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Neighborhoods' Walkability for Elderly People: An Italian Experience

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Abstract: The scientific literature shows some attributes of neighborhood built environments that can contribute to promoting physical activity, thereby encouraging older adults to take outdoor walks. The aim of this study was to measure the walkability of 20 neighborhoods in five Italian cities using the Walking Suitability Index of the Territory (T-WSI) to evaluate their propensity to support walking for elderly people and to suggest some specific good practices to local authorities. Our investigation shows that although the neighborhoods present very different physical and morphological characteristics, most of their walkability levels are low. The overall T-WSI value is equal to 46.65/100, with a wide variability between districts (from 28.90/100 to 68.28/100). The calculation of the T-WSI shows that the problems and critical issues are similar between districts, independent of their sizes, and they refer mainly to the same categories and indicators. In general, the results relating to both the safety (e.g., protection from vehicles, road lighting, etc.) and urbanity (e.g., road equipment) of districts are very deficient.

Keywords: walkability; elderly; sustainable neighborhood; T-WSI

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1. Introduction

Physical activity is one of the most important measures for maintaining health in later life; it contributes to improving metabolic parameters; reducing falls, fall-related injuries, frailty, and osteoporosis; and improving physical function in general [1,2]. Before 2020, the World Health Organization (WHO) recommended adults and over-65-year-olds to practice at least 150 min of moderate physical activity, or 75 min of intense activity, every week [3]. Today, the most recent recommendations consider physical activity useful for health even if only practiced for short sessions, with the aim of counteracting completely sedentary lifestyles [3,4].

In general, individuals should start with small amounts of physical activity and gradually increase its frequency, intensity, and duration over time. Walking or engaging in different types of physical activity (e.g., gardening) can help improve physical function, bringing several health benefits. Multicomponent physical activity (combinations of balance, strength, endurance, gait, and physical function training) is indicated for reducing the risk of fall-related injuries. Therefore, the WHO recommends that older adults adopt a varied, multicomponent physical activity program at a moderate intensity on 3 or more days a week to enhance functional capacity [4].

Despite these recommendations, many elderly people remain inactive; it has been estimated that in Italy the percentage of inactive elderly people is over 39%, with peaks of >50% in the south of the country [5], mainly among people living in city areas [6–8] that are deprived due to economic difficulties, cultural barriers, or low levels of education. Furthermore, in 2020, an important increase in sedentary lifestyles was detected, probably due to the containment measures related to the COVID-19 pandemic; this trend continued in 2021 [5].

The scientific literature shows that neighborhood built-environment layouts can contribute to promoting physical activity, encouraging older adults to take outdoor walks [1,9–19]. Depending on an area's characteristics and its socioeconomic level, inequalities in the pedestrian infrastructure [20], greenery, and aesthetic quality of the built environment are commonly observed; these disparities play an important role in influencing the perceived safety of neighborhoods and the propensity of people to take outdoor walks [12,20,21], especially if they are older adults.

In fact, the built environment contributes aspects such as the neighborhood residential density, the land use mix, and route connectivity, but also other aspects, including perceived safety, the available pedestrian infrastructure, and aesthetics, all of which can strongly influence elderly people in their choice to walk [22–27].

Moran et al. (2014) [12] grouped the environmental determinants influencing walking into five major categories: pedestrian infrastructure, access to facilities, aesthetics, environmental conditions, and safety. For example, the presence of sidewalks, their continuity, quality, maintenance level, and slopes, and the presence of temporary obstacles are all factors that interfere with walkability [12,25,26,28–31]. Likewise, the suitability of street furniture is of relevance, especially the presence of benches and seats for stopping during walks [12,29,30,32–34].

In terms of access to facilities, the presence of food outlets, easy access to various other daily commercial/institutional destinations, and easy entrance to buildings and public transport are all factors positively associated with the propensity of older adults to move around on foot [12,17,32–43].

It follows that proximity to various destinations, including health services, in the neighborhood is an aspect of primary interest in the design of a neighborhood that is friendly towards elderly people; these provisions both make the neighborhood livable and promote physical activity [17,18,44,45]. On the contrary, every condition that increases the fear of crime or accidents is a documented obstacle to active living in a neighborhood [17,18,41]. Therefore, to promote outdoor walks for elderly people, several authors have suggested also paying attention to other factors, such as good lighting for paths, the availability and proximity of non-isolated trails and well-lit outdoor green spaces, and aesthetically enjoyable pathways [12,14,21,30,32–34,38,39,46,47].

Despite the evidence of the influence of environmental factors on the physical activity of elderly people, local authorities have incorporated these good practices very slowly; additionally, in several previous investigations, shortcomings were observed in neighborhoods' environmental attributes related to walkability, mainly those regarding safety and amenities [48–51].

Generally, excluding a few cases [17,25,26,31,40,47], these investigations have not been specifically focused on the needs of older people. The present study aims to focus on this topic, comparing the walkability of several neighborhoods in two Italian regions, located in the center and the south of the country, to evaluate elderly people's propensity to favor outdoor walks and to suggest some specific good practices to local authorities.

2. Methods

2.1. Investigated Neighborhoods

This study investigated how suitable walkability levels are for older people, focusing on neighborhoods in five Italian cities (Rieti, Cassino, Monterotondo, Rome, and Benevento).

These cities, located in the Latium and Campania regions, were selected because they have different sizes, offering us the opportunity to investigate small, medium, and large municipalities with different degrees of complexity (see Table 1).

Table 1. Percentage of population ≥ 65 years (sources: https://www.comune.roma.it/web-resources/cms/documents/La_popolazione_a_Roma2019.pdf (accessed on 10 November 2023) [52]; https://www.tuttitalia.it/lazio/ (accessed on 10 November 2023) [53]).

Municipality	% Population ≥ 65 Years	Total Population
Rome—Municipio I *	25.7	167,330
Rome—Municipio III *	24.1	205,759
Rieti **	25.8	45,557
Monterotondo **	19.0	41,060
Cassino **	23.0	35,235
Benevento **	23.8	56,916
Latium Region **	22.8	5,714,882
Campania Region **	20.1	5,624,420
Italy **	23.9	59,030,133

* "Municipio I and III" are administrative subdivisions of the municipality of Rome; ** updated for 2021.

The neighborhoods of each city were chosen with the aim of comparing their streets' physical and infrastructural characteristics based on the following criteria:

(a) Having a high percentage of elderly people living in the district in comparison with the regional and national average.
(b) Belonging to different construction eras and having different sizes, urban layouts, and complexities.

In general, the selected districts have a 300–500 m radius, a distance easily walkable in a few minutes by populations of all age groups. This size matches the "environmental areas" already described elsewhere by several authors in the literature [48–51,54,55]. These are areas protected from traffic flows and crossings, where the viability is characterized by a hierarchy of roads; the surrounding roads for crossing traffic are distinguished from the internal roads for local traffic.

Based on size, the neighborhoods were classified into the following categories:

- Small districts (A) if their areas were ≤250,000 square meters;
- Medium districts (B) if their areas were between 250,000 and 500,000 square meters;
- Large districts (C) if their areas were over 500,000 square meters.

2.2. The Measure of Walkability and the Walkability Suitability Index of the Territory Characteristics

The literature shows a wide range of instruments and methods to measure walkability both for elderly people and the general population. As shown in Table 2, we grouped them in categories based on their characteristics, their use for the evaluation regarding elderly people, and their pros and cons.

In our opinion, many tools, like those mainly based on data analyzed using GIS, are not able to evaluate environmental quality. On the contrary, direct observation can help analyze the physical factors (e.g., obstacles) interfering with walkability, for example, reducing the use and access of urban streets and structures to some vulnerable groups, such as older people [49].

Many tools to measure walkability consider the population as a whole [47]. A few, although specifically designed to measure walkability for elderly people, do not calculate relevant differences in terms of evaluation parameters, since elderly people are one of the main target populations regarding walking in districts.

Table 2. Methods in use to evaluate walkability and their characteristics.

Method	Characteristics	References	Pros and Cons
Self-reported measures: interviews and questionnaires	- Study how individuals perceive their surroundings; - Investigate the relationship between walkability and urban factors influencing citizens' choices (quality of infrastructure, social status, environmental conditions, aesthetics, perceived safety, vegetation, public lighting, cleanliness, etc.); - The most common method for measuring physical activity (ref. dd2); - Widely used for investigations concerning elderly people, generally in combination with other types of walkability measurements (GIS-based methods and audits).	[24,47,56–72]	- Qualitative methods; - Require specific skills to ensure that all participants' views are considered.
Walkability audits	- Evaluate pedestrian facilities and identify specific improvements to increase routes' attractiveness to pedestrians; - Can be translated into local policy recommendations aiming to promote safer and healthier behaviors among community members and ensuring the full commitment of local administrators in the long term; - Often used for investigations concerning elderly people (often in combination with interviews and questionnaires).	[25–27,31,65,66,73,74]	- Include both quantitative and qualitative data processes and analyses; - Based on direct observation of reality.
GIS-based methods	- Introduce standardized measures that could evaluate different variables; - Can process more complex calculations and analyses considering a large number of variables; - Can process more variables from statistical data associated with the area in hand; - Widely used for investigations concerning elderly people (often in combination with interviews and questionnaires).	[24,40,47,60,65,67,72,75–89]	- Quantitative methods; - Evaluate built environment's physical drivers and barriers; - Require specific skills to process GIS information and calculations; - It takes time to analyze the data; - Based on archival datasets, which do not consider the environmental quality of the context; - Not based on direct observation of reality.

Our aim was to evaluate the walking-friendliness of the whole neighborhoods where elderly people walk, independently of the distance covered by walking.

For that reason, to measure walkability, we designed and used the "Walking Suitability Index of the Territory" (T-WSI) [48–50,55], a tested and scientifically validated measuring tool, as described in previous investigations [48–50,55]. Its characteristics, methods of use, and evaluation criteria have been described in previous studies [48–50,55]. In this paper, we will again describe these methodological components to explain the reasons we consider this tool suitable for measuring walkability for elderly people.

Compared to other methods, the T-WSI is easier to use and less expensive.

More in depth, the T-WSI includes 12 indicators built using data that are easy to collect from a specifically trained observatory. These indicators were grouped in four categories with the aim of performing a multi-scope assessment measuring the neighborhoods' practicability, safety, urbanity, and appeal in terms of suitability to promote active walking.

The category of *practicability* aims to assess how the current quality of sidewalks may affect the actual usability of the walking infrastructure, referring to three specific indicators: the quality of the sidewalk surface, the presence of obstacles, and the slope. All these indicators are of particularly high interest for elderly people, as well as other vulnerable groups, since they may have difficulties using sidewalks. In fact, several specific tools built to measure walkability for elderly people take these measures into account [12,17,24–26,31,90].

The *safety* category is equally important; this aims to describe the level of protection from danger due to motorized vehicles and includes the following indicators: safeguarding from vehicles, road lighting, and safe crossings. These indicators focus on visibility in the street, permitting people both to see and to be seen, especially while crossing, which is a particularly critical issue for elderly people [12,17,32–34,38,39,47]. In particular, the *safeguarding from vehicles* indicator is used to assess whether pedestrians in general, and elderly people in particular, can walk in the street free from risks originating from private cars (e.g., due to illegal, overspill parking onto sidewalks) and have good visibility when next to crossing areas. The *road lighting* indicator is used to evaluate the public lighting adequacy, which is generally not designed to satisfy pedestrians' requirements (e.g., fear of crime). Finally, the *safe crossing* indicator is used to assess the level of safety for elderly people specifically at intersections in terms of the availability of signs and signals.

The attractiveness of a street depends on several characteristics [2,12,14,30], including the availability of services and shops, but also having sidewalks of sufficient width and street furniture such as benches. This is of particular importance for elderly people, since this equipment gives them the opportunity to stop and rest as well as socialize during their walk [1,2,7,12,17,31,41,47]. The aim of the *urbanity* category is to evaluate the different factors that contribute to creating pleasant and attractive walking conditions regarding the functions offered (measured by the indicator *activity mix*), the size of the sidewalk (measured by the indicator *sidewalk width*), and the availability of equipment to promote elderly people walking (measured by the indicator street furniture).

The category *pleasantness*, or appeal, referring to the sphere of wellbeing, is interpreted as the evaluation of the possible ambient stimuli that may affect elderly people walking [1,2,12,17,21,32,38,46,47]. The following indicators are used to simplify this complex realm: the *traffic*, since it can hinder walking; the harmony of the surrounding *building stock*, which can influence the area's appeal; and, similarly, the *vegetation*, which is used to evaluate the presence and maintenance of vegetation in the area.

The categories, the indicators, and their respective weights were developed by a multidisciplinary panel of experts (urban planners and transportation and public health professionals) who were asked to assess the overall T-WSI index and define weights for each category and indicator [48,51]. Table 3 reports the results of the discussion.

Table 3. Evaluation categories, indicators, weights, and assessment scores (from [50], modified by authors).

Category	Weight	Indicators	Weight	Evaluation Criteria (Scores)			
				Excellent (1)	**Good (0.70)**	**Poor (0.35)**	**Not Acceptable (0.00)**
Practicability P	0.30	Sidewalk surface P1	40	No distress, level	Scarcely distressed, level	Irregular and recurrently distressed, not totally level	Irregular and severely distressed, unleveled
		Obstacles P2	25	None	Scarce	Few	Continuous
		Slope P3	35	<2%	2–5%	6–8%	>8%
Safety S	0.25	Speed control S1	31	Pedestrian zone, zone 30/20/10 with speed reduction devices	Zone 50 with speed reduction devices	Few speed reduction devices	None
		Public lighting S2	31	Bollard/pencil lights fully available	Bollard/pencil lights partly available	Just light poles	Poor overall lighting
		Safe crossing S3	38	All signaled and protected	Most signaled and/or protected	Some signaled and/or protected	Neither signaled nor protected
Urbanity U	0.22	Sidewalk width U1	40	Clearance > 4 m (>3 m residential street)	2.5–4 m clearance (2–3 m residential street)	1.5–2.5 m clearance (1–2 m residential street)	Clearance < 1.5 m (>1 m residential street)
		Street furniture U2	25	Available, well-maintained, partly covered	Partly available, maintained	Poorly available, unmaintained	Not available
		Activity mix U3	35	Mixed and continuous	Moderately mixed	Mostly monofunctional, residential	None, just fences and walls
Appeal A	0.23	Traffic A1	38	<300 veh/h	300–600 veh/h	600–1000 veh/h	>1000 veh/h
		Building stock A2	31	Detached houses, 3 stories max	Low-rise blocks, 3 stories max	High-rise blocks, 9 stories max	High-rise and towers, >10 stories
		Vegetation A3	31	Continuous and varied	Scattered	Scarce	None

Furthermore, a spreadsheet was designed for entering the collected data and calculating the indexes. Taking into account the number of indicators, the spreadsheet includes a 12 × n matrix, where n is the number of rows, one for each street of the neighborhood. This required an initial classification of each street of the neighborhood and knowledge of its length. For example, considering the safety category, its score S (sco) for street n.1 was calculated as:

$$S\ (sco1) = S_w[(a \times S1_w) + (b \times S2_w) + (c \times S3_w)]$$

where:

S_w = category weight for safety;
$S1_w$, $S2_w$, and $S3_w$ = weights for indicators S1, S2, and S3, respectively;
a, b, and c = scores assigned by the surveyors to the indicators S1, S2, and S3, respectively, in the 1–0 range.

The total safety score for all the n-streets in the neighborhood was then calculated as the sum of all the n-S_{sco} values calculated.

The same procedure was applied for the other evaluation categories (practicability, urbanity, and pleasure) and for the relative indicators, each with its weight as indicated in Table 3. Consequently, it was possible to calculate the Street Index–SI1 as:

$$SI1 = P_{sco}1 + S_{sco}1 + U_{sco}1 + A_{sco}1$$

The neighborhood index results as the sum of the weighted averages of each street index, in which the length of each street is considered, since it is a relevant factor in the overall assessment of the streets' network.

Therefore, the final calculation of the T-WSI walkability index is the following:

$$\text{T-WSI} = (l \times SI)/L$$

where:

l = length of the street (m);
L = length of the neighborhood streets (m).

Using the calculation for all the streets in the neighborhood, it is possible to calculate the total value of the T-WSI for the neighborhood.

Before collecting the data, a team of surveyors was trained on how to score the items, especially focusing on defining some characteristics which might cause uncertainty or subjectivity.

An in-depth description of the calculation methodology is reported in [51].

Before carrying out this study, an evaluation of the T-WSI's reliability and reproducibility was performed; the results are reported in [55].

In this study, the average T-WSI index of all neighborhoods was calculated to define a benchmark value for comparison. The average T-WSI values for the categories and indicators were then calculated for each group (A, B, and C) (Section 2.1) in order to observe any significant differences related to the neighborhoods' sizes.

Finally, to understand how diffused the shortages in the streets of the investigated districts were, for each district, the percentage of streets with acceptable indicator values ($\geq$0.7 or $\geq$70%) was calculated. The objective of this analysis was to understand how many streets had characteristics that permit elderly people to walk throughout the districts safely and pleasantly.

3. Results

3.1. Investigated Neighborhoods' Characteristics

The study analyzed 535 streets in 20 neighborhoods located in five cities, studying an overall street length of about 120 km (119,808 m). Table 2 shows the districts' characteristics. Overall, the population living in these areas amounts to 77,321 inhabitants (inh) (Table 4), with an average density of 12,085.74 inh/km^2.

Neighborhoods markedly differ in terms of size and population density; the average density of the whole study area is about 12,085.74 inh/km^2, ranging from "*Salaria*" (Monterotondo), the least densely inhabited neighborhood (170.98 inh/km^2), to "*Rione Libertà*" (Benevento), the most densely inhabited neighborhood (29,203.34 inh/km^2).

Table 4. Characteristics of the investigated neighborhoods (sources: Registry Office of the municipality of Rieti; Registry Office of the municipality of Monterotondo; Registry Office of the municipality of Benevento; Registry Office of the municipality of Cassino; https://www.comune.roma.it/web-resources/cms/documents/La_popolazione_a_Roma2019.pdf (accessed on 10 November 2023) [52]; https://www.tuttitalia.it/lazio/ (accessed on 10 November 2023) [53]).

City	Neighborhood	Period of Construction	Population (inh)	Density (inh/km^2)	Surface (m^2)	Streets (#)	Overall Street Length (m)
Rieti	*Città Giardino*	1950–1980s	1375	11,052.3	124,408.00	17	3607
	Quattro strade	1920–1990s	2138	10,751.0	198,866.00	21	4704
	Fiume dei Nobili	1950–1980s	824	6901.2	119,400.00	16	2872
	Molino della Salce	1950–1980s	915	5962.4	153,462.00	18	4017
	Borgo S. Antonio	1950–1980s	1849	8788.7	210,383.00	25	4135
	Viale dei Flavi	1920–1950s	738	8037.5	91,820.00	10	2214
	Regina Pacis	1950–1980s	239	13,589.3	175,874.00	25	4977
	Piazza Tevere	1960–2000s	1765	6444.5	273,879.00	20	3607
	Villa reatina	1920–1990s	2303	8157.4	282,320.00	19	3733
	Fassini	1920–1990s	2437	7912.7	307,985.00	23	585
	Micioccoli	1960–2000s	3562	6233.9	571,395.00	27	6721
	Campoloniano	1960–2000s	395	5396.1	732,015.00	39	8349
Monterotondo	*Stazione*	1930–1990s	3171	348.5	9112.06	24	5151
	Green Village	1950–2000s	3097	461.9	6718.00	27	606
	Salaria	1930–2000s	3014	170.9	17,729.41	16	3217
Rome	*San Saba*	1900–1920s	3531	3190.2	1,106,800.00	26	4125
	Tufello	1930–1970s	14,577	16,755.1	870,000.00	72	1836
	Sacco Pastore	1940–1960s	10,325	22,445.6	460,000.00	26	5335
Benevento	*Rione Libertà*	1930–1950s	12,207	29,203.3	418,000.00	70	19,669
Cassino	*San Bartolomeo*	1969–1990s	3153	11,785.1	267,540.80	14	3099
	Total	**1990–2000s**	**77,321**	**12,085.7**	**6,397,707.27**	**535**	**119,808**

All investigated neighborhoods were built in the last century (from the 1900s to the 2000s) (Table 4). Each study area was classified according to the periods of urbanization, which involve different local urban textures and building characteristics, as described below. Table 5, depicting the main characteristics of the building stocks of the investigated districts categorized by construction era and city of origin, shows the wide variability in building typology observed.

Figure 1 shows the satellite imaging of the twenty districts, providing an indication about the territorial layout of each one. The investigated areas are delimited by red borders. The lowercase letters in each image are used to identify the neighborhood, and they are the same as those reported in Table 3.

As already reported in previous papers [48–51,55], the 12 test areas in the city of **Rieti** belong to four main periods of urbanization (Tables 4 and 5). The oldest is "*Vale dei Flavi*" *(a)*, built between the 1920s and 1950s. This area shows a high-quality built environment and mixed land use (Table 5). It has 738 inhabitants and an overall area of 91,820.00 m^2 (average density: 8037.5 inh/km^2). The few streets included in the analysis of the district (10 streets) cover a length of 2.214 m.

Figure 1. *Cont.*

Figure 1. Satellite images of the districts (sources: created by authors in July 2023, based on https://www.google.com/intl/it/earth/about/ (accessed on 5 July 2023) [91] and https://www.google.com/maps/@41.29085,12.71216,6z?entry=ttu (accessed on 5 July 2023) [92]): (**a**) Viale dei Flavi, (**b**) Fassini, (**c**) Villa Reatina, (**d**) Quattro Strade, (**e**) Città Giardino, (**f**) Fiume dei Nobili, (**g**) Molino del Salce, (**h**) Regina Pacis, (**i**) Borgo, (**j**) Piazza Tevere, (**k**) Micioccoli, (**l**) Campoloniano, (**m**) Stazione, (**n**) Salaria, (**o**) Green Village, (**p**) San Saba, (**q**) Sacco Pastore, (**r**) Tufello, (**s**) Rione Libertà, (**t**) San Bartolomeo.

Three districts (Figure 1), "*Fassini*" *(b)*, "*Villa Reatina*" *(c)*, and "*Quattro Strade*" *(d)*, urbanized between the 1920s and 1990s, include residential, working-class areas characterized by a mix of buildings (Table 5). Compared with "*Viale dei Flavi*" *(a)*, their sizes are larger, their population densities are similar, and they have more than double the number of streets, which explains their overall higher length of streets (from 3733 m in "*Villa Reatina*" *(c)* to 5850 m in "*Fassini*" *(b)*) (Table 4).

Five other districts (Figure 1 and Table 5), "*Città Giardino*" *(e)*, "*Fiume dei Nobili*" *(f)*, "*Molino della Salce*" *(g)*, "*Regina Pacis*" *(h)*, and "*Borgo*" *(i)*, were built between the 1950s and 1980s. They are middle-class and relatively small neighborhoods, with areas ranging from 119,400.00 m^2 for "*Fiume dei Nobili*" *(f)* to 175,874.00 m^2 for "*Regina Pacis*" *(h)* (Table 4). The sizes and characteristics of their building heritage areas can explain the differences in population density observed between the neighborhoods of this cluster. They can also explain the variability in the number of streets (from 16 streets in "*Fiume dei Nobili*" *(f)* to 25 in "*Regina Pacis*" *(h)*) and their overall lengths (from 2872 m for "*Fiume dei Nobili*" *(f)* to 4977 m for "*Regina Pacis*" *(h)*).

"*Piazza Tevere*" *(j)*, "*Micioccoli*" *(k)*, and "*Campoloniano*" *(l)* (Figure 1) are the last group of investigated neighborhoods in Rieti (Table 4 and Figure 1). They are suburban areas built between the 1960s and 1990s (Tables 4 and 5), including a mix of apartment blocks with a height ranging from three to six floors and terraced houses. Two of them ("*Micioccoli*" *(k)* and "*Campoloniano*" *(l)*) have a large number of streets and overall street lengths compared with the other districts of Rieti. On the contrary, their population densities are low due to the typological characteristics of the districts.

Table 5. Neighborhood characteristics by city and period of urbanization (source: information provided by the municipal offices of Rieti, Monterotondo, Cassino, Benevento, and Rome).

City	Construction Era	Buildings' Characteristics
Rieti	1920s–1950s	This era only includes the "**Viale dei Flavi**" **(a)** (Figure 1) district. Its development started in the 1920s and continued until the early 1940s, with the first expansion close to the historic center of the city, and ended in the 1950s. This area shows a high-quality built environment and a mixed land use (small villas, low-rise apartment blocks, and public buildings).
	1920s–1990s	This group contains three districts: "**Fassini**" **(b)**, "**Villa Reatina**" **(c)**, and "***Quattro Strade***" **(d)** (Figure 1). They were first urbanized during the Fascist period and expanded later on, until the 1990s. They include residential, working-class areas characterized by a mix of building types: one- or two-family houses, built in the 1940s–1960s, and two- or three-story apartment buildings (some within social housing projects), built between the 1960s and the 1990s. The most recent part, in the "*Fassini*" *(b)* neighborhood, also shows single-family and multi-family buildings, terraced houses with a height of two/three floors.
	1950s–1980s	This cluster includes five districts: "**Città Giardino**" **(e)**, "**Fiume dei Nobili**" **(f)**, "**Molino della Salce**" **(g)**, "**Regina Pacis**" **(h)**, and "**Borgo**" **(i)** (Figure 1). Mainly built in the 1950s (with some parts completed in the 1980s), these are middle-class districts next to the city center, with a mixed building stock, mainly residential, consisting of detached and terraced houses, little villas, and low-rise apartment blocks.
	1960s–1990s	This group includes three districts: "**Piazza Tevere**" **(j)**, "**Micioccoli**" **(k)**, and "**Campoloniano**" **(l)** (Figure 1). These are suburban areas containing a mix of apartment blocks (buildings, in-line buildings, etc.) with a height ranging from three to six floors and terraced houses.
Monterotondo	1930s–2000s	This group includes two districts: "**Stazione**" **(m)**, completed in the 1990s, and "**Salaria**" **(n)** (Figure 1), completed in the 2000s. The "*Stazione*" district, which began during the 1930s, includes a mostly residential area, characterized by the presence of the railway network, which constitutes an important connection with Rome and Fiumicino Airport. The building typology of the original nucleus of the district consists of single-family and multi-family houses. The most recently built part, completed in the 1990s, shows a building typology consisting of a mix of in-line buildings and apartment blocks, with a mixed land use. The construction of the "*Salaria*" district began during the 1930s and developed over the years until the 2000s. The neighborhood, mainly residential (the commercial part is concentrated along the Salaria road), is made up of single-family and multi-family buildings and terraced houses.
	1950s–2000s	This cluster includes only the "**Green Village**" **(o)** (Figure 1). The first building dates to the 1950s and the neighborhood includes multi-family buildings. It is a residential area with an accentuated commercial component. In the most recent part, built over the years up to the 2000s, the prevailing building typology is a mix of in-line buildings and apartment blocks and single-family and multi-family houses.
Rome	1900s–1920s	The urban area "**San Saba**" **(p)** (Figure 1), mostly residential, was built after the early 1900s and is characterized by apartment blocks, small villas, single- and multi-family houses, and buildings of up to four floors. It is a neighborhood with high environmental quality and part of it is included in the historic center.
	1940s–1960s	The study area "**Sacco Pastore**" **(q)** (Figure 1) was built starting in the 1940s and was completed over the 1960s. It is a residential area with a high settlement intensity characterized by large buildings between six and nine floors (blocks and lines).
	1930s–1970s	The "**Tufello**" **(r)** (Figure 1) area was built starting in the 1930s (it was the first neighborhood built outside the "Aureliane" city walls). The prevailing building typology of the first period is characterized by small–medium-sized buildings (buildings and terraced houses). The building stock was completed in the 1970s, and the predominant construction type is typical of the social housing of the 1960s–1970s (in-line buildings and apartment blocks) with large green spaces between the buildings.

Table 5. *Cont.*

City	Construction Era	Buildings' Characteristics
Benevento	1930s–1950s	The study area "**Rione Libertà**" **(s)** (Figure 1) was built mainly during the Fascist period (1930s–1940s) and expanded in the second half of the twentieth century. Its construction, of mediocre quality, includes almost exclusively residential buildings with a heterogeneous mix of building types (single-family houses, multi-family houses, apartment blocks, and in-line buildings).
Cassino	1969–1990s	The study area "**San Bartolomeo**" **(t)** (Figure 1) was built during the urbanization period between 1969 and 1990. It is a suburban area of 3153 inhabitants, encompassing primarily a mix of low-rise blocks and terraced houses, but also in-line buildings and apartment blocks.

In the city of **Monterotondo**, the three selected districts, "*Stazione" (m)*, "*Salaria" (n)*, and "*Green Village" (o)*, are small (from 6718.00 m^2 for "*Green Village" (o)* to 17,729.41 m^2 for "*Salaria" (n)*), with a very low population density (from 170.9 inh/km^2 for "*Salaria" (n)* to 461.9 inh/km^2 for "*Green Village" (o)*) (Table 4). The building stock can be associated with two main periods of urbanization. "*Stazione" (m)* and "*Salaria" (n)* belong to the 1930s–2000s; "*Stazione" (m)* is developed on 24 streets with an overall length of 5551 m. The second has the largest size among the three districts but the lowest number of streets and the lowest population density, as described in Figure 2. "*Green Village" (o)*, built between the 1950s and 2000s, is a residential area with the highest population density among the city's districts and the highest number of streets (27) and overall length (6060 m) (Table 4).

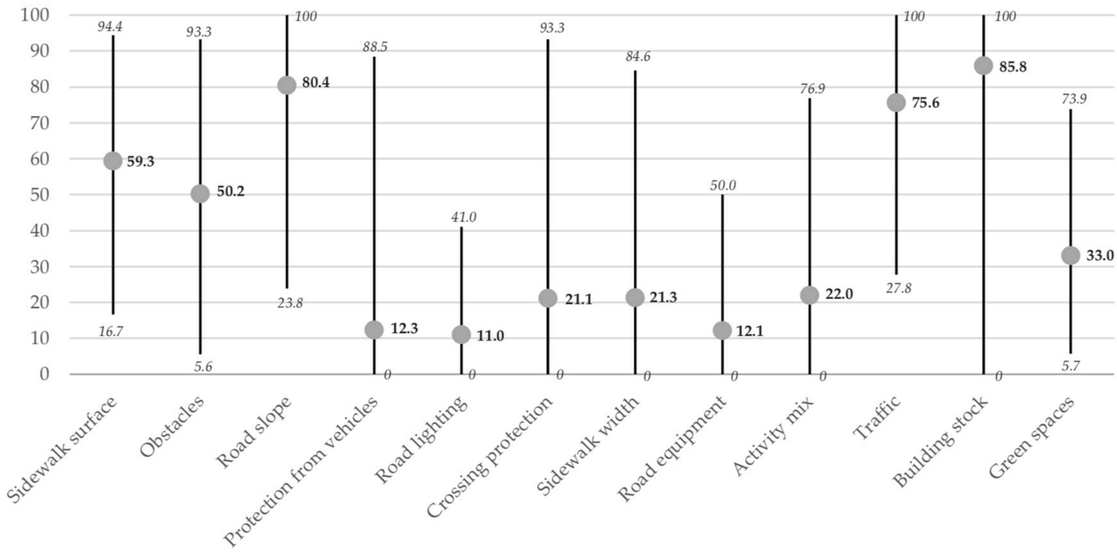

Figure 2. Percentage of streets with acceptable values (≥0.7) by indicator (average, min, and max values).

The study areas selected in the city of **Rome** are located in both the center and the periphery of the city. "*San Saba" (p)*, built between 1900 and the 1920s in the historic center of Rome (Table 5), is mostly a residential area and has the largest surface (1,106,800.00 m^2) among the investigated areas (Table 4) and a low population density (3190.2 inhabitants/km^2). The number of streets (26) and their overall length (4125 m) are both limited. "*Sacco Pastore" (q)* was built starting in the 1940s and completed over the 1960s, and it has a high settlement intensity [28] and one of the highest population densities of the analyzed districts (22,445.6 inh/km^2), following only "*Rione Liberta" (s)* in Benevento city (Table 4). "*Tufello" (r)*, built between 1930 and 1970, was the first neighborhood built outside the "Aureliane" city walls (Table 5). It has a large area (870,000.00 m^2), with the highest number of streets (72) among the investigated areas and an overall network length of over 18 km.

In the city of **Benevento**, the study area (Figure 1) "*Rione Libertà" (s)* includes buildings of mixed typologies. This district, of medium size (418,000.00 m^2), has the highest population density (29,203.3 inh/km^2), a close road network (70 streets), and the largest overall street length (19,669 m) among the investigated districts (Table 4).

Finally, "*San Bartolomeo" (t)*, belonging to the city of **Cassino**, is a suburban area with 3153 inhabitants, 14 streets, and a total street length of 3099 m.

3.2. Application of the Audit (T-WSI)

Table 6 shows the 20 neighborhoods divided into three categories by size (A, B, and C). For each district, the T-WSI and the numerical values of the categories (practicability, safety, urbanity, and pleasantness) included in the Walking Suitability Index of the Territory (T-WSI) are reported.

Table 6. Average score of each category and of the T-WSI by neighborhood.

Group	Neighborhood (City)	Practicability	Safety	Urbanity	Appeal	T-WSI
A	*Città Giardino* (Rieti)	75.3	31.3	42.9	57.3	53.06
	Quattro strade (Rieti)	24.8	12.5	16.7	63.8	28.90
	Fiume dei Nobili (Rieti)	64.7	38.0	27.1	45.5	45.34
	Molino della Salce (Rieti)	85.7	28.8	25.7	52.0	50.52
	Borgo S. Antonio (Rieti)	75.7	27.1	35.1	62.3	51.55
	Viale dei Flavi (Rieti)	77.4	24.4	36.2	64.5	52.12
	Regina Pacis (Rieti)	69.8	35.8	37.1	64.8	52.97
	Stazione (Monterotondo)	53.8	31.0	20.8	63.0	42.95
	Green Village (Monterotondo)	62.6	44.9	31.5	57.5	50.17
	Salaria (Monterotondo)	38.1	34.4	19.8	69.5	40.34
	Mean values:	***63.1***	***31.7***	***29.4***	***61.5***	***47.46***
B	*Piazza Tevere* (Rieti)	75.9	24.1	28.9	70.9	51.46
	Villa reatina (Rieti)	41.2	10.9	23.6	72.5	36.95
	Fassini (Rieti)	56.0	25.3	30.7	85.3	49.48
	Sacco Pastore (Rome)	80.2	59.3	69.5	61.4	68.28
	Rione Libertà (Benevento)	76.9	11.6	13.1	50.9	40.55
	San Bartolomeo (Cassino)	69.0	9.0	8.6	72.3	41.46
	Mean values:	***70.4***	***20.6***	***24.8***	***62.4***	***46.09***
C	*Micioccoli* (Rieti)	76.9	31.4	33.0	64.0	52.89
	Campoloniano (Rieti)	68.8	27.3	30.4	73.8	51.11
	San Saba (Rome)	65.5	48.2	46.8	67.4	57.51
	Tufello (Rome)	45.1	30.3	35.8	44.4	39.20
	Mean values:	***58.3***	***31.8***	***35.6***	***57.2***	***46.45***
Total	***Mean values:***	***64.1***	***27.9***	***29.7***	***60.5***	***46.65***

A: small district, with an area ≤ 250,000 square meters; B: medium district, with an area between 250,000 and 500,000 square meters; C: large district, with an area over 500,000 square meters.

Although the neighborhoods have very different physical and morphological characteristics, the T-WSI shows low scores for most of them.

The average T-WSI value is equal to 46.65, with a wide variability between districts, ranging from 68.28 in "*Sacco Pastore*" to 28.90 in "*Quattro Strade*" (Table 5).

The analysis by categories determined that safety and urbanity reached the lowest scores, with average values of 27.9 for safety and 29.7 for urbanity.

In particular, the lowest scores were obtained for the "*San Bartolomeo*" district (9.0 for safety and 8.6 for urbanity), while the highest were observed for "*Sacco Pastore*", showing a score of 59.3 for safety and 69.5 for urbanity.

Practicability achieved lower scores in larger districts (group C), with an average score of 58.3 for practicability against a value of 63.1 for small districts (group A) and 70.4 for medium-sized ones (group B). The same is applicable to appeal, showing an average score of 57.2 for large districts against a value of 61.5 for smaller and 62.4 for medium-sized ones

(Table 6). This remains true even if the small number of districts is not sufficient to show significant differences among the groups.

Overall, security and urbanity achieved the lowest scores in the medium-sized neighborhoods (group B), equal to 20.6 and 24.8, respectively (Table 6). The larger districts (group C), though they showed critical issues in the same categories (safety and urbanity), still had higher scores (31.8 for safety and 35.6 for urbanity) than the other two groups.

The final index (T-WSI) was slightly higher in group A (47.46) than in groups B (46.09) and C (46.45), and higher than the overall average index of the three groups too (Table 6).

To understand how diffused the shortages in the streets of the investigated districts were, for each district, the percentage of streets with acceptable values (≥0.7 or ≥70%) for the indicators was calculated. Figure 2 shows the median values and ranges of acceptable streets by indicator.

Building stock, traffic, and road slope showed very high mean percentages of acceptability (85.8%, 75.6%, and 84.4%, respectively), but a wide variability between neighborhoods (e.g., from 0.0% to 100% for building stock) was observed (Figure 2).

Road lighting and road equipment showed very low average percentage values for acceptable streets (11.0% and 12.1%, respectively) and a limited variability between districts (Figure 2), showing the criticality of these indicators in almost all of the investigated areas.

Protection from vehicles, crossing protection, sidewalk width, and activity mix had very low average percentage values for acceptable streets (Figure 2), but they showed a larger variability among neighborhoods, with a wide dispersion of results (Figure 2).

Other indicators, such as sidewalk surfaces, obstacles, and green spaces, showed discrete average percentage values as well as a wide variability in the percentages between districts (Figure 2).

4. Discussion and Conclusions

This study offers several interesting insights thanks to the comparison of districts built in different eras and belonging to cities of different sizes.

First of all, the calculation of the T-WSI shows that the problems and the critical issues are similar between districts, independent of their sizes, and they refer mainly to the same categories and indicators.

In general, the parameters included in the practicability and appeal categories obtained higher scores, while those used to evaluate the safety and urbanity of the districts showed several detriments. These shortcomings are obstacles for elderly people, since the neighborhoods where they live can be considered their "gym" and walking is the most popular sport, especially for more socioeconomically disadvantaged people [93].

All these factors can be easily improved through a review of local land-use planning policies [94,95]. At present, however, the lack of the aforementioned environmental factors determines the criticalities of indicators related to the ability to walk and, more generally, to partake in physical activity [50,93].

From the comparison, it emerges that the category of "practicability" obtained an average score of 64.1 (Table 5), since more than 80% of the investigated streets do not include criticalities in terms of road slope (Figure 2). They are also satisfactory (≥0.7) in terms of sidewalk surfaces and the absence of obstacles, although with lower percentages (59.3% and 50.2%, respectively). In general, between them, the indicator relating to the presence of obstacles is the most lacking. The obstacles derive from the presence of street furniture, poles, various equipment, and vehicles parked outside the dedicated spaces; these reduce the available walking space, creating important problems for elderly people and for the overall population, as highlighted in the literature [12,28,29,32–34,47,90]. Therefore, the absence of, or a possible reduction in, obstacles would be desirable, considering that their increasing recurrence could encourage the choice to avoid walking or to walk elsewhere [12,25,26,30,31,47,54].

The safety category showed the lowest scores, with an average value of 27.9 (Table 6); the percentage of safe streets (score $\geq$ 0.7) is very low due to the contribution of all the indicators composing this category (protection from vehicles: 12.3%; road lighting: 11.0%; crossing protection: 21.1%) (Figure 2). Practicability also strongly influences the physical activity levels of older adults, as it affects their perception of safety (crime, accidents, etc.) with respect to the environment that surrounds them [12,17,29,38,39,47,96]. All indicators are seriously problematic, and the worst situation relates to protection from speeding vehicles. As described in previous works [48–51], protection from vehicles is a parameter used to assess whether pedestrians are able to walk safely and free from the risks deriving from private cars (e.g., in historic centers) or to have an unobstructed view when they approach intersections. As shown in Figure 2, this indicator shows very low percentages of acceptable streets (mean: 12.3%) and a large variability between districts (from 0.0 to 88.5%). This variability, above all, is due to the Sacco Pastore neighborhood, which, unlike the others, reached a high percentage of satisfactory streets thanks to the identification of strategic interventions for the redevelopment of the neighborhood dedicated to users (e.g., pedestrian areas, limited traffic areas, protected crossings, pedestrian paths, adequate lighting dedicated to pedestrians, maintenance of pedestrian infrastructures, etc.).

In general, high levels of protection can be achieved when pavements or pedestrian areas are equipped with any type of device useful to reduce traffic and vehicle speed [17,50,54]. For example, to prevent cars from colliding with pedestrians, intersections could be designed with sidewalk extensions to reduce crossing distance and allow drivers and pedestrians to see each other (e.g., pedestrian gulfs) [54]. At the same time, it is important to free the area from any other obstacle that could reduce visibility (vegetation, service equipment, advertising, etc.) [12,14,48,49,54].

Within the safety category, another critical indicator is road lighting (Figure 2), which showed a very low percentage of satisfactory streets. In this case, it is understood as the quality of public lighting suitable to meet the requirements of pedestrians (for example, to prevent the fear of crime) [48–51]. The lighting and brightness of streetlamps are essential to prevent accidents [50,97], but the benefits can be greatly reduced if light poles are too high or positioned to create shaded areas on the pavements. Therefore, the lighting of paths and their specific performance are essential requirements that can affect the propensity to carry out physical activity, especially for older adults [12,14,33].

Also regarding safety, the urbanity category and all the indicators that compose it also highlight several criticalities. This category reached an average score of 29.7 and, with the exception of the Sacco Pastore district, which obtained a higher score (69.5), the scores of the neighborhoods were low, ranging from 8.6 (San Bartolomeo District) to 43.9 (Città Giardino District) (Table 6). Analyzing the indicators of this category (Figure 2), we can see that the average percentage of satisfactory streets (score ≥ 0.7) in terms of sidewalk width is 21.3% and that adequate road equipment is found in only 12.1% of the streets; furthermore, only 22.0% of streets show an acceptable level of activity mix. There is much scientific evidence on the influence of these specific factors on physical activity for the general population and for elderly people [17,24,28]. The presence of various activities along the streets generates a flow of people, which in turn can give rise to a sort of spontaneous control of spaces [2,30,51,98,99]. This is a very favorable condition for elderly people, since it contributes to creating safer spaces for walking, exercising, and socializing.

Furthermore, among the indicators of urbanity, it has to be argued that road equipment is unsatisfactory, since the equipment and elements to support and facilitate walking (e.g., benches, handrails, etc.) are lacking; consequently, the walking pathways for older adults are unattractive [12,17,30,47,50,51,90,99,100]. On this topic, many experiences and good practices carried out in some European countries are available [101,102]. Some aim to promote sustainable modes of transport, increasing the livability of urban centers, with the final objective being to enhance the levels of physical activity among the population, especially elderly people. These countries have developed programs and projects dedicated to road safety, safe pedestrian crossing, cycling courses for elderly people (Finland: the Hyvinkää sustainable traffic mobility plan) [101], and walking groups [101,102].

Others, however, focus on the physical characteristics of the urban environment and on the interventions to be implemented to make spaces and routes suitable for city users, especially elderly people [101]. This can be achieved, for example, through the presence of road signs, streetlights dedicated to pedestrians with non-glaring light, handrails along the most difficult routes, curbs to help elderly people with vision difficulties, benches along the paths with armrests of different heights (e.g., the Maunula activity trail, Finland), and sports equipment in green spaces (e.g., gym equipment in the city of Brasov, Romania) [101].

Finally, the appeal category obtained an average score of 46.64 (Table 5). The factors evaluated in this category concern the sphere of welfare, which takes into account the feelings and perceptions caused by agreeable (or disagreeable) stimuli and how they affect older people's walking trends [2–4,17,47,101]. Through these indicators, we evaluated attractiveness on the basis of the perceived sensations of walking along the streets of the neighborhood. A district with high buildings separated by internal roads of modest width can generate unpleasant perceptions for those who walk along these streets [17,28,50,51,98,99,102,103].

Two of the indicators included in the appeal category, traffic and building stock, did not highlight important criticalities, with the percentages of acceptable streets ($\geq$0.7) being 75.6% and 85.8%, respectively. The third indicator, green spaces, showed a lower average percentage of acceptable streets (33.0%), with a wide variability in values between neighborhoods (Figure 2).

Green spaces, in this case, refers to the availability of parks, gardens, green paths, and planted beds, or, more simply, trees, hedges, and flower beds that are suitably positioned and maintained, which are certainly perceived by pedestrians as an added value, especially elderly people [12,17,36,37,45,47,50,51,104]. The design of green spaces in neighborhoods is a pivotal issue for health promotion. Their main characteristics which favor their usability by elderly people seem to be proximity, attractiveness, and size [34]—elements frequently lacking in the investigated districts in this study. At the same time, if green areas are not well designed (too big, with scarce views, etc.), they can be perceived as unsafe, hindering their use by elderly people [17,34,47,105,106].

In conclusion, as already mentioned in previous articles [48–50,55], the opportunity to promote interventions to improve the walkability of roads and livability in neighborhoods through the elaboration of proposals for the municipalities is an important objective for urban health and environmental sustainability.

At the same time, it is pivotal to understand the real effectiveness of these interventions in terms of changes in population behaviors, especially for elderly people. A limitation of this study is the lack of correlations between environmental characteristics and the health status of elderly people. In our view, this study is a first step aiming to simply evaluate the state of the neighborhoods and their propensity to favor walkability. Further longitudinal studies will be necessary to quantify the real impact of district walkability for elderly people's health.

The results obtained confirm that the T-WSI is a reliable, efficient, and reproducible tool to evaluate the characteristics of an area and its ability to satisfy people's needs regarding walking [55], and some studies show how important these characteristics are for promoting physical activity [12,17,25,26,31,47].

In our view, the use of tools like the T-WSI could support the decision-making processes [48–50,55] and address the choices concerning the priorities of interventions and investments in designing neighborhoods from the perspective of sustainability and salutogenesis [105].

This study highlights the lack of attention paid to the design of spaces dedicated to pedestrians, especially with regard to street furniture and protection from speeding vehicles. As observed in the literature [37,39,49,50], roads continue to be designed for vehicular traffic rather than for the promotion of active mobility, both pedestrian and cycle.

In recent years only, even following the COVID-19 pandemic, the relationship between proximity and quality of life has been in the process of rediscovery, especially for a sedentary population such as elderly people [107].

This study observed and quantified several areas of need commonly detected in streets which require adaptation interventions, sometimes simple and low-cost. These interventions, which should be a priority for local decision makers, can provide an opportunity, if properly managed, to promote broader accessibility to public spaces, improving social cohesion as well. At the same time, they can also contribute to reducing environmental injustice and improving neighborhoods' livability and sustainability.

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References

1. Kerr, J.; Rosenberg, D.; Frank, L. The role of the built environment in healthy aging: Community design, physical activity, and health among older adults. *J. Plan. Lit.* **2012**, *27*, 43–60. [CrossRef]
2. Sugiyama, T.; Thompson, C.W. Outdoor environments, activity and the well-being of older people: Conceptualising environmental support. *Environ. Plan. A* **2007**, *39*, 1943–1960. [CrossRef]
3. Sorveglianza Passi. Available online: https://www.epicentro.iss.it/passi/dati/attivita-oms (accessed on 28 August 2023).
4. Bull, F.C.; Al-Ansari, S.S.; Biddle, S.; Borodulin, K.; Buman, M.P.; Cardon, G.; Carty, C.; Chaput, J.P.; Chastin, S.; Chou, R.; et al. World Health Organization 2020 guidelines on physical activity and sedentary behaviour. *Br. J. Sports Med.* **2020**, *54*, 1451–1462. [CrossRef] [PubMed]
5. Sorveglianza Passi d'argento. Available online: https://www.epicentro.iss.it/passi-argento/dati/attivita (accessed on 28 August 2023).
6. Zandieh, R.; Martinez, J.; Flacke, J.; Jones, P.; van Maarseveen, M. Older adults' outdoor walking: Inequalities in neighborhood safety, pedestrian infrastructure and aesthetics. *Int. J. Environ. Res. Public Health* **2016**, *13*, 1179. [CrossRef]
7. Davis, M.G.; Fox, K.R.; Hillsdon, M.; Coulson, J.C.; Sharp, D.J.; Stathi, A.; Thompson, J.L. Getting out and about in older adults: The nature of daily trips and their association with objectively assessed physical activity. *Int. J. Behav. Nutr. Phys. Act.* **2011**, *8*, 116. [CrossRef] [PubMed]
8. Hillsdon, M.; Lawlor, D.; Ebrahim, S.; Morris, J. Physical activity in older women: Associations with area deprivation and with socioeconomic position over the life course: Observations in the british women's heart and health study. *J. Epidemiol. Commun. Health* **2008**, *62*, 344–350. [CrossRef] [PubMed]
9. Li, F.Z.; Fisher, K.J.; Bauman, A.; Ory, M.G.; Chodzko-Zajko, W.; Harmer, P.; Bosworth, M.; Cleveland, M. Neighborhood influences on physical activity in middle-aged and older adults: A multilevel perspective. *J. Aging Phys. Act.* **2005**, *13*, 87–114. [CrossRef]
10. Li, F.; Fisher, K.J.; Brownson, R.C. A multilevel analysis of change in neighborhood walking activity in older adults. *J. Aging Phys. Act.* **2005**, *13*, 145–159. [CrossRef] [PubMed]
11. Li, F.; Fisher, K.J.; Brownson, R.C.; Bosworth, M. Multilevel modelling of built environment characteristics related to neighbourhood walking activity in older adults. *J. Epidemiol. Commun. Health* **2005**, *59*, 558–564. [CrossRef] [PubMed]
12. Moran, M.; Van Cauwenberg, J.; Hercky-Linnewiel, R.; Cerin, E.; Deforche, B.; Plaut, P. Understanding the relationships between the physical environment and physical activity in older adults: A systematic review of qualitative studies. *Int. J. Behav. Nutr. Phys. Act.* **2014**, *11*, 79. [CrossRef]
13. Christiansen, L.B.; Cerin, E.; Badland, H.; Kerr, J.; Davey, R.; Troelsen, J.; van Dyck, D.; Mitáš, J.; Schofield, G.; Sugiyama, T.; et al. International comparisons of the associations between objective measures of the built environment and transport-related walking and cycling: IPEN Adult Study. *J. Transp. Health* **2016**, *3*, 467–478. [CrossRef] [PubMed]
14. Zuniga-Teran, A.A.; Orr, B.J.; Gimblett, R.H.; Chalfoun, N.V.; Marsh, S.E.; Guertin, D.P.; Going, S.B. Designing healthy communities: Testing the walkability model. *Front. Archit. Res.* **2017**, *6*, 63–73. [CrossRef]
15. Colom, A.; Mavoa, S.; Ruiz, M.; Wärnberg, J.; Muncunill, J.; Konieczna, J.; Vich, G.; Barón-López, F.J.; Fitó, M.; Salas-Salvadó, J.; et al. Neighbourhood walkability and physical activity: Moderating role of a physical activity intervention in overweight and obese older adults with metabolic syndrome. *Age Ageing* **2021**, *50*, 963–968. [CrossRef] [PubMed]
16. Brown, B.B.; Smith, K.R.; Hanson, H.; Fan, J.X.; Kowaleski-Jones, L.; Zick, C.D. Neighborhood design for walking and biking: Physical activity and body mass index. *Am. J. Prev. Med.* **2013**, *44*, 231–238. [CrossRef] [PubMed]

17. Peters, M.; Muellmann, S.; Christianson, L.; Stalling, I.; Bammann, K.; Drell, C.; Forberger, S. Measuring the association of objective and perceived neighborhood environment with physical activity in older adults: Challenges and implications from a systematic review. *Int. J. Health Geogr.* **2020**, *19*, 47. [CrossRef] [PubMed]
18. Mavoa, S.; Bagheri, N.; Koohsari, M.J.; Kaczynski, A.T.; Lamb, K.E.; Oka, K.; O'Sullivan, D.; Witten, K. How Do Neighbourhood Definitions Influence the Associations between Built Environment and Physical Activity? *Int. J. Environ. Res. Public Health* **2019**, *16*, 1501. [CrossRef] [PubMed]
19. Sallis, J.F.; Cerin, E.; Kerr, J.; Adams, M.A.; Sugiyama, T.; Christiansen, L.B.; Schipperijn, J.; Davey, R.; Salvo, D.; Frank, L.D.; et al. Built Environment, Physical Activity, and Obesity: Findings from the International Physical Activity and Environment Network (IPEN) Adult Study. *Annu. Rev. Public Health* **2020**, *41*, 119–139. [CrossRef]
20. Zandieh, R.; Flacke, J.; Martinez, J.; Jones, P.; van Maarseveen, M. Do Inequalities in Neighborhood Walkability Drive Disparities in Older Adults' Outdoor Walking? *Int. J. Environ. Res. Public Health* **2017**, *14*, 740. [CrossRef] [PubMed]
21. Hartig, T.; Mitchell, R.; de Vries, S.; Frumkin, H. Nature and health. *Annu. Rev. Public Health* **2014**, *35*, 207–228. [CrossRef]
22. Cain, K.L.; Millstein, R.A.; Sallis, J.F.; Conway, T.L.; Gavand, K.A.; Frank, L.D.; Saelens, B.E.; Geremia, C.M.; Chapman, J.; Adams, M.A. Contribution of streetscape audits to explanation of physical activity in four age groups based on the microscale audit of pedestrian streetscapes (maps). *Soc. Sci. Med.* **2014**, *116*, 82–92. [CrossRef]
23. Sallis, J.F.; Slymen, D.J.; Conway, T.L.; Frank, L.D.; Saelens, B.E.; Cain, K.; Chapman, J.E. Income disparities in perceived neighborhood built and social environment attributes. *Health Place* **2011**, *17*, 1274–1283. [CrossRef] [PubMed]
24. Nyunt, M.S.; Shuvo, F.K.; Eng, J.Y.; Yap, K.B.; Scherer, S.; Hee, L.M.; Chan, S.P.; Ng, T.P. Objective and subjective measures of neighborhood environment (NE): Relationships with transportation physical activity among older persons. *Int. J. Behav. Nutr. Phys. Act.* **2015**, *12*, 108. [CrossRef]
25. Alves, F.; Cruz, S.; Ribeiro, A.; Silva, A.B.; Martins, J.; Cunha, I. Walkability Index for Elderly Health: A Proposal. *Sustainability* **2020**, *12*, 7360. [CrossRef]
26. Alves, F.; Cruz, S.; Rother, S.; Strunk, T. An application of the Walkability Index for Elderly Health–WIEH. The Case of the UNESCO Historic Centre of Porto, Portugal. *Sustainability* **2021**, *13*, 4869. [CrossRef]
27. McCormack, G.R.; Patterson, M.; Frehlich, L.; Lorenzetti, D.L. The association between the built environment and intervention-facilitated physical activity: A narrative systematic review. *Int. J. Behav. Nutr. Phys. Act.* **2022**, *19*, 86. [CrossRef]
28. Brown, C.J.; Bradberry, C.; Howze, S.G.; Hickman, L.; Ray, H.; Peel, C. Defining community ambulation from the perspective of the older adult. *J. Geriatr. Phys. Ther.* **2010**, *33*, 56–63.
29. Mitra, R.; Siva, H.; Kehler, M. Walk-friendly suburbs for older adults? Exploring the enablers and barriers to walking in a large suburban municipality in Canada. *J. Aging Stud.* **2015**, *35*, 10–19. [CrossRef]
30. Thompson, C.W. Activity, exercise and the planning and design of outdoor spaces. *J. Environ. Psychol.* **2013**, *34*, 79–96. [CrossRef]
31. Bonatto, D.D.A.M.; Alves, F.B. Application of Walkability Index for Older Adults' Health in the Brazilian Context: The Case of Vitória-ES, Brazil. *Int. J. Environ. Res. Public Health* **2022**, *19*, 1483. [CrossRef]
32. Stathi, A.; Gilbert, H.; Fox, K.; Coulson, J.; Davis, M.; Thompson, J. Determinants of neighborhood activity of adults aged 70 and over: A mixed methods study. *J. Aging Phys. Act.* **2012**, *20*, 148–170. [CrossRef] [PubMed]
33. Van Cauwenberg, J.; Van Holle, V.; Simons, D.; Deridder, R.; Clarys, P.; Goubert, L.; Nasar, J.; Salmon, J.; De Bourdeaudhuij, I.; Deforche, B. Environmental factors influencing older adults' walking for transportation: A study using walk- along interviews. *Int. J. Behav. Nutr. Phys. Act.* **2012**, *9*, 85. [CrossRef] [PubMed]
34. Wennberg, H.; Hyden, C.; Stahl, A. Barrier-free outdoor environments: Older peoples' perceptions before and after implementation of legislative directives. *Transp. Policy* **2010**, *17*, 464–474. [CrossRef]
35. Barnett, D.W.; Barnett, A.; Nathan, A.; Van Cauwenberg, J.; Cerin, E.; Council on Environment and Physical Activity (CEPA)—Older Adults working group. Built environmental correlates of older adults' total physical activity and walking: A systematic review and meta-analysis. *Int. J. Behav. Nutr. Phys. Act.* **2017**, *14*, 103. [CrossRef] [PubMed]
36. Michael, Y.L.; Perdue, L.A.; Orwoll, E.S.; Stefanick, M.L.; Marshall, L.M. Physical activity resources and changes in walking in a cohort of older men. *Am. J. Public Health* **2010**, *100*, 654–660. [CrossRef]
37. Astell-Burt, T.; Feng, X.; Kolt, G.S. 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. *Br. J. Sports Med.* **2014**, *48*, 404–406. [CrossRef]
38. Grant, T.L.; Edwards, N.; Sveistrup, H.; Andrew, C.; Egan, M. Neighborhood walkability: Older people's perspectives from four neighborhoods in Ottawa, Canada. *J. Aging Phys. Act.* **2010**, *18*, 293–312. [CrossRef]
39. Leavy, B.; Aberg, A.C. "Not ready to throw in the towel": Perceptions of physical activity held by older adults in Stockholm and Dublin. *J. Aging Phys. Act.* **2010**, *18*, 219–236. [CrossRef] [PubMed]
40. Lam, T.M.; Wang, Z.; Vaartjes, I.; Karssenberg, D.; Ettema, D.; Helbich, M.; Timmermans, E.J.; Frank, L.D.; den Braver, N.R.; Wagtendonk, A.J.; et al. Development of an objectively measured walkability index for the Netherlands. *Int. J. Behav. Nutr. Phys. Act.* **2022**, *19*, 50. [CrossRef] [PubMed]
41. Tuomola, E.M.; Keskinen, K.E.; Viljanen, A.; Rantanen, T.; Portegijs, E. Neighborhood Walkability, Walking Difficulties, and Participation in Leisure Activities Among Older People: A Cross-Sectional Study and 4-Year Follow-Up of a Subsample. *J. Aging Health* **2023**, 8982643231191444. [CrossRef]

42. Laborde, C.; Ankri, J.; Cambois, E. Environmental barriers matter from the early stages of functional decline among older adults in France. *PLoS ONE* **2022**, *17*, e0270258. [CrossRef]
43. Rantanen, T.; Eronen, J.; Kauppinen, M.; Kokko, K.; Sanaslahti, S.; Kajan, N.; Portegijs, E. Life-Space Mobility and Active Aging as Factors Underlying Quality of Life among Older People Before and during COVID-19 Lockdown in Finland-A Longitudinal Study. *J. Gerontol. A Biol. Sci. Med. Sci.* **2021**, *76*, e60–e67. [CrossRef] [PubMed]
44. Koohsari, M.J.; Kaczynski, A.T.; Giles-Corti, B.; Karakiewicz, J.A. Effects of access to public open spaces on walking: Is proximity enough? *Landsc. Urban. Plan.* **2013**, *117*, 92–99. [CrossRef]
45. Ngom, R.; Gosselin, P.; Blais, C.; Rochette, L. Type and proximity of green spaces are important for preventing cardio-vascular morbidity and diabetes—A cross-sectional study for Quebec, Canada. *Int. J. Environ. Res. Public Health* **2016**, *13*, 423. [CrossRef]
46. Takano, T.; Nakamura, K.; Watanabe, M. Urban. residential environments and senior citizens' longevity in megacity areas: The importance of walkable green spaces. *J. Epidemiol. Commun. Health* **2002**, *56*, 913–918. [CrossRef]
47. Akinci, Z.S.; Delclòs-Alió, X.; Vich, G.; Salvo, D.; Ibarluzea, J.; Miralles-Guasch, C. How different are objective operationalizations of walkability for older adults compared to the general population? A systematic review. *BMC Geriatr.* **2022**, *22*, 673. [CrossRef] [PubMed]
48. D'Alessandro, D.; Assenso, M.; Appolloni, L.; Cappucciti, A. The Walking Suitability Index of the Territory.(T-WSI): A new tool to evaluate urban neighborhood walkability. *Ann. Ig. Med. Prev. Comun.* **2015**, *27*, 678–687. [CrossRef]
49. D'Alessandro, D.; Appolloni, L.; Capasso, L. How walkable is the city? Application of the Walking Suitability Index of the Territory (T-WSI) to the city of Rieti (Lazio Region, Central Italy). *Epidemiol. Prev.* **2016**, *40*, 237–242. [CrossRef]
50. Appolloni, L.; Corazza, M.V.; D'Alessandro, D. The Pleasure of Walking: An Innovative Methodology to Assess Appropriate Walkable Performance in Urban Areas to Support Transport Planning. *Sustainability* **2019**, *11*, 3467. [CrossRef]
51. Appolloni, L.; Giretti, A.; Corazza, M.V.; D'Alessandro, D. Walkable Urban Environments: An Ergonomic Approach of Evaluation. *Sustainability* **2020**, *12*, 8347. [CrossRef]
52. La popolazione di Roma. Struttura e Dinamica Demografica. 2019. Available online: https://www.comune.roma.it/web-resources/cms/documents/La_popolazione_a_Roma2019.pdf (accessed on 10 November 2023).
53. Tuttitalia. Available online: https://www.tuttitalia.it/lazio/ (accessed on 10 November 2023).
54. Barp, A.; Bolla, D. *Spazi per Camminare. Cam-Minare fa Bene Alla Salute*; Marsilio Editori: Venezia, Italy, 2013.
55. D'Alessandro, D.; Valeri, D.; Appolloni, L. Reliability of T-WSI to Evaluate Neighborhoods Walkability and Its Changes over Time. *Int. J. Environ. Res. Public Health* **2020**, *17*, 7709. [CrossRef]
56. Santos, R.; Silva, P.; Santos, P.; Ribeiro, J.C.; Mota, J. Physical activity and perceived environmental attributes in a sample of Portuguese adults: Results from the Azorean Physical Activity and Health study. *Prev. Med.* **2008**, *47*, 83–88. [CrossRef] [PubMed]
57. Saelens, B.E.; Sallis, J.F.; Black, J.B.; Chen, D. Neighbourhood-based differences in physical activity: An environment scale evaluation. *Am. J. Public Health* **2003**, *93*, 1552–1558. [CrossRef]
58. Tilt, J.H.; Unfried, T.M.; Roca, B. Using objective and subjective measures of neighborhood greenness and accessible destinations for understanding walking trips and BMI in Seattle, Washington. *Am. J. Health Promot.* **2007**, *21*, 371–379. [CrossRef]
59. Kerr, J.; Norman, G.; Millstein, R.; Adams, M.A.; Morgan, C.; Langer, R.D.; Allison, M. Neighborhood Environment and Physical Activity among Older Women: Findings from the San Diego Cohort of the Women's Health Initiative. *J. Phys. Act. Health* **2014**, *11*, 1070–1077. [CrossRef] [PubMed]
60. McCormack, G.R.; Spence, J.C.; McHugh, T.L.; Mummery, W.K. The effect of neighborhood walkability on changes in physical activity and sedentary behavior during a 12-week pedometer-facilitated intervention. *PLoS ONE* **2022**, *17*, e0278596. [CrossRef] [PubMed]
61. Giles-Corti, B.; Timperio, A.; Cutt, H.; Pikora, T.J.; Bull, F.C.; Knuiman, M.; Bulsara, M.; Van Niel, K.; Shilton, T. Development of a reliable measure of walking within and outside the local neighborhood: RESIDE's Neighborhood Physical Activity Questionnaire. *Prev. Med.* **2006**, *42*, 455–459. [CrossRef] [PubMed]
62. Koohsari, M.J.; Oka, K.; Nakaya, T.; Shibata, A.; Ishii, K.; Yasunaga, A.; McCormack, G.R. Environmental attributes and sedentary behaviours among Canadian adults. *Environ. Res. Commun.* **2020**, *2*, 051002. [CrossRef]
63. Cerin, E.; Saelens, B.E.; Sallis, J.F.; Frank, L.D. Neighborhood Environment Walkability Scale: Validity and development of a short form. *Med. Sci. Sports Exerc.* **2006**, *38*, 1682–1691. [CrossRef]
64. Sallis, J.F.; Bowles, H.R.; Bauman, A.; Ainsworth, B.E.; Bull, F.C.; Craig, C.L.; Sjöström, M.; De Bourdeaudhuij, I.; Lefevre, J.; Matsudo, V.; et al. Neighborhood environments and physical activity among adults in 11 countries. *Am. J. Prev. Med.* **2009**, *36*, 484–490. [CrossRef] [PubMed]
65. Weiss, R.L.; Maantay, J.A.; Fahs, M. Promoting Active Urban Aging: A Measurement Approach to Neighborhood Walkability for Older Adults. *Cities Environ.* **2010**, *3*, 12. [CrossRef]
66. Travers, C.; Dixon, A.; Laurence, A.; Niblett, S.; King, K.; Lewis, P.; Owen, N.; Veysey, M. Retirement Health and Lifestyle Study: Australian Neighborhood Environments and Physical Activity in Older Adults. *Environ. Behav.* **2018**, *50*, 426–453. [CrossRef]
67. Berke, E.M.; Koepsell, T.D.; Moudon, A.V.; Hoskins, R.E.; Larson, E.B. Association of the built environment with physical activity and obesity in older persons. *Am. J. Public Health* **2007**, *97*, 486–492. [CrossRef]
68. Clarke, P.; Hirsch, J.A.; Melendez, R.; Winters, M.; Sims Gould, J.; Ashe, M.; Furst, S.; McKay, H. Snow and Rain Modify Neighbourhood Walkability for Older Adults. *Can. J. Aging* **2017**, *36*, 159–169. [CrossRef] [PubMed]

69. Kikuchi, H.; Nakaya, T.; Hanibuchi, T.; Fukushima, N.; Amagasa, S.; Oka, K.; Sallis, J.F.; Inoue, S. Objectively measured neighborhood walkability and change in physical activity in Older Japanese adults: A five-year cohort study. *Int. J. Environ. Res. Public Health* **2018**, *15*, 1814. [CrossRef]
70. Liao, Y.; Lin, C.Y.; Lai, T.F.; Chen, Y.J.; Kim, B.; Park, J.H. Walk Score® and Its Associations with Older Adults' Health Behaviors and Outcomes. *Int. J. Environ. Res. Public Health* **2019**, *16*, 622. [CrossRef] [PubMed]
71. Marquet, O.; Hipp, J.A.; Miralles-Guasch, C. Neighborhood walkability and active ageing: A difference in differences assessment of active transportation over ten years. *J. Transp. Health* **2017**, *7*, 190–201. [CrossRef]
72. Takahashi, P.Y.; Baker, M.A.; Cha, S.; Targonski, P.V. A cross-sectional survey of the relationship between walking, biking, and the built environment for adults aged over 70 years. *Risk Manag. Healthc. Policy* **2012**, *5*, 35–41. [CrossRef]
73. Strath, S.J.; Greenwald, M.J.; Isaacs, R.; Hart, T.L.; Lenz, E.K.; Dondzila, C.J.; Swartz, A.M. Measured and perceived environmental characteristics are related to accelerometer defined physical activity in older adults. *Int. J. Behav. Nutr. Phys. Act.* **2012**, *9*, 40. [CrossRef]
74. Lee, R.E.; Mama, S.K.; Medina, A.V.; Ho, A.; Adamus, H.J. Neighborhood factors influence physical activity among African American and Hispanic or Latina women. *Health Place* **2012**, *18*, 63–70. [CrossRef] [PubMed]
75. Robertson, L.B.; Ward Thompson, C.; Aspinall, P.; Millington, C.; McAdam, C.; Mutrie, N. The influence of the local neighbourhood environment on walking levels during the walking for wellbeing in the West pedometer-based community intervention. *J. Environ. Public Health* **2012**, *2012*, 974786. [CrossRef]
76. Siqueira Junior, J.A.; Lopes, A.A.D.S.; Godtsfriedt, C.E.S.; Justina, M.D.D.; de Paiva, K.M.; d'Orsi, E.; Rech, C.R. Neighbourhood walkability and mental health in older adults: A cross-sectional analysis from EpiFloripa Aging Study. *Front. Aging* **2022**, *3*, 915292. [CrossRef] [PubMed]
77. Carr, L.J.; Dunsiger, S.I.; Marcus, B.H. Walk ScoreTM as a global estimate of neighborhood walkability. *Am. J. Prev. Med.* **2010**, *39*, 460–463. [CrossRef] [PubMed]
78. Rundle, A.G.; Chen, Y.; Quinn, J.W.; Rahai, N.; Bartley, K.; Mooney, S.J.; Bader, M.D.; Zeleniuch-Jacquotte, A.; Lovasi, G.S.; Neckerman, K.M. Development of a Neighborhood Walkability Index for Studying Neighborhood Physical Activity Contexts in Communities across the U.S. over the Past Three Decades. *J. Urban Health* **2019**, *96*, 583–590. [CrossRef] [PubMed]
79. Frank, L.D.; Schmid, T.L.; Sallis, J.F.; Chapman, J.; Saelens, B.E. Linking objectively measured physical activity with objec- tively measured urban form: Findings from SMARTRAQ. *Am. J. Prev. Med.* **2005**, *28* (Suppl. S2), 117–125. [CrossRef]
80. Neckerman, K.M.; Lovasi, G.S.; Davies, S.; Purciel, M.; Quinn, J.; Feder, E.; Raghunath, N.; Wasserman, B.; Rundle, A. Disparities in urban neighborhood conditions: Evidence from GIS measures and field observation in New York City. *J. Public Health Policy* **2009**, *30* (Suppl. S1), S264–S285. [CrossRef] [PubMed]
81. Wagtendonk, A.; Lakerveld, J. Walkability Score Netherlands Version 1.0. 2019 Update on 25 March 2022. Available online: https://www.google.it/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwj5u_Woyb6CAxUr_7sIHYgbBBEQFnoECBgQAQ&url=https://s6a05c11b03ccc044.jimcontent.com/download/version/1648200192/module/8135484864/name/Walkability%2520score%2520Netherlands%2520version%25201.0%2520-%2520Technical%2520document_update%2520-%2520March%25202022.pdf&usg=AOvVaw0A4gy3ZBwF77fljjRt2Y-8&opi=89978449 (accessed on 5 November 2023).
82. Liao, B.; van den Berg, P.E.W.; van Wesemael, P.J.V.; Arentze, T.A. Empirical analysis of walkability using data from the Netherlands. *Transp. Res. Part D Transp. Environ.* **2020**, *85*, 102390. [CrossRef]
83. Todd, M.; Adams, M.A.; Kurka, J.; Conway, T.L.; Cain, K.L.; Buman, M.P.; Frank, L.D.; Sallis, J.F.; King, A.C. GIS-measured walkability, transit, and recreation environments in relation to older Adults' physical activity: A latent profile analysis. *Prev. Med.* **2016**, *93*, 57–63. [CrossRef] [PubMed]
84. Portegijs, E.; Keskinen, K.E.; Tsai, L.-T.; Rantanen, T.; Rantakokko, M. Physical limitations, walkability, perceived Environmental facilitators and physical activity of Older adults in Finland. *Int. J. Environ. Res. Public Health* **2017**, *14*, 333. [CrossRef]
85. Van Holle, V.; Van Cauwenberg, J.; Gheysen, F.; Van Dyck, D.; Deforche, B.; Van de Weghe, N.; De Bourdeaudhuij, I. The Association between Belgian Older Adults' Physical Functioning and Physical Activity: What Is the Moderating Role of the Physical Environment? *PLoS ONE* **2016**, *11*, e0148398. [CrossRef] [PubMed]
86. Hirsch, J.A.; Winters, M.; Ashe, M.C.; Clarke, P.; McKay, H. Destinations that Older Adults Experience within Their GPS Activity Spaces Relation to Objectively Measured Physical Activity. *Environ. Behav.* **2016**, *48*, 55–77. [CrossRef]
87. Frank, L.D.; Sallis, J.F.; Saelens, B.E.; Leary, L.; Cain, K.; Conway, T.L.; Hess, P.M. The development of a walkability index: Application to the Neighborhood Quality of Life Study. *Br. J. Sports Med.* **2010**, *44*, 924–933. [CrossRef]
88. Kuzmyak, J.R.; Baber, C.; Savory, D. Use of Walk Opportunities Index to Quantify Local Accessibility. *Transp. Res. Rec.* **2006**, *1977*, 145–153. [CrossRef]
89. Leslie, E.; Coffee, N.; Frank, L.D.; Owen, N.; Bauman, A.; Hugo, G. Walkability of local communities: Using geographic information systems to objectively assess relevant environmental attributes. *Health Place* **2007**, *13*, 111–122. [CrossRef] [PubMed]
90. Edwards, N.; Dulai, J. Examining the relationships between walkability and physical activity among older persons: What about stairs? *BMC Public Health* **2018**, *18*, 1025. [CrossRef] [PubMed]
91. Available online: https://www.google.com/intl/it/earth/about/ (accessed on 23 August 2023).
92. Available online: https://www.google.com/maps/@41.29085,12.71216,6z?entry=ttu (accessed on 23 August 2023).

93. WHO. *Active Ageing—A Policy Framework*; World Health Organization: Geneva, Switzerland, 2002. Available online: https://extranet.who.int/agefriendlyworld/wp-content/uploads/2014/06/WHO-Active-Ageing-Framework.pdf (accessed on 29 September 2023).
94. Santinha, G.; Costa, C.; Diogo, S. How are local policies promoting older people's mobility? A Case Study. *Urban Sci.* **2018**, *2*, 63. [CrossRef]
95. Fernandes, A.; Forte, T.; Santinha, G.; Diogo, S.; Alves, F. Active Aging Governance and Challenges at the Local Level. *Geriatrics* **2021**, *6*, 64. [CrossRef] [PubMed]
96. Congiu, T.; Migliori, G.B.; Castiglia, P.; Azara, A.; Piana, A.; Saderi, L.; Dettori, M. Built Environment Features and Pedestrian Accidents: An Italian Retrospective Study. *Sustainability* **2019**, *11*, 1064. [CrossRef]
97. Oya, H.; Ando, K.; Kanoshima, H. A Research on Interrelation between Illuminance at Intersections and Reduction in Traffic Accidents. *J. Light Vis. Environ.* **2002**, *26*, 29–34. [CrossRef]
98. Cinderby, S.; Cambridge, H.; Attuyer, K.; Bevan, M.; Croucher, K.; Gilroy, R.; Swallow, D. Co-designing urban living solutions to improve older people's mobility and well-being. *J. Urban Health* **2018**, *95*, 409–422. [CrossRef]
99. Gehl, J. *Cities for People*; Island Press: New York, NY, USA, 2013; p. 288.
100. Ewing, R.; Handy, S. Measuring the unmeasurable: Urban design qualities related to walkability. *J. Urban Des.* **2009**, *14*, 65–84. [CrossRef]
101. Supporting Policy and Action for Active Environments (SPACE). Environments for Physical Activity in Europe. A Review of Evidence and Examples of Practice. 2017. Available online: https://activeenvironments.eu/media/space-review-evidence-exemples-practice.pdf (accessed on 29 September 2023).
102. PRO.SA. Banca dati di Progetti e Interventi di Prevenzione e Promozione Della Salute. Available online: https://www.retepromozionesalute.it/bd2_riclib.php (accessed on 29 September 2023).
103. Zaidi, A.; Gasior, K.; Zólyomi, E.; Schmidt, A.; Rodrigues, R.; Marin, B. Measuring active and healthy ageing in Europe. *J. Eur. Soc. Policy* **2017**, *27*, 138–157. [CrossRef]
104. Lynch, K. *The Image of the City*; MIT Press: Cambridge, MA, USA, 1960.
105. Triguero-Mas, M.; Gidlow, C.J.; Martínez, D.; de Bont, J.; Carrasco-Turigas, G.; Martínez-Íñiguez, T.; Hurst, G.; Masterson, D.; Donaire-Gonzalez, D.; Seto, E.; et al. The effect of randomised exposure to different types of natural outdoor environments compared to exposure to an urban environment on people with indications of psychological distress in Catalonia. *PLoS ONE* **2017**, *12*, e0172200. [CrossRef] [PubMed]
106. Jacobs, J. Chapter 5: The use of neighborhood parks. In *The Death and Life of Great American Cities*; Vintage Books: New York, NY, USA, 1961.
107. Capolongo, S.; Rebecchi, A.; Buffoli, M.; Appolloni, L.; Signorelli, C.; Gaetano, M.; Daniela, D.A. COVID-19 and cities: From urban health strategies to the pandemic challenge. A decalogue of public health opportunities. *Acta Biomed.* **2020**, *9*, 13–22. [CrossRef]