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# Older Adults in Public Open Spaces: Age and Gender Segregation

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## Abstract

**Background and Objectives:** There is a substantial body of literature on the importance of the environment in the lives of older adults. Nonetheless, to date, there has been limited research on everyday activities of urban older adults in public open spaces. The present study examined the activities of older adults in public open spaces in Israel with a specific focus on age and gender as potential variables of relevance.

**Research Design and Methods:** Using still photography, we systematically photographed four sessions in two different public outdoor settings attended by older Israelis. Still photographs were converted to narrative descriptions, and then coded, quantified, and compared using descriptive statistics.

**Results:** The majority (311, 97%) of older adults arrived alone to the public setting. Of these, 44% formed a social group of two or more people, whereas the remaining older adults stayed alone. When social interactions occurred, they were primarily gender homogenous (69%); women were more likely to integrate in spontaneous social conversations and men were more likely to participate in common games.

**Discussions and Implications:** Our findings call attention to the important role played by the outdoor environment as a venue for social activities among older adults. The findings further stress the high levels of aloneness experienced by older adults, which do not seem to be alleviated by the mere attendance of public spaces.

**Keywords:** Environmental gerontology, Outdoor, Engagement, Activity, Aloneness, older adults

*“This is what the Lord Almighty says: ‘Once again men and women of ripe old age will sit in the streets of Jerusalem, each of them with cane in hand because of their age.’” Zechariah, Chapter VIII*

Rowles situated the convergence space in “the general schema” of five geographic life circles (Rowles, 1978, p.168) and characterized it as follows: “the private home is situated in the center, and the surrounding areas are the surveillance zone, the neighborhood, the city, and beyond.” Each geographic circle is characterized by different levels of physical closeness and mobility. The core idea is that as people age, their living space shrinks. One reason is a decline in mobility,

which results in older people concentrating their efforts and lives in the most accessible and immediate vicinity, namely, their home. A second reason is changes in the social composition and function of the places surrounding their homes. These changes make older adults feel like they do not belong, and cause them to find alternative places that do not exclude them. Older adults adjust to changing indoor and outdoor situations by expanding the concept of home beyond their private dwelling to the surveillance zone (Rowles, 1978).

Between the abstract concept of a domestic sense in outdoor areas and actual personal homes, rests the physical living space that Rowles (1978) called the “surveillance zone.” It is “a watchful space from the house, and extended to encompass

that space external to accommodation and forming a ‘buffer zone’ with the widowed society” (Rowles 1978, p. 167). Peace, Kellahe, and Holland (2005) describe this physical area, between the private home and the neighborhood streets, as a transition area between the inside and the outside that is used for personal and social roles that can be performed inside the house or outdoors, including: watching, sitting, eating, reading, tending much-loved flowers, walking, or playing.

Older adults’ shrinking living spaces can grow by “leaking” into the nearest public area. Moss (1997) has argued that “home” is a fluid and fluctuating space that extends beyond the household to include community centers, meeting places, corner stores, and other dwellings, as well as social interactions with family, friends, paid workers, and community members. Home becomes a place that extends beyond the walls of the house and garden to include the neighborhood, community, city, and beyond (Wiles Leibing, Guberman, Reeve, & Allen, 2011). An example of this can be found in a study by Leibing, Guberman, and Wiles (2016) that examined the ideal home for older adults. One important finding was the connection of the “nest” (home) to the wider community. In search for ways to express a sense of home, older adults identified nearby services, which they described as convenient (for instance, being able to shop without the need for transportation) but also as possible spaces for interaction with others. These highly valued interactions were highlighted in relation to specific activities (e.g., attending church or a book club) as well as in relation to superficial contacts (e.g., a concierge who regularly greets them).

### Older Adults and the Urban Environment

Research on older adults in public open spaces has addressed the physical elements of the environment as potential obstacles to or facilitators of accessing public parks, for instance (Aspinall et al., 2010; Choi & Matz-Costa, 2017; Sugiyama, Francis, Middleton, Owen, & Giles-Corti, 2010; Sugiyama, Thompson, & Alves, 2009; Vitman et al., 2014). These studies reflect a general assumption that older adults tend to walk in the “open air” mainly for the sake of their health.

A different line of research has examined consumer behaviors in malls. This line of research could potentially provide insights regarding the activities of older adults in urban areas, including the importance of public places for the social welfare of older adults. Kim, Kang, and Kim (2005) have argued that mall shopping involves not only the consumption of goods but also enhances emotional satisfaction that is derived from the ambience, the opportunity to meet friends or acquaintances and watch passersby. It has been argued that feelings of loneliness among older consumers might increase the consumption of goods (Kim et al., 2005). Consistently, White, Toohey, and Asquith (2015) indicate explored the experiences of seniors in four Australian shopping centers. They have found that the

shopping center is a prime site for interaction, communication, and social outing. Aside from shopping, the participants generally identified social activities—such as meeting family and friends, going to a movie, watching, and sharing a meal or a hot drink—as key reasons for going to the shopping center. An Israeli study (Gilboa & Vilnai-Yavetz, 2010) has proposed an age division with regard to consumers’ behaviors. Whereas older adults born between 1921 and 1940 appear to be the least engaged in mall shopping, the baby boomers, born between 1941 and 1960 tend to sit in coffee shops and use the mall to socialize with others.

### Age and Gender Segregation and the Environment

The environment likely plays an important role with regard to both age and gender segregation. Hagestad and Uhlenberg (2005) have long argued for the importance of considering the meso-level in any discussion concerning ageism. Reportedly, in modern society, there is a clear segregation between the young and the old, based on pre-planned life scripts, which include education, family creation, and work and finally, retirement (Riley & Riley, 1994). When the younger and older generations do not socially engage, ageism is likely to flourish (Hagestad & Uhlenberg, 2005). Consistent with this claim, it has been stressed that age segregation is highly prevalent in the urban environment and tends to intensify ageism towards older adults (Laws, 1993).

Similarly to age, gender is another basis, on which the environment reinforces segregation and inequality (Spain, 2014). Gender segregation could be attributed not only to the built environment, however, but also to gender differences in social skills and social interaction. In general, women are considered as the main gatekeepers in social interactions, whereas men are seen as less socially active. Whereby women develop intimate social contacts and tend to have discussions around personal issues, men are more likely to connect on the basis of mutual interests (Fehr, 1995). Yet, women are more likely than men to report loneliness (Cavanaugh & Blanchard-Fields, 2014).

### The Present Study

The present study aims to examine activities that older adults are engaged in public open spaces. Although informative, past research has largely examined older adults in green parks or malls. These spaces are not necessarily integral parts of the living environment of urban older adults and do not represent the “surveillance zone.” At least in Israel, most urban areas do not offer easy access to green parks or shopping malls (Vitman et al., 2014). Hence, older adults have to actively seek out these settings. Because older adults tend to be confined to their local neighborhoods, due to health and functional limitations (Rowles, Oswald, & Hunter, 2003; Wahl, Iwarsson, & Oswald, 2012), research

has to address their nearby surroundings, rather than more remote specialized settings. Moreover, past research has primarily examined the health effects of the environment on older adults by focusing on mobility, accessibility, or fresh air. It has paid a lesser attention to the environment as a facilitator of or a barrier to the social participation of older adults (Lederbogen et al., 2011; Rosso, Auchincloss, & Michael, 2011).

The study adds to a growing body of knowledge by examining public open spaces, in which urban older adults gather with no formal guidance or planning of any authorities or service providers. We aim to classify, describe and count the different activities urban older adults are engaged in when they attend public open spaces. Fueled by our hypotheses concerning age segregation (Riley & Riley, 1994) and gender differences in social interactions (Fehr, 1995), we compare activities between older and younger passerby, and between men and women. To document these activities, we use a visual research method; specifically, we rely on systematic snapshots produced over several occasions (Shenk & Schmid, 2001).

## Methods

The present study photographed scenes in public open spaces. We used a visual research method—the review of still photographs (Collier & Collier, 1986; Prosser, 2013; Tinkler, 2013)—to examine the activities of older adults who spend time in public open spaces. Visual research is a tool that relies on still images produced by a camera to gather information (Collier & Collier, 1986; Pauwels, 2010). It involves the production, organization, and interpretation of images (Prosser, 2007). Visual research follows the rationale that images provide information that cannot be gained otherwise (Tinkler, 2013). Both visual sociology and visual anthropology are grounded in the idea that valid scientific insights can be acquired through observing, analyzing, and theorizing about visual manifestations, which may include the behaviors of people and the material products of a culture (Pauwels, 2010). Visual images can evoke emotions, abstract ideas, and the shared human experience (Hodges, Keeley, & Grier, 2001). They provide evidence that is difficult to put into words. Moreover, this unique technology allows slowing down or repeating observations for a deeper reflection on perceptions and meanings (Ball & Smith, 1992).

### Site Selection

The present study was conducted in the city of Holon, Israel. Holon is a medium-sized city of 186,400 inhabitants, located in the Tel Aviv metropolitan (Shroitman, Sason, & Drory, 2015). According to the Israeli Central Bureau of Statistics, economically and socially, the city is located in the middle of the Israeli scale. (Burck & Feinstein, 2000). Holon is a Jewish city, composed of almost 100% Jews (Shroitman et al., 2015).

The systematic research process begins at the research design stage, by identifying the proper sites for photography (Suchar, 1997), including the choice of dates and plans to re-photograph in order to create a solid sample (Rieger, 1996). The selection of the photographed sites was done following a very thorough preparation. The first author has worked as a geographer and service planner in the city for 6 years. She specifically selected sites that had a high presence of older adults. When choosing the sites, the researcher consulted with municipal employees who were familiar with the city, such as inspectors and police officers.

A two-layer map was created for the purpose of selecting appropriate sites for this study. The first layer painted the city according to older adults' housing density—based on the municipality's housing data, and a second layer of older adults' gathering places—was based on information provided by the city employees. Based on this map, it became clear that open commercial spaces in the older neighborhoods of the city, which were characterized by a high density of older adults' households, had a high presence of older adults.

The two open commercial spaces, examined in this study, are located in two neighborhoods that are inhabited by a dense population of older adults (women over 62 and men over 67; based on the definition of retirement age of the National Insurance Institute of Israel). The percentage of older adults in the two neighborhoods ranges between 17% and 24.4% (Shroitman et al., 2015). This is higher than the current percentage of older adults in the country, which stands at about 11% (Brodsky, Shnoor, & Be'er, 2015). The commercial centers that serve as the neighborhoods' central places were built in the 60's of the previous century and now include shops, cafes, restaurants, banks, and nearby health clinics (Aharoni, 2017).

Each site was photographed on two occasions: in the summer and in the winter. These two seasons were selected because they reflect the two extreme weather conditions in Israel. During these two seasons, staying outdoors is not always enjoyable or feasible. In contrast, the autumn and spring are quite mild and are not always distinguishable. Each of the two settings was photographed both in the morning and at noon. Because our preliminary observation and consultation suggested that older adults are less likely to stay outdoors in the afternoon or evening, we did not photograph during these times of the day.

### Data Collection

During each photography session, the first author photographed the entire area and all people who were present, unrelated to their age. This created a complete 360 degree representation of all the people and occurrences, present in the public open commercial spaces, as well as possible changes which have occurred during each of the four shootings. Each session lasted between one and one and half hours.

## Date Analysis

Collier & Collier (1986) and Suchar (1997) have suggested a five-stage model for the analysis of photographed information. In the *first stage*, the database is organized and observed as a whole in order to examine it within the research context (Collier & Collier, 1986). In the *second stage*, each photograph is scrutinized using a descriptive narrative (Suchar, 1997), to identify repetitive themes and behaviors that will serve the coding stage that follows. The *third stage* is the coding, or the addition of labels to each descriptive narrative (Suchar, 1997). The *fourth stage* involves structural analysis, such as measuring distances, counting heads, and comparing movements (Collier & Collier, 1986). The *final stage* involves the revision of the entire database and re-coding (Collier & Collier, 1986; Suchar, 1997).

Each image was assigned both an index number and a scene number, because people were often photographed from different angles. The scene number prevented counting or describing the same person more than once, even if there were changes in the location or composition of photographed people. Each of the scenes was cataloged by (a) a description of the actions older people are engaged in and (b) the number of older persons, broken down by gender, as well as the presence of younger people or caregivers. It is important to note that older adults were not asked for their age. Hence, the classification was done based on their physical attributes (e.g., hair style, posture, wrinkles, dressing style).

We searched for actions (e.g., sitting, walking, watching, reading a newspaper, talking, or shopping) and for social situations (e.g., a chance encounters, a common game, no interaction, or a person who is alone). To create a coding scheme, we identified recurring patterns of actions and social situations and created common definitions. Finally, in order to determine whether the behaviors engaged by older adults differed from those engaged by younger adults, we conducted chi-square analyses. We also conducted chi-square analyses to compare the various behaviors across gender.

All photographs were reviewed and coded by the first author. To validate the coding process, the coding of 20% of the images was conducted by two additional independent researchers and an inter-rater agreement of 0.92 was obtained. All three individuals involved in the initial coding of the pictures are geographers, who specialize in urban planning. A fourth reviewer (the second author; a clinical psychologist) assisted in the classification and definition of the coding scheme. Disagreements between coders were discussed and resolved through a consensus process.

## Ethical Issues

When images are taken in public places, it is impossible to gain the consent of all people involved. Hence, it is viewed as acceptable (and legal) to use these images without their

expressed consent (Wiles, Coffey, Robison, & Prosser, 2012). Nevertheless, the researcher should act responsibly to protect the photographed people and should avoid using images in a way that will harm their privacy and dignity. Hence, in this study, images are displayed in a blurred form and the findings are based on a textual description. This procedure was approved by the researchers' university.

## Results

### A General Impression of the Sites

The first impression from the photographed sites is that these are "old people's places." The "old" character of the places emerges from the buildings, shops, and open spaces; it is reflected in the mixture of shops and products for sale—small grocery stores and supermarkets, Russian food stores (non-Kosher), textiles and fabrics, inexpensive fashion stores—all of which match older adults' life style. The inexpensive restaurants and cafes seem to have old-fashioned décors that have not been updated for years.

The first site is composed of two neighboring square spaces. One is an outdoor space, the primary city square (a quad), which is often used for the city's outdoor events. In this outdoor space, there is a long row of benches along one side. The other site is an enclosed space, with benches scattered in different ways: some are scattered around a tree, where they are placed back to back, and some are facing one another so that people can look at each other. The second space includes the inner yard of a shopping center and a small nearby park. In the commercial space, there are several crescent-shaped groups of benches, and some benches are placed on both sides of a large tree that provides shade.

The sun and shade play an important role in determining people's location. In photographs taken in the summer, the people are mainly in shaded areas, whereas in the winter, people are mainly in the sun. Hence, people are mostly concentrated in desired locations. In both sites, there are always people present on all photographs. Even during Israel's very hot summer, when most people would rather be indoors, many older adults seem to be spending time outdoors.

### Age Segregation

The first overall observation is that older adults constitute the majority in these two public open spaces. A total of 423 people were photographed over the four time periods. Of these, 311 were classified as older adults (56% men and 44% women), 69 were younger adults, not related to the older adults in the photographs and 43 were caregivers, who accompanied older adults. Thirty-two people (10% of all older adults) were photographed in a wheelchair. Fifteen women, but no men, were photographed with a walker.

Compared with the older adults (31, 10%), younger adults (non-caregivers) were more likely to be in movement, with the goal of changing locations, rather than staying

in one place (50, 72%;  $\chi^2[1] = 130.8, p < .001$ ). The vast majority of older adults arrived to the public space alone (97%). The majority of older adults (56%) remained alone throughout the entire period. Yet, 44% of the older adults were photographed as they engage with others. Hence, we identified two main categories: Situations in which older adults are alone and situations where older adults are in contact with others. These situations were subdivided into six subcategories. Examples of the six subcategories are provided in Figures 1–6.

The first category of older adults *alone* included the following four subcategories: (a) “Aloneness”—Older adults sitting alone, without any interaction with another person (16.7%); (b) “Gathering”—older adults sitting alone next to other older adults, who are also alone (21.2%). For example, a woman and a man sitting separately on two nearby benches; (c) “Alone in movement”—Older adults who are in motion, alone, for example, walking to a shop, roaming; (10%); and (d) “Transferred”—Older adults, transferred by their caregivers (8.0%).

The second category included two subcategories in which older adults are *in contact* with others: (e) “Meeting”—A few

people who come together to participate in a social gathering for the purpose of card games, dominoes, etc. (19.6%); and (f) “Together”—A group of several people, engaged in a common conversation (24.4%). Whereas activities classified as “Meeting” seemed to be pre-planned around a common interest, activities classified as “Together” appeared to occur naturally, without prior acquaintance or planning.



**Figure 1.** “Aloneness”: An old man sitting alone on a bench, reading a newspaper. Behind him, there is a group of young people.



**Figure 2.** “Gathering”: A woman and a man sitting separately on two nearby benches.



**Figure 3.** “Alone in movement”: An old man walking with a shopping cart.



**Figure 4.** “Transferred”: Older adults, transferred by their caregivers.



**Figure 5.** “Meeting”: A group of older men engaged in backgammon.

## Gender Differences

**Table 1** shows the results by gender. Overall, 56% of the older adults were photographed *alone*, with no significant difference between men (58%) and women (56%). As for older adults *in contact*, there were significant differences between men and women. It appears that men (29.9%) were more likely than women (6.6%) to engage in an organized meeting with a clear aim to play cards, backgammon, or dominoes (e.g., “Meeting;”  $\chi^2[1] = 31.08, p < .001$ ). A total of 24.4% managed to fit into a random gathering with others and engage in spontaneous conversation (“Together”). The majority in this group were women: 35.0% compared with 16.1% men ( $\chi^2[1] = 31.08, p < .001$ ).

Another gender issue is the tendency to form gender homogeneous groups, that is, groups composed of all women or all men. Out of all 32 social groups classified as “Meeting” or “Together,” 69% were gender-homogenous. Eight of these groups consisted of all men, who mostly engaged in table games tournaments (“Meeting”), whereas fourteen consisted of women, engaged in what appears to be spontaneous conversations (e.g., “Together”).



**Figure 6.** “Together”: Three older women sitting on a common bench, talking. Facing them are two women, with a shopping cart. On a nearby bench, an old man is sitting alone.

## Discussion

This study explores the phenomenon of older adults spending time outdoors during the day. The unique contribution of this study is that the place under study is not formally organized for older adults. Rather, it represents a natural social laboratory, a place that is not defined or designated for older adults. There is no sign that marks the place, and there are no designated services for older adults, such as the availability of social workers or nursing staff. The place does not require enrollment or membership, and there is no guide or therapist in charge. Nevertheless, many older adults spontaneously gather there to do as they please—move around, make connections, or remain alone.

The ture that emerges from the study underscores the importance of public spaces in the lives of older adults. The city public spaces are the continuation of the private home, especially for those older adults who are alone. These places, which are close to older adults’ private homes and within their familiar neighborhood, fit Rowles’s description (Rowles, 1978) of the smaller sphere of life that surrounds the private homes of older adults: the “surveillance zone.”

## Age Segregation and the Environment

The description of social situations and activities of older adults in these places creates the impression that the older adults “feel at home” comfortable and secure. Geographic gerontology theories highlight the development of “a sense of home away from home.” This concept describes how, in the process of adapting to decreased mobility and a reduction in the area that is accessible to them, along with a reduction in the number of social relationships (Rosso, Taylor, Tabb, & Michael, 2013), older adults expand their concept of home to include the familiar neighborhood, the community and the city (Wiles et al., 2011). Older adults’ convergence in safe places aims to increase their sense of control over the environment and maintain their independence and continued sense of membership in society (Rubinstein, 1989). They do this by concentrating in places where they can spend time on a routine basis (Oswald & Rowles, 2006; Scharf, Phillipson, & Smith, 2005; Wahl et al., 2012). In contrast to green parks or shopping malls,

**Table 1.** A Descriptive Analysis of Actions and Situations of Older Adults by Gender

N (%)	Men 174 (56.0%)	Women 137 (44.0%)	Total 311
(I) Person is alone (N = 174)	58.0%	56.0%	57.0%
a. Aloneness	16.1%	17.5%	16.7%
b. Gathering	22.4%	19.7%	21.2%
c. Alone in movement	8.1%	12.4%	10.0%
d. Transferred	7.5%	8.8%	8.0%
(II) Person is in social contact (N = 137)	46%	42%	44%
e. Meeting	29.9%	6.6%	19.6%
f. Together	16.1%	35.0%	24.4%

which are often located in the outskirts of the city (Zeitler & Buys, 2015), the places examined in the present study constitute the nearby living environment of urban older adults; not directly part of their home, yet located in close proximity and easily accessible. As can be seen in the present study, these places are relatively accessible even to those older adults who rely on canes or wheelchairs. Older adults can reach these places on their own or through the assistance of a caregiver. The vast picture that emerges is that through their presence in large numbers, older adults have created unique places to meet their needs.

Our findings are consistent with Hagestad and Uhlenberg's (2005) claim for an age division in society. Intergenerational contact was almost absent from the photographed scenes. In this study, the only subcategory, which involved both young and old people, consisted of older adults being transferred by their caregivers. Moreover, whereas the majority of older adults photographed, were sedentary, the younger people in the photographs, seemed to be in movement. Hence, the two age groups likely attend these spaces for different reasons. The clear age division identified in this study is inconsistent with current calls of the World Health Organization towards age friendly cities that cater to all age groups and facilitate intergenerational contact (the World Health Organization, 2007).

Another interesting finding, which distinguishes the present study from past research (Aspinall et al., 2010; Sugiyama, 2010; Vitman et al., 2014; Wiles et al., 2011) is the focus on the social purpose that these public spaces likely have. Whereas much of the literature has focused on green parks as places that provide opportunities for fresh air and facilitate older adults' engagement in health behaviors, the present study shows that urban older adults favor public open spaces for social purposes. Older adults do not simply pass through. Rather, the streets and the squares are places to remain in. Although more than half of all older adults in these settings remained alone within the entire period of photography, a little less than half made social contact with others. Hence, the present study clearly documents that the "surveillance zone" has a social purpose for older adults.

### Aloneness and the Urban Environment

The concept of aloneness presented here does not refer to a state of mind, the subjective feelings of loneliness, but rather describes a person who is on his or her own. A notable finding is that more than half of the older adults remained alone over the entire photographing period. This suggests that even when older adults go outdoors to bustling places, many remain alone without any social contact. A study on older adults' loneliness has found that women are more likely to report loneliness than men (Shiovitz-Ezra & Nehemia, 2013). This is inconsistent with the present study, which has shown that women are more likely to participate in occasional conversations compared with

men. However, this discrepancy could be explained by the hypothesis that men are embarrassed to report loneliness (Shiovitz-Ezra, 2011). Hence, the findings stress the advantage of visual research, which can point to innovative directions of understanding the experiences of older adults, beyond the reliance on self-report.

Of the 311 older adults who were photographed, only a few seemed to be with a partner of the opposite sex. In addition, there were only a few situations in which older men and women spoke with each other (in a group of two people). Although we cannot conclude that these men and women do not have a life partner, it can be hypothesized that there is a connection between the situation in which they were photographed—namely, being alone—and their wish to go outdoors in the city and remain there. In support of our observation, a study on older adults' sense of loneliness has found that loneliness in Israel is especially prevalent among the separated and the widowed (Shiovitz-Ezra, 2011).

The large number of older adults who were seen alone in open commercial areas is consistent with another study that examined the social contacts of widowed older adults and found that they tend to participate in more informal social activities than do the pre-widowed (Utz, Carr, Nesse, & Wortman, 2002). The researchers have argued that although social participation is a strategy for dealing with the loss of a spouse, a significant proportion of widows do not have the resources to do so. Hence, one can interpret the large presence of older adults who were photographed on their own in nearby commercial areas as being fueled by a shortage of social resources.

### Gender Differences and the Environment

Although there were no gender differences in the number of older adults who were alone, consistent with past research (Fehr, 1995), there were significant gender differences with regard to type of social activities men and women engaged in. Whereas men were more likely to participate in what appeared to be pre-planned, table games (e.g., "Meeting"), women were more likely to engage in spontaneous conversations (e.g., "Together"). Moreover, most interactions of several older adults were gender-homogeneous, that is, composed of only men or only women. It is important to note that these were not religious people who strived for gender segregation, at least not based on their appearance and what we know about the religious characteristics of city residents in these areas. Hence, the findings clearly stress the tendency towards gender segregation among older adults in open public spaces.

### Implications

The aim of this study was to bring the image of older adults to the front stage, to the attention of researchers, policy makers, and planners. Academically, visual research can be

a prelude for further research on older adults' life in the city, especially because images reflect spontaneous social processes, without guidance or organization. The picture that emerges from this research shows that older adults create places for themselves by reaching out to spaces abuzz with activity. This is contrasted with the image of older adults who prefer quiet green spaces for personal solitude (Astell-Burt, Feng, & Kolt, 2013).

Instead, our findings stress the preference of a substantial number of older adults towards informal activities within urban areas. Older adults come to these places in order to spend time. Therefore, these places should be designed for long periods of stay, rather than for passersby. The municipal system should arrange streets and squares, avoid potholes, install comfortable street furniture, improve appearance, and thus make these places accessible and comfortable for the long-term stay of older adults. It is expected that a targeted design of street furniture can produce opportunities for social gatherings. When remodeling the physical environment, it is important to take older adults' preferences into account and potentially, their preference for "old looking environments." Given the limited presence of younger people in the open spaces examined in this study and the finding that individuals of different age groups engage in different activities, it is possible that different age groups have different requirements or preferences for the physical environment. Hence, the design of spaces that cater to all ages may not be feasible.

The World Health Organization has promoted the idea of age friendly cities; cities which cater to individuals of all ages (the World Health Organization, 2007). Our findings, however, indicate that older adults engage in different kinds of activities from younger adults. Moreover, old and young seem to have very little spontaneous interaction in these open spaces, other than in the roles of care recipients and carers. Our findings suggest that a multi-generational presence within a single setting is not enough to establish contact. Hence, this study stresses the potential importance of attitude change to facilitate social interaction between people of different age groups.

"Aging in place" is defined as "individuals growing old in their own homes, with an emphasis on using environmental modifications to compensate for limitations and disabilities" (Alley, Liebig, Pynoos, Banerjee & Choi, 2007, p. 2). The present research is important for understanding hidden physical and social aspects of aging in place. The study has shown the ways in which older adults make an effort on their own, without the guidance of an institution or formal sources, to keep their presence in the urban environment and stay part of the social fabric. Our findings are consistent with past research, which has shown that older adults are interested in being part of the social fabric (Portacolone, Perissinotto, Yeh, & Greysen, 2017). The findings support the need for mixed-use development that offers pedestrian connection and blends residential, recreational, and commercial areas. This is particularly

essential for older adults, who use the "surveillance zone" as an opportunity to extend their social life beyond their home. With growing physical impairment, older adults become dependent on mixed-use spaces to maintain their social involvement with the outside world. This claim has been supported by Choi and Matz-Costa, (2017) that have argued that special attention should be paid to older adults with functional limitations who appear to be more vulnerable to environmental hurdles.

Another important implication of the present study stems from the gender division identified. The study suggests a clear tendency towards gender homogenous activities. This could reflect a preference towards gender homogenous interactions or a differential preference of social activities among men and women. Whereas men are more likely to engage in pre-planned structured activities, women are more likely to engage in unstructured conversations. Hence, the study suggests that both age and gender preferences and needs should be taken into account in city planning. Specifically, city planners should design sitting areas that allow for conversations as well as settings that promote structured card games or other structured activities.

It is important to stress that the city in which the study was conducted is characterized by a substantial welfare support for older adults. Within a close distance from the two sites, there are an elderly social club, an adult day care center, and community centers, all potentially available to older adults. Yet, our study clearly demonstrates that many older adults prefer to engage informally in their nearby surroundings. This informal gathering could serve as an opportunity to reach out to older adults, who are not necessarily recognized by authorities. It is important to note, however, that they may or may not be interested in establishing formal relationships with authorities.

Despite its notable strengths, this study has several limitations that should be acknowledged. The analysis was conducted based on the researchers' personal impressions, relying on a subjective categorization of activities and social scenes. Although we were deductively inspired by past theories and research in the field of environmental gerontology (Lawton & Nahemow's, 1973; Rowles, 1983; Wahl et al., 2012), we attempted to ensure that our coding system was inductively developed. This tension between inductive and deductive reasoning is expected given the relative unexplored nature of the topic area, yet, it poses a challenge, which has to be explicitly acknowledged. To strengthen the trustworthiness of our approach, we relied on independent raters for coding purposes.

The findings reveal only the observed layers of outdoor occurrences and we cannot present detailed information about participants' characteristics or inner thoughts and feelings. Further research could uncover a deeper layer regarding the motives for staying outdoors and identify the deeper meanings that older adults are creating in these spaces. The integration of observational data with interview

data can be particularly valuable with regard to loneliness as it stresses the distinction between objective and subjective perceptions of social encounters.

Finally, it is important to note that the present study was conducted in Israel, a country that is characterized by mild weather conditions. Hence, people are quite accustomed to spending their time in the outdoor environment. Possibly, countries that have more extreme weather conditions are characterized by different patterns of behaviors of older adults. Despite its limitations, this study provides a unique perspective on the observed activities of older adults in public open spaces. It stresses the importance of the “surveillance zone” in their lives and the social roles that it plays.

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## Conflict of Interest

None declared.

## References

- Aharoni, R. (2017). History of Holon. Holon Municipality site. Retrieved from: <http://www.holon.muni.il/English/CityOfHolon/Pages/History.aspx>
- Alley, D., Liebig, P., Pynoos, J., Banerjee, T., & Choi, I. H. (2007). Creating elder-friendly communities: preparations for an aging society. *Journal of Gerontological Social Work, 49*(1–2), 1–18. doi:10.1300/J083v49n04\_01
- Aspinall, P. A., Thompson, C. W., Alves, S., Sugiyama, T., Brice, R., & Vickers, A. (2010). Preference and relative importance for environmental attributes of neighborhood open space in older people. *Environment and Planning B: Planning and Design, 37*(6), 1022–1039.
- Astell-Burt, T., Feng, X., & Kolt, G. S. (2013). Green space is associated with walking and moderate-to-vigorous physical activity (MVPA) in middle-to-older-aged adults: Findings from 203 883 Australians in the 45 and Up Study. *British Journal of Sports Medicine, 48*(5), 404–406. doi:10.1136/bjsports-2012-092006
- Ball, M. S., & Smith, G. W. (1992). *Analyzing visual data*, Vol. 24. Newbury Park, CA: Sage.
- Brodsky, J., Shnoor, Y., & Be'er, S. (2015). *The elderly in Israel: Statistical abstract 2014*. Jerusalem: Eshel.
- Burck, L., & Feinstein, Y. (2000). *Characterization and classification of geographical units by the socioeconomic level of the population*. Jerusalem: Central Bureau of Statistics.
- Cavanaugh, J. C., & Blanchard-Fields, F. (2014). *Adult development and aging*. Toronto, Canada: Nelson Education.
- Choi, Y. J., & Matz-Costa, C. (2017). Perceived neighborhood safety, social cohesion, and psychological health of older adults. *The Gerontologist, gnw187*. doi:10.1093/geront/gnw187
- Collier, J., & Collier, M. (1986). *Visual anthropology: Photography as a research method*. Albuquerque: University of New Mexico Press.
- Fehr, B. (1995). *Friendship processes*, Vol. 12. Thousand Oaks, CA: Sage.
- Gilboa, S., & Vilnai-Yavetz, I. (2010). Four generations of mall visitors in Israel: A study of mall activities, visiting patterns, and products purchased. *Journal of Retailing and Consumer Services, 17*(6), 501–511.
- Hagestad, G. O., & Uhlenberg, P. (2005). The social separation of old and young: A root of ageism. *Journal of Social Issues, 61*(2), 343–360.
- Hodges, H. F., Keeley, A. C., & Grier, E. C. (2001). Masterworks of art and chronic illness experiences in the elderly. *Journal of Advanced Nursing, 36*(3), 389–398.
- Kim, Y. K., Kang, J., & Kim, M. (2005). The relationships among family and social interaction, loneliness, mall shopping motivation, and mall spending of older consumers. *Psychology & Marketing, 22*(12), 995–1015.
- Laws, G. (1993). “The land of old age”: Society’s changing attitudes toward urban built environments for elderly people. *Annals of the Association of American Geographers, 83*(4), 672–693
- Lawton, M. P., & Nahemow, L. (1973). Ecology and the aging process. In Eisdorfer, C. E., & Lawton, M. (Eds.), *The psychology of adult development and aging*. Washington, DC: American Psychology Association.
- Lederbogen, F., Kirsch, P., Haddad, L., Streit, F., Tost, H., Schuch, P.,...Meyer-Lindenberg, A. (2011). City living and urban upbringing affect neural social stress processing in humans. *Nature, 474*(7352), 498–501. doi:10.1038/nature10190
- Leibing, A., Guberman, N., & Wiles, J. (2016). Liminal homes: Older people, loss of capacities, and the present future of living spaces. *Journal of Aging Studies, 37*, 10–19. doi:10.1016/j.jaging.2015.12.002
- Moss, P. (1997). Negotiating spaces in home environments: older women living with arthritis. *Social Science & Medicine (1982), 45*(1), 23–33.
- Oswald, F., & Rowles, G. D. (2006). Beyond the relocation trauma in old age: New trends in today’s elders’ residential decisions. In H.-W. Wahl, C. Tesch-Römer, & A. Hoff (Eds.), *New Dynamics in Old Age: Environmental and Societal Perspectives* (pp. 127–152). Amityville, New York: Baywood Publication.
- Pauwels, L. (2010). Visual sociology reframed: An analytical synthesis and discussion of visual methods in social and cultural research. *Sociological Methods & Research, 38*(4), 545–581.
- Peace, S., Kellaheer, L., & Holland, C. (2005). *Environment and identity in later life*. Berkshire, England: McGraw-Hill Education.
- Portacolone, E., Perissinotto, C., Yeh, J. C., & Greysen, S. R. (2017). “I feel trapped”: The tension between personal and structural factors of social isolation and the desire for social integration among older residents of a high-crime neighborhood. *The Gerontologist*. doi:10.1093/geront/gnw268
- Prosser, J. (2007). Visual methods and the visual culture of schools. *Visual Studies, 22*(1), 13–30.
- Prosser, J. D. (2013). Toward a more seeing research. In Denzin, Norman K., & Yvonna S. Lincoln (Eds.), *The SAGE handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Rieger, J. H. (1996). Photographing social change\*. *Visual Studies, 11*(1), 5–49.
- Riley, M. W., & Riley, J. W. Jr. (1994). Age integration and the lives of older people. *The Gerontologist, 34*(1), 110–115.
- Rosso, A. L., Auchincloss, A. H., & Michael, Y. L. (2011). The urban built environment and mobility in older adults: a

- comprehensive review. *Journal of Aging Research*, 2011, 816106. doi:10.4061/2011/816106
- Rosso, A. L., Taylor, J. A., Tabb, L. P., & Michael, Y. L. (2013). Mobility, disability, and social engagement in older adults. *Journal of Aging and Health*, 25(4), 617–637. doi:10.1177/0898264313482489
- Rowles, G. D. (1978). *Prisoners of space?: Exploring the geographical experience of older people*. Boulder, CO: Westview Press.
- Rowles, G. D. (1983). Place and personal identity in old age: Observations from Appalachia. *Journal of Environmental Psychology*, 3(4), 299–313.
- Rowles, G. D., Oswald, F., & Hunter, E. G. (2003). Interior living environments in old age. *Annual Review of Gerontology and Geriatrics*, 23, 167–194.
- Rubinstein, R. L. (1989). The home environments of older people: a description of the psychosocial processes linking person to place. *Journal of Gerontology*, 44(2), S45–S53.
- Scharf, T., Phillipson, C., & Smith, A. E. (2005). Social exclusion of older people in deprived urban communities of England. *European Journal of Ageing*, 2(2), 76–87.
- Shenk, D., & Schmid, R. M. (2001). A Picture Is Worth ...: The use of photography in gerontological research. In Rowles, G. D., & Schoenberg, N. E. (Eds.), *Qualitative gerontology: A contemporary perspective*. New York: Springer Publishing Company.
- Shiovitz-Ezra, S. (2011). Loneliness in late adulthood: A comparison of the phenomenon in Israel and the US. *Hevra Urevaha [Society and Welfare]*, 31(1), 91–111 (Hebrew).
- Shiovitz-Ezra, S., & Nehemia, R. (2013). Long-term loneliness and its correlates among older adults in Israel. In Achdut, L., & Litwin, H., (Eds.), *Changes in the second half of life* (pp. 283–301). Jerusalem: The Israel Gerontological Data Center, The Hebrew University of Jerusalem (Hebrew).
- Shroitman, H. T., Sason H., & Drory, D. (2015) *Holon, Statistical Yearbook (2010–2014)*. Holon: Holon Municipality
- Spain, D. (2014). Gender and urban space. *Annual Review of Sociology*, 40, 581–598.
- Suchar, C. S. (1997). Grounding visual sociology research in shooting scripts. *Qualitative Sociology*, 20(1), 33–55.
- Sugiyama, T., Francis, J., Middleton, N. J., Owen, N., & Giles-Corti, B. (2010). Associations between recreational walking and attractiveness, size, and proximity of neighborhood open spaces. *American Journal of Public Health*, 100(9), 1752–1757. doi:10.2105/AJPH.2009.182006
- Sugiyama, T., Thompson, C. W., & Alves, S. (2009). Associations between neighborhood open space attributes and quality of life for older people in Britain. *Environment and Behavior*, 41(1), 3–21.
- Tinkler, P. (2013). *Using photographs in social and historical research*. Thousand Oaks, CA: Sage.
- Utz, R. L., Carr, D., Nesse, R., & Wortman, C. B. (2002). The effect of widowhood on older adults' social participation: An evaluation of activity, disengagement, and continuity theories. *The Gerontologist*, 42(4), 522–533.
- Vitman, A., Iecovich, E., & Alfasi, N. (2014). Ageism and social integration of older adults in their neighborhoods in Israel. *The Gerontologist*, 54(2), 177–189. doi:10.1093/geront/gnt008
- Wahl, H. W., Iwarsson, S., & Oswald, F. (2012). Aging well and the environment: toward an integrative model and research agenda for the future. *The Gerontologist*, 52(3), 306–316. doi:10.1093/geront/gnr154
- White, R., Toohey, J. A., & Asquith, N. (2015). Seniors in shopping centers. *Journal of Sociology*, 51, 582–595.
- Wiles, J. L., Leibing, A., Guberman, N., Reeve, J., & Allen, R. E. (2011). The meaning of “aging in place” to older people. *The Gerontologist*, 52(3), 357–366. doi:10.1093/geront/gnr098
- World Health Organization. (2007). *Global age-friendly cities: A guide*. Geneva, Switzerland: WHO press.
- Zeitler, E., & Buys, L. (2015). Mobility and out-of-home activities of older people living in suburban environments: ‘Because I’m a driver, I don’t have a problem’. *Ageing and Society*, 35(04), 785–808.