

Research Article

The Role of Third Place concerning Loneliness in the Context of Ageing in Place: Three Neighbourhoods in Stockholm

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Received 19 April 2023; Revised 1 February 2024; Accepted 3 February 2024; Published 29 March 2024

Academic Editor: Tracy Collins

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There is an increasing recognition of the impact of built environment in the neighbourhood on healthy ageing, especially in the context of ageing in place. This study examines perceptions of third place and its potential value for mitigating loneliness in older adults. Thirty participants aged 65–89, living in ordinary housing across three neighbourhoods in the city of Stockholm, Sweden, conducted the interview-based sorting procedures, namely, Multiple Sorting Tasks (MST). In each individual MST procedure, the participant was asked to sort twenty pictures into groups using his or her own categories. The data were analysed using Multidimensional Scalogram Analysis, integrating qualitative data input and quantitative statistical analysis of the categorisations. Accessible local third places, which facilitate physical activities (especially walking) and community building (meaningful social connections) and provide options for food (a medium for social interactions), were seen as vital resources to combat loneliness. Thus, these places are supportive built environment elements of healthy ageing and ageing in place. The management aspect in third places operated by municipalities, including designing diverse public programs and services, and the service mentality of the staff members play an important role in making these places feel safe, at home, and potentially lessen the experience of loneliness to some extent. This study adds an urban design and planning perspective that can be integrated into environmental approaches to combat loneliness among older adults living in the community.

1. Introduction

Many countries have adopted an ageing-in-place policy based on the assumption that it is beneficial for older adults' wellbeing and independence to stay in their ordinary home as long as possible and, thus, avoid or delay transfer to a care home. Older adults who can stay in their homes often require fewer societal resources than those supported in care homes [1–3]. Growing old in the city is a prevailing trend globally [4, 5], but it may come with challenges such as an increased risk of loneliness [6], which is often defined as the discrepancy between one's desired and achieved social relationships [7, 8]. Integration in the neighbourhood has proven important for reducing loneliness [9]. The built

environment can be both a facilitator and a barrier to social integration and contact [10, 11]. A critical built environment element, the so-called “third place” [12], which refers to popular public places outside home (first place) and work (second place) for informal social life, is increasingly advocated as a (social) health promotion strategy for older adults [13, 14]. Throughout the COVID-19 pandemic, although the effects of lockdown and closure of public space including third places implemented in many parts of the world were assumingly associated with an increase in loneliness in public discussions, systematic reviews of longitudinal studies reveal a small and heterogeneous increase in loneliness before and during the pandemic [15, 16]. The present study investigates the perceptions of third places

among older adults through the case studies of three neighbourhoods in Sweden's capital the city of Stockholm. It aims to develop further the conceptualisation of "third place" in specific place-and-cultural contexts and understand better the nuances of third place interventions for promoting healthy ageing including their potential to mitigate loneliness among older adults.

2. Research Framework

2.1. Loneliness among Older Adults. Loneliness has been a central concern in ageing research, although it is not only present in old age [17–19]. Tesch-Roemer and Huxhold [20] argued that levels of severe loneliness were stable across lifespan, whereas Dykstra [19] found that it was a U-shape if mild loneliness was considered. Lack of social stimuli in old age can lead to decreasing social competence and health losses and, in turn, exacerbate further social isolation and loneliness (*ibid.*). The negative effects of loneliness include increased risks of morbidity and mortality [21–23]. Furthermore, loneliness is often associated with social isolation and social exclusion [24, 25]. Thus, combating loneliness is a major target for achieving healthy ageing. In old age, risk factors such as widowhood, limited social contacts, poor self-rated health, and depression are found to predict higher levels of loneliness [26], and living in deprived neighbourhoods is reported to have a similar effect on loneliness (e.g., [27]).

The built environment, especially in the neighbourhood, is a crucial resource of social stimuli for those who may experience loneliness. Neighbourhood built environment refers to human-made surroundings that provide physical settings for people to live, work, recreate, and travel [28]. The materiality of such local resources, that is, supportive or hindering physical environments, is shaped by planning and design as well as management, investment, and policy-making processes. Studies find that deprived neighbourhoods have few locations for older adults to gather or socialise resulting in poor opportunities for sustaining social ties [27, 29], which may contribute to loneliness. Other studies report that well-designed neighbourhoods with good walkability, transportation access, age-friendly housing options, and diverse public spaces correlate with less pronounced loneliness and/or social isolation among older adults [30–32]. However, individual factors including functional decline, poor health, and social/cultural standards may influence an individual's perception and use of physical environments [33, 34]. Thus, there seem to be bi-directional and complex relationships between people and their surrounding environments. A recent systematic review of 57 interdisciplinary studies finds that no single built environment element is associated with loneliness and that the built environment provides opportunities for social interactions and belonging that can prevent loneliness experience, and individuals' experience of the built environment influences loneliness [10]. They call for future research in this regard paying attention to context, specificity, nuance, and the power of individual agency.

Current reviews of loneliness interventions yield different modes (individual or group), goals, approaches, and inconsistent characteristics [35, 36]. The key message of the reviews is that there is no one-size-fits-all intervention strategy for combating loneliness, given the diversity of individual, group, and social contexts [35]. Noone and Young [37] have identified the main themes of effective loneliness interventions in specific communities: autonomy, new social connections, and belonging. They [37] call for stronger evidence of the effectiveness of interventions and a theoretical understanding of the mechanism of successful loneliness interventions. Bantry-White and colleagues [38] have analysed social interventions of loneliness (i.e., befriending) in a sociocultural framework in the case of rural living older adults in Ireland, emphasising the importance of "place-based, authentic ties, shared activity, and intra-community solidarity" informed loneliness interventions. These studies imply that there is room to further understand the spatial dimension of loneliness interventions. For instance, research needs to explore: Where do effective loneliness interventions take place? What are the physical environmental characteristics of those places? What built environment elements accommodate shared activities that are supportive of strengthening social ties and community solidarity? How can we design a built environment to support older adults' autonomy, create opportunities for social connections, and enable a sense of belonging? This means, broadly, environmental approaches to combat loneliness and support healthy ageing are required, and specifically, an urban design and planning perspective can help improve the understanding of the impact of the built environment on loneliness.

2.2. The Potential of "Third Place" in Mitigating Loneliness. This study focuses on the perceptions of third places, a concept and a part of loneliness intervention toolkit to explore the role of physical space in mitigating loneliness. "Third place" originally refers to physical public places beyond the realms of home and work, where people happily gather, sometimes described as "homes away from home" ([12], p. ix). It includes cafés, bars, restaurants, bookstores, hair salons, and other physical places to spend time and is characterised by being low profile, accessible, inclusive, conversational, fun, and frequented by regulars. Later, the notion of third place has expanded to include virtual environments, enabled by technological advancements, and evolving digital culture [39, 40]. The characteristics of third places are hence changed accordingly. Klinenberg's [41] example of older adults playing virtual bowling at the local library in New York City, which he calls "social infrastructure," demonstrates the evolution of "third place." This example shows physical and virtual spaces overlapping through their management and use. For Oldenburg [12], theoretically, third place is a means for retired people to stay in contact with society, get to know people, care for one another, and ultimately develop social connections—"the superior form of welfare" (P. xxi). Oldenburg [12] is

concerned that people would “remain lonely within their crowd” without third places (P. xxviii).

In ageing studies, several studies link third places to healthy ageing and combating loneliness, but the definition of third place can vary. For example, third place is referred to “popular public place where many people go to socialise” contributing to the social health of older adults ([13], P. 1459) in an Australian qualitative study of suburban neighbourhoods, whereas shops and services (public facilities) were included as third places where 45% of face-to-face social interactions took place in a quantitative study in the Eindhoven region in the Netherlands [42]. Furthermore, in the British study of six deprived neighbourhoods [43] and the American studies in suburban Chicago [44] and shopping centre settings [45], third places (i.e., shops, cafés, and restaurants) that fostered social interaction and social support commonly involved a commercial element. Another U.S. study concerning the impact of the closure of third places during 2008–2015 on community health and well-being included private establishments and public/civic organisations [46]. The Canadian case study in downtown Toronto articulated the role of third places and transitory zones in providing older residents with a sense of belonging [47]. In Gardner’s account, third places comprised public parks, local businesses, community places and institutions (e.g., clubs and churches), and destinations much closer to home (e.g., porch, backyard, and balcony). Importantly, these examples show that the inconsistency in the conceptualisations of third place seems to lie in the ignorance of individuals’ subjective account of third place. This point is somewhat mentioned but perhaps less obvious in Oldenburg’s text [12] in which he notes that people who have a third place to go would resonate with him.

The theoretical link between third place, healthy ageing, and loneliness is established in the framework of the people-environment interrelationships, aligning frameworks in ageing research and urban design and planning literature [48–50]. For the latter, third places are also believed to be important for safety reflecting the urban design idea of “eyes on the street” [51]. This expression refers to the fact that local residents and business owners’ attention to people and activities in the neighbourhoods can contribute to the safety of neighbourhoods [52, 53]. These qualities of third places are enabled by physical design elements, such as central locations, sidewalks, and front yards [54, 55]. While all share the benefits, some groups, such as older adults, may depend more on them. Additionally, older adults may have different perceptions and preferences of third places than younger people. Urban design principles including connectivity and pedestrian access, diverse and age-appropriate housing types, mixed neighbourhood retail and services, and attractive public spaces, therefore, can contribute to an age-friendly built environment [55, 57]. However, tensions between theories and practices to support healthy and age-friendly built environments for older adults remain and may be overcome by a genuinely interdisciplinary and interprofessional approach.

Taking this position, this study aims to improve understanding of the notion of “third place,” focusing on the potential of third places to mitigate loneliness among older

adults in the context of ageing in place in Sweden. Based on case studies of three neighbourhoods in Stockholm, the following research questions were addressed: (a) what can be considered to be third places in contemporary Swedish urban neighbourhoods; (b) according to older adults, what role do third places have in relation to loneliness; and (c) do older adults’ perceptions of third places vary across neighbourhoods.

3. Materials and Methods

3.1. Study Design and Study Area. This study used a mixed-methods design to investigate third places and their effects on loneliness among older adults through case studies of three neighbourhoods in the city of Stockholm [58]. One inner-city neighbourhood (Kungsholmen) and two suburban neighbourhoods (Farsta and Rinkeby), with varying sizes and environmental characteristics (see Table 1), were selected. The rationale of this choice is that (1) these neighbourhoods represent specificity in their physical environments and socioeconomic characteristics and (2) two of the three neighbourhoods have a higher proportion of older person aged 65 and above than that of Stockholm: this rate for Kungsholmen is 17.3%, that for Farsta is 15.8%, that for Rinkeby is 12.1%, and that for the city of Stockholm is 15.5% [59]. The district Farsta has the same average age as that of Stockholm at 39 in year 2021, whereas the average age of the district Kungsholmen is 41 and that for the district Rinkeby-Kista is 36 (ibid.). Kungsholmen is perceived as a popular middle-class city neighbourhood with various types of private-owned and rental housing (ibid.), whereas Farsta and Rinkeby are typical Swedish ABC-city suburban neighbourhoods built in the 1960s and 1970s, respectively [60, 61]. In contrast to the other two neighbourhoods, Rinkeby has a large stock of housing accommodating low-income and immigrant residents. Overall, the three neighbourhoods were primarily built before “ageing in place” was discussed explicitly in the Swedish Social Services Act 2006 [62]. They are all well-connected to multiple public transportation modes and have municipal senior (and disability) housing stock. Among the three neighbourhoods, Kungsholmen has the highest building density, population density, and most senior residential buildings; Farsta has the lowest population density and most differing housing types; and Rinkeby has the smallest surface area and the most crowded residential environment and is the only one absent of open water area.

3.2. Data Collection. In the early phase of the study, a convenience sample of three volunteers (aged 60+) from each neighbourhood was recruited to identify neighbourhood-specific material for conducting the Multiple Sorting Tasks (MST) [63–67]. The present study chose the MST to elicit participants’ understanding of third places because the MST is known as an interview-based sorting procedure for exploring perceptions of abstract concepts. As the participants reflected that they were not aware of “third place” (“tredje rum” in Swedish), they were asked to, respectively, nominate eight public places in Stockholm that

TABLE 1: Characteristics of the three neighbourhoods.

	Farsta	Kungsholmen	Rinkeby-Kista
Total population (% aged 65+)	9631 (15.8%)	12229 (17.3%)	6279 (12.1%)
Average age (year 2021)	39	41	36
Surface (ha)	1,729 (land: 1544 + water: 185)	703 (land: 485 + water: 218)	1179 (land: 1179 + water: 0)
Population density (/ha)	39	146	44
Building density (/1000 m ²)	2099	2713	1480
Person per household	2.0	1.6	2.4
Main street network	Cul-de-sac, traditional loop	Grid, traditional loop	Traditional loop
Public transportation	3 metro lines; multiple bus lines	5 metro lines; multiple bus lines; ferry (summer)	1 metro line; multiple bus lines
Main built form	“ABC” suburb	City central area	“ABC” suburb
Main housing type	Multifamily, single-family	Multifamily	Multifamily
Public senior/disability dwelling (number of apartment)	809	981	531

were (a) outside home, (b) meaningful for everyday life, and (c) regularly visited per week. In line with the authors' previously published study [66], the decision was made to include twenty places for the sorting procedures for each neighbourhood. Each neighbourhood had a set of twenty places, consisting of four places extracted from the previous study aforementioned and sixteen places selected from the places nominated by the participants from the respective neighbourhood. Overlapping places and places with similar services in each respective neighbourhood were filtered out.

This design was to make it possible to observe any similarities or differences in the perceptions of third places across the participants and neighbourhoods. Twenty coloured picture representations of the identified places were then chosen by the primary author through online open sources and assigned to letters from A to T.

The research participants were recruited through convenience and snowballing sampling methods. An advertisement was emailed to the local municipalities, senior associations, and district senior centres. Some of these organisations helped to post the advertisement on their social media pages. Inclusion criteria were aged 60+ and living either in Farsta, Kungsholmen, or Rinkeby. Exclusion criteria were living in care home and with major functional impairment (e.g., dementia, hearing/vision loss, and mobility disability).

The research participants conducted the MST individually, with verbal and written instructions. They were asked to familiarise themselves with all the pictures before sorting, considering ways they may relate to the places in situations of feeling lonely. The participants decided on the number of groups and pictures in each group to sort, with the principle that all pictures in one group were similar to one another in some important ways and different from pictures in other groups. The participants were asked to assign descriptors to the groups and then verbally elaborate on their sorting. This was followed by a questionnaire consisting of personal [26, 67], environmental [27, 32], and health factors [26, 68] which have been found to increase the risks of loneliness.

The interviews were recorded, transcribed, and edited for improved readability by the primary author. In Farsta, eight participants conducted the MST in-person and two online; in Kungsholmen, five MSTs were performed online and five in-person; and the participants from Rinkeby all conducted the MST in-person. The in-person data collection took place at either the local senior centres or cafés to which the participants had easy access and felt safe. For online data collection, the involvement of municipal and civil organisations in the study recruitment served as a medium to help establish rapport between the researcher and participants.

To support the data interpretation in context, sixteen trips were made to each neighbourhood at different times of day and week. These field trips included participating in indoor and outdoor activities organised by the local senior centres. Field notes were taken, focusing on the physical characteristics of the built environment that the participants used/interacted with and the key points they stressed during walking regarding the neighbourhood environment. All data were collected from October 2021 to September 2022 by the primary author.

3.3. Data Analysis. The qualitative data from each neighbourhood's MST procedures were first transformed into a matrix (20 places by 10 participants) and then analysed using Multidimensional Scalogram Analysis (MSA). The MSA is a form of nonmetric statistics analysis working with categorical data [64, 72]. This study used the HUDAP software package [73] to run the MSA. The MSA plot was then derived, representing the sorting objects (i.e., pictures) as points in a two-dimensional graph. The closer the points were, the more similar their representing places were conceptualised, and vice versa [67]. Next, the qualitative data, i.e., pictures, were inputted into the MSA plot so that the places were shown directly in the MSA graph. An iterative process of integrating qualitative data, including the descriptors given by the participants, their verbal elaborations and questionnaire responses, and the observations from the field trips, was followed. This step allowed lines drawn to identify the emerging regions best representing the underlying structure of the overall perceptions of third places studied in each neighbourhood. It is noted that the verbal data during the sorting procedures and the complementary field trips were similarly used as an illustration and sense-making aid in parallel to the emerged MSA regions (a detailed description of the integrated qualitative and quantitative analysis can be found in [71]). This data analysis was first carried out by the primary author and then repeated by one of the coauthors to reach the agreed analysis.

3.4. Ethics. The present study has received ethical approval from Swedish Ethical Review Authority (reg.no. 2020-04084) and followed the Swedish Public Health Agency's COVID-19 restrictions and recommendations. The participants provided informed consent prior to the study, in person and online, verbally and in written form. All interviews were conducted in Swedish language except one, which was done in English language following the interviewee's preference. For this article, pseudonymised names were given to the individuals reserving their age, gender, and neighbourhood residence.

4. Results

4.1. Characteristics of the Participants. A total of thirty older adults, ten from each neighbourhood, participated in the study (Table 2). They were aged 65–89 years, with a median age of 77 years. Seven were males and twenty-three females. Most participants were widows/widowers, divorced/single, and consequentially lived alone, usually in smaller apartments with rental contracts. The median length of neighbourhood residence of the participants was 30 years, with the longest being 57 years (in Farsta) and the shortest being 3 years (in Rinkeby). Most participants were regulars of the local senior centres and were involved in activities (e.g., walking, biking, workshop, cards play, etc.) organised by senior associations. The median score of the participants' Internet use for social activities was higher in Rinkeby than that of the other two neighbourhoods. Each neighbourhood had some participants using canes or walking aids. All of

them lived independently and took walks outside home everyday. Most participants used combined transport modes (i.e., public transportation, biking, and walking), while a few participants used a single transportation mode. Car dependence was very low in the sample: two older men used cars as their most frequent transportation mode. A few participants who lived in the inner-city neighbourhood occasionally used taxi or paratransit services. The participants reported less use of public transportation and more walking (at least combined with other transportation modes) and car use during the COVID-19 pandemic period. The self-evaluated health of the participants was 2.5 (out of 4) in Farsta and 3 in Kungsholmen and Rinkeby, while loneliness was between 4 and 4.5 (on a scale from 3 to 9) across the three neighbourhoods.

4.2. Third Places for the Older Adults in Farsta, Kungsholmen, and Rinkeby. The resulting forty-nine places examined in this study were examples of “third place,” as interpreted by a group of Swedish older adults. These places included public places that were located in the central area of the respective neighbourhood and neighbouring neighbourhoods and the city, could be easily reached by public transportation, and were managed by either municipalities, city, or private owners. Many of these third places had more than one of the three qualities (access to physical activity, community building, and options for food) of built environments supportive of health and wellbeing [50]. It means these qualities are often interlinked and simultaneously mediated through places. For instance, some older adults went to the local libraries not only to borrow books but also to participate in public programs or to meet friends at the library cafés; others went to the local sports centres for group training while socialising over “fika” (a Swedish social provision where people socialise while typically drinking coffee and eating biscuits).

4.3. The Older Adults’ Perceptions of Third Places concerning Loneliness in Farsta, Kungsholmen, and Rinkeby. Using Multidimensional Scalogram Analysis (MSA) techniques described in Section 3.3, the overall perceptions of third places concerning loneliness in each neighbourhood were derived. The MSA of the neighbourhood Farsta showed four regions (Figure 1), with the key underlying constructs: “nature,” “commercial/shopping,” “walking,” “activities,” “seeing/meeting people,” and the participants’ attitudes towards utilising the places as a resource to combat loneliness. These constructs were revealed based on the descriptors assigned to each picture by the participants. As the plot shows, the participants overall were positive towards going to places shown in Region 2 (Pictures G, K, and A) but negative towards the potential of the places in Region 3 (Pictures C, P, and L) to alleviate loneliness. The places in Regions 2 and 3 both provided opportunities for “seeing people.” However, other characteristics, such as “commercial” and “nonlocal,” associated with the places in Region 3 might make them less attractive to the participants to spend time there than the places in Region 2. The places in Region 2 embodied typical characteristics such as “shopping” and

“walking” activities. The participants found the places in Region 1 (Pictures B, M, R, H, O, and S) and Region 4 (Pictures D, Q, N, I, E, T, J, and F) somewhat positive, ambivalent, and/or negative as resources for alleviating loneliness. These two regions comprised of a local church, library, and senior centre; museums and theatres in the city centre; and local parks and open spaces for activities. The varied contexts and individual agency might influence the participants’ perceptions of the places.

Anna (74 years): I almost go there [Picture F in Figure 2] everyday. The walking passages have been improved—they are widened and easily accessible, for wheelchairs and baby strollers.

Pernilla (76 years): I no longer go to Friskis & Svetteit [Picture Q in Figure 2, a gym located in Farsta centre], but I go to a gym close to my home and I can walk there. . . . During the pandemic, I found an online gym program very useful and I have been using it since then.

Annika (74 years): I like going to museums [in central Stockholm] as I love art. Therein, I feel at home. I can go there by myself or meet someone. I usually take a bus and metro to get there, not on the weekends though, as it would be too crowded.

Figure 3 represents the MSA of the neighbourhood Kungsholmen, showing six regions reflecting similar key underlying constructs as that of the neighbourhood Farsta. The participants were positive to go to the places in Regions 1 (Pictures F, S, and B) and 5 (Pictures M, N, E, D, and R) in situations characterised by loneliness, although these regions had slightly different focuses. For instance, the places in Regions 1 and 5 both had “nature” present, were perceived as “calm,” and provided opportunities for social interactions. However, the former was preferred “walking” environment, whereas the latter was recognised as spaces open for general leisure activities. The participants felt somewhat positive and/or ambivalent about utilising the places in Region 2 (Pictures O and A), Region 3 (Pictures H, C, T, L, and G), and Region 6 (Pictures K and I) as resources to alleviate loneliness. For example, some participants commented that going to places where they could see people and be seen might help temporarily lessen their feelings of loneliness. Others mentioned circumstances (e.g., whether they had someone to go together with), or previous personal experiences at those places, made them feel ambivalent about recognising those places as resources with potential to alleviate loneliness. These regions represented places for “shopping,” “walking,” and “interactions” in various forms. For example, Region 2 had a culture centre in the city centre, boutiques, and second-hand stores, which provided a wide range of social and cultural activities; Region 3 included cafés and restaurants in the neighbourhood and city, a local supermarket, and library (located on local main street), which were food-related places and activities with opportunities of socialising; and the places in Region 6 shared many characteristics with the previous ones mentioned, but being perceived as “destinations” implying the extent of popularity and scale which distinguished them from other places. Finally, the participants were negative about the

TABLE 2: Characteristics of the participants from the three neighbourhoods.

	Farsta	Kungsholmen	Rinkeby
<i>Sociodemographic factors</i>			
Age	64–74	70–87	65–89
Medium age	69	78.5	77
Gender	8 females; 2 males	7 females; 3 males	8 females; 2 males
Place of birth	Sweden: 8; non-Sweden: 2	Sweden: 9; non-Sweden: 1	Sweden: 7; non-Sweden: 3
Civil status	Widow/widower: 3; Divorced: 5; Married: 2	Widow/widower: 3; Divorced 5; Married: 2	Widow/widower: 2; Divorced: 3; Married: 2; Single: 3
Education	University: 1; College: 3; High school: 5; Elementary school: 1	University: 5; College: 2; High school: 1; Middle school: 2	University: 1; College: 3; High school: 2; Elementary school: 4
<i>Environmental factors</i>			
Housing type	Apartment: 8; Villa: 1; Row house: 1	Apartment: 10	Apartment: 8; Villa: 1; Town house: 1
Ownership	Rental: 5; Condominium: 4; Private: 1	Rental: 5; Condominium: 4; Co-operative: 1	Rental: 7; Condominium: 2; Private: 1
Household structure	2 adults+: 2; 1 adult: 8	2 adults+: 2; 1 adult: 8	2 adults+: 5; 1 adult: 5
Time lived in the neighbourhood (years)	28.7	27.4	37.6
Transportation choice	Combined: 6 (public transport + walk: 1; public transport + bike + walk + private car: 5); Public transport: 3; Walk: 1	Combined: 5 (public transport + walk: 1; public transport + walk + taxi/paratransit + private car: 3); walk + taxi: 1); Public transport: 4; Private car: 1	Combined: 2 (public transport + walk: 1; private car + walk: 1); Public transport: 7; Private car: 1
Transportation choice (during the pandemic)	Combined: 4 (public transport + walk: 2; public transport + bike/car + walk: 2); public transport (overground): 1; Bike: 1; Walk: 1; Private car: 3	Combined: 6 (public transport + walk: 1; public transport + paratransit: 1; walk + private car: 1; walk + taxi: 3); Walk: 3; Private car: 1	Combined: 6 (public transport + walk: 5; walk + private car: 1); Public transport (bus): 1; Walk: 1; Private car: 2
Use of Internet/digital devices (1–4) ¹	Median score: 2	Median score: 2	Median score: 2.5
<i>Health factors</i>			
Using assistive walking equipment (cane/walker)	4	2	3
Self-evaluated health (1–4) ²	Median score: 2.5	Median score: 3	Median score: 3
Loneliness (3–9) ³	Median score: 4.5	Median score: 4	Median score: 4

¹Use of Internet/digital devices was measured via the item “How often do you use Internet or digital devices for social interaction” (response option: rarely (1), sometimes (2), often (3), and very often (4)).
²Self-evaluated health condition was measured via the item “How would you rate your current general health situation” (response options: not so good (1), some problem (2), good (3), and very good (4)).
³Loneliness was measured via the 3-item UCLA Loneliness scale [72], with items summed into a scale from 3 to 9.

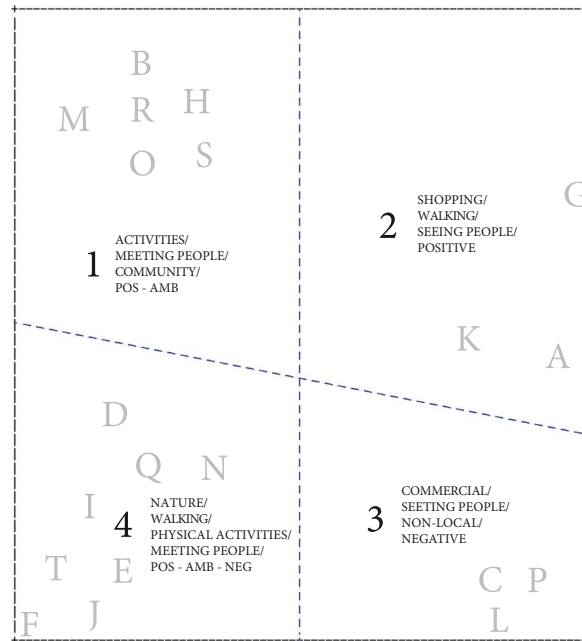


FIGURE 1: The MSA of Farsta. Note: four regions emerged in the MSA plot; each region's main characteristics are summarised in text written in uppercase; each picture (place) is assigned with a letter shown in the plot.

places in Region 4 (Pictures P, Q, and J) as recourses for alleviating loneliness. This region represented places typically “commercial” and “entertainment,” such as a big-scale mall, bingo centre, and amusement park.

Maria (68 years): I've been there [Picture P in Figure 4: a new large-scale shopping mall] but I don't like it. It's too big for me. I don't really need to buy more things. I went there with my daughter and grandchildren. We had food and coffee there.

Ulf (83 years): I don't go to Bingo centre, although I know some people do. I play Bridge at the club in Kungsholmen and play golf in Ekerö [just outside Stockholm].

Ola (74 years): I may go to Gröna Lund [Picture J in Figure 4: an amusement park] with my grandchildren, we had fun there. But I will never go there alone.

Barbara (81 years): I often visit Kungsholmen Church's courtyard, close to my home. That is a very important place to me. There has memory throughout my life—I played the sandbox there when I was a child; my late husband rests there. . . . At other times, when I feel lonely, I sit at the entrance of the garage in my building facing the street. . . . I like walking through Kungsholmen's Square, in there, I sometimes have conversations with strangers. I met one of my best friends there. She is like me, my age, lives by herself, in the building next to the square.

Figure 5 illustrates the MSA of the neighbourhood Rinkeby. Five of the identified regions showed similar underlying constructs aforementioned. The participants were somewhat positive and/or ambivalent about going to the places shown in Region 1 (Pictures T and B), Region 2 (Pictures D and I), and Region 3 (Pictures F and J) when

feeling lonely. Regions 1 and 2 represented environments that facilitated “meeting people.” Region 1 involved “commercial” characteristics, Region 2 had places with “nature” present and relatively “distant” to the participants, and Region 3 represented places with a larger scale natural environments than that of Region 2 and quality for “walking” activity. The participants felt negative and/or ambivalent about the places in Region 4 (Pictures S, G, L, C, N, P, K, and A) as potential resources to alleviate loneliness. These places were characterised by “commercial,” “social,” and “cultural,” including local places, e.g., the main street, the mall and the library, and places in the city, e.g., parks, restaurants, cafés, and shopping street. The participants were negative about the places in Region 5 (Pictures E, H, Q, O, R, and M) as resources for combating loneliness. Although these places, including a local park, football field and basketball court, an international supermarket in the neighbouring neighbourhood, and a waterfront park in the nearby neighbourhood, embodied opportunities for “activities” and “meeting people,” the participants felt “unfamiliar” with them for different reasons.

Cajsa (82 years): I have been there [Picture M in Figure 6: an urban beach area]. It's a well-known place, but it is in the city. Maybe I will go there this autumn if the farmers' market is up. I can take the subway to Fridhemsplan [an area/a subway stop in Kungsholmen where Picture M is located] to meet my friends and we may go there together.

Tora (78 years): I don't go there [Picture H in Figure 6: a supermarket with international food]. There isn't much Swedish food. I drive to supermarkets in Vällingby or Bromma to shop [neighbouring neighbourhoods to Rinkeby].

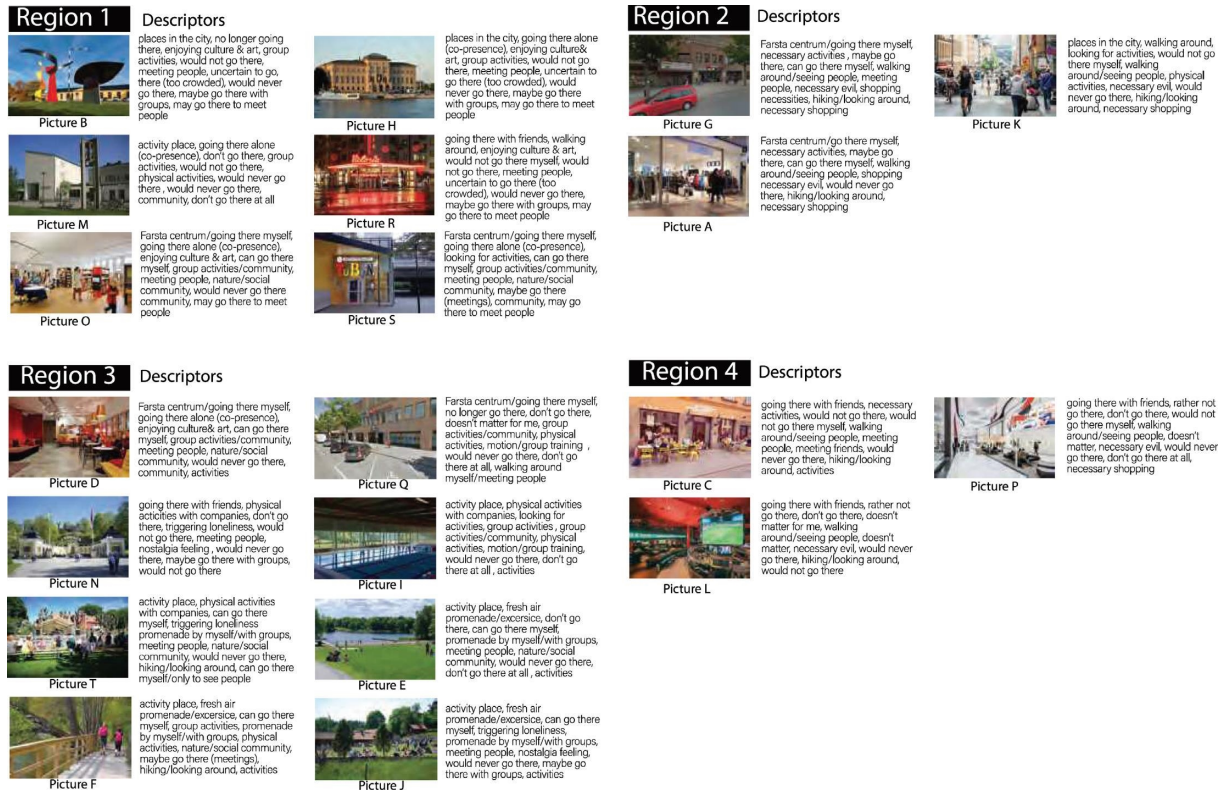


FIGURE 2: Overview of the regions emerged in the MSA of Farsta and the descriptors assigned to each picture/place.

Moa (89 years): I never felt the need to go there [Picture O in Figure 6: a local park]. We have a nice garden at the senior centre, which I am here almost every day and have so much to do.

4.4. Comparison of the Perceptions of Third Places across the Three Neighbourhoods. Although this study used three different sets of neighbourhood-specific pictures (places) for the MST procedures, there are some general patterns of the overall perceptions of third places (see Figure 7). First, for the five places (Pictures C, K, L, N, and P) used consistently across the three neighbourhoods, Pictures C (a neighbourhood café), P (a new large-scale mall), and L (a sport-theme restaurant) were close to each other and were further away from the places featured “nature” environment across the three MSAs. Furthermore, Picture N (an open-air museum park) appeared towards the centre of all MSA plots. However, Picture K (a car-free main street) was located in different regions relatively across the three sorts: Region 2 in the MSA of Farsta, Region 6 in the MSA of Kungsholmen, and Region 2 in the MSA of Rinkeby. These regions had varied focus of the environmental features as perceived, meaning Picture K was conceptualised relatively differently in the neighbourhood-specific contexts.

Second, across the three neighbourhoods, “nature,” “shopping”/“commercial,” “physical activities,” “walking,” and “seeing/meeting people” were distinctive constructs underlying the overall perceptions of third places. Many participants reported positive feelings (i.e., “calm,” “peaceful,” and “powerful”) towards natural environments in

which they often independently took walks and had physical exercises and social activities. Some participants also found themselves doing these activities in “commercial” environments. However, they generally found typical commercial places uninteresting and were more ambivalent about going there in times of feeling lonely. The places with religious attributes (i.e., Picture M in Farsta and Picture R in Kungsholmen and Rinkeby, respectively) were always differentiated from the places with “nature” and “shopping” environments with one exception. In Rinkeby, Picture R (a mosque) was shown in the same region as Picture O (a local park) and Picture M (a waterfront park), which the participants found unfamiliar. For the municipality-managed public places in each neighbourhood, such as swimming pools and libraries, the participants often perceived swimming pools as “physical activities” and “community” places while libraries as “social” and “community” places. The participants had differing preferences for whether going alone, with groups, or not going at all to both places to mitigate loneliness, reflecting their individual conditions.

Linn (77 years, lives in Farsta): I often go there [library] myself as I love reading. The staff is nice there and they have interesting cultural programs where I can learn new things.

Krister (81 years, lives in Farsta): I usually go to the library’s café to meet my friends. We spent a lot of time there talking to each other and had fun together.

Barbara (82 years, lives in Kungsholmen): I used to go to the library often, to attend the association’s meetings.

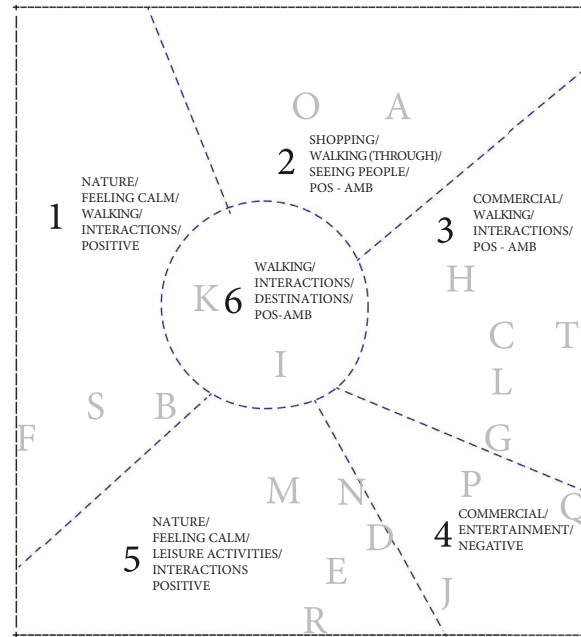


FIGURE 3: The MSA of Kungsholmen. Note: six regions emerged in the MSA plot; each region's main characteristics are summarised in text written in uppercase; each picture is assigned with a letter shown in the plot.

But room booking is no longer available there. So, I find myself less and less going there.

Meta (67 years, lives in Rinkeby): It takes several bus transits to get there [library] from my home. If I am feeling lonely, I can't think of myself taking all the troubles to go there.

Overall, the MSAs of the three neighbourhoods revealed similarities in the perceptions of third places concerning loneliness. All participants have their own third places to go in times of feeling lonely in their neighbourhoods, though more places in Kungsholmen and Farsta were found positive and/or ambivalent for alleviating loneliness by their respective older-age residents than that of Rinkeby. For example, in Farsta and Kungsholmen, well-designed walking passages along open water body intersecting parks and greenery were present and commonly valued by the participants as vital resources for combating loneliness. The physical characteristics of walking environments in Rinkeby were different and were not particularly articulated by the participants. This was evident in the field trip observations, especially through joining in the group walking activity with the participants from Rinkeby. Fewer sitting and unrefined street pavement (e.g., edges and connections between street sections) were challenging for those with walking aids and vision impairment.

5. Discussion

This study explores third places in older adults' accounts in three neighbourhoods in Stockholm. The findings from this case study largely corroborate the empirical insights on the contribution of third places to older adults' wellbeing internationally (e.g., [12, 13, 42]). The study adds nuances by highlighting the

complex people-environment interrelationships and the place-and-culture specificity that should be considered to understand the potential of third places to combat loneliness.

5.1. Third Places Are Valuable Environmental Resources for Combating Loneliness and Supporting Healthy Ageing. The Swedish older adults' perceptions of third places, including their potential for mitigating loneliness, have been shown to respond to the physical, action, and cognitive facets of place [73]. A couple of key underlying constructs revealed through the MSAs: "nature," "commercial," "walking," "physical activities," "seeing/meeting people," and positive, negative, or ambivalent feelings towards seeing third places as potential resources to alleviate loneliness. While some people use outdoor natural environments (e.g., water, trees, and green areas) for walking and various physical and social activities, others use indoor environments (e.g., involving a commercial element) for the same activities. Options of food, particularly the Swedish "fika," as a form of social eating, often mediate social interactions as part of organised or unorganised activities in all environmental contexts. Social eating, or commensality where people eat together, is understood as an evolving mechanism to facilitate social bonding [74] and community building [75] and decrease the risks of social isolation [76] and loneliness [77]. Ambivalent feelings towards places as a resource to combat loneliness may occur in various situations, reflecting the dynamic interplay between individual and environmental characteristics. For example, the same place (i.e., local square and city park/museum) may provide refuge for some, whereas it may burden others as it may trigger "social comparison" [78]. Other examples, such as changing environmental characteristics (i.e., the



FIGURE 4: Overview of the regions emerged in the MSA of Kungsholmen and the descriptors assigned to each picture/place.

disappearance of places including their services) or changing personal conditions (i.e., age-related functional ability impairment) may also contribute to ambivalent feelings towards places. Generally, third places, which support older adults' independence, feelings of safety, sense of community, easily accessible, smaller scale, with nature presence, and are free of charge or relatively inexpensive, are more likely to be positive resources to ameliorate some aspects of loneliness and thus beneficial for health and wellbeing.

The findings reflect Swedish welfare policies and town planning practices (e.g., ABC-city) supportive of an ageing-in-place policy. However, there is still room for making the built environments more age-friendly [79]. Most of the identified third places in this study are concentrated in and around the centres of the (suburban) neighbourhoods and major cultural and recreational third places are in the urban core area. The suburban participants report more use of local third places than those in the city, although they stress that it

is convenient to take the metro to the city to visit museums and theatres. For the inner-city participants, it is relatively easier to access diverse cultural third places, including having the option of walking/biking to the destinations or using paratransit/taxi services. This latter point may be particularly important for those very old or disabled considering the proximity and economic aspects. Subsidised food programs (i.e., lunch or "fika") are found in municipality-managed third places (e.g., senior centres) and churches and senior discounts are offered (once a week) at many supermarkets. The participants commonly appreciate outdoor walking passages, senior centres, libraries, and cultural and sports facilities in their neighbourhoods and city. They emphasise the significance of the management aspect of place (e.g., social programs and staff) and access (e.g., public transportation) to third places. Across the three neighbourhoods, senior centres are valued for their role of being "homes away from home." The senior centres

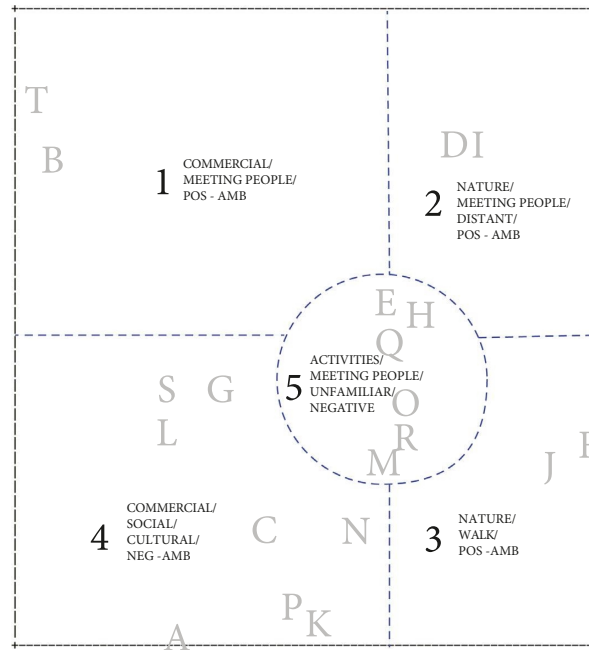


FIGURE 5: The MSA of Rinkeby. Note: five regions emerged in the MSA plot; each region's main characteristics are summarised in text written in uppercase; each picture is assigned with a letter shown in the plot.

examined are all located in the neighbourhood centres, in proximity to subway stations and other public spaces, with diverse and quality public programs (e.g., group walking, singing, lectures, digital support, etc.) served by the caring staff members. It implies that the management aspect is indispensable for third place making [12, 80]. Thus, policymaking and investment, especially the district-level resource allocation, are critical for enabling thriving third place.

5.2. Place-Based Loneliness Interventions from Urban Design and Planning Perspective. This study demonstrates that accessible public places, municipality or privately managed, fulfil the function of third places with the potential to combat loneliness and support healthy ageing, beyond commercial third places (e.g., cafés, restaurants, and stores) exemplified in previous studies (e.g., [12, 42, 44]). The study also shows that urban design and planning are crucial in improving environmental conditions to enable third places. For example, the transit-oriented development planning model (promoting public transportation), mixed land-use neighbourhood centres, and continuing design improvements in local environments are holistic urban design interventions that can enable third places. Among the three neighbourhoods studied, Rinkeby has the most ongoing permanent and temporary design interventions (e.g., added a new library, renovated the local main street and parks, increased outdoor benches, and provided direct-line bus service to bring people from Rinkeby Square to the local healthcare centre). It is worth noting that all of these developments are in proximity to the local senior centre, which enhances the networks of public spaces and the overall neighbourhood quality. Similar urban design interventions are also

implemented in Kungsholmen, Farsta, and throughout the city. Regarding the ambivalence towards places to combat loneliness, the core of urban design in enabling third places lies in inclusiveness, considering individual conditions and social standards [20]. By creating environments supportive of older adults' independence (accessible environments) and sense of belonging ("home" environments), urban design and planning can make a novel contribution to ageing studies and place-based loneliness interventions.

5.3. Limitations and Future Research. There are several limitations of the study. First, although the participants reflect the demographics at neighbourhood and city levels, sampling bias remains. The sample sizes were relatively small, with more women than men included and no typical older age immigrants from the neighbourhood Rinkeby included due to possible language (or cultural) barriers. Furthermore, participants were recruited through online communications due to the COVID-19 restrictions. This means that future studies can develop methods so that older adults who do not have access to the Internet or have limited digital literacy are included, and a more representative sample from the local neighbourhoods could be reached. Second, the relatively long period for data collection caused by the changing local COVID-19 protocols resulted in the data from two neighbourhoods being collected in winter/spring and the third one in summer. There may be seasonal effects on loneliness in relation to the built environments. However, the respondents argued that they conducted similar activities year-round at the same places except for walking slower in the winter. Further observations on potential seasonal aspects of loneliness will need to incorporate quantitative empirical data. Third, the study was limited to nominating physical third



FIGURE 6: Overview of the regions emerged in the MSA of Rinkeby and the descriptors assigned to each picture/place.

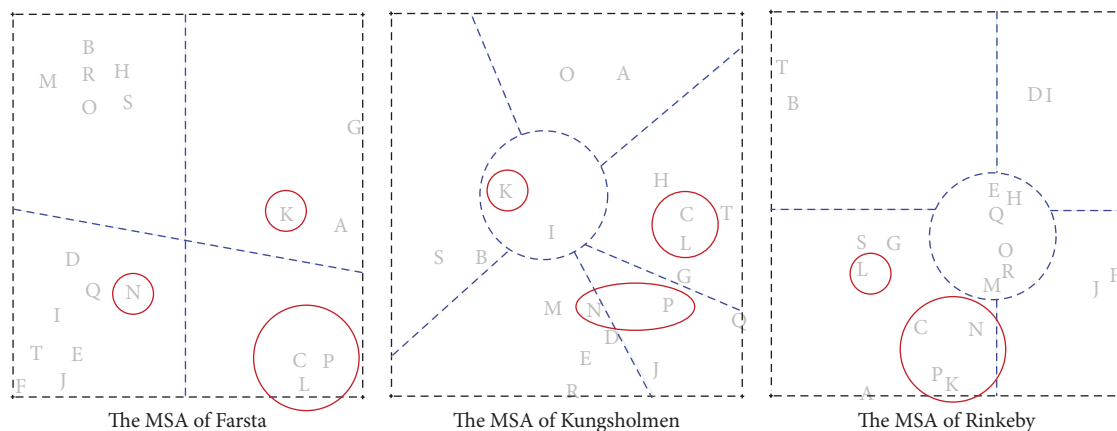


FIGURE 7: Comparison of the MSAs across the three neighbourhoods.

places in Stockholm. This decision implies that future research could possibly explore whether the notion of third place could be extended to further physical, virtual, or hybrid places, e.g., desired destinations to travel to, digital/tele spaces, and their value for combating loneliness [81].

Nonetheless, the strength of this study is the coherent result using the chosen methodology focusing on revealing the cognitive conceptual system of third places in relation to loneliness, as well as the theoretical and practical implications illustrated in the case study.

6. Conclusions

This study provides an improved understanding of third place from the perspective of older adults living in three neighbourhoods in the city of Stockholm, Sweden. The findings of this study echo the pertinent literature on the significance of third places for older adults' overall well-being, rendering the importance of social context, place specificity, and individual agency. The main results show that third places located in the neighbourhoods and city, easily accessible, and supportive of independence and a sense of belonging are potential environmental resources for combating loneliness among older adults. These third places often facilitate physical activities (especially walking in natural environments) and community building (fostering meaningful social connections) and provide options for food and drink (a medium for social interactions). The participants' ambivalence towards place as a recourse to combat loneliness reflects the complexity of people-environment interrelationships. While these nuances contribute to the development of literature on the interplay between ageing and loneliness, they can also be useful in the design of targeted loneliness interventions, including utilising urban design and planning approaches that help instil physical design, management, and perceptions of third places to reach their potential for combating loneliness. This knowledge is useful for a wide range of professions, including urban design and planning, transportation, management, community service, social care, policymaking, and urban development investment [79–81].

Data Availability

The data are subjected to data protection under the Swedish law. Data extracted from public documents are provided with links to digital files and can be found in the reference list.

Ethical Approval

The present study has received ethical approval from Swedish Ethical Review Authority (reg.no. 2020-04084).

Disclosure

This research is part of a doctoral study.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Acknowledgments

This research was supported by the KTH Royal Institute of Technology and the Axel and Margaret Ax:son Johnson Foundation. Open-access funding was enabled and organized by Bibsam 2023.

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