wide range of courses at the community centers. Subjects studied included language-learning (15 informants), musical instruments (12 informants), drama (8 informants), painting (7 informants), philosophy (4 informants) and social dancing (23 informants). During the interviews, the informants mentioned many subjects they wished to learn such as calligraphy, painting, photography, Western and Chinese paintings, signing, painting, folk dancing, social dancing, badminton, lawn bowling, video production and poetry.

In order to contextualise the concept of active ageing, we have organized and summarized the scope of a quality life as proposed by the informants into the following table:

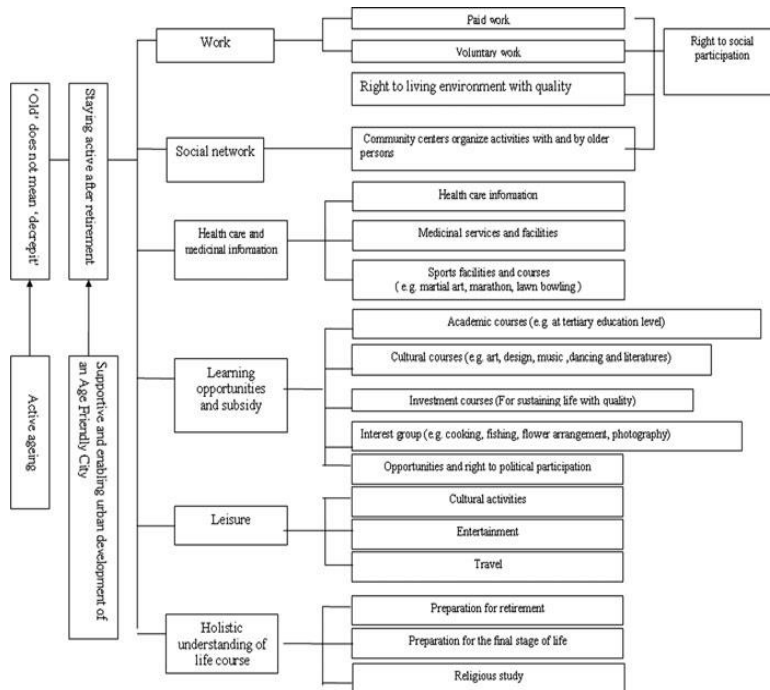


Figure 1. The scope of a quality life in respect to the concept of active ageing

3. Analysis: Hong Kong--- A livable city? A dual city?

The findings of this research have offered us a comprehensive picture on how the active older people organize their everyday life in urban space. The informants had the habit of going out everyday. To these elderly informants, places with social events and activities were attractive destinations to satisfy and enrich their various interests. Natural environment with good leisure facilities, such as hilly areas with walking trails and seaside with beaches, were also favorable places for the elderly informants. As these were the places where people gather, the informants were, thus, building and sustaining their social network while enjoying various activities at the same time.

For obtaining daily subsistent necessities, like food products and maintaining physical health, they preferred going to wet market and supermarkets, as well as doing physical exercises in their neighborhood. Many of them visited the community centers near their houses on regular basis. However, they were also ready to move to other districts to participate in different activities. They were frequent users and visitors of the libraries, community centers, indoor dancing halls and parks, swimming pools, walking trials on the hill and beaches. They also enjoyed dining out in affordable Chinese restaurants with friends and relatives.

Like most adults, they were ready to take different means of transportation to work, to attend classes to learn about the world, to contribute to the society by engaging in volunteer works, to meet friends and relatives and to participate in a wide range of interesting activities.

Though the informants were financially ‘secured’, they were not rich people within the society. They preferred going to places where costs were low or free of charge. For example, they would do exercises in the natural environment or in the sport fields run by the government. They would participate in events and activities organized by NGOs where only small charges were required. They would also visit museums on Wednesdays because admission was free of charge on that day.

Our research has established a contrary view from the observation of Tinker, who stated that ‘older people tend to spend longer time at home’ [Tinker, 1997]. Our informants, with sufficient financial resources and good health conditions, were able to maintain autonomy and independence in life. Ranzi [2002] suggested that ‘older people can foster a sense of purpose in life and a positive effect about themselves if they participate in different activities, because they help to promote physical and mental health’. We noticed that the informants did not just undertake activities for ‘leisure’ purposes, and the ‘fear of isolation’ was not the only reason for the informants to sustain their social network of friends and family members. As a group of healthy and active elderly citizens, they had a desire to work, to learn about the world, to contribute to the society and to get to know new friends. Some of them even declared that they would like to meet ‘companions’. The research, thus, tells us that even in advanced age, elderly people can still remain very enthusiastic about life.

We are aware that the setting of the urban environment plays a major role in enabling our informants to sustain an active lifestyle in Hong Kong. As mentioned, the Economist Intelligence Unit (EIU) has ranked Hong Kong as the top city in a worldwide livability survey this year. It considers Hong Kong as ‘a very compact city that has managed to maintain its natural heritage, create a dense network of green spaces and enjoy extensive links to the rest of the world. Although Hong Kong scored relatively poorly for pollution and cultural assets, the city benefited from strong scores in the natural assets and sprawl categories.’

The districts where most of our informants resided, such as the downtown area and the well-developed new towns of Hong Kong, are compact places. These districts provided mixed functions of housing, commercial activities and social services which contribute toward the formation of a lively neighborhood. The well-connected transportation network in which they find it affordable also motivates them to go out and enjoy the vibrant public life. Moreover, some of the informants would go and enjoy the nature which is usually less than one hour from the downtown area by train or by bus.

However, the poorer elderly citizens cannot be benefited from the vibrant city life in Hong Kong. In 2009, a major political party, the Democratic Alliance for the Betterment and Progress of Hong Kong (DAB), conducted a telephone survey (with 681 informants aged 60 or older who lived independently) to investigate the standards of living amongst the Hong Kong's elderly community. The research findings were gloomy: (1) many informants stated that they would avoid social activities because of the lack of money (57.7%); (2) many senior citizens who were under severe financial pressure would avoid visiting a doctor if they fell ill (38.3%); (3) some stated that they did not have enough money to buy foods (20.3%); (4) 66.4% of the informants believed that the government was not doing enough to care for the senior citizens; and (5) 48.5% felt there was less respect for elderly people within the Hong Kong society. (DAB News, November 2009) 0.

This sad picture of the poor elderly people living in Hong Kong illustrates a sharp contrast to our findings. When the findings of both researches are put into comparison, they reveal the naked fact that Hong Kong is actually a ‘dual city’. Chui and Lui [6] stated that ‘Hong Kong experienced, during the 1990s, a process of occupational polarization and widening income inequality as a result of its transformation from an industrial colony to a producer service-driven global city’. Lee, Wong & Law [9] continued the discussion as they claimed that the low-skilled and less-educated workers were both marginalized and trapped in a vicious cycle of low income and poverty. Moreover, as reported by Anthony Cheung, the current Secretary for Transport and Housing, many single elderly people were still living in the overcrowded, dilapidated caged beds and sub-divided units in the old downtown apartments. He emphasized that this phenomenon pointed to a more deep-seated and multifaceted urban poverty crisis⁴. In this context, old age is naturally ‘a time of fraught and passivity’ for the poorer elderly population. Ranzi [13] stressed that ‘the greatest perceived barrier to “productive ageing” were illness

⁴ Cheung, A. ‘This City is Dying’, article published on the newspaper MingBao, 14 December, 2011

and lack of money’. Only half of what Ranzin said is correct. The DAB research revealed the naked fact that the major cause of ‘social withdrawal, reduction in activity, increased dependency and illness’ was not a body getting old, but *poverty*. The comparison between our research and the survey conducted by DAB also strongly suggests that *age* is not a barrier to an active social life. In reality, *poverty* is the major factor that makes people feel both helpless and hopeless with their lives. If the city was planned to be more inclusive and affordable in the interests of its elderly citizens, then many of them would be able to organize a healthy lifestyle by engaging actively within the society.

4. Conclusion: Sustaining active ageing in Hong Kong

When considering the situation in Sweden, Gunnarsson [7] stated that, “research on the everyday life of older women and men who are not in need of help from elder care is scarce” [p. 33]. The empirical data presented in this article clearly reveals that elderly people who live with adequate financial resources are playing an active part in the urban space, instead of representing a problem within the ageing society.

Hardill and Baines [8] correctly remarked that the ageing rhetoric often focused on the processes of decline: elderly people were usually described as ‘dependent’; and ‘in terms of the costs of pensions and health care’, they were ‘considered as the “burden” of support falling on a narrower section of the population’ [p. 37]. This statement also corresponds to the current situation in Hong Kong. Chan urges the citizens to prepare for their old age by ‘*saving* the physical, social and financial resources’ while they are still young⁵. Nevertheless, with the serious problems on income inequality, the preparation for old age is almost impossible to be left to individual endeavor. Chan has omitted the fact that many Hong Kong citizens cannot gain retirement pension, which will guarantee financial security after their retirements⁶. Without the support of the government, the majority of the elderly people will not be able to find a sense of fulfillment in their old age.

When we considered the scope of activities of our informants, we found that the environment of Hong Kong could fulfill the criteria for creating a public space, which would be adequate to satisfy the needs of the elderly people (i.e. accessibility, connectivity, intensity, conviviality, flexibility, comfort and security) as established by Martinoni, Sassi & Sartoris [2009] [10]. Unfortunately, with the rocketing housing prices and the cost of living in the downtown districts, only high spending ‘productive elites’ and tourists can stay in those vibrant areas and enjoy life in this ‘world’s most livable city’. As social polarization is becoming serious and wealth disparity is worsening continuously, the picture is turning gloomy for the poorer people who are unable to plan and prepare for their old age in this city. How will this city prepare for the coming of an ageing society, in which one third of the population will be aged over 60?

At the moment, the government’s imagination of an ageing society by 2050 is filled with anxieties because it focuses too much on the financial burden caused by medical care and social assistance. The ideas coupling ‘city and older citizen’ are seldom mentioned in the urban space development policy of the Hong Kong Government. Instead of focusing on searching for solutions to ease the government’s burden of medical care and social services, gerontologists in Hong Kong should conduct more in depth studies on the distribution of public resources, the complexity of the urban setting and its implication on the large group of the older people, each of whom may lead a different life from others. To promote ‘active ageing’,

⁵ Chan, A. (2011) emphasized on the role of individual responsibility in shaping a person’s life chance --- in a slide of the presentation, he stated:

‘The future is patently clear: SAVE! SAVE! SAVE!

(1) Save health – to stay active; (2) Save money – to stay in comfort; (3) Save friends – to stay connected’

⁶ The Mandatory Provident Fund (MPF) was launched by the Hong Kong government in 2000. The MPF is a ‘forced saving programme’, which is compulsory for employers to make contributions to their workers’ retirement schemes and demands employees to save for their old age. Chan, CK. (2003) critically remarked that MPF could be seen as a residual welfare state’s minimal and market-oriented intervention in an ageing society. In respect to the low waged workers, since their salaries are too low to enable them to save up sufficiently for their retirements, only little protection is provided under these situations.

the government should not just urge the elderly citizens to organize an active life on their own. If the living environment is adequate, inclusive and supportive where public resources are fairly distributed to all, then, most people will become active agents, who will be able to shape and sustain their own quality lifestyle, inside the most livable city of the world today.

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References

- [1] The Economist, 3 July 2012, <http://www.economist.com/blogs/gulliver/2012/07/city-rankings>
- [2] Chan, A. (2011), 'Moving Forward with Health Promotion & Active Ageing in Hong Kong: Alignments of Policy Trends in Asia and the Pacific', paper presented at the symposium on the future of ageing society: 12 December, 2011, Organised by the Faculty of Social Sciences, The Hong Kong University. <http://www.socsc.hku.hk/fas/pdf/Moving%20Forward.pdf>
- [3] Chan, CK. (2003). 'Protecting the ageing poor or strengthening the market economy: the case of the Hong Kong Mandatory Provident Fund', *International Journal of Social Welfare*, 12(2), pp.123-131.
- [4] Martinoni, Sassi & Sartoris. (2009). *UrbAging: When cities grow older*, *UrbAging*, vol. 8, no. 3, pp127.
- [5] Hong Kong's Gini coefficient gained to 0.537 in 2011, from 0.525 in 2001
- [6] Chiu, S WK & Lui TL. (2004). 'Testing the Global City—Social Polarisation Thesis: Hong Kong since the 1990s', *Urban Studies*, 41(10), pp. 1863–88.
- [7] Gunnarsson, E. (2009). 'I think I have had a good life': the everyday lives of older women and men from a life course perspective *Ageing and Society*, 29(01), pp. 33-48.
- [8] Hardill I. & Baines, S. (2009). Active Citizenship in Later Life: Older Volunteers in a Deprived Community in England. *The Professional Geographer*, 61(1), pp. 36-45.
- [9] Lee, KM. Wong H. & Law, KY.(2007). *Social Polarisation and Poverty in the Global City: The Case of Hong Kong*. China Report 43: 1.
- [10] Martinoni, M.; Sassi, E. & Sartoris, A. (2009). *UrbAging: when cities grow older*. *Gerontechnology*, 8 (3), pp. 125-128.
- [11] Phillipson, C. (2004). *Urbanization and Ageing: toward a new environmental gerontology*. *Ageing and Society*, 24, pp. 963-972.
- [12] Raphael, D., et al. (2001). Making the links between community structure and individual well-being: community quality of life in Riverdale, Toronto, Canada. *Health & Place*, 7, pp. 179–196.
- [13] Ranzijn, R. (2002). The Potential of Older Adults to Enhance Community Quality of Life: Links between Positive Psychology and Productive Ageing. *Ageing International*, 27(2), pp. 30–55.
- [14] Tinker, A. (1997). The environment of ageing. *Philosophical Transactions of the Royal Society, B: Biological Sciences*, 352(1363): pp. 1861–1869.
- [15] WHO. (2002). *Active Ageing: A policy framework*. WHO/NMH/NPH/02.8. Geneva: World Health Organization.