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between ergonomics and environmental

psychology



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# New design models for proximity retail and senior inclusion

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### **Abstract**

According to the world health organization (WHO) the impact of the pandemic on the population aged 60 years or over still need further assessment. Besides biological and physiological risk factors, indirect risk factors derived from loneliness and exclusion must be considered. When asked about the impact of social distancing and isolation over the course of the lockdowns, many seniors reported a degree of physical and mental deterioration. The prolonged restriction of mobility caused a lack of confidence in their walking ability and less motivation to spend time outside, leading to sedentary behavior. In some cases, the pandemic increased awareness about ageing itself, but this was often perceived as a negative rather than positive life transition (Phillipson et al., 2021). Mobility is generally associated with active ageing and has several benefits on the individual's quality of life, whereas a sedentary lifestyle amplifies age related conditions. Studies have shown that the most ordinary everyday activities, such as shopping, can have longterm health benefits. As a matter of fact, this simple daily activity can stimulate cognitive processes and provide physical benefits while promoting social engagement. Older adults who preserve social interactions are proved to have 50% increased chance of living longer than the isolated ones (Holt-Lunstad et al., 2010). Going out of home and interact with public spaces such as supermarkets, is therefore essential to seniors as they allow them to feel connected with the local community maintaining their identity favoring the process of active ageing. In the given context a strategic design approach can help shaping a different proximity retail format which can enable "time-rich" senior users to engage in a unique form of "convenience-shopping" revolving around social interaction and convivial relationship, rather than on a time-saving and automated experience. The research aims to examine new functional configurations for proximity retail with particular attention to promoting the social networking of elderly people.

### **Author keywords**

Active ageing; Isolation; Public spaces; Proximity retail; Social interactions

### Ageing population and social exclusion, the effects of the lockdowns

The progressive ageing of the population in western developed economies must be dealt with as one of the main chal-

lenges to maintain a healthy social interaction in future cities. The unprecedent life condition of the pandemic with its social isolation, could easier make evident that people aged 80 or over were 5 times more at risk of death than before due to the additional indirect risk factors derived from Ioniless and social isolation as they are more likely to face Ione life, loss of family members and friends, chronic illness, and hearing loss. (Loneliness and Social Isolation Linked to Serious Health Conditions, 2022). Despite them being strongly subjective factors, social isolation and Ioneliness were proven linked to (Social Isolation and Loneliness in Older Adults, 2020)

- Increased risk of premature death from all causes, a risk that may rival those of smoking, obesity, and physical inactivity.
- » 50% increased risk of dementia.
- 29% increased risk of heart disease and a 32% increased risk of stroke.
- » Higher rates of depression, anxiety, and suicide.
- A times higher risk of death, 68% increased risk of hospitalization, and 57% increased risk of emergency department visits in isolated patients with heart related conditions.

The segregation of already marginalized subjects such as isolated seniors or other not self-sufficient individuals can therefore effectively be considered a form of abandonment (Armitage & Nellums, 2020; Han & Mosqueda, 2020) to the extent that it does not only affect the physical wellbeing of the isolated individuals, but it prevents them to access primary services and goods while eventually resulting in agebased discrimination, so called ageism. According to the World Health organization "WHO" the term ageism refers to "the stereotypes (how we think), prejudice (how we feel) and discrimination (how we act) towards others or oneself based on age" (WHO). It is reported that elders are typically associated with negative physical to mental condition which make them essentially uninteresting and unattractive for the community. As a result, the older person who has unwillingly internalized these clichés just accepts them as representative of his/her condition. Unlike other forms of discrimination, ageism is often normalized and even disregarded, hence, not considered as a task in urban development.

Over the course of the COVID lockdowns many seniors experienced an important "degree of physical and mental de-

terioration" (Phillipson et al., 2021). The prolonged restriction of mobility particularly concerned those with already existing mobility problems as the home confinement induced a lack in motivation to simply leave the house, encouraging the sedentary behavior of many elderlies. Evidence suggest that the pandemic may have caused "significant changes to the "relationship of groups and individuals with public spaces, reducing the possibility of spontaneous or casual relationships. This is indicated by the extent to which the two activities which bring people into public space – shopping and socializing – are precisely those most affected by the pandemic" (Phillipson et al., 2021).

### **Mobility and wellbeing**

Bringing it to the point, it can be stated that "mobility, locality and social networks influence the perceived quality of life, and this perception or wellbeing can be reconstructed in terms of six main "building blocks" (Banister, 2004; Bricocoli et al., 2018):

- » Peoples' standards of social comparison and expectations of life.
- A sense of optimism and belief that "all will be well in the end".
- » Having good health and physical functioning.
- » Engaging in many social activities and feeling supported.
- » Living in a neighbourhood with good community facilities and services (including transport).
- >> Feeling safe in one's neighborhood.

These subjective and social factors seemed to contribute far more to the perceived quality of life than indicators of material circumstance, such as actual levels of income, education, home ownership or social class (Bowling et al., 2002). It is important to state however that these qualities are different from one individual to another and will always keep being subjective matters even if generally suggested for a healthy life style. "Profiles of ageing mobilities are defined considering the interplay of mobility and movement. Mobility is the ability to move through space and overcome spatial friction, while movement consists of putting mobility into practice" (Akhavan & Vecchio, 2018). A priority target in building neighborhood communities is the availability of worth-to-reach public spaces that trigger the mobility of elder people in order to overcome individual hurdles.

Walking has always been promoted as a good practice among older adults due to its many health benefits, ranging from lower risk of cardiovascular conditions, obesity, diabetes, and lower mortality in general. It is useful however to distinguish between recreational and utilitarian walking "Utilitarian walking can be defined as walking to shop and do other necessary errands or tasks of daily life". While recreational walking is considered optional and "not necessary", utilitarian walking become crucial to keep their independence. By being often the only physical activity, it plays a crucial importance of providing with opportunities to shop inside the neighbourhood, to reach places of social contact and interaction, and health services such as general doctors and pharmacies. These spaces contribute in the sense of belonging to a place, constitute the imageability of the place (Lynch, 1960) in order to keep stable the understanding of one self's location inside a larger community space which centre is the own dwelling (Paradisi, 2017). This sense of belonging and attribution to one's environment as an integrated living space mitigates and overcomes a series of physical and psychological barriers, that occur more often in aging people. That affects positively the social engagement by feeling part of a place. Because otherwise, it's not rare for elderly with hearing impairments to decide not to engage in communication in the first place, as they might feel embarrassed by their condition. Vision impairments can cause the elderly to have hard times reading instructions, signs, or spot other people around them, also poor vision can even trouble listening and comprehension.

### The importance of daily shopping activity

The impact of these issues is huge and avoids leading the elderly to reconsider their habits and downgrade their lifestyle choices essentially resulting in an unhappy life characterised by apathy and personal devaluation ultimately leading to self-isolation and exclusion. Recent studies suggest that it might be the most ordinary everyday activities, such as shopping which can have the biggest impact on health and wellbeing on the long run. Among 1800 individuals aged 65 or over, those who shopped every day, have been observed to have 27 % lower risk of death than those who did not (Chang et al., 2012). Shopping stimulates cognitive processes as the shopper must identify the items they need, compare different products, and determine whether an item is indeed worth being purchased based on a value to cost assessment. These kinds of task are stimulating those areas of the brain in charge of the decision-making process. Other benefits stem from the opportunity to make buying decisions that could positively affect their health in the long term together with the physical activity, typically walking, involved in everyday shopping. The last component is social interaction, which might be the most significant one as it has been shown that socially invested elderly are 50% more likely to live longer than isolated ones (Holt-Lunstad et al., 2010). Shopping is in fact for many an actual way to leave their home and meet or interact with people such as neighbours or casually bump into friends and acquaintances. Shopping places are therefore essential to seniors as they allow them to feel connected with the community and express their identity in a social context, Generally, shopping centres and supermarkets are regarded as "public yet non-civil space" on behalf of their consumerist nature. "Such spaces encourage action, not inter-action. Any interaction between the actors would, however, keep them away from the actions in which they are individually engaged and would be a liability to each, not an asset The task is consumption." It is even fair to say shopping centres and supermarkets are conceived as "non-places" which "accept the inevitability of a protracted, sometimes very long sojourn of strangers, and so do all they can to make their presence 'merely physical' while socially little different, preferably indistinguishable altogether" (Bauman, 2000). Despite discouraging "the thought of 'settling in', making colonization or domestication of the space all but impossible" (Bauman, 2000) shopping centres and supermarkets have become important community meeting places for a wide range of users from different age groups and financial backgrounds (White et al., 2013). Together with parks, gardens, and squares, "commercial spaces" are not a less popular nodal point for elderly communities. It is therefore time to investigate the senior's experience of community spaces, particularly in relation to their sense of inclusion in, or exclusion from, consumptive spaces. However, as various research studies have demonstrated, the meaning of 'shopping' varies greatly in terms of motivation, experience, emotion and satisfaction (Tauber, 1972). Indeed, going to the commercial area does not necessarily mean the pursuit of shopping at all; it can be an activity of pure leisure that does not require purchasing anything except a cup of coffee perhaps (Novak, 2006; Weinblatt et al., 2000). Part of what makes such public spaces so attractive is the sheer diversity of people, and activities, within them (White et al., 2013). Many seniors therefore gladly engage in "People watching", that is the act of observing of people. Sharing this "activity" with peers is one way how seniors can effectively create social networks by spontaneous and casual encounters in public spaces as well as consumption sites. For their characteristics we can suitably define seniors as "time-rich" users, which in opposition to their "time-poor" younger counterpart, are prone to a different and unique form of "convenience shopping" revolving around social interaction and convivial relationship, rather than on time saving and automated processes.

## Proximity retail, convenience shopping: innovation and trajectories

The gradual shift in consumer habits, the effects of inflation together with the rise of digital economy and e-commerce are the main reason behind what has been called "retail apocalypse" which determined the closing of numerous brick-andmortar retail stores. Thanks to accurate inventory control, special seasonal discount (i.e., black Friday/ cyber-Monday) and constant attention to innovation and customer experience, digital platforms outperformed conventional physical stores. The COVID-19 outbreak just added to the ongoing crisis as many storeowners were forced to shut down as non-essential business, effectively marking their definitive expiration. For physical stores to stay relevant and keep up with their digital counterparts, the brick-and-mortar format had to be updated in the fashion of an experiential retail which could make use of the physical retail space to offer additional experiences beyond conventional shopping. Since time, this strategy of exploring new retail formats led to the appearance of numerous temporary stores, pop up shops and concept store which in many cases use digital technologies as a mean to effectively enhance the experience of shopping in person. However, that is not the case for the traditional local business and proximity retail shops/corner shops which inevitably lost the competition with big retailers, department stores and their digital stores. As small corner shops and family businesses began disappearing, big retailers gained traction and started expanding their presence in the proximity retail market and the central areas of the city. According to large retail chains the small format store is ideally the best format to try out new marketing approach and solutions to later adopt on a bigger scale. The proximity retail format assumed the traits of the convenience store and quick shopping. If departments stores and supermarkets can offer a wide and localized assortment, small format proximity stores are an answer the on-demand shopping and impulsive buying. In 2016 the leading e-commerce platform Amazon opened its own chain of convenience store for grocery and daily shopping. "Amazon Go" stores are tight and hyper technological spaces which aim to offer the ultimate time saving, seamless approach to daily shopping rather than an experience. The fact alone, that the most renowned e-commerce platform and tech operator in the world decided to open a chain of physical shop should be enough to grasp the unexpressed potential of physical stores and proximity retail. Italian retail store chain Esselunga, is not new to innovation as it was the first retailer in Italy to introduce customer fidelity program (1995) and experiment e-commerce with the launch of their website (2001). Proximity retail stores "LaEsse" by Esselunga are the latest evolution of the Italian brand introduced to intercept new consumer behaviour shifting to daily and impulsive shopping while expanding the brand presence to the city center and neighborhoods. Esselunga has intended these stores as modern and premium reinterpretation of local convenience stores, which provides for two different shopping experience: one concept points on a "gourmet" like shopping with exclusive product categories like wine cellar, related to impulsive purchase while allocating daily products to a more automated platform. The more recent "iteration" of the "laEsse Hop" format is the most disruptive one as the store is meant to act both as a delivery hub and corner shop at the same time. Customers can order their groceries online and pick them up in person or have them sent home straight from their local store. Like in a conventional convenience store customers can shop in person at the store but all they must do is place their order through the tablet at the storefront as goods are only accessible by the staff "behind the scenes".

### **User interviews**

In this context a series of qualitative user interview were conducted among the older customer of 4 different markets/ supermarkets asking their experience about social isolation, everyday routines and lastly about shopping to get some user insights on their experience.

4 different areas of the city of Bologna, Italy were purposefully chosen to investigate each kind of "ageing neighborhood": Bologna city center, S. Donato and Pilastro neighborhood at the first periphery and Osteria Grande at approximately 28 km from Bologna. The participants who trusted taking part in the survey ranged in age from 60 to 87. They were interviewed while standing or sitting nearby the shopping place. People aged 60 to 70 years, who just retired from work, are glad to finally spend time at home. This attitude however changes as they grow older as older participants referred, they liked spending much time at home at first, but soon started miss their past busier life as it felt more self-fulfilling. In the city center it is more likely to meet a person who happened to keep in touch with long-time friends of the same neighborhood. It is possible to identify 4 recurring themes in their experience: they were characterized by a decent level of mobility nevertheless they complained about their lack of autonomy which eventually made them homebound. Following the death of a significant other, most of the elderly who live alone won't be able to reach valuable opportunities. Many shared a relevant degree of insecurity and mistrust. Except for younger individuals (60-70 years old) the others clearly stated they would like to spend more time out; hence they preferred walking to the store rather than get their groceries delivered. However, there was a general desire for companion. That is particularly the case for all those who had experienced a fall and now lost confidence in their own physical ability. The interviews confirmed the central role of supermarkets and shopping spaces to replace (missing) recreational places in order to interact with peers.

### Findings for a design concept

Throughout the research emerges the necessity of "upgrading" proximity retail for daily necessities with opportunities of social encounter for elderly people. Later years of life can be characterized by physical and mental decline, which can be contrasted by moving and social interaction, as well as mental activities such as choosing products. In an age where digital technology eliminates and replaces physical meeting places, necessity-based shopping is an essential activity which motivates people into public space, helping shape their sense of identity and belonging. Alongside the current phenomenon of e-commerce and delivery services this research stresses the important role of physical retail and suggests exploring the idea of an extended form of "convenience shopping" that offers additional services and community spaces for elder people and which aims to stimulate human interaction. Latest retail trend consisting in dematerialization, virtual showroom, and the implementation of state-of-the-art logistics for home delivery, aimed to the ultimate user experience needs to be eventually matched by a tangible equivalent, able to properly fulfil the growing need of inclusion and participation of the elderly population, avoiding isolation and all related conditions. Instead of claiming for returning of a traditional proximity retail that has already been replaced, the concepts want to gain benefit from up-to-date technology to diversify services, grasp best practices of delivery and shopping experience, eventually integrate marketing strategies of cashback and token in order to create a lively environment that is integrated with chat corners, newspaper readings and simple consumer offer. Return of Investment strategies for economical rentability have to be consider in order to create a sustainable retail format that might be also integrated in existing spaces as extended services.

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