

SILVER CITIES: ATTRACTIVE CITIES FOR ELDERLY

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Abstract

The demographic challenge posed by the increase in the population over 60 entails challenges in other orders such as social, health or urban. There is a negative perception on the capabilities of the elderly and a generalized mindshare that they are a social burden due to the increasing cost of retirement pensions and social/healthcare. However, those over 50 constitute a group with a great weight in the economy and that has given rise to the so-called Silver Economy. In addition, they hold a human/social capital and an immense capacity to help other generations. They have put this at the service of their families and society at all times, which has been especially evident during the last economic crises. According to the research carried out, the cities adapted to the elderly are also inclusive and attractive environments for talented. Society in general, and urban environments in particular, must adapt so that the elderly feels comfortable and become attracted to them. This article addresses the reasons and proposes some measures to achieve that goal.

Keywords

Silver Cities; SmartCities; Elderly; Attractive Cities; Silver Economy; Ageing; Age-friendly

1. SILVER CITIES CHALLENGES

“The term 'silver economy' was created by experts from the University of Oxford. It refers to the economy of people over 50 years old, including all their economic activities, products, demands and expenses.” (Zsarnoczky, 2016, 105).

If we think about what cities should be like to better prepare and become more attractive to elder people, the 'Silver-haired people', we could think of the term 'Silver Cities' to

name them. In this article we are going to study what characteristics they must accomplish to achieve that objective.

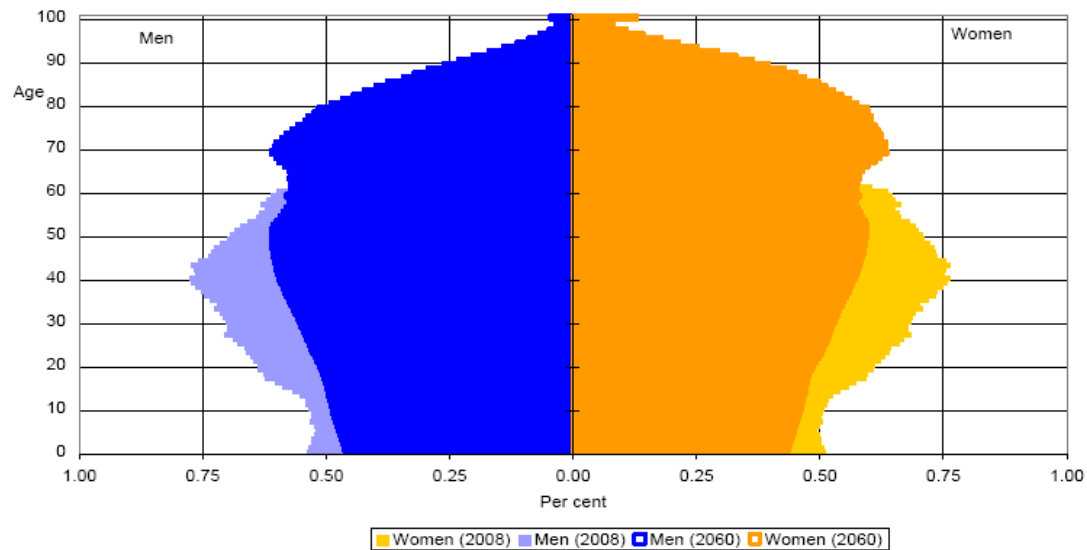
The elderly population is not homogeneous. Senior citizens are different in many ways. Age is the main distinguishing feature because there may be decades of difference between them. If we use two fundamental time milestones such as: the retirement age at 65 and the average life expectancy age at 80, then we obtain three groups of elder people. (Adapted and extended from Zsarnoczky, 2016, 105):

- Young Elder (active workers): aged 50-65
- Adult Elder (retired): 66-80
- Oldest elderly: >80

Demographic change will have important consequences for economic growth and return on investment.

1.1 Demography trends

By 2050, 80% of elderly people in developed countries will live in urban areas (OECD, 2015). Many challenges must be faced to provide for everyone's legitimate right to a long, happy and healthy life. Chronic and infectious diseases and microbial resistance due to the abuse of antibiotics are increasing. Pandemics' spread along the world is underpinned by global mobility. Demographic data on aging are increasing the demand for social and health services. Health services are usually offered by national or regional entities, but social services remain on the shoulders of cities. Unfortunately, cities are not prepared for this tsunami, neither financially nor infrastructurally, nor in terms of service provision capacity.



Source: Eurostat, EUROPOP2008 convergence scenario

Figure 1.1. Demographics evolution (2008-2060). Source Eurostat (Eurostat, 2011).

The current demographic curve in the advanced countries is shaped like a 'baobab', (See figure 1) with a large proportion of people in its central zone, threatening by a massive incorporation of elderly people into the retiree area, with a high demand for services and no contribution to Social Security to finance it. This situation will undoubtedly mean an exponential increase in service costs, which will lead to the collapse of the current system.

The direct effects of an aging population should be addressed: the number of people in the EU (Eurostat, 2017) over 65 will increase by 70% by 2050, and the population over 60 is growing 3.5 times faster than the overall population. It is expected that the proportion of the population aged 65 or older in Europe will increase from 17% in 2010 to 30% by 2060. For the first time in history, this group will be the largest. The share of those aged 80 or over (the *oldest-elderly*) is growing faster than any other segment of the population and is projected to triple by 2060. The old-age dependency ratio (population aged 65 years or over vs that 20-64 years old) is projected to more than double, from 28% in 2010 to 59% by 2060.

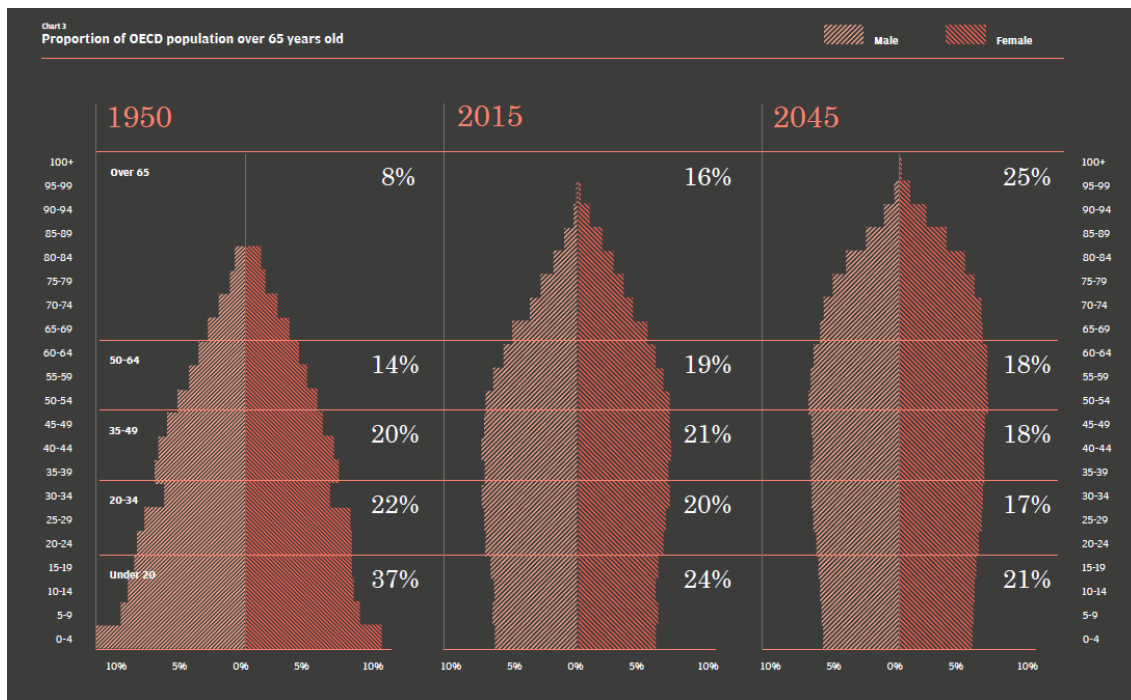


Figure 1.2. Proportion of OECD population over 65 years old. Source: Grosvenor Research (2018, 8-9), based on data from UN World Population Prospects 2017.

Japan leads global life expectancy (living more years from the age of 60) with 26 (UNDATA, 2014), which points to a total expectation of 86 years (data from 2012 with an upward trend). It is followed very closely by most modern countries at 85 and 84. If citizens reach retirement age at 65, this means that, on average, our population expects around 20 years of receiving a pension, social and health services and many others, without contributing to the maintenance of the system. This trend also contributes to increasing the total cost of the benefits guaranteed for retirees.

According to the United Nations (UN, 2017), the number of elderly people globally is expected to reach nearly 2.1 billion by 2050. Not only are older people increasing in number, but they take an increasing share of total population in every country. This has implications for most sectors of society. The modern welfare society began in the late 1940s with a ratio of eight workers to each pensioner (Grosvenor Research 2018, 19). Currently, this ratio is 4:1, which is projected to become 2:1 in 2060. The percentage of elder adults is continuously growing, with a greater increase in women (Zsarnoczky 2016, 106). These new age distributions will lead to fewer workers sustaining each elderly person. This trend will continue for the next 60 years because of decreasing fertility rates.

1.2 Increased demand for Social/Care Services. Social Security Collapse

The number of face-to-face doctor visits per year in advanced countries exceeds 10 and rapidly points to 15 (already 17 in South Korea) (STATISTA, 2019). This trend is unaffordable. Most of these visits are made, obviously, by the elderly. With technological investments, mainly towards remote care and for devices to monitor patients at home, Nordic countries are reducing this to 4 visits or less (Sweden at 2.8).

There are only two ways to contain the cost of social and health services: simply cutting them, assuming the impact on the modern welfare society and the political cost; or ration their use, by using technology to get people to use the services strictly when truly essential. Going to the doctor to renew a chronic prescription or simply to socialize for a while is unsustainable, and unnecessary, as we have learnt from pandemic times. People need to socialize, and we need to avoid undesired loneliness, but with specialized services, not overloading regular medical resources. Some governments are considering setting up a basic minimal fee per visit, to prevent this behavior. There are much cheaper ways to achieve those objectives. Our services continue to collapse every flu season. Technology can help us stay healthy without having to physically go to the doctor. First things first: prevent problems and maintain healthy habits with the advice of a personal monitoring system. Then, use remote care to deal with minor illnesses, so to prevent visiting the doctor if health indicators are under control and basic prescriptions are working. Finally, use remote specialized care for serious but chronic diseases, such as dementia, Alzheimer's, Parkinson's and so on.

Keep people at home for treatment unless really necessary to do otherwise.

A citizen with any disease at a hospital is considered a patient, and the responsibility falls upon the healthcare system, mostly provided by Regions or Central Government. The same person with the same non-urgent disease at home is a citizen with some dependencies, or who needs some care (mainly social). Then, the responsible authority is, basically, the city. This will imply an exponentially-demanded service which cities are not prepared for. Anyway, it's widely proven that the best way to support a person with a chronic disease is by keeping them at home. It's cheaper for the system, and better for the citizen's health. Another alternative for elderly people is staying in a nursing home. As 90% of elderly people prefer to live at home, that means they link their happiness with that lifestyle, surrounded by family, neighbors and friends while maintaining access to community centers where they can connect with other seniors. When the elderly can no longer live in their own homes, they can be taken in by family members and get external assistance from caregivers while family members are at work. Many Nordic families build extra rooms at home to keep their loved ones closer. A person's home is more familiar,

therefore if they stay in their homes as long as possible, they remain happier. At home, elderly people maintain some of their independence and confidence even though they may need assistance with certain things. They know where things are, routines are easier to maintain, everything is friendlier. Homes can be adapted to become age-friendly.

New technologies help avoid undesired loneliness by connecting people (Collier, 2019). Elderly people have different requirements, depending on their mental and physical condition. The plan is to always provide the most positive attitude, balancing:

- Socialization instead of isolation. Avoid undesired loneliness.
- Focus on health more than illness. Enjoy life, every day.
- Activity over inaction. Activity is always better (heart rate, blood pressure, glucose, cholesterol levels are very dependent on activity)
- Better to work on prevention than providing treatment.
- Freedom of choice instead of coercion. Always respect human dignity.
- Monitoring to prevent problems or to quickly react to alerts vs a Big Brother reality of continuous surveillance. The right to privacy is a must. Avoid cameras when possible.

Aging population just adds to other social challenges at the center of most political agendas like funding, social inclusion, high-quality healthcare, undesired loneliness, digital inclusion, or access to quality housing.

With Bloomberg Philanthropies support, Barcelona's "Vincles" ("links") project provides a basic device as a communicator tool to keep elderly always on, connected to family and friends, able to make videocalls, photos and socialization (Barcelona 2020).

Physical Inclusiveness. The UN Enable program published that 650 million people, approximately 10% of the world population, live with a disability, and more updated reports point to one billion (Ecosoc, 2008). Elderly people are at greater risk of cognitive deterioration, frailty and multiple chronic health conditions with implications for their independence, their quality of life (and that of their families), but also for the general sustainability of social assistance systems. The challenge now is to develop safe, intelligent and respectful digital solutions for integrated care which guarantee a truly personalized provision of health and social assistance, while consolidating advances in the efficiency of service delivery, and guaranteeing the trust of users and public officials on access, privacy and data exchange. Making provisions for disabled persons to find their way independently in urban areas, town centers in particular, should play a relevant

role in all urban planning. Due to the graying of the population, it is expected that by 2050, 15% of the urban population will need some kind of support (UN, 2016b). Some apps and tools are available to ease the accessibility of disabled persons (Walsh, 2019), however they still are suboptimal applied (Hamraie, 2018).

1.3 Silver Economy power

The Silver Economy is considered the general economy area that is relevant to the needs and demands of elder adults. It would include all the economic activity generated by the production, consumption and trade of goods and services relevant to this age group, both public and private, including their direct and indirect effects on the economy (Varnai *et al.* 2018, 6).

In 2015, in the European Union, there were 199 million people over 50, 39% of the total population (Ibid. p.8). At that time, it accounted for around €4.2 trillion of Gross Domestic Product (GDP) and about 78 million jobs, of which 30 million were direct jobs. This represented 35.3% of employment in the entire EU (Ibid. p.10). For the next decade, this group is expected to reach 222 million people (43% of the EU total). As an example of their purchase power, their household spending share is forecasted to reach 44% in 2025, around €5.0 trillion (Ibid. p.9). *If it were a country, the silver economy would be the third largest economy in the world, only behind the USA and China.* It generated profits for companies of almost €780 billion (Ibid. p.9). Although the Silver Economy focuses on the elderly consumption patterns, there is an indirect effect in providing opportunities for all generations, both adults and young people. Challenges and opportunities are therefore interrelated.

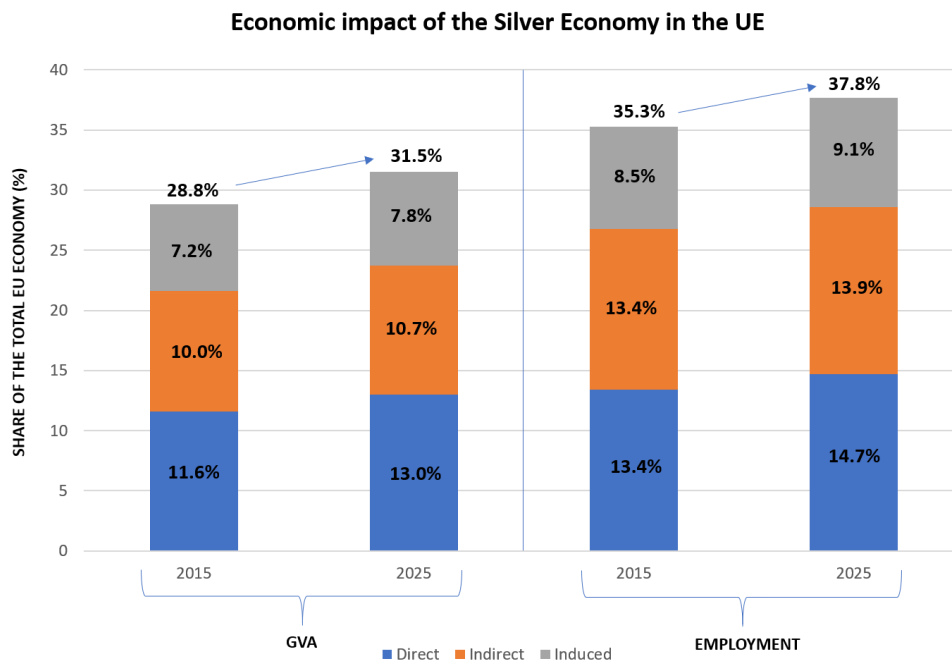


Figure 1.3. Economic Impact of the Silver Economy in the UE. Based on Varnai *et al.* (2018:11). *The Silver Economy*; GVA: Gross Value Added.

Currently, this age group has a higher educational level and purchasing power than previous generations, same as the use and access to new technologies. It is also expected that the level of well-being achieved by this generation will be even higher than that of the next. Real estate is the main investment held by elder people, which is favoring the proliferation of financial solutions such as reverse mortgages. This makes it possible to improve economic conditions in the retirement stage since a periodic amount that complements the pension received from the State is received (Grosvenor Research 2018, 19). On the other hand, since they do not have to dedicate part of their income to expenses related to the purchase/rental of their living home, they allocate part of them to other purposes such as travel and entertainment. They take short trips more often and are more willing to buy expensive or luxury products. They are increasingly shopping online at times when others are working (Ibid. p.24). Among their shopping habits, most of the people over 60 prefer to buy in stores near their residence, they buy fewer items on each occasion, but of greater value (Ibid. p.25).

A whole market of products and services for this group is developing. New applications are also being created, such as the opportunity offered by the autonomous vehicle, especially targeting elderly, when certain capabilities such as reflexes diminish. Another sector that has been growing for years is *travelling & hospitality*. In one of the researches we carried out, traveling was distinguished as the activity that most motivates this group.

2. WHY ELDERLIES ARE IMPORTANT? WHY MAKING OUR CITIES MORE AGE-FRIENDLY?

2.1 Why are they so relevant and can't be left apart?

It is grossly unfair that the generation that won WWII, got our current welfare system, democracy and civil rights is despised in this way. But of course, the new generations who were born already at the time of social and economic prosperity do not know the effort that it did cost. They were born on the cusp of the mountain of well-being, and they are simply not willing to step down, not even for their own parents.

“By adapting cities and communities to elder people, we are turning them into inclusive and equitable places where no one is left behind, especially the most vulnerable senior people. In turn, equitable societies benefit everyone.” Said by John Beard, Director of the Department of Aging and Life Cycle of the WHO (WHO 2018, V).

In Europe, the decrease in the available workforce will lead to economic decline, unless retirement age is prolonged. There are studies that support that elder workers are less productive due to a decrease in physical and cognitive agility (Varnai *et al.* 2018, 16). Hearing loss can lead as well to loss of balance and cognitive impairment, such as memory loss, poor concentration, and even dementia. In addition to social isolation, depression and lack of confidence are commonly found. They make the brain have to work harder, generating fatigue. Although with aging there is a slight loss of some cognitive functions (related to hearing and vision, slower processing of complex or dual tasks), it is offset by an increase in social and verbal skills, as well as semantic/implicit memories. Elder workers bring benefits such as becoming the repository of tactical knowledge (know-how) accumulated over years and as experienced mentors for the team younger people (Ibid, p.26-27).

In addition to all the above, associated to a social nature, there is a huge economic aspect and impact on GDP, as previously explained.

In several Southern Europe countries or Asia, when physical distance allows it, they are also a fundamental support in the care of grandchildren: taking them to and from school, taking care of them after school classes end and parents have not yet finished their working day, or preparing a snack and babysitting when parents want to enjoy leisure. During the hardest years of the 2008-13 crisis, pensions remained stable while salaries fell and unemployment increased, which caused many pensioners to have to help financially their children in what can be considered a *generational transfer*. Many paid

for food or accommodate back their children at home. Many families endured the ravages of the crisis thanks to this generational transfer.

2.2 Elderly as a social burden

For this group, the majority of public spending is focused on health and, secondly, on social protection services.

“An image of aging as a social burden is disseminated, both by the media and, sometimes, by the scientific discourse. In addition, elder people tend to be spoken of as passive beings, anchored in tradition and lacking in attractiveness and social utility. This fatalistic vision of the phenomenon, however, usually ignores that, far from lacking initiative or stagnating in their attitudes and behaviors, they adapt to the new times like those of any other age. It is what they are doing at present, in effect, fitting into social modernity and contributing to its development like the most.” (López & Díaz 2013, 68).

It seems that the increase in the elderly population, as described above, leads to considering aging as a social problem with global impact (Donizzetti 2019:1). The main concern about what the aging process produces in people may be related to an internal desire to satisfy the social ideals of youth, typical from Western societies. This promotes an anti-aging culture (Ibíd. p.7). In almost all societies there are established stereotypes and prejudices related to elder people. Education in this sense has proven to be the most valuable method for changing attitudes and anxiety produced by the anticipation of aging itself (Ibíd. p.2). 'Ageism' is a form of prejudice towards people for the mere fact of being older or being perceived as such. Gerontophobia and ageism are manifested in different social settings and productive sectors. A clear example is the high percentage of long-term unemployed among the elderly who are still active.

There is a big difference in the respect that society shows for the over the years acquired knowledge. In the Western model, the worker develops his professional career and, upon reaching a certain age, leaves their job permanently. In the Japanese model instead, after a few years of professional growth, the older worker gives way to a collaborator and remains in the background to continue contributing based on the accumulated experience over the years of work, without leaving the company.

2.3 Cities must transform themselves. Adaptation to elderly-friendly

We must prepare for the demographic challenge and reduce the perception of social burden, transforming challenges into opportunities for economic growth and social development.

As Felix (2018, 125) would say, human super-aging is an unprecedented experience in the mankind history. Governments face a complex twofold demand: rising social costs as populations age vs cutting spending on education/unemployment with its impact on the younger generations. This could produce an intergenerational fracture.

One of the observed trends on urbanization is senior population migrating from rural to urban areas because they aspire to get access to better services, but most of the times cities are not prepared to welcome them (Zsarnoczky 2016, 107).

By 2030 a third of households in OECD countries will include an elder person. In the next 30 years, due to divorces at middle age and widowhood later on, households with an elder owner living alone, mostly women, will largely increase. Although they have fewer needs for space in the homes, few of them change areas due to the roots generated in and with the environment. This produces an underutilization of space in larger houses. On the other hand, when they require assistance needs, they prefer to receive them at home and, only when there is no other alternative, move to nursing homes. Homes that are not well designed/adapted for the needs of the elderly can lead to greater home accidents (Grosvenor Research 2018, 29).

Cities must also incorporate elderly-friendly principles to make the urban environment more attractive, accessible, adaptable and appropriate for their needs. Currently, there are many initiatives that propose measures to promote active and healthy aging. For example, the World Health Organization established the Decade of Healthy Aging 2020-2030 and launched the Active and Healthy Aging Plan. Previously, in 2010, it created the World Network of Elderly-Friendly Cities and Communities (Age-friendly World, 2020). Its objective is to create inclusive, safe and accessible urban environments. It has a guide with indexes to measure the degree of friendliness of any city (WHO 2015). The World Health Organization (WHO 2007)) defines an *Age-friendly City* as an inclusive and accessible community environment that optimizes opportunities for health, participation and security, in order that quality of life and dignity are ensured as people age. Although open to later improvements, it is worth highlighting a first guide of 16 indicators to establish the degree of age-friendliness of a community, developed for a pilot experience carried out by the WHO in 2007 in several cities of the world. The condition of an age-friendly community (not just cities) is not limited to urban services (Kano *et al.* 2018). In 2002, the United Nations defined 'active aging' as "the process of optimizing opportunities for health, participation and safety in order to improve the quality of life of the elderly". One of its determinants is the physical environment, since spaces adapted to the needs of the elderly can influence the level of dependency, social isolation, mobility

problems and sedentary lifestyle. The first books on environmental gerontology emerged around 1970 (Baquero & Higuera 2019, 110). Among the initiatives launched by the "Age-friendly World" Network, we can identify city of Zaragoza (Spain), in which a group of elder people audits the streets to determine whether they have places to rest or public toilets, among other aspects, within the "Walk and discover a safe and accessible city" plan.

Another good ally to improve the lives of the elderly is technology, especially artificial intelligence, which is focusing on developing solutions to aging problems such as hands tremors or hearing loss. Devices are being created, internal and external to the human body, to activate and pulse sensors connected to the brain/mind, to cognitively stimulate with neurofeedback or combat depression, among others. Also advances in pharmacology, preventive and curative medicine will ensure a better quality of life.

"The creation of environments adapted to the elderly requires action in many sectors (health, chronic care, transport, housing, work, social protection, information and communication) and by many actors (Government, service providers, civil society and older people and their organizations, families and friends). Working to create sustainable and accessible cities and communities for all involves a lifelong process in which the harmonization between the needs of people and the environments in which they live is progressively improved." (WHO, 2018:1). The factors that influence healthy, pathologies-free aging, are intimately connected to the environment (Zsarnoczky 2016, 106). Some studies show that the perception of a pleasant and clean environment is associated, to a certain extent, with the presence of vegetation. In addition, green areas, aesthetics, accessibility to walking areas, parks, children's play areas, security and maintenance are the elements that influence physical activity in public spaces (Baquero & Higuera 2019, 120).

There must be greater private and public collaboration since many of the technological advances that will improve the lives of the elderly are on the hands of private companies. It is necessary to promote collaboration between transnational networks on smart, sustainable, resilient and inclusive cities. The WHO General Work Program highlights the need to follow the Plan of Action on Aging and Health and the Decade of Healthy Aging, including work on cities adapted to the elderly. (Ibíd.p.4). Based on the WHO pilot study plus some relevant additions (16 WHO Indicators extended to 21), Table 2.1 shows most important age-friendly indicators (initiatives) that facilitate the elderly living conditions.

1. Neighbourhood walkability
Street lighting and adaptation for visually-unpaired and reduced mobility, also hearing (replace sound signals with visual or tactile). Sidewalk curbs highlighted with illuminated physical reliefs and visual cues. In some cities, the height differences between sidewalks and road have been eliminated to avoid falls, as in Ottawa, Canada.
2. Accessibility of public spaces and buildings
Weel-chair accessible sidewalks. Easy to find indications. Visually-unpaired aids (beepcons, 3D tactile maps, indoor maps navigation, etc).
3. Accessibility of public transportation vehicles
Senior adapted buses with seats slightly inclined to make it easier to bend down and stand up or simply lean on; with space to place the walker in front or the cane to one side. The planning of cities must observe age-friendly principles, with adapted accessibility in all means of transport and spaces in the living quarters that allow their use by those with reduced mobility. (Grosvenor Group 2018, 32).
4. Accessibility of public transportation stops
Tools to easily locate the right bus-lane, ramps always better than stairs, information always available, easy to visualize (on the floor, front, voice/sound aided information systems, etc). 5G equipment, connectivity.
5. Affordability of housing
Social housing should include special accommodations for elderly. We should keep in mind that they feel always better at home than at a nursing house.
6. Refurbishing of public spaces
The exercise areas in the parks are outdoor on the ground. They cannot be used when the weather is not good (rain, sun heating machines, heat stress). Many studies agree that with age, thermal sensitivity decreases, this being one of the factors that make the elderly a vulnerable group facing thermal extremes. (Baquero e Higuera 2019, 110).
7. Refurbishing of comercial spaces
Increased size of the labels/tags on the products in the stores is needed. For physical fatigue, allocate places to sit and rest while shopping are convenient.
8. Refurbishing work places
If the retirement age is delayed, several generations will coincide in the work centers and this requires physical spaces adaptation. In particular, the lighting, ergonomics and acoustics needs will be different for each other.
SOCIAL ENVIRONMENT
9. Positive social attitude toward older people
Activities in schools between adults and children to foster relationships between generations (As in Loncoche, Chile). Creation of spaces for intergenerational relationships to avoid social fracture. Care networks, neighborhood mutual support networks, social and community centers are more than needed because a project of biological and social reproduction is developed at home and district. Public space plays an important role in coping with isolation and loneliness. Create a sense of belonging through interaction and connectivity.
10. Engagement in volunteer activity
Many volunteerism activities and social giving have risen during COVID times. Among them, helping elderly to do common activities are very frequent, like go shopping, walk the dog, paying taxes, use Internet for medical dates and many other.
11. Paid employment
Paid works & tasks in addition to pension mean an incentive to put interest, dedication, active thought and are very healthy to mainly prevent mental disorders / dementia.
12. Engagement in socio-cultural activity
Social participation and engagement, not only with family and friends is crucial to stimulate the sense of being socially relevant, heard, fostering city co-creation. This prevents isolation, loneliness, sense of 'abandoned-parked old junk'.
13. Participation in local decision-making
Experience is a great asset. Participation in political decisions is very empowerment builder. Sense of useful co-creation and future thinking makes life exciting.
14. Availability of information
In this technology driven, accelerated changing society, access to information is vital. Special formats, devices are needed to help elderly gain right access.
15. Availability of social and health services

Crucial as explained. Social services are mainly provided by cities. Healthcare is mainly provided by regions or central systems. As age and demand increase, an available, affordable, accessible, high quality care services are turning essential.
16. Economic security Economic stability is a must. Basically, elderly can't be dedicated to make money (work) but to care themselves, enjoy life, and be as active as desired.
17. Intragenerational relationships Revitalization of associations for the elderly. Foster intragenerational relationships to avoid loneliness.
IMPACT
18. Quality of life Quality of life is the main and final indicator that measures the impact from all other actions / city transformation.
EQUITY
19. Population attributable risk Unbalanced societies (low GINI index or high concentration of wealth on few hands) make elderly lives miserable. Overpopulated societies are always treating elder as a burdening, not as a human asset / capital.
20. Inequality between two reference groups Mentioned before, ruling generations decide over other, which must guarantee minimal ethical fairness. Social & Economic classes make a strong difference in the way elderly live and spend their time. Access to high quality care is also determined by economic power.
HOUSING
21. Housing design Initiatives as co-living/co-housing, the 'Grandma o Granny Pod' (homes for the elderly on the same parcel as their children to combine independence as well as close family contact). Take into account the needs of the elderly at their homes, with larger rooms to maneuver with wheelchairs and other reduced mobility aids, with accessibility from the street to home and a room for assistance staff (caregivers). Adapt the houses size and design, allowing a change to smaller houses and in the same area in which they already lived so as not to lose relationships and attachments with their neighborhood because, as Ibáñez (2002: 20) refers, "the house is the privileged place for rooting the body into the world". With this, the largest housing stock will be free for young families who have the greatest need for space. Also, by being adapted to your needs, home accidents due to inadequate housing will be avoided (Grosvenor Group 2018, 29). Establish a network of advisors who visit the elderly homes to ensure they are safe to age in. Although the different generations coexist for a longer time due to the increasing life expectancy, the living together time is shorter since residential independence has increased. The percentage of elder people in multi-generational households has decreased both in Europe, in the USA and even in Japan where the traditional family model included the coexistence of several generations in the same home. Elder people, after a more lasting marriage stage than ever, tend to models of family coexistence with 'remote intimacy', with each one at their home although maintaining close ties between them. (López y Díaz 2013, 66, 72).

Table 2.1. Adapted and extended from WHO pilot study (WHO, 2018).

2.4 Why Attractive Cities should retain elderly

Cities want to be attractive to elder people, not only because of an ethical question of equality between ages, but because talent also ages and cities are permanently competing for it, and in addition, the segment of elder people enjoys a superior economic position, generally due to their ability to generate wealth (savings and investments) due to their long working life.

There are cities and geographic areas specialized in attracting retired and affluent seniors. Places like Florida, the Canary Islands, the Balearic Islands, the southern coast of Europe, enjoy exceptional climatic and well-being conditions that make them very attractive to elder people. But we should not be confused: these touristic areas are also attractive for families, and in general, for anyone who can afford to live there. Therefore, cities want to be attractive to elderly, despite the fact that this implies bearing a significant burden on social and health services, because it avoids generational and family fractures, retains its enormous talent and know-how and takes advantage of its economic contribution by helping youth to grow and the city's economy.

As previously stated, the silver economy represents a relevant percentage of the economy. Then, cities should be attractive to elder people to retain them and avoid them to move to another place when they enjoy greater purchasing power. The longevity economy is a cross market with great job creation (Felix, 2018, 116). It is a challenge for municipal managers to retain this age group which contribute with their investments, purchases and taxes. They are direct consumers of goods and services and indirect generators of wealth for the city. Beyond that, they contribute to social change and should not be considered passive or resigned. By having greater purchasing power than the average, a whole area of market opportunity for premium products is being created in the tourism, insurance, automotive sector with autonomous cars, emotional well-being, culture or entertainment, among others.

3. Main Hypothesis

What is the ideal city for the elderly like?

We have seen many of the age-friendly features and initiatives that contribute to creating cities that are better prepared and adapted for the elderly. But which of these characteristics are the most important? To what extent will a city ready to retain and attract talented citizens also be an optimal city for elder people? Or from another way, an attractive city for talented citizens (those who are looking for the best cities to develop their full potential), will it also be suitable for the elderly? We are going to highlight a short list of main characteristics as hypothesis that we will try to corroborate with research activities.

1.- Elderly = Human, most likely talented => Attractive city for the talented MUST BE Attractive for the Elderly. You don't need another city.

If we study the research (Ondiviela, 2020) on what elements make up an attractive city for talent, (Emotional Magnetism: identity, dynamism, strategy; Rational Profitability:

provided city services compared to cost of live), we'll find that those elements are also necessary for the attractive city model for the elderly. What varies is the importance of some of these components compared to others more valued by the younger generations. And in the other way, an attractive city for the elderly must have a series of characteristics that make it attractive for any talented citizen as well. We will study it in section 3.1.

2.- Social/Care services is main driver, as described and explained before.

3.- Inclusive/Accessible for disabled people. As these conditions are mainly impacting elderly.

4.- Adaptation. Physical (Housing, transportation, spaces, mobility), Social (Inclusion, open, respectful, age equity, integrating, dignifying. Not a social burden but human capital). As explained before as essential adaptations to keep in mind.

5.- Safety. As fragility increases, the sense of safety (mental, physical, digital, social) is gaining relevance.

6.- City identity is an important factor. The elders are more tied down, loyal to a particular city. They live more present than looking to the future. Except for a clear need or opportunity, elder people do not often think about moving cities; once established and accommodated in a city that meets their demands, they will hardly consider change. City Identity (history, customs, culture, gastronomy, climate, branding, etc.) plays a preponderant role over other emotional magnets. Active elder people enjoy the city culture more as they enjoy more free time. The roots with a city are stronger. Fear of the unknown, laziness in the effort required to move and, in general, increased conformism make the emotional appreciation for a city and the sense of belonging superior to other emotional drivers.

3.1 Attractive for elderly means attractive for talented

An attractive city for the elderly must be attractive to talented citizens. We start from the hypothesis that the initiatives incorporated in the city for the elderly are valid for the rest of society, and also contributing to create an attractive city for any person at any age that is evaluating the alternatives to finally move there. That way, we can identify some of the most demanded areas to improve in the perfect city for elderly as very important drivers for making that city attractive for everybody. To mention the most relevant:

Identity

- Culturally attractive. A strong Identity builder, very much appreciated by elderly because they can better enjoy these attractions/services as they have the needed time for. Also, traditionally, the elderly better understand the value of history and past contributions. They don't need to work for the future as most are retired, but enjoy the present and remind the good memories from the past with joy.
- Climate. Enjoying a wonderful weather is very desired by elderly, for general healthcare, and for mental health in particular. Exposure to sun at places with high ratio of sunhours has been proven as especially healthy. That's the reason why many decide to spend their retirement at Florida in US, or at South in Europe (Balearic Islands, Canary Islands, etc). And these places are also attractive for everybody. Main reason why they are not attracting millions for living is the labor conditions, but telework is raising the new concept of smartworking and many talented workers are deciding to move and work from these paradises (also the new group of tech nomads).
- Quality of food. Same quality of life and healthcare reasons.
- Natural wonderful places. Balnearies, touristic attractions.

Dynamism. Social conditions to grow.

- Stable economy / Government model. Same good economic conditions that make a city attractive for the talent, growing the wealth, etc, are also guaranteeing the good provision of pension, and needed social services for elderly. It's obvious that reaching the senior age in a rich city means different benefits than in other city where social investments are not the top priority.
- Equity. Social inclusion. A city with high achievements in social equity, equality, social balance, etc is attractive for elderly because it includes the respect, consideration and integration they need, but also same values are very important for attracting talent, as this approaching talent could come from different societies, and social tolerance will mean a door opened to settle in that city and contribute to its prosperity.

City services. Although with different weights, all city services especially designed for elderly are also very much welcome by the rest. To mention the most likely appreciated by elderly:

- Safety.

- Social Services/HealthCare. Special healthcare for elderly? Most people use same hospitals (with some exceptions).
- Environment (especially short-distance air quality, clean and drinkable water). Maybe elderly better appreciate current conditions while younger citizens mainly think about future (Global warming, climate change), but everybody looks for a better place and take care of our planet.
- Excellent urban mobility. This seems to be one of most demanded and critical city services, as city is, in essence, a place where humans meet/encounter, so the way to make this happen, to connect them is considered the city's bloodstream. It's also very well studied that a high density is making a boosting effect on prosperity / creativity / competitiveness (Glaeser, 2011), reinforcing this concept of meeting catalyzer to make $1+1+1=111$ (Arithmetic of Synergy) (Kotelnikov, 2010). It's easy to figure out that objectives may differ: elderly need an affordable, cheap, well-prepared urban mobility system, while young workers look for a well-connected fast one (concept of 15-minute City, where most important things -including job- are located at less than 15' by an individual electric microvehicle) (Moreno, 2019). Elderly wants to reduce use of cars because they dislike driving and its associated costs, while younger are more convinced about reducing its use due to environmental and space availability conditions.

Affordable cost of living

- Affordable Cities. This is again important for everybody. Same as elderly can't afford expensive areas and high cost of life due to their modest pensions, same think most of millennials with their low wages. Both strongly consider the benefits in lower cost of live from alternative second cities (non-capitals), and also their better environment situations (always keeping a good connection with main city if needed).

4. RESEARCH

Our object of study will be treated from different approaches, combining the quantitative and qualitative dimensions, as well as a review of the related literature, under a strategy of methodological 'complementarity' (Bericat 1998,108).

The research analysis units have been: silver economy, active aging, healthy aging, gerontophobia, resilient cities, age-friendly cities, inclusive cities, smart cities, attractive cities.

4.1 Survey

We ran a survey at the largest SmartCity event in the world: the SmartCity Expo & WW Congress that Barcelona organizes every mid-November. At the 2018 event, we added our survey to the post-event feedback form, reaching all the more than 21,000 attendees. Around half of attendees came from Western Europe and the other half from the rest of the world, (mainly Asia and the U.S.) which included people from 146 countries. Mean profile was a balance between technology decision makers and government officials from cities, salespeople and technical staff from exhibitors. To become integrated with the event, we took same main theme of “Cities to live IN”, and we asked participants to think about City Performance/Services and Cities Magnetism (emotional magnets) from Attractive cities they would consider to “Live IN”. Find survey form at reference (Survey, 2018). We obtained 1,550 answers, which for a total sample of N=21,334 means a large, strong, solid, representative test, with Confidence=95% and Error=2%. (SurveyMonkey, 2018). We can confirm that sample is a valid representative group of Cities&Technology Industry by 2018. Let’s analyze the results. (See results Data Summary at figure 4.1).

Our responding population was 42 on average, 25% with elderly people at their charge. It represents an unbalanced gender sample, with 67% males, which is unfortunately consistent with a very male-driven technology industry. Aged more than 50 from total answers was 400 or 26%, which leads to a good sample as well.

We consider three main layers (groups): Senior-Young-Active (50-59), Senior-Senior-Active (60-65) and Retired (+65). This retired group could be considered active as well, as they were participants at this global event and aged 67 on average. No older people (more than 80) found in the survey / event. This has little impact or bias in the test, as this group is very unlikely motivated to look for a different city to live. They simply ask for better conditions in the city they currently live.

By watching the results, first at Magnetism, there is a clear shift in preferences towards Identity-Past (History, Climate, Geo-position, Gastronomy, Branding) as main emotional component for those aged more than 50. Dynamism-Present (Creativity, competitiveness and ethics) goes right after, then Strategy-Future (Human capital, SmartCity Plan, Innovation). This confirms our hypothesis about a strong preference for City Identity as main emotional driver. Elderly people prefer cities with strong identity,

image and cultural assets, over new, recently founded, little branding and image cities. Roots start to be relevant and they look at past and present more than future. People at this age want to enjoy the city's flavor, signs of historical identity, appreciate the people and happenings which made the city, built its assets and image. These old cities are basically more human, cozy, friendly if compared with new cold, distant, generic repetitive cities.

Regarding the city services, we asked the participants to sort these 10 groups:

GOVERNANCE
EDUCATION
EMPLOYABILITY
CONNECTED CITY
SOCIAL SERVICES / HEALTH
SUSTAINABILITY / ENVIRONMENT
CULTURAL SERVICES / TOURISM
URBAN MOBILITY / TRANSPORTATION
URBAN PLANNING
SAFETY (PHYSICAL/VIRTUAL)

Table 4.1 Grouped City Services to evaluate

Senior-Young-Active (50-59) answers are very aligned with the (40-49) group, being *Urban Mobility* the most important area, allowing people to connect, meet each other. Strongest change with younger people is the relevance of *Safety*, with moves from position 6 to 3 then top 1 for those >60.

DATA AVERAGES																	
CITY SERVICES - SCALE OF 1-10	RK	1-10	Over 100	INPUT	CHILDREN		ELDER		AGE					GENDER			
					Yes	No	Yes	No	18-29	30-39	40-49	50-59	60-65	65+	Female	Male	N.A.
GOVERNANCE	8	285	6.95	3.74	3.71	3.77	3.76	3.73	3.67	3.84	3.71	3.70	3.72	4.11	3.80	3.71	3.92
EDUCATION	5	7.67	11.40	4.21	4.24	4.19	4.15	4.23	4.30	4.37	4.19	4.03	3.96	4.22	4.32	4.17	4.19
EMPLOYABILITY	6	7.11	10.87	4.16	4.10	4.22	4.07	4.19	4.23	4.31	4.10	4.11	3.60	4.00	4.32	4.08	4.12
CONNECTED CITY	9	1.83	6.01	3.64	3.63	3.65	3.68	3.63	3.66	3.55	3.61	3.76	3.81	3.72	3.61	3.66	3.42
SOC SERVICES / HEALTH	2	9.04	12.66	4.35	4.31	4.38	4.38	4.34	4.33	4.40	4.27	4.42	4.19	4.72	4.49	4.28	4.35
ENV. SUSTAINABILITY	3	8.95	12.57	4.34	4.32	4.35	4.33	4.34	4.38	4.32	4.35	4.33	4.26	4.44	4.40	4.32	4.00
CULTURAL SVS / TOURISM	10	1.00	5.24	3.56	3.53	3.58	3.60	3.54	3.42	3.56	3.55	3.64	3.61	3.78	3.60	3.54	3.42
URBAN MOBILITY / TRANSPORT	1	10.00	13.54	4.44	4.38	4.49	4.37	4.46	4.44	4.47	4.42	4.46	4.26	4.50	4.46	4.43	4.50
URBAN PLANNING	7	4.78	8.72	3.93	3.88	3.98	3.94	3.93	3.96	3.99	3.85	3.94	3.89	4.11	3.98	3.91	4.00
SAFETY (PHYSICAL/VIRTUAL)	4	8.37	12.04	4.28	4.29	4.28	4.36	4.26	4.23	4.21	4.28	4.40	4.30	4.44	4.35	4.26	3.81
MAGNETISM PREFERENCES																	
RK	1-10	Over 100	INPUT	CHILDREN		ELDER		AGE					GENDER				
Yes	No	Yes	No	18-29	30-39	40-49	50-59	60-65	65+	Female	Male	N.A.					
2	8.43	35.33	4.14	4.12	4.15	4.12	4.14	4.08	4.08	4.14	4.23	4.07	4.44	4.18	4.12	3.96	
1	10	36.93	4.19	4.19	4.19	4.13	4.27	4.17	4.16	4.02	4.44	4.21	4.16	4.21	4.16	4.23	
3	1	27.74	3.89	3.88	4.03	3.85	3.81	3.90	3.88	3.90	4.04	4.04	4.28	3.84	3.93	3.42	
RANKINGS																	
CITY SERVICES - SCALE OF 1-10	RK	1-10	Over 100	INPUT	CHILDREN		ELDER		AGE					GENDER			
Yes	No	Yes	No	18-29	30-39	40-49	50-59	60-65	65+	Female	Male	N.A.					
GOVERNANCE	8	285	6.95	3.74	8	8	8	8	8	8	8	8	7				
EDUCATION	5	7.67	11.40	4.21	5	6	5	5	4	3	5	5	5				
EMPLOYABILITY	6	7.11	10.87	4.16	6	5	6	6	6	5	6	5	6				
CONNECTED CITY	9	1.83	6.01	3.64	9	9	9	9	9	10	9	8	7				
SOC SERVICES / HEALTH	2	9.04	12.66	4.35	3	2	1	3	3	2	4	2	4				
ENV. SUSTAINABILITY	3	8.95	12.57	4.34	2	3	4	2	2	4	2	4	2				
CULTURAL SVS / TOURISM	10	1.00	5.24	3.56	10	10	10	10	10	9	10	10	9				
URBAN MOBILITY / TRANSPORT	1	10.00	13.54	4.44	1	1	2	1	1	1	1	2	2				
URBAN PLANNING	7	4.78	8.72	3.93	7	7	7	7	7	7	7	7	6				
SAFETY (PHYSICAL/VIRTUAL)	4	8.37	12.04	4.28	4	4	3	4	5	6	3	3	1				
n					786	764	383	1,167	230	424	496	325	57	18	482	1,040	26
					51%	49%	25%	75%	15%	27%	32%	21%	4%	1%	31%	67%	2%
									24	35	45	55	62	67			
										AVERAGE	42.1						

Figure 4.1 SmartCityExpo 2018 Research Summary.

Colors Codes: Blue are Categories. In every category, Dark Green is Best, Red is worst with yellows in between.

As we move from 50 to >65 groups, the leading service is, as expected, *Social Services/Health* as the basic and most critical service, as retirement age is reached. *Urban mobility* keeps being very relevant from top 1 to 2nd position as everybody needs it, as explained, the core component of city's essence. *Environmental sustainability* is also positioned at same places as younger, in 2,3,4 scores, meaning that it is important for everybody, although because of different motivations. *Employability* drops to bottom position as retirement is reached, obviously. *Connectivity* is also little relevant as it is considered a city basic service more than a competitive advantage from one city to another. Only leading services need the latest technology, speed and latency and offer little value to retired (more targeted to younger). Lifelong *Education* keeps at position 5-6 although it is obviously less relevant than for younger people. This suggests that the elderly understand the value of continuous training, always learning concept. *Urban planning* and *governance* bring little interest (same as young). And unfortunately, *Cultural services & Tourism* maintain lowest positions, although they experience a little increase. This means that culture as Identity component is highly appreciated but culture as a service is the least valued service. So, elderly is proud of their roots, culture and city identity but prefer to spend time with family at home than attending cultural events. Travelling is a different option, considered as leisure and very much appreciated. As audience was interested on technology, this low cultural preference is also easier to interpret, as both worlds are commonly (and wrongly in our opinion) considered as antagonist.

See at Appendix the list of 140 top world Cities ranked according to this survey preferences.

4.2 Panel

In April 2020, a semi-structured anonymous survey was carried out (with closed and open questions) distributed through personal online social networks (Twitter, LinkedIn and Facebook) and in thru snowball (people who recommended its completion to other contacts acquaintances and / or in their own online social networks). It was designed with a qualitative rather than quantitative approach, seeking the relevance of the responses rather than representativeness. The survey was closed when 'discourse saturation' was reached with 118 responses. All of them in Spanish and, due to the

diffusion, it is very likely that they were all citizens living in Spain. Although the survey was aimed at people 50 years and older, 95% of the responses came from participants between the ages of 50 and 64, so they were, for the purposes of this article, among the young elders (active workers).

Regarding the profile of the participants: Gender: 45% women and 55% men. The vast majority (80%) with a stable partner. Someone at your charge (elder or children) 55% live with someone in their care and 23% only with their partner. Labor status: 12% are already retired, compared to 50% who work full time and 15% part time.

Regarding the more quantitative part of the survey, despite the number of participants, we can make some observations. On the question about being more or less happy than in the past, there was quite a bit of equality in every section, so we cannot highlight any conclusions in this regard. Regarding whether society values people over 50, there were most responses between level 1 and 3 of a 5-level Likert scale. So, among this group there was the perception of not being overly valued by society. Even being considered somewhat less valued at a professional level. All this, despite the fact that 77% considered that their age group was very well prepared to face the professional challenges required by the current labor market. This percentage rose to 86% when asked about their particular skills.

At the most qualitative part of the survey, the objective was to detect motivations, concerns and dreams of this age group. Main conclusions were:

- What motivates them the most in their day-to-day lives was job and relationships with friends and family.
- What brings the biggest excitement in your life, or would contribute if you could afford it, was traveling. 42% gave this answer.
- The main 'low' about aging was focused on two large areas: health and professional worth. Both were considered in decline, although this perception was more associated to an emotional or even spiritual idea than to a clear fact.
- They considered that what society values the most from them was their experience, although, paradoxically, they did not consider that this was the case in real life. According to the participants, society did not value that the elderly was adaptable and was quite up to date with the skills and knowledge required by today's professional challenges. There were many preconceptions about them.

- In the self-declared unemployed group (19.7%), there was great anger against companies and recruiters for not valuing their knowledge and skills, as well as their human and social capital, as competitive advantages in front of other younger candidates.

5.- CONCLUSIONS AND RECOMMENDATIONS

People over 50 form a heterogeneous group, with very different nature vital, social and assistance needs. They are much more valuable to society than what biased prejudices establish. They still can work and contribute. They are as well, a key pillar in family cohesion.

If 80% of the elderly will live in urban areas by 2050 (90% in Europe) and this age group will be the majority population worldwide, for the first time in history, then the challenges that society faces in terms of population aging must be promptly addressed. An urgent action is more evident and clearer than ever! It seems that current governments are passing this hot potato to next ones without paying attention or starting the needed investment. A strategic plan is needed, but very few cities have a plan for the next 10 years or more, most just work short-term. A wide pact between all main political parties would be needed to design a strong and integrated strategy about coming people aging threat tsunami.

The ratio of workers vs pensioners will decrease, posing a challenge for state-dependent retirement benefits. Demand for social services will increase and the national pension and social security system will collapse.

The COVID-19 pandemic has highlighted the weaknesses of the nursing home model and the need to rethink how we want them to live their last stage of life.

“No generation has a monopoly on justice, ethics, rights or responsibility.”
(Levine, 2020)

It must become a matter of State, not subject to electoral fluctuations, the development of long-term strategic plans from the local, regional and state levels.

Cities must be attractive enough for elderly so that they do not move to another city when their working period ends, since the silver economy generates great direct and indirect benefits.

The goal is to create inclusive, sustainable, safe and prosperous communities for all. **What’s good for elderly is good for all.**

The ideal city for elderly (Silver City) is a combination of the Attractive City for talented citizens drivers (Ondiviela, 2020) with specific additional adaptations as described by previously described Agefriendlyworld indicators. In other words, best Silver City is a strong identity, top Attractive City for talent, with special emphasis on social services/health, security, and adapted urban mobility. By this way, societies will be inclusive environments for all ages.

Main aging challenges our societies are facing: combat ageism in the professional sphere, gerontophobia, improving intergenerational relationships, change the pension model, achieve healthy aging that reduces social assistance needs, adapt homes and cities (public spaces, transport, shops, etc.).

And the main strategies are to understand the real elderly needs and the collaboration between the public and private sectors.

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BIBLIOGRAPHY & REFERENCES

BARCELONA (2020) Vincles-BCN City of Barcelona Website. <https://ajuntament.barcelona.cat/vinclesbcn/en/vincles-bcn> retrieved by Oct 2020

BAQUERO, M.T. and HIGUERAS, E. (2019). Factores ambientales que influyen en el uso del espacio público para las personas mayores en Madrid. *Revista Urbano* Nº 40 / Noviembre 2019 - Abril 2020, 108 – 126. ISSN 0717 - 3997 / 0718-3607. DOI.: <https://doi.org/10.22320/07183607.2019.22.40.06>

BERICAT, E. (1998). *La integración de los métodos cuantitativo y cualitativo en la investigación social*. Barcelona: Ariel.

COLLIER, C. (2019) “Lonely People in Big Cities: How Technology Is Both Creating and Solving the Isolation Crisis” *SmartCitiesConnect*, <http://smartcitiesconnect.org/lonely-people-in-big-cities-how-technology-is-both-creating-and-solving-the-isolation-crisis> retrieved by May 2019

DONIZZETTI, A.R. (2019). Ageism in an Aging Society: The Role of Knowledge, Anxiety about Aging, and Stereotypes in Young People and Adults. *International Journal of Environmental Research and Public Health* 2019, 16, 1329; doi:10.3390/ijerph16081329 www.mdpi.com/journal/ijerph

ECOSOC (2008), "Resolution 2008/21", ECOSOC, *The Economic and Social Council, UN*, <https://www.un.org/en/ecosoc/docs/2008/resolution%202008-21.pdf>_p.1

EUROSTAT (2011), "Archive:Population projections", 2011, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Population_projections&oldid=59201 retrieved by January 2019

EUROSTAT (2017), "People in the EU - statistics on an ageing society", 2017 https://ec.europa.eu/eurostat/statistics-explained/index.php/People_in_the_EU_-_statistics_on_an_ageing_society retrieved by April 2018

FELIX, J. S. (2018). Economia da Longevidade, Gerontecnologia e o complexo econômico-industrial da saúde no Brasil: uma leitura novo-desenvolvimentista. *Revista Kairós — Gerontologia*, 21(1), 107-130. ISSN 2176-901X. São Paulo (SP), Brasil: FACHS/NEPE/PEPGG/PUC-SP. doi: <http://dx.doi.org/10.23925/2176-901X.2018v21i1p107-130>

GLAESER, E. (2011) *Triumph of the City: How Our Greatest Invention Makes Us Richer, Smarter, Greener, Healthier and Happier*, New York: Penguin Press. P.6

GROSVENOR RESEARCH (2018). *Silver cities. Planning for an ageing population.* <https://www.grosvenor.com/news-and-insight/all-articles/silver-cities-planning-for-an-ageing-population>

HAMRAIE, A. (2018) "A Smart City Is an Accessible City", *The Atlantic*, <https://www.theatlantic.com/technology/archive/2018/11/city-apps-help-and-hinder-disability/574963/> retrieved by Oct, 2020

IBÁÑEZ, J. (2002). Por una sociología de la vida cotidiana. Madrid: *Siglo XXI*.

KANO, M., Rosenberg, P.E. & Dalton, S.D. (2018) A Global Pilot Study of Age-Friendly City Indicators. *Soc Indic Res* 138, 1205–1227 (2018). <https://doi.org/10.1007/s11205-017-1680-7> link to Indicators Table: <https://link.springer.com/article/10.1007/s11205-017-1680-7/tables/1>

KOTELNIKOV, V. (2010) "Synergistic Team" http://1000ventures.com/business_guide/crosscuttings/team_synergistic.html retrieved by Oct, 2020

LEVINE, J. (2020) "As Covid Slams Us, Elders Want Solidarity, Not Sentiment—or Blame" *TheNation* <https://www.thenation.com/article/politics/coronavirus-austerity-elderly/> retrieved by Nov2020

LÓPEZ, J. and DÍAZ, M.P. (2013). Modernización social de la vejez en España. *Revista Internacional de Sociología* (RIS) Vol.71, nº 1, Enero-Abril, 65-89, 2013. DOI:10.3989/ris.2011.04.26

MORENO, C. (2019) "The 15 minutes-city: for a new chrono-urbanism!" <http://www.moreno-web.net/the-15-minutes-city-for-a-new-chrono-urbanism-pr-carlos-moreno/> retrieved by Oct 2020

OECD (2015), "Governing Cities", <http://www.oecd.org/gov/cities.htm> retrieved by January 2018

ONDIVIELA, J. A. (2020) "Beyond SmartCities: How to create an Attractive City for Talented Citizens" *Kult-Ur*, 7(13), 205-232. <https://doi.org/10.6035/Kult-ur.2020.7.13.8>

STATISTA (2019), "Number of doctor visits per capita in selected countries as of 2018" *STATISTA Reports*, <https://www.statista.com/statistics/236589/number-of-doctor-visits-per-capita-by-country/>, retrieved December 2019.

SURVEY (2018). "Attractive Cities Survey." SmartCityExpo Nov2018. <https://forms.office.com/Pages/DesignPage.aspx#FormId=v4j5cvGGr0GRgy180BhbR4L8YT1UMAdFgiXBzCdEJSBURTNRjhDS05BMzNHMkdPUew0VFFEUVPnTi4u> retrieved by Dec2018.

SURVEYMONKEY (2018) "SurveyMonkey Calculator" <https://www.surveymonkey.com/mp/margin-of-error-calculator/> retrieved by Oct2018

UNDATA (2014) "Life expectancy at age 60 (years)" http://data.un.org/Data.aspx?q=life+expectancy&d=WHO&f=MEASURE_CODE%3AWHOSIS_00015 retrieved by January 2019

UN (2016), "Good Practices of Accessible Urban Development", *Department of Economic and Social Affairs. Social Inclusion*. <https://www.un.org/development/desa/dspd/2016/10/good-practices-of-accessible-urban-development/> retrieved by December 2020

UN (2017), "UN World Population Ageing Report", Department of Economic and Social Affairs p.1 https://www.un.org/en/development/desa/population/publications/pdf/ageing/WPA2017_Highlights.pdf retrieved by January 2019

VARNAI et al. (2018). *The Silver Economy*. A study prepared for the European Commission, Directorate-General Communications Networks, Content & Technology by Technopolis Group and Oxford Economics.

WALSH, N.P. (2019) "10 Technologies for Accessible, Affordable Cities". *ArchDaily*, 2019, <https://www.archdaily.com/923441/10-technologies-for-accessible-affordable-cities> retrieved by Oct, 2020.

WHO (2015). *Medición del grado de adaptación de las ciudades a las personas mayores: guía para el uso de los indicadores básicos*. Ginebra: Ediciones de la OMS, Organización Mundial de la Salud; 2015. ISBN 978 92 4 350969 3 (Clasificación NLM: WA 380).

WHO (2018). *La Red Mundial de Ciudades y Comunidades Adaptadas a las Personas Mayores: Revisar el último decenio y mirar con optimismo hacia el siguiente*. Ginebra: Organización Mundial de la Salud, 2018 (WHO/FWC/ALC/18.4). Licencia: CC BY-NC-SA 3.0 IGO. <https://www.who.int/ageing/publications/gnafcc-report-2018/en/>

WHO (2020) “Age-friendly World”, *World Health Organization* <https://extranet.who.int/agefriendlyworld/> Retrieved by Oct2020

ZSARNOCZKY, M. (2016). Innovation challenges of the silver economy. *Vadyba Journal of Management* (Szent Istvan University, Enyedi György Doctoral School of Regional Sciences), Vol. 28, No. 1 2016, 105–109.

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APPENDIX

Suggested ranking as Best Silver Cities. From list of 140 top World Cities, we assign 50% weight to those best on Attractiveness (Ondiviela, 2020), and another 50% weight to the combination of most preferred components as obtained from survey: Identity + Social Services/Health + Safety.

City	Country	SILVER RK
Stockholm	Sweden	1
Melbourne	Australia	2
Berlin	Germany	3
Zurich	Switzerland	4
Vienna	Austria	5
Oslo	Norway	6
Adelaide	Australia	7
Sydney	Australia	8
Göteborg	Sweden	9
Bern	Switzerland	10
Montreal	Canada	11
London	United Kingdom	12
Hamburg	Germany	13
Copenhagen	Denmark	14

Basel	Switzerland	15
Cologne	Germany	16
Frankfurt	Germany	17
Amsterdam	Netherlands	18
Paris	France	19
Manchester	United Kingdom	20
Barcelona	Spain	21
Munich	Germany	22
Rotterdam	Netherlands	23
Geneva	Switzerland	24
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