sustainability

MDPI

Article

Seniors' Mobility and Perceptions in Different Urban Neighbourhoods: A Non-Aggregative Approach

Claudia Burlando [1,2], Enrico Ivaldi [2,3,4,*] and Andrea Ciacci [1,4]

[1] Department of Economics and Business Studies, University of Genoa, 16126 Genoa, Italy; burlando@economia.unige.it (C.B.); andrea.ciacci@edu.unige.it (A.C.)
[2] C.I.E.L.I., The Italian Center of Excellence on Logistics Transports and Infrastructures, University of Genoa, 16126 Genoa, Italy
[3] Department of Political Science, University of Genoa, 16125 Genoa, Italy
[4] C.I.E. Centro de Investigaciones en Econometría—Universitad de Buenos Aires, Buenos Aires C1113 CABA, Argentina
* Correspondence: enrico.ivaldi@unige.it

Abstract: In order to highlight the subjective criticality of each neighbourhood to inspire future policy actions, we propose an analysis comparing the perceptions of over-65s residents in the neighbourhoods that make up the Municipality of Genoa. We suggest a new approach based on a quantitative non-aggregative method, Partially Ordered Set (Poset), to measure the levels of satisfaction related to local public transport (LPT), pedestrian mobility, and quality of life in the 25 districts of Genoa. Final data of the analysis come from 401 questionnaires, distributed to residents over 65 years old in the Municipality of Genoa. This approach allows to address the multidimensionality of the phenomenon, as well as its different conceptual spheres. The findings highlight a great variance in local public transport needs perception between different neighbourhoods. In particular, the analysis shows that the types of intervention requested by respondents differ from district to district, so that a common urban transport policy would be ineffective. Some neighbourhoods stress the need for improving pedestrian mobility, whilst local public transport faults dominate in others. There is no significant relation between the three dimensions: Perceived quality of LPT, perceived quality of pedestrian mobility, and perceived quality of neighbourhood. Therefore, interventions should be carefully modulated, according to the specific needs expressed by the residents of each neighbourhood. We conclude that the importance of urban mobility intervention is reduced, whereas the concept of neighbourhood analysis and intervention becomes more relevant.

Keywords: seniors' mobility; neighbourhoods; non-aggregative methodology; partially ordered set; local public transport

check for updates

Citation: Burlando, C.; Ivaldi, E.; Ciacci, A. Seniors' Mobility and Perceptions in Different Urban Neighbourhoods: A Non-Aggregative Approach. *Sustainability* **2021**, *13*, 6647. https://doi.org/10.3390/su13126647

Academic Editor: Giuseppe Inturri

Received: 12 May 2021
Accepted: 8 June 2021
Published: 10 June 2021

1. Introduction

The ongoing demographic shift will inevitably impact the urban transport system, as the share of elderly citizens is destined to increase, therefore requiring a reassessment of urban transport options in order to better serve their needs. This is a complex task that requires in-depth studies of the elderly's travel patterns and mobility needs in order to successfully implement urban transport policies. The ongoing demographic shift is going to impact the urban transport system, since the share of elderly citizens is increasing; then, the reassessment of urban transport options becomes necessary, to better serve their needs. This complex task requires in-depth studies of the elderly's travel patterns and mobility needs.

Most existing literature on local public transport (LPT) uses quantitative methods, excluding mixed-method and cross-sectional studies. On the other hand, there is a growing interest in new models of public policies related to transport for the elderly that involve objective or subjective aspects of quality of life and well-being [1,2].

According to Levasseur et al. [3], mobility and social participation in seniors are positively linked to indicators of most of age-friendly characteristics, i.e., proximity to resources and recreational facilities, social support, having a car or driver's license, public transportation, and security. Instead, they are negatively related to low user-friendliness of the walking environment and insecurity. Scharf and De Jong Gierveld [4] found that people living in highly urbanised and deprived neighbourhoods are lonelier. They also found that the subjective evaluation of the quality of the neighbourhood is significantly related to loneliness. Metz [5] first explicitly notes the relation between quality of life and mobility among older people.

Significant associations have been demonstrated between perceived age-friendly environments and quality of life. The strongest predictor of quality of life was social trust, followed by safety, service accessibility, social support, social cohesion, aesthetics, and a walkable neighbourhood [6].

Nieboer and Cramm [7] clarified that "levels of age-friendliness and older people's ability to realize the instrumental goals to achieve overall well-being varied seriously among neighbourhoods, with older people living in less age-friendly communities reporting lower levels of well-being".

Lack of urban accessibility can lead to social exclusion intended as the incapacity to participate in social activities and will therefore have a negative impact on the quality of life. In addition, higher levels of mobility and participation in social and physical activities are normally associated with greater life satisfaction [8]. Indeed, mobility has more widespread effects than simply satisfying the need to make a journey. Notably, the demand for transport has a derived nature, as most individuals travel because they want to benefit from the social, recreational, educational, and other opportunities that become accessible with movement [9].

According to latest Eurostat data [10], Italy, the country with the oldest population in the EU, has the highest number of over-65s in Europe (22% of the population) and the worst elderly dependency index at 35% (in comparison to the EU average of 30%).

The Italians' average life is 85 years for women and 81 years for men [11] and tops the EU ranking, which means a long post-retirement lifespan. Independence and mobility are important elements constituting the well-being of the elderly and investigating the issue of elderly urban mobility becomes crucial [1]. In Italy, amongst large cities (>250,000 inhabitants), Genoa has the highest share of over 65s (28.6%), the worst elderly dependency index (47.5%), and the highest average age in Italy (48.9) [11]. It is therefore an appropriate candidate for a case study.

In this paper, we investigate in depth the perception of individuals residing in the different neighbourhoods of the city. Any analysis of elderly mobility must recognise the links to the city and its neighbourhoods for mobility policies at the urban level to effectively interpret the needs of the elderly population and to profoundly affect life quality, given that seniors tend to spend most of their time within the neighbourhood of residence [2]. In these terms, the neighbourhood can be considered to be the main spatial unit of elderly mobility analysis [12,13].

We analysed the 25 districts (neighbourhoods) that make up the Municipality of Genoa in terms of three aspects: Perceived quality of local public transport, pedestrian mobility, and quality of life in the neighbourhood. Subjective perception is one of the fundamental elements of modal choice of movement, or giving up it, but this approach is often overlooked in mobility studies [2,14,15]. Older people's choices are often more oriented by psychological rather than objective factors [16,17].

In this paper, we propose a cross-sectional analysis, from a subjective point of view, measuring the levels of satisfaction related to LPT, pedestrian mobility, and the district area in the 25 neighbourhoods of Genoa. We compare the results obtained for the various neighbourhoods to identify policies that address the needs of the elderly community. The main findings of this analysis suggest that the residents over 65 years old of different areas indicate different priorities for intervention; therefore, urban policies applied to transport according to a common criterion are unsuitable if the needs expressed differ greatly from one area to another, and transport policies for neighbourhoods are needed. The results are grafted onto that branch of the literature according to which districts of different cities (uniform in economic, social, transport conditions) are more similar than districts of the same city [18,19]. Therefore, we must apply analytical methods to the urban context that render the multidimensionality of the different subjective expressions on a territorial basis.

In the present work, we adopt a quantitative non-aggregative method, which allows us to not alter the basic indicators through processes of normalization and/or aggregation. The new analytical approach proposed here is based on the use of Partially Ordered Sets (Posets) [20]. Poset evaluation is a way to obtain a complete order out of a partial order: After assigning a value to each profile, it is possible to order each element according to the linear relationships that characterize it vis-à-vis all the other elements that make up the ordered structure [21]. Among the advantages offered by the Poset method, we find the synthesis capacity provided by the Hasse diagrams, the possibility to analyse the data structure with the preservation of the incomparability between elements with particular differences, and the non-alteration of data that would result from the application of specific transformation processes on the basic indicators [22].

The paper is structured as follows: In Section 2, we provide the theoretical framework for studying elderly mobility within a neighbourhood; Section 3 presents the data, the way in which they have been obtained, and their structure; Section 4 describes the method of analysis; and Section 5 examines the main results that will be discussed in detail in Section 6, along with conclusions.

2. Literature Review

According to the median scenario, the expected resident population in Italy is estimated to reach 59 million in 2045 and 54.1 million in 2065. The average age of the population will increase from 44.9 to over 50 years in 2065. In this context, the share of over-65s in the total population will increase, reaching a percentage close to 34% in 2045–2050 [11].

In light of these demographic changes, the issue of elderly mobility is a critical one. Neighbourhood elements and pedestrian mobility affect the overall assessment of the validity of a local public transport system [2].

Nowadays, urban mobility is still mainly focused on the massive use of cars [23,24]. Although "keeping older people driving as long and safely as possible may well be the most feasible and cost-effective mobility option for an ageing society" [25], it is necessary to establish other options that will be available once using the car will no longer be a feasible option [26]. With the current generation of older people being more active than previous generations of equivalent age [27–30], public transport will play a crucial role in maintaining their active lifestyle, even when they are no longer able to drive. The literature has amply explored the concept of movement not only aimed at the use of goods and services: "travel is not purely a derived demand but an activity that also generates positive utility" [31], in a perspective where "travel time can be conceptualized as a gift in producing and maintaining social relationships" [32]. Hence, public transport is important for older people's quality of life, their sense of freedom, and independence [33]. Several studies about the elderly show an increase in leisure trips, car trips, and driver licensing rates in the last decade [34–36].

As regards LPT, we have to consider the existence of multiple elements. According to Davey [37], access and safety are keys for making LPT more popular and attractive. In addition, to promote the success of public transport, drivers should be more aware and informed about the needs of the elderly population, routes and schedules should be more flexible and responsive, and door-to-door services should be available.

The features of LPT use by older people include finding information about the service and transport location, reaching the transport location (urban design and accessibility conditions), waiting for the transport, indicating to the vehicle driver the intention to board, purchasing or validating the ticket if it is necessary, finding a seat, indicating the intention to alight, and reaching the destination (concern with urban design and accessibility conditions) [38,39].

Ståhl et al. [40] found that mobility-related problems for the elderly involve getting to, from, and around bus stops, and on and off the bus. The transition from an inaccessible fixed-route system to one with accessible vehicles, stops, and stations can take many years. Despite this, in the interim, the transit system will be partially accessible. During this period, decisions must be made about the distribution of accessible buses and other vehicles throughout the fixed-route system.

The public mobility scheme depends not only on characteristics of the population, but also on the conformation of the territory. Mobility in rural and suburban communities remains an issue, particularly for seniors who live in low-density suburbs. Seniors in rural communities are more isolated than their suburban counterparts and have few alternatives other than family and friends [41].

Siren et al.'s findings [42] suggest that, while it is important to provide general basal mobility and accessibility, in order to enable older persons' independent life, it is equally important to specifically support activities that strengthen their sense of belonging to the community. Thus, independency and sense of community are the components of mobility-related well-being in old age. While some researchers have challenged the view of travel as solely derived from the need to reach a destination [43,44], mobility as a component in well-being is still predominately understood as instrumental [15], i.e., something giving access to a destination that then produces well-being [45]. According to Metz [5], accessibility can be defined as the ease with which people can reach destinations for different purposes and it is inextricably linked to the quality of life and general wellbeing [46].

While the efficiency of local mobility for older people depends on multiple factors, it can influence many others at the same time. Freedom of movement for older people is one of the factors that improves their perception of life [47,48]. It is increasingly important for seniors to have ways to manage, perform their tasks, and maintain their autonomy and independence without having to depend on someone to assist them. Studies on urban mobility aim to increase not only levels of transport systems, but also to create a system that is functional to the performance of other daily activities (ibidem).

According to the WHO definition [49], a city can be defined as age-friendly when it is characterised by "an inclusive and accessible urban environment that promotes active and healthy ageing". Among the features of an age-friendly neighbourhood, we identify both an accessible built environment and an inclusive social environment [50,51]. Widening the discussion to the community, an age-friendly community should provide a comprehensive and accessible physical and social environment that supports the health, social involvement, and security of the elderly [52].

Improving the quality of life for seniors is urgent, promoting an active and an empowered ageing [53] (Rowe and Kahn, 1987). Ageing can be conceived as a process of fine-tuning of opportunities for health, participation, autonomy, and security, in order to improve the quality of life [23].

Older people prefer to spend most of their time in their homes and neighbourhoods, in other words, they are more vulnerable to changes to the environment or potential challenges to their residential housing. These can consist of urban hazards and risks such as traffic jams, difficult access to public toilets or resting places, pedestrian safety, or the physical layout of homes, which may lead to limited mobility or noticeable risk of fall [54,55]. Crash statistics clearly identify older people as an at-risk group of road users [56]. Older people tend to cut back on or stop driving and are thus more likely to be pedestrians. Older pedestrians are more exposed to crashes than younger pedestrians are. They may use public transportation more frequently and may need to walk further to get to transportation and shops. In addition, injury risk is related to the frailty of older people and the reduced ability to withstand crash forces or recover from injury. As a result of their general physical weakening, older adults lose agility and endurance and experience musculoskeletal wasting and neuromuscular weakening. These changes may predispose older pedestrians to fatal or serious injury outcomes when in a crash [33,57].

In Italy, a high number of pedestrian fatalities happen every year. In absolute terms, Italy is, after Poland and Romania, the country where most of these types of accidents occur [58], with an amount of 570 fatalities per year. Moreover, throughout the year, the highest relative percentage of pedestrian fatalities occur in the evening and at night, when the lighting is lower, during the autumn period (October-December). Moreover, 60% of pedestrian fatalities involve people over 64 years of age (ibidem).

An increase in age, health, and economic conditions determine the possibility to enjoy urbanization economics more and for longer. Yet, this fruition is determined by accessibility to such places or services. Built environment characteristics such as neighbourhood walkability and access to facilities have also emerged as an important theme in studies on local social interaction and community liveability [59,60].

Quality of life from a living environment perspective includes both objective factors, such as provision of services, availability of green spaces and condition of houses, and subjective characteristics, such as perception of safety, social cohesion, degeneration, and satisfaction with their environment [59]. Subjectivity is a component of reality. Subjective data differ from objective data because the former is collected only from individual's assertions. Dealing with subjective variables implies knowing their strengths and weaknesses. The measure of a subjective character is influenced by factors such as conscience, cognition, emotion, attitude, and opinion, which are related to contingent and mutable situations [61]. Consequently, it is often difficult to identify which specific elements have most influenced the perception of reality expressed by an individual or community as a whole [62,63]. Criticalities that affect subjective variables can be traced back to two distinct reasons, as explained by Seghieri et al., [63], i.e., scaling and omitted dispositions. Scaling refers to the use of different mental scales by individuals, so that, for instance, a given score for one person might correspond to a different score for another. In this case, there is no easy way to make sure that comparison is carried out properly.

The omitted-disposition problem derives from the unreliability of people's expressions of subjective feelings because individuals' innate personalities may play a major part both in how they actually feel and in how prepared they are to reveal their feelings.

3. Context and Sample

Questionnaires were administered in the 25 constituent districts of the Municipality of Genoa (see Table A2 in Appendix A for the complete list), using computer-assisted telephone interviews (CATI). We adopted the CATI rather than CAWI method to reach as many older adults as possible. Since a large proportion of the elderly may experience difficulties in using the web, thanks to the CATI method, we achieved a higher number of respondents and greater clarity in the formulation of the question.

The total number of questionnaires amounted to 486. Eighty-five people did not respond or did not complete the questionnaire, so they were excluded from the survey. Consequently, final data of the analysis come from 401 questionnaires, distributed to elderly residents over 65 in the Municipality of Genoa. The sample was divided into four different age groups: 65–70, 71–75, 76–80, and over 80; the need for a proper age segmentation is confirmed by several studies that have disaggregated the "elderly" category into different subcategories with very specific needs [36,42,64–66]. Judgements on mobility differ among the different age groups. For example, Kim et al. [1] shows that there are progressive and incisive differences in assessment in terms of mobility between younger and older seniors. In these terms, satisfaction increases with age, which might be due to less pressured schedules as well as reduced expectations. Different routines characterise women and men. In order to obtain an assessment that reflects the real structure of the population, it is necessary to stratify the sample to interview on the basis of age and gender factor [67].

Therefore, our sample is constructed to reflect the composition of the Genoese municipal population. The sample is stratified according to the following two factors: Gender and age of each district (Tables A3 and A4). In this way, we have obtained a sample that reflects the characteristics of the population living in the municipality of Genoa (Figure 1).

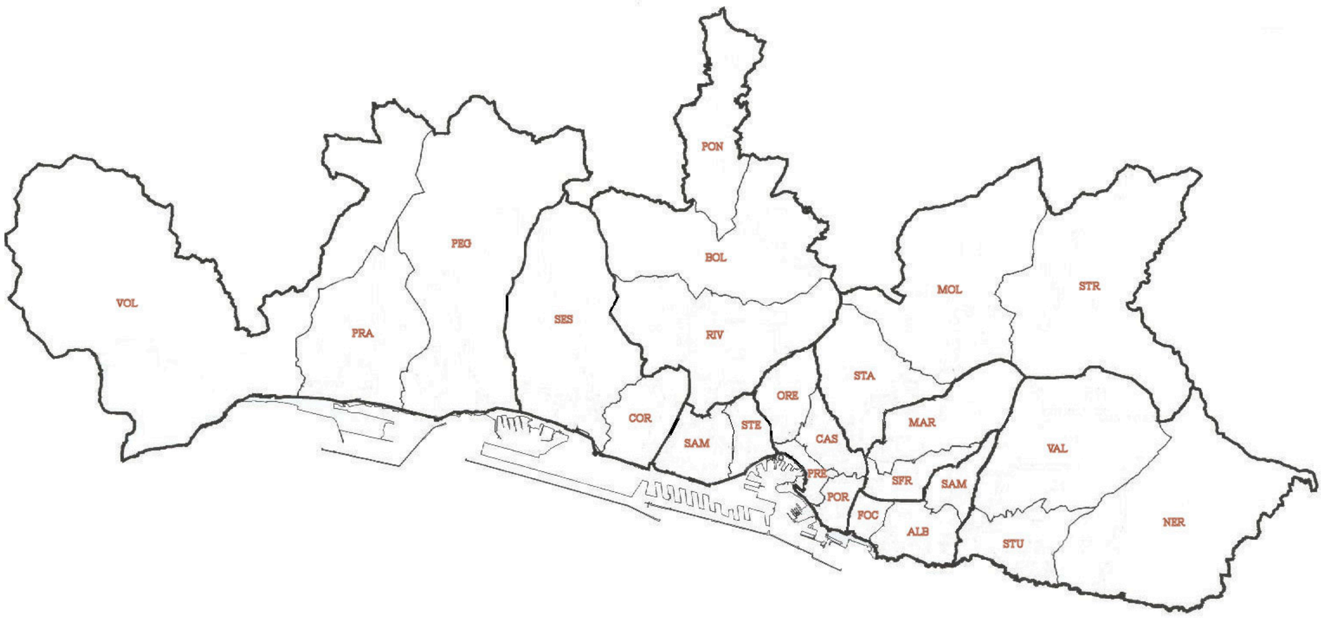

Figure 1. Neighbourhoods of Genoa.

It is largely made up of long-term residents of the neighbourhood. Table 1 shows that the highest relative percentage of respondents is in the category of those who have been residents in a neighbourhood for more than 46 years. Only 4% of respondents have been living in their neighbourhood for less than 5 years. Overall, 76% of respondents have been living in their neighbourhood for at least 26 years. The extended residence in the neighbourhood reveals respondents' awareness of the issues that characterize their neighbourhood and, subsequently, their ability to critically assess the situation in their neighbourhood and the condition of LPT.

Table 1. Years of residence in the interviewees' neighbourhood.

Duration of Residence in the Neighbourhood	Total Respondents	Relative Percentage
Over 46 years	157	39%
Between 36 and 45 years	80	20%
Between 26 and 35 years	68	17%
Between 16 and 25 years	56	14%
Between 6 and 15 years	24	6%
Less than 5 years	16	4%

The answers given by the individual respondents in the questionnaire represent the basis for the data. Subsequently, for each variable selected, the average was calculated for the 25 Genoese districts. In this way, it was possible to obtain a score at neighbourhood level for each variable.

For each dimension, the numerical profile associated with each neighbourhood is represented by the sequence of the averages obtained on the different variables. This profile identifies the perception of neighbourhoods relating to three different subjective dimensions: Perceived quality of LPT, perceived quality of pedestrian mobility, and perceived quality of neighbourhood (Table 2).

As stated by Kim et al. [1], mobility is related to an individual's perception of the quality of life after having given up driving and potentially having to face a lack of public transport. Older drivers, especially aged over 75 years, have increasing "navigational" problems, particularly when travelling through unfamiliar areas [36]. Quality of LPT, pedestrian mobility, and the quality of neighbourhood become particularly important for maintaining elderly well-being [68], and the perception indicates individuals' satisfaction with the dimensions under consideration. Dimensions and variables were chosen on the basis of the scope of the analysis and the principal literature on elderly mobility [25,34,36,65,69–73].

All three dimensions are on a scale of range 1–10.

Table 2. Dimensions and variables of the analysis.

Perceived Quality of LPT (Scale 1–10)	Perceived Quality of Pedestrian Mobility (Scale 1–10)	Perceived Quality of Neighbourhood (Scale 1–10)
What is your opinion about the frequency of LPT? [Variable 1]	What is your opinion about the condition of the platforms for pedestrian mobility? [Variable 1]	How satisfied are you with your neighbourhood with regard to community centres? [Variable 1]
What is your opinion about safety at stops of LPT? [Variable 2]	What is your assessment of maintenance and cleanliness for pedestrian mobility? [Variable 2]	How satisfied are you with the green spaces in your neighbourhood? [Variable 2]
How do you rate comfort on board of LPT? [Variable 3]	What is your opinion of lighting for pedestrian mobility? [Variable 3]	How satisfied is your neighbourhood with the presence of commercial activities? [Variable 3]
How do you rate the ease of boarding and disembarking in LPT? [Variable 4]	What is your opinion about the safety of pedestrian mobility when walking? [Variable 4]	How satisfied is your neighbourhood with the proximity of public transport? [Variable 4]
How do you rate safety on board of LPT? [Variable 5]		How satisfied is your neighbourhood with the general feeling of security? [Variable 5]

4. Methodology

The most commonly used methods to obtain a hierarchy have recourse to aggregation [74–77]. Despite their widespread use in multiple fields of analysis, aggregative methods suffer different criticalities, so they must be used applying specific precautions [61,62,78]. However, the requirements to obtain synthetic measurements of complex phenomena do not necessarily require aggregation.

The non-aggregative approach adopted allows one to overcome the problems that aggregative methods present. For example, given a certain phenomenon, distorting compensative effects related to the aggregation of distinct non-substitutable dimensions can be overcome using non-aggregative methods. Comparing elements that are sometimes very distant from each other, due to the characteristics of their variables, is another serious problem that particular non-aggregative methods allow us to resolve [79].

Under this paradigm, one of the best known non-aggregative methods is based on the Partially Ordered Set theory, indicated with the acronym "Poset" [20,80–82]. Poset is a technique that can be applied to study multidimensional systems [79,83,84]. The use of the Partially Order Set is also connected to the need for and possibility of processing data without altering their nature [20].

In order to understand the Poset methodology, some definitions are needed.

A partially ordered set (or Poset) is a set $\Omega(\pi)$ equipped with a partial order relation $\trianglelefteq$, i.e., a binary relation satisfying the properties of reflexivity, antisymmetry, and transitivity [85–87].

Each element (or statistical unit) forming an ordered structure is associated with a profile, i.e., a sequence of integers within a range to which all the values of the different indicators are traced.

Where there is a comparability relation between two elements of the structure, i.e., it is possible to make a comparison between them ($q \leq p$ or $p \leq q$), statistical units are comparable. In this case, the partial order is called linear order or complete order. Otherwise, the two units are termed incomparable.

Describing a comparability relation using the corresponding coverage allows us to provide a comfortable graphical representation, known as a Hasse diagram (see Figures 2–4). A Hasse diagram is the natural way to present the scheme of comparability (and incomparability) of Poset.

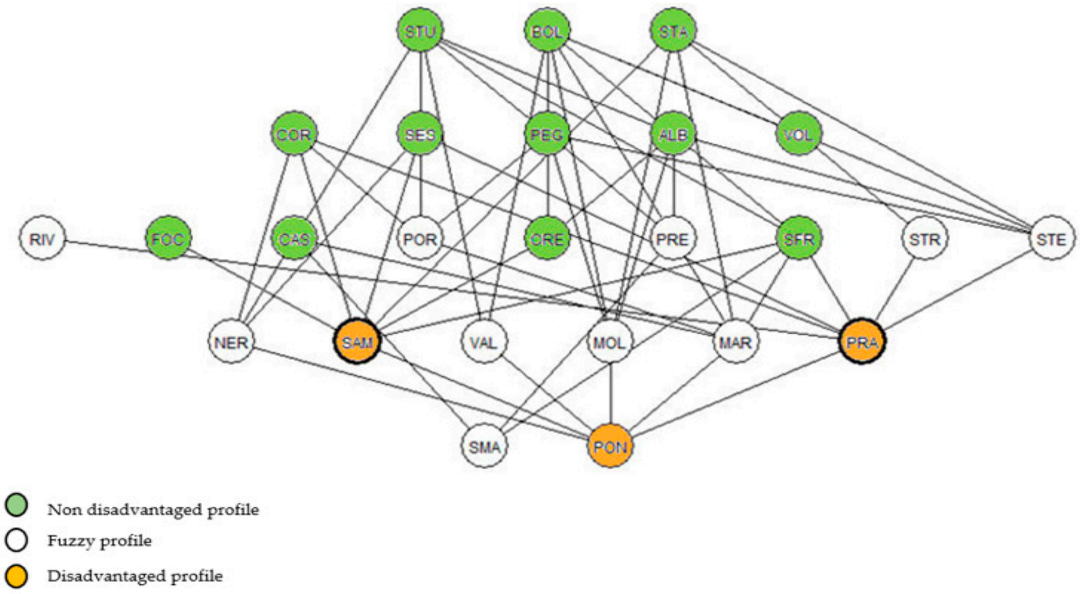

Figure 2. Hasse diagram of perceived quality of LPT.

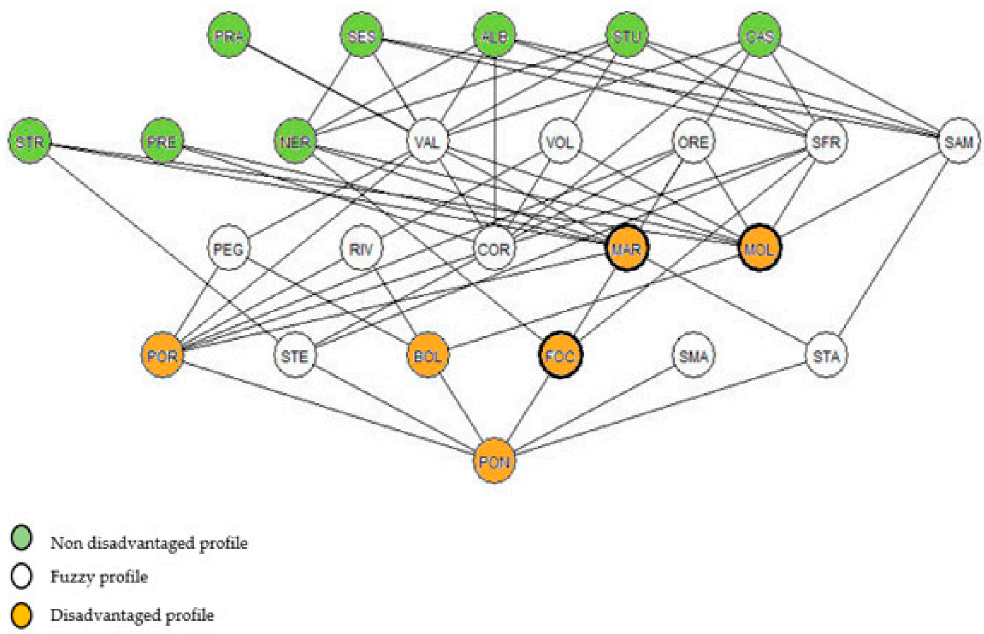

Figure 3. Hasse diagram of perceived quality of pedestrian mobility.

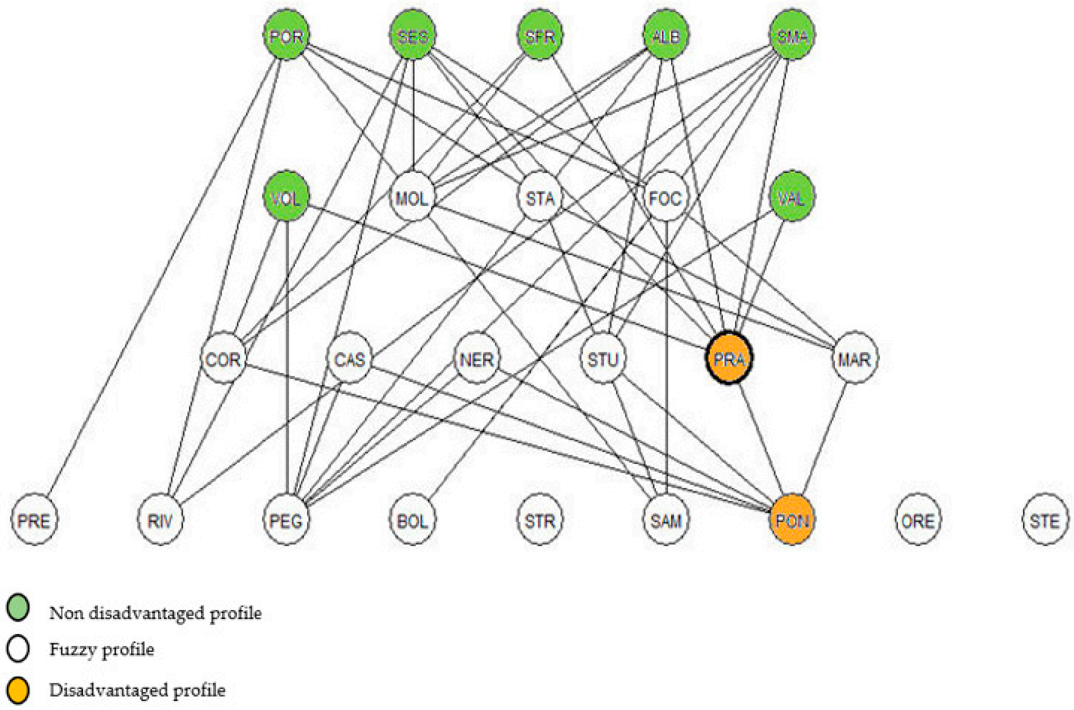

Figure 4. Hasse diagram of perceived quality of neighbourhood.

It is an acyclic oriented graph, which is drawn according to the following rules:

- If $q \leq p$, the node q is placed lower than the node p;
- If $q \prec p$, an edge is inserted between them (the edge is not graphically oriented, because the diagram naturally reads from top to bottom).

The procedure described by Fattore [82] consists of assigning a finite Poset a score to each element representing its position in a "low-high" axis. In this way, we obtain the average rank, i.e., the average position assumed by a profile in each of the considered linear extensions. By using average ranks, it is possible to solve any incomparability in a hierarchical perspective. The lower the average rank, the better the position taken by the profile in the order.

Average rank, identification, and severity values are the most important measures provided by Poset theory. They give us a variety of information, oriented to an analysis in depth of a given phenomenon, so it is advisable to use them jointly in the analysis [84].

To apply the identification and severity functions, it is necessary to identify threshold profiles [79]. In our analysis, threshold profiles are the neighbourhoods that present judgements on each variable of a given size below average. The evaluation of the threshold occurs at the level of a single variable (for the average) and, subsequently, by the combination of the different variables referring to a single dimension.

As a result, each dimension will have different threshold cut-off values from other dimensions. This allows us to assess cases of LPT perception from a relative perspective, leading the assessment back to comparisons, not in absolute terms.

Generally speaking, the threshold identifies those neighbourhoods where the perception of a component is negative. In order to better understand the results obtained, it is important to specify that the threshold neighbourhoods, or those below it, are neighbourhoods where there is a perception of disadvantage with regard to the quality of the LPT service, pedestrian mobility, and one's own neighbourhood.

In detail, we have identified the thresholds considering the values schematised in Table 3.

Table 3. Cut-off for threshold determination.

Perceived Quality of LPT	Cut-Off (<Mean Values)	Perceived Quality of Pedestrian Mobility	Cut-Off (<Mean Values)	Perceived Quality of Neighbourhood	Cut-Off (<Mean Values)
Variable 1	<5.04	Variable 1	<4.10	Variable 1	<4.20
Variable 2	<5.24	Variable 2	<4.14	Variable 2	<4.34
Variable 3	<4.37	Variable 3	<5.55	Variable 3	<5.13
Variable 4	<4.41	Variable 4	<4.90	Variable 4	<5.32
Variable 5	<4.87			Variable 5	<4.64

The fourth step consists of the evaluation procedure to identify disadvantaged neighbourhoods in the distribution. This step involves the use of the identification function and, subsequently, the severity function in the ambit of Poset theory.

The identification function can assume, as can the severity function, values in [0, 1]. In these terms, negatively perceived profiles are identified comparing them to some reference configurations or benchmarks, i.e., threshold profiles.

The motivation behind this approach is to inject a minimum set of normative information into the process, leaving the evaluation procedure to assess the deprivation degree of all the other profiles. This leads to the identification step of the evaluation process, in which the identification function is built. Next, the severity assessment step measures the negative-perception intensity of profiles with non-null perception levels.

For exhaustive definitions of "linear extension", "average rank" calculation procedure, identification and severity functions, and relative formalisations, see Fattore [20,82].

More in general, the strengths that emerge from this application of the Poset method can be defined as follows: The analysis based on Poset method provides, through the Hasse diagrams, an immediate synthesis of the phenomenon. It can be considered as a sort of exploratory analysis that shows a preliminary image of the phenomenon under scrutiny. In addition, we can study the structure of the comparability present in each partially ordered structure and analyse the frame in terms of uncertainty of the relations between statistical units. This information is relevant to understand a phenomenon without flattening its complexity.

The measure obtained is more efficient than any synthesis through the aggregative approach. The non-aggregative method defines measures by a profile analysis. This avoids the implementation of some procedures of data pre-processing (excluding the need to invert polarity if negative): In particular, no normalization or aggregation of basic indicators is necessary. As a result, it allows a greater discriminatory capacity than that of the aggregative methods.

Moreover, the average rank obtained from the Poset analysis is a position index, which is an easy-to-understand and non-distortive measurement system. In other words, no artificially created measurements are introduced by an externally borrowed reference value, as is the case with normalization. On the contrary, the average rank value comes from the analysis of the relationships that characterize the initial structure.

5. Results

The analysis has been developed in four steps:

- In the first step, we analyse the Hasse diagrams to assess the hierarchical relations between the different neighbourhoods;
- Subsequently, we adopt the synthetic measures provided by the average ranks to solve any incomparability in a hierarchical perspective;
- In the third step, we determine the mean values for each variable, in order to perform identification and severity functions in the last step;
- Finally, in order to analyse the information collected from the Hasse diagrams and the average rank values, we analyse the results deriving from the application of the identification and severity functions.

5.1. Local Public Transport Perceived Quality

Neighbourhoods that are higher up in the partially ordered structure of LPT perceived quality (Figure 2) are STU, BOL, and STA. Neighbourhoods placed at the same height are impossible to compare because of their profile's composition. In other words, we are unable to establish with certainty which of these neighbourhoods show the best perception of LPT. STA shows values below the average frequency of the LPT (5.00). On the other hand, it shows the highest values in the judgement of safety at stops (6.91) and comfort during boarding and alighting (5.73). BOL is first in the perception of comfort onboard (6.30) and ranks second in security onboard (5.90), below STU (6.44), comfort during boarding and alighting (5.40), and safety at stops (6.60). In the case of STU, in addition to the feelings of security onboard, it ranks in a high position in the perception of comfort onboard (second, average score of 5.56).

If we look at neighbourhoods placed on the underlying level, we see that they are all dominated by a superior neighbourhood, with the sole exception of COR, incomparable with the three highest neighbourhoods. The element that determines its incomparability is the judgement on the frequency of the LPT vehicles, which is much higher in the district of COR (6.40) than in STU (5.81), BOL (5.20), and STA (5.00). Between the other neighbourhoods placed at the same level of COR, we have the following relations: SES≺STU, PEG≺STU, ALB≺STU, and VOL≺BOL, VOL≺STA. VOL and PEG show a perception below the average, respectively, in frequency of the LPT (4.38) and safety at stops (5.00). In detail, VOL is particularly well-placed for the perception of comfort during boarding and alighting (third, 5.38), and is part of the top 5 neighbourhoods for comfort on board (5.13). PEG is fourth for safety on board (5.45), while ALB is fifth in the perceived safety at stops (5.95).

The profiles of the districts on the third level of the Hasse diagram differ from each other. Among the most evident peculiarities we note RIV and FOC, which are not dominated by any neighbourhood. In RIV and FOC, there is a high perception about the frequency of TPL (6.35 and 5.86). On the basis of the judgement of their residents, RIV and FOC particularly suffer with regards to safety at stops (under average, 5.21 and 5.15) and safety onboard (4.64, 3.95). In addition, FOC is below average in the perception of comfort onboard (3.93), a variable in which it ranks twentieth.

On the fourth level of the Hasse diagram are the threshold profiles of SAM and PRA. Underneath them are the SMA and PON districts. While the latter is the neighbourhood where all aspects of LPT are perceived as the worst, the former shows a good perception of safety onboard (5.36). SMA is not dominated by any neighbourhood on the level above. At the same time, SMA does not prevail over any neighbourhood. The only relations that we can determine with certainty between SMA and other neighbourhoods are the following: SMA≺CAS, SMA≺PRE, SMA≺SFR.

5.2. Pedestrian Mobility Perceived Quality

Looking at Figure 3, we can see that concerning the perceived quality of pedestrian mobility, the picture is fuzzy. Five neighbourhoods, i.e., PRA, SES, ALB, STU, and CAS, occupy the highest level of the partially ordered structure. PRA is first for the perceived state of the sidewalks (6.00), while the perception of quality substantially decreases if we move to maintenance and cleaning of pedestrian areas (4.00, under the mean) and lighting (5.67). SES shows a lower variability of assessment than PRA. It ranks third in the state of the sidewalks (5.12), second in maintenance and cleaning of pedestrian areas (5.38), and second again if we consider the assessment of the safety of walking (6.04). The variable where the perception is less satisfactory than the previous ones is lighting (ninth place, 5.88). ALB ranks first in perceived safety of walking (6.12), while in the other variables, it occupies between the fourth and the tenth positions. STU and CAS show their best perceptions in safety of walking (third, 5.97) and maintenance and cleaning of the streets (third, 5.31), respectively.

On the level below, STR and PRE are not dominated by any neighbourhood. According to the respondents' opinion, STR's strengths are in pedestrian mobility for the good condition of the pavements (second, 5.31) and for the maintenance and cleanliness of urban areas (first, 5.54). Weaknesses emerge, however, on the side of pedestrian space lighting (5.15, under the mean) and walking safety (4.69, under the mean). In PRE, a negative opinion is expressed on the safety of walking (twentieth, 4.45).

On the third level of the Hasse diagram, it is possible to identify two threshold profiles, i.e., MAR and MOL. On this same level, RIV is not dominated by any neighbourhood. The reason is the high perception of lighting quality (second, 6.65) by the residents of the neighbourhood.

The third threshold is FOC. It is placed at an inferior level compared to MAR and MOL because of the fewer number of relations and the incomparability with neighbourhoods that are dominated by MAR and MOL (POR≺MAR, BOL≺MOL). SMA's profile is anomalous. It establishes a single relation (PON≺SMA). SMA shows below-average judgment due to poor pavement condition (3.36) and poor safety perception when walking (4.82). On the contrary, the positive opinion for the lighting of its pedestrian areas (third, 6.27) places SMA in a fuzzy position.

PON is unequivocally placed alone in the last position. All neighbourhoods have an overall perception of pedestrian mobility better than PON.

5.3. Neighbourhood Perceived Quality

Shifting the focus to assessments of the quality of neighbourhoods, we see that POR, SES, SFR, ALB, and SMA are placed above all the others (Figure 4). At the same time, this indicates that it is impossible to make many comparisons among the best perceived neighbourhoods without incurring forcing or compensation. POR residents have a good perception of the presence of aggregation centres (5.05) and the proximity to public transport (6.18). On both variables, POR is the neighbourhood with the best records. Moreover, POR is second only to SES when we consider the perception of presence of commercial activities in the neighbourhood (6.27). The evaluations decrease in the feeling of security of the neighbourhood (eighth, 5.05) and, above all, for the low perceived presence of green spaces (fourteenth, 4.32). SES has a very good appreciation of the presence of aggregation centres (second, 4.96), shopping centres (first, 6.35), and proximity to public transport (third, 6.08). ALB is the neighbourhood where the highest level of security is perceived (5.60).

VOL and VAL, despite the fact they are placed at a lower level than the previous, are not dominated by any neighbourhood. Remaining at this level, VOL and VAL are also the only neighbourhoods that prevail over the threshold profile, identified in the neighbourhood of PRA. At this height, CAS and NER are not dominated, but they in turn prevail over only two neighbourhoods, placed at the base of the Hasse diagram (PEG≺CAS, PON≺CAS, PEG≺NER, PON≺NER).

At the base of the diagram, we find mainly two types of profiles: RIV, PEG, SAM, and PON, where overall, a negative perception of neighbourhood factors is detected, and STR, ORE, and STE that do not establish any relationship within the partially ordered structure. This is due to the uneven results that STR, ORE, and STE show on the different variables. In all three neighbourhoods, the perception regarding the presence of aggregation centres is negative, between the twenty-first and the last position. On the contrary, the judgement about the presence of green spaces fills the most part of the ranking. STE ranks first (5.58), STR ranks third (5.46), and ORE occupies the eighth position (5.00) on this variable. ORE (4.15), STR (4.08), and STE (3.67) are, in sequence, placed below the average value from position twenty-three to position twenty-five on the variable that indicates the assessment of the presence of commercial activities. Residents of ORE and STE judge their neighbourhood with a score on the average for proximity to public transport (5.77 and 5.50 respectively), while a more negative judgment is associated with STR (twenty-second, 4.77). The perception of safety in the three neighbourhoods is high on average, with values oscillating between the sixth and eleventh position.

5.4. Average Rank Values

Table 4 shows the average rank values for each dimension. STU shows a low average in the perceived quality of LPT (1.80) and perceived quality of pedestrian mobility (3.97), while it increases in perceived quality of the neighbourhood (15.70). In the first two dimensions, STU has the lowest average ranks of the entire distribution. BOL shows a high deviation between the LPT judgement, positive with an average rank of 3.58, and pedestrian mobility, judged to be deficient (22.55). The negative perception of urban mobility within the neighbourhood, in the case of BOL, also affects the judgement assigned to the neighbourhood (18.78). STA has similarities with BOL. The judgement on LPT is among the most positive (4.93). On the other hand, the perception worsens when the questions concern the quality of pedestrian mobility (18.86). Perception improves with regards to the neighbourhood (12.10). PEG presents a good perception of the LPT service (5.99), while multiple criticalities emerge in the judgment given on neighbourhood factors (20.65). ALB shows average low rank values on the three dimensions. ALB's average ranks are equal to 4.42, 5.71, and 6.18 considering LPT, pedestrian mobility, and quality of neighbourhood, respectively. SES is most similar to ALB; it tends to show low average rank values in all three dimensions. Particularly, in the cases of perceived quality of pedestrian mobility and perceived quality of the neighbourhood, SES ranks 4.42 and 4.33, respectively.

The analysis of the average rank values confirms oscillating results for POR. It ranks 4.00 for the perceived quality of neighbourhood, establishing the lowest average rank value in that dimension. Respondents become more critical regarding the perception of LPT (15.86) and, in particular, the assessment of the quality of pedestrian mobility (22.53). Another interesting case is represented by SMA (5.39 in neighbourhood, 12.48 in pedestrian mobility, 20.62 in LPT) and PRA (6.61 in pedestrian mobility, 18.11 in neighbourhood, 21.94 in LPT). The most critical views concern SAM, MAR, and PON, where the perceptions are the worst on all three dimensions.

It is also possible to observe how the average rank is complementary to the correct reading of doubtful cases, i.e., those cases that are difficult to clarify simply from the Hasse diagram. Resuming the comment of Figure 2, for example, we have identified RIV, FOC, and SMA as fuzzy cases. Looking at the average rank values (Table 4), we see that RIV and FOC ranks 10.93 and 10.41, respectively, better than VOL that, despite being placed at an upper level, is dominated by two neighbourhoods. The average rank confirms negative judgements by inhabitants of SMA. It assumes, in fact, a value equal to 20.62.

Looking at Figure 4, the average rank can usefully evaluate the situation of some neighbourhoods. SMA, despite its low placement within the Hasse diagram, ranks 12.48. A similar consideration applies to RIV. Among the threshold profiles, MAR establishes an average rank value lower (17.97) than MOL (19.69) and FOC (19.52).

In the ambit of perceived neighbourhood quality (Figure 3), cases of difficult evaluation are STR, ORE, and STE, incomparable with all other units. In these terms, average rank values (Table 4) indicate that their perception can be roughly traced back to a median position within the distribution (13.03).

Table 4. Average rank values.

COD	Average Rank—Perceived Quality of LPT	Average Rank—Perceived Quality of Pedestrian Mobility	Average Rank—Perceived Quality of Neighbourhood
ALB	6.18	4.42	5.71
BOL	3.58	22.55	18.78
CAS	9.19	4.80	10.14
COR	7.18	15.99	17.01

Table 4. *Cont.*

COD	Average Rank—Perceived Quality of LPT	Average Rank—Perceived Quality of Pedestrian Mobility	Average Rank—Perceived Quality of Neighbourhood
FOC	10.41	19.52	11.11
MAR	21.23	17.97	19.86
MOL	16.67	19.69	14.09
NER	18.42	11.42	10.14
ORE	14.30	8.36	13.03
PEG	5.99	12.77	20.65
PON	24.89	25.00	23.99
POR	15.86	22.53	4.00
PRA	21.94	6.61	18.11
PRE	13.52	7.39	15.05
RIV	10.93	10.78	16.62
SAM	20.81	12.31	20.86
SES	8.10	4.42	4.33
SFR	10.95	11.98	6.32
SMA	20.62	12.48	5.39
STA	4.93	18.86	12.10
STE	15.20	19.30	13.03
STR	16.61	8.03	13.03
STU	1.80	3.97	15.70
VAL	14.45	14.10	8.52
VOL	11.23	9.76	7.42

5.5. Correlations and Other Poset Functions

Analysing the correlations between the average ranks of the three dimensions, the absence of significant relationships emerges. All correlations oscillate between the value 0.1 and 0.2 of Pearson's correlation coefficient. This means that the perceived differences between the various dimensions are significant. To address situations perceived as more disadvantaged, local authorities should conceivably implement many and various actions according to the different needs expressed by the residents of each neighbourhood.

The neighbourhoods that show a real weakness in the perceived quality of LPT are represented in Table 5 by *idn* and *svr* values. More in detail PON, PRA, and SAM (idn = 1) show a strong weakness in LPT perceived quality.

Among these three neighbourhoods, the intensity of negative perception is particularly severe in the case of PON (svr = 0.98), and it decreases at PRA (svr = 0.49) and SAM (svr = 0.35).

As regards the perceived quality of pedestrian mobility, we see that BOL, FOC, MAR, MOL, PON, and POR present an idn value equal to 1. They can be defined as completely disadvantageous, i.e., neighbourhoods with a completely negative perception of their pedestrian mobility. In particular, PON, with a svr value equal to 1.00, shows the highest intensity of negative responses, followed by BOL and POR (0.74), FOC (0.44), MOL (0.43), and MAR (0.28).

Focusing our attention on the perceived quality of the neighbourhood, PON and PRA show an idn value equal to 1.00. The svr value is higher for PON (0.87) than PRA (0.17).

Table 5. Identification and severity functions' values.

Neighbourhood	Perceived Quality of LPT		Perceived Quality of Pedestrian Mobility		Perceived Quality of Neighbourhood	
	idn	svr	idn	svr	idn	svr
ALB	0.00	0.00	0.00	0.00	0.00	0.00
BOL	0.00	0.00	1.00	0.74	0.55	0.35
CAS	0.03	0.01	0.00	0.00	0.15	0.06
COR	0.00	0.00	0.49	0.22	0.43	0.22
FOC	0.04	0.02	1.00	0.44	0.12	0.04
MAR	0.65	0.41	1.00	0.28	0.63	0.36
MOL	0.32	0.18	1.00	0.43	0.22	0.07
NER	0.42	0.24	0.00	0.00	0.15	0.06
ORE	0.07	0.03	0.06	0.02	0.30	0.18
PEG	0.00	0.00	0.30	0.12	0.68	0.47
PON	1.00	0.98	1.00	1.00	1.00	0.87
POR	0.21	0.09	1.00	0.74	0.00	0.00
PRA	1.00	0.49	0.01	0.00	1.00	0.17
PRE	0.10	0.03	0.04	0.01	0.36	0.22
RIV	0.09	0.04	0.24	0.10	0.43	0.26
SAM	1.00	0.35	0.18	0.05	0.70	0.48
SES	0.00	0.00	0.00	0.00	0.00	0.00
SFR	0.00	0.00	0.10	0.03	0.00	0.00
SMA	0.59	0.40	0.35	0.19	0.00	0.00
STA	0.00	0.00	0.71	0.41	0.17	0.06
STE	0.15	0.07	0.76	0.43	0.29	0.18
STR	0.21	0.10	0.03	0.01	0.30	0.18
STU	0.00	0.00	0.00	0.00	0.36	0.18
VAL	0.24	0.14	0.29	0.10	0.00	0.00
VOL	0.05	0.02	0.16	0.05	0.00	0.00

6. Discussion and Conclusions

Elderly mobility can favour healthy, independent, and socially connected living, increasing older adults' well-being [88]. On the contrary, deprivation of accessibility can lead to social exclusion intended as the incapacity to participate in social activities and has a negative impact on the quality of life. Furthermore, higher levels of mobility and participation in social and physical activities are normally associated with greater life satisfaction [89]. The need for social interaction continues in later life and it is a prerequisite for active ageing. Rambaldini-Gooding et al. [90] conducted an extensive literature review that investigated the impact of urban transport on the health and wellbeing of older adults.

As stated by Mariotti et al. [91], the conditions of the neighbourhood where older adults live become increasingly important. Fobker and Grotz [92] explored everyday mobility of elderly people in different urban settings, and they found that increasing age is marked by a withdrawal away from the public to the private sphere and this behaviour is reflected by a shrinking of the activity space. The district or neighbourhood of residence is typically where the elderly move around most on foot or by LPT. This increases with advancing age, as navigational or traffic problems make using the car less frequent [93–96].

In this work, we identify issues at neighbourhood level and their impact on local elderly mobility, with the aim of providing policy guidelines.

The decision to break down the aggregate of the City of Genoa into smaller units of analysis, i.e., the 25 districts of the city, was determined by the mobility characteristics of the over-65s. The city overall is not the most effective unit of analysis to capture the specific problems of elderly mobility and therefore to design policy solutions The district or neighbourhood of residence is typically where the elderly move around the most on foot or by LPT. This increases with advancing age, because navigational or traffic problems make the use of a car less frequent [93–96].

The administrative units have different opinions regarding the three dimensions investigated (perceived quality of local public transport, perceived quality of pedestrian mobility, and perceived quality of life in the neighbourhood). Similarly, a broad range of opinions emerge regarding the variables that make up each dimension, which show that respondents perceive the individual aspects of LPT, personal mobility, and neighbourhood quality differently. The results of the present work show that it is almost impossible to identify a substantial trend: Indeed, by performing a correlation analysis, we see that there are no significant relationships between the three dimensions. For this reason, we propose an in-depth analysis using Poset methodology.

This approach has allowed us to compare the perceptions that characterise the neighbourhoods across the three dimensions. Bearing in mind the distinctive features of each district, the non-aggregative approach based on Poset theory has avoided the risk of making inappropriate comparisons.

Poset methodology identified the dimensions to investigate in the various neighbourhoods, plus the type of specific investigation (produced by the variables of the analysis) that, according to the collective perception, is most significant.

The analysis shows that the types of intervention requested by respondents differ from district to district. Interventions should be carefully modulated, recognising the particularities of each case and the priority. Regarding the question of elderly mobility, some neighbourhoods highlight the need to improve pedestrian mobility, whilst in others, LPT criticalities dominate. Within each dimension, seniors' perceptions relating to individual variables are disaggregated, thereby allowing micro-targeted responses at the neighbourhood level, where specific problems emerge to improve mobility.

Certain neighbourhoods (e.g., PON) in a certain dimension (e.g., pedestrian mobility) have a disadvantage compared to other neighbourhoods. The analysis also allows one to get into specifics on the dimension and the neighbourhood (e.g., pedestrian mobility of PON), identifying the particularly critical elements within that dimension and that neighbourhood, in order to then micro-target the public administration's effort (for example, intervening on the specific criticality of lighting in the pedestrian paths of a certain neighbourhood).

The analysis also shows that three districts of Genoa are higher in the perceived quality dimension of the TPL (STU, BOL, STA), while there are five in the perceived quality of pedestrian mobility and five in the perceived quality of the neighbourhood. The TPL therefore seems to be the most critical area, thus indicating the necessity of concentrating the efforts of the Public Administration for an inclusive mobility of the elderly.

The method used is therefore effective in helping the public administration to choose suitable strategies for inclusive mobility of the elderly. It makes it possible to identify, for each neighbourhood, the critical dimensions (LPT, pedestrian mobility, quality of neighbourhood) and specific actions required by a community that knows its mobility needs. The main findings of the work are:

- The city as a whole is not the correct analysis unit to identify mobility interventions in favour of the elderly;
- The elderly are aware of their neighbourhood and the mobility key elements that characterize it: They perceive the individual aspects of TPL, pedestrian mobility, and the quality of the neighbourhood;
- The perceived differences between the various dimensions and the different neighbourhoods are significant.

To address situations perceived as more disadvantaged, local authorities should conceivably implement differentiated actions according to the different needs expressed by the residents of each neighbourhood.

7. Conclusions

This work does not identify a neighbourhood that is better overall than others. There may in fact be a neighbourhood that is disadvantaged in one dimension but advantaged in another with data that do not allow to identify the absolute best score.

Through the Poset, we have identified the specific areas of criticality, according to the respondents, for each dimension analysed (perceived quality of LPT, perceived quality of pedestrian mobility, perceived quality of neighbourhood) in the different neighbourhoods.

The objective of the work is not to hierarchize the different neighbourhoods according to perceptions, but to compare and analyse them in a relative perspective, to identify advantaged and disadvantaged dimensions and specific aspects of each dimension. We compare the results obtained for the various neighbourhoods to identify policies that address the needs of the elderly community. Having identified the disadvantaged dimensions on the single neighbourhood and the specific disadvantaged aspects of each dimension, public authorities should be able to draw more precise indications about specific targets to meet, in order to improve the mobility of the elderly.

Our work, however, has two limitations. The first concerns the choice of the variables. In fact, there is a risk of designing different mobility policy and measures just on the basis of the variables used. Generally speaking, it is important to bear in mind that each local community may have differing priorities about which measures to adopt regarding the problems perceived in the dimensions. Consequently, a preliminary analysis may help to identify the most urgent issues. For example, focus groups prior to the analysis might be worthwhile, in order to choose the variables according to the sentiment of the target community. The variables identified could also change from one district to another.

A second limitation relates to the nature of subjective variables, always influenced by respondents' capacity to adapt to disadvantageous situations [96] and their expectations [97]. Subjective variables notoriously suffer from the tendency on the part of respondents to offer opinions that are implicitly affected by a comparison between their actual state or condition and that of their neighbours [91,98]. To prevent this, our sample was made by considering the years of residence in the neighbourhood as a decisive factor. In this way, we sought to limit the risk that a respondent's assessment about how their district has changed becomes essentially a comparison between the neighbourhood they live in now and the one where they lived in the past.

Finally, this work does not consider the objective elements of the urban public mobility equipment. Future work, starting from the subjective approach adopted here, should focus on the comparison between the objective characteristics of mobility (e.g., number of bus lines in relation to the size of the population, bus frequency, number of accidents involving elderly pedestrians, etc.) and the quality of the neighbourhood (e.g., number of shops in relation to the size of the population, green areas, number of attacks on old people, etc.). Such a research design will allow cross-validation along the objective-subjective analysis trajectory and will provide more exhaustive insights about mobility situation.

Author Contributions: Writing—original draft preparation, C.B., A.C. and E.I. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Statistics variables.

Dimension	N	Min	First Quartile	Median	Mean	Third Quartile	Max
What is your opinion about the frequency of LPT?	25	3.89	4.44	5.09	5.04	5.43	6.40
What is your opinion about the safety at stops of LPT?	25	2.33	4.87	5.15	5.24	5.68	6.91
How do you rate comfort on board of LPT?	25	2.73	4.00	4.39	4.37	4.68	6.30

Table A1. *Cont.*

Dimension	N	Min	First Quartile	Median	Mean	Third Quartile	Max
How do you rate the ease of boarding and disembarking in LPT?	25	2.56	4.05	4.46	4.41	4.91	5.73
How do you rate the safety on board of LPT?	25	2.33	4.62	5.00	4.87	5.36	6.44
What is your opinion of the condition of the platforms for pedestrian mobility?	25	3.00	3.58	4.00	4.10	4.43	6.00
What is your assessment of maintenance and cleanliness for pedestrian mobility?	25	2.33	3.75	4.07	4.14	4.41	5.54
What is your opinion of lighting for pedestrian mobility?	25	4.33	5.00	5.67	5.55	6.18	6.75
What is your opinion on the safety of pedestrian mobility when walking?	25	3.22	4.50	4.80	4.90	5.11	6.12
How satisfied are you with your neighbourhood with regard to community centres?	25	3.08	4.00	4.16	4.20	4.60	5.05
How satisfied are you with the green spaces in your neighbourhood?	25	2.46	3.70	4.33	4.34	5.24	5.58
How satisfied is your neighbourhood with the presence of commercial activities?	25	3.67	4.54	5.13	5.13	5.64	6.35
How satisfied is your neighbourhood with the proximity of public transport?	25	3.44	5.00	5.28	5.32	5.80	6.18
How satisfied is your neighbourhood with the general feeling of security?	25	2.96	4.27	4.83	4.64	5.10	5.60

Table A2. Coding and stratification for amount of population of the sample.

Neighbourhood	Code	Percentage of the Neighbourhood's Population
Bolzaneto	BOL	2.52
Castelletto	CAS	4.79
Cornigliano	COR	2.57
Foce	FOC	2.70
Marassi	MAR	6.76
Molassana	MOL	4.22
Nervi-Quinto-S.Ilario	NER	3.26
Oregina	ORE	4.13
Pegli	PEG	4.50
Pontedecimo	PON	2.09
Portoria	POR	2.15
Prà	PRA	3.45
Prè-Molo-Maddalena	PRE	4.28
Rivarolo	RIV	5.70

Table A2. *Cont.*

Neighbourhood	Code	Percentage of the Neighbourhood's Population
Sampierdarena	SAM	7.48
San Fruttuoso	SFR	5.90
San Martino	SMA	2.57
San Teodoro	STE	3.60
Sestri	SES	7.66
S. Francesco d'Albaro	ALB	4.85
Staglieno	STA	3.51
Struppa	STR	1.71
Sturla-Quarto	STU	5.03
Valle Sturla	VAL	2.45
Voltri	VOL	2.10

Table A3. Female resident population by age group respect to neighbourhood's population.

Neighbourhood	65–69	70–74	75–79	over 80
BOL	6.43	6.67	6.63	12.68
CAS	6.73	6.40	6.35	11.14
COR	6.18	5.57	5.15	12.78
FOC	7.32	7.35	6.84	12.47
MAR	6.05	6.67	6.89	10.58
MOL	7.34	6.57	7.13	10.53
NER	6.97	7.07	7.88	11.19
ORE	6.26	5.85	6.43	10.21
PEG	7.14	6.78	6.93	10.89
PON	6.04	5.89	6.02	12.35
POR	6.98	6.78	6.74	12.45
PRA	6.77	6.81	6.54	6.75
PRE	5.37	4.86	3.58	13.51
RIV	5.92	5.99	5.63	12.89
ALB	6.67	7.04	7.29	13.42
SFR	6.38	6.63	6.70	14.43
SMA	6.64	6.50	7.92	12.42
STE	6.80	6.25	7.06	11.37
SAM	6.11	6.03	5.89	11.36
SES	6.32	6.65	6.78	12.00
STA	6.29	6.09	6.66	12.73
STR	6.91	6.08	6.90	13.04
STU	6.36	6.67	7.16	14.83
VAL	7.11	6.82	7.13	13.02
VOL	7.27	6.88	6.75	13.37

Table A4. Male resident population by age group respect to neighbourhood's population.

Neighbourhood	65–69	70–74	75–79	over 80
BOL	6.04	5.97	4.76	6.55
CAS	6.84	6.06	5.44	7.92
COR	5.32	4.73	4.18	5.35
FOC	6.71	6.74	5.98	7.98
MAR	6.01	6.06	5.84	7.94

Table A4. *Cont.*

Neighbourhood	65–69	70–74	75–79	over 80
MOL	7.01	6.62	5.84	7.43
NER	7.25	7.25	5.92	9.02
ORE	5.29	5.38	4.96	7.12
PEG	6.82	6.33	5.99	8.80
PON	6.54	4.94	4.84	6.44
POR	6.75	6.48	5.77	8.18
PRA	6.50	5.63	5.27	6.06
PRE	5.47	4.03	2.97	2.79
RIV	5.95	5.51	4.87	5.97
ALB	6.52	6.75	6.17	8.95
SFR	6.27	6.09	6.03	8.27
SMA	5.73	6.27	5.83	8.22
STE	6.12	5.61	5.24	7.19
SAM	5.75	5.34	4.71	6.20
SES	6.41	6.00	5.72	7.52
STA	5.67	5.31	4.73	7.14
STR	6.94	5.92	5.31	7.35
STU	6.16	5.70	6.05	8.93
VAL	6.28	6.47	5.71	7.42
VOL	8.20	6.22	5.79	7.93

References

1. Kim, J.; Schmöcker, J.D.; Nakamura, T.; Uno, N.; Iwamoto, T. Integrated impacts of public transport travel and travel satisfaction on quality of life of older people. *Transp. Res. Part A Policy Pract.* **2020**, *138*, 15–27. [CrossRef]
2. Pinto, F.; Sufineyestani, M. Key characteristics of an age-friendly neighbourhood. *TeMA J. Land Use Mobil. Environ.* **2018**, 117–132. [CrossRef]
3. Levasseur, M.; Généreux, M.; Bruneau, J.F.; Vanasse, A.; Chabot, É.; Beaulac, C.; Bédard, M.M. Importance of proximity to resources, social support, transportation and neighborhood security for mobility and social participation in older adults: Results from a scoping study. *BMC Public Health* **2015**, *15*, 1–19. [CrossRef]
4. Scharf, T.; De Jong Gierveld, J. Loneliness in urban neighbourhoods: An Anglo-Dutch comparison. *Eur. J. Ageing* **2008**, *5*, 103. [CrossRef]
5. Metz, D.H. Mobility of older people and their quality of life. *Transp. Policy* **2000**, *7*, 149–152. [CrossRef]
6. Tiraphat, S.; Peltzer, K.; Thamma-Aphiphol, K.; Suthisukon, K. The role of age-friendly environments on quality of life among Thai older adults. *Int. J. Environ. Res. Public Health* **2017**, *14*, 282. [CrossRef] [PubMed]
7. Nieboer, A.P.; Cramm, J.M. Age-friendly communities matter for older people's well-being. *J. Happiness Stud.* **2017**, *19*, 2405–2420. [CrossRef]
8. Button, K.J. *Transport Economics*, 2nd ed.; Edward Elgar Publishing: Cheltenham, UK, 1993.
9. EUROSTAT. Population Structure Indicators, Record High Old-Age Dependency Ratio in the EU, Eurostat News. 2018. Available online: https://ec.europa.eu/eurostat/web/products-eurostat-news/-/DDN-20180508-1 (accessed on 11 May 2021).
10. ISTAT. *Il Futuro Demografico del Paese. Previsioni Regionali della Popolazione Residente al 2065*; ISTAT: Rome, Italy, 2018; Available online: https://www.istat.it/it/files/2017/04/previsioni-demografiche.pdf (accessed on 11 May 2021).
11. Cao, X.; Mokhtarian, P.L.; Handy, S.L. Neighborhood design and the accessibility of the elderly: An empirical analysis in Northern California. *Int. J. Sustain. Transp.* **2010**, *4*, 347–371. [CrossRef]
12. Michael, Y.L.; Green, M.K.; Farquhar, S.A. Neighborhood design and active aging. *Health Place* **2006**, *12*, 734–740. [CrossRef]
13. Siren, A.; Hjorthol, R.; Levin, L. Different types of out-of-home activities and well-being amongst urban residing old persons with mobility impediments. *J. Transp. Health* **2015**, *2*, 14–21. [CrossRef]
14. Ziegler, F.; Schwanen, T. 'I like to go out to be energised by different people': An exploratory analysis of mobility and wellbeing in later life. *Ageing Soc.* **2011**, *31*, 758–781. [CrossRef]
15. Hakamies-Blomqvist, L. Safety of older persons in traffic. In *Transportation in an Aging Society. A Decade of Experience*; Transportation Research Board 2004 Executive Committee: Bethesda, MD, USA, 2004; ISBN 0-309-07745-1.
16. Smiley, A. Adaptive Strategies of Older Drivers. In *Transportation in an Aging Society. A Decade of Experience*; Transportation Research Board 2004 Executive Committee: Bethesda, MD, USA, 2004; ISBN 0-309-07745-1.
17. Mouratidis, K. Neighborhood characteristics, neighborhood satisfaction, and well-being: The links with neighborhood deprivation. *Land Use Policy* **2020**, *99*, 104886. [CrossRef]

18. Le Falher, G.; Aristides, G.; Mathioudakis, M. Where is the Soho of Rome? Measures and algorithms for finding similar neighborhoods in cities. In Proceedings of the 9th International AAAI Conference on Web and Social Media, Oxford, UK, 26–29 May 2015.
19. Fattore, M. Partially Ordered Sets and the Measurement of Multidimensional Ordinal Deprivation. *Soc. Indic. Res.* **2015**, *128*, 835–858. [CrossRef]
20. Bruggemann, R.; Patil, G.P. *Ranking and Prioritization for Multi-Indicator Systems—Introduction to Partial Order Applications*; Springer: New York, NY, USA, 2011.
21. Alaimo, L.S.; Arcagni, A.; Fattore, M.; Maggino, F.; Quondamstefano, V. Measuring equitable and sustainable well-being in Italian regions: The non-aggregative approach. *Soc. Indic. Res.* **2020**, *2020*, 1–23. [CrossRef]
22. Aguiar, B.; Macário, R. The need for an elderly centred mobility policy. *Transp. Res. Procedia* **2017**, *25*, 4355–4369. [CrossRef]
23. Burlando, C.; Ivaldi, E.; Parra Saiani, P.; Penco, L. To own or not to own? Car ownership and consumer awareness: Evidence from an Italian survey research. *Transp. Bus. Manag.* **2020**, *33*, 100435. [CrossRef]
24. Rosenbloom, S. Meeting transportation needs in an aging-friendly community. *Gener. J. Am. Soc. Aging* **2009**, *33*, 33–43.
25. Burlando, C.; Cusano, I. Growing old and keep mobile in Italy. Active ageing and the importance of urban mobility planning strategies. *TeMA J. Land Use Mobil. Environ.* **2018**, 43–52. [CrossRef]
26. Nordbakke, S.T.D.; Schwanen, T. Well-being and mobility: A theoretical framework and literature review focusing on older people. *Mobilities* **2014**, *9*, 104–129. [CrossRef]
27. Szeto, W.Y.; Yang, L.; Wong, R.C.P.; Li, Y.C.; Wong, S.C. Spatio-temporal travel charateristics of the elederly in an ageing society. *Travel Behav. Soc.* **2017**, *9*, 10–20. [CrossRef]
28. Lanzieri, G. *The Greying of the Baby Boomers: A Century Long-View of Ageing in European Populations*; Eurostat: Luxembourg, 2011; ISSN 1977-0316. Available online: https://ec.europa.eu/eurostat/documents/3433488/5578868/KS-SF-11-023-EN.PDF.pdf/882b8b1e-998b-454e-a574-bb15cc64b653?t=1414693393000. (accessed on 11 May 2021).
29. Lutz, W.; Sanderson, W.; Scherbov, S. The coming acceleration of global ageing. *Nature* **2008**, *451*, 716–719. [CrossRef]
30. Loo, B.P.Y.; Chow, S.Y. Sustainable urban transportation: Concepts, policies, and methodologies. *J. Urban Plan. Dev.* **2006**, *132*, 76–79. [CrossRef]
31. Jain, J.; Lyons, G. The gift of travel time. *J. Transp. Geogr.* **2008**, *16*, 81–89. [CrossRef]
32. Shrestha, B.P.; Millonig, A.; Hounsell, N.B.; McDonald, M. Review of public transport needs of older people in European context. *J. Popul. Ageing* **2017**, *10*, 343–361. [CrossRef]
33. Arentze, T.; Timmermans, H.; Jorritsma, P.; Kalter, M.-J.O.; Schoemakers, A. More gray hair—But for whom? Scenario-based simulations of elderly activity travel patterns in 2020. *Transportation* **2008**, *35*, 613–627. [CrossRef]
34. Newbold, K.B.; Scott, D.M.; Spinney, J.E.L.; Kanaroglou, P.; Paez, A. Travel behaviour with Canada's older population: A cohort analysis. *J. Transp. Geogr.* **2005**, *13*, 340–351. [CrossRef]
35. Alsnih, R.; Hensher, D. The mobility and accessibility expectations of seniors in an aging population. *Transp. Res. Part A Policy Pract.* **2003**, *37*, 903–916. [CrossRef]
36. Davey, J. *Coping Without a Car*; New Zealand Institute for Research on Ageing: Wellington, New Zealand, 2004.
37. Ryan, J.; Wrestrand, A.; Schmidt, S.M. Exploring public transport as an element of older persons'mobility: A capability approach perspective. *J. Transp. Geogr.* **2015**, *48*, 105–114. [CrossRef]
38. Suen, S.L.; Sen, L. Mobility options for seniors. In *Transportation in an Aging Society. A Decade of Experience*; Transportation Research Board 2004 Executive Committee: Bethesda, MD, USA, 2004.
39. Ståhl, A.; Brundell-Freij, K.; Makrí, M. *The Adaptation of the Swedish Public Transportation System—Yesterday, Today and Tomorrow*; TFB Report; Swedish Transport Research Board: Stockholm, Sweden, 1993; Volume 14.
40. Coughlin, J.; Lacombe, A. Ten myths about transportation for the elderly. *Transp. Q.* **1997**, *1*, 91–100.
41. Siren, A.; Haustein, S. Babyboomers' mobility patterns and preferences: What are the implications for future transport? *Transp. Policy* **2013**, *29*, 136–144. [CrossRef]
42. Urry, J. *Mobilities*; Polity Press: Cambridge, UK, 2007.
43. Mokhtarian, P.L. Travel as desired end, not just means. *Transp. Res. A Policy Pract.* **2005**, *39*, 2–3. [CrossRef]
44. Yen, I.H.; Anderson, L.A. Built environment and mobility of older adults: Important policy and practice efforts. *J. Am. Geriatr. Soc.* **2012**, *60*, 951–956. [CrossRef]
45. Zali, N.; Rahimpoor, M.; Benab, S.S.; Molavi, M.; Saber, M. The distribution of public services from the perspective of spatial equality. *TeMA J. Land Use Mobil. Environ.* **2016**, *9*, 287–304. [CrossRef]
46. Shergold, I.; Parkhurst, G. Transport-related social exclusion amongst older people in rural Southwest England and Wales. *J. Rural Stud.* **2012**, *28*, 412–421. [CrossRef]
47. Davey, J.; Nimmo, K. *Older People and Transport*; New Zealand Institute for Research on Ageing: Wellington, New Zealand, 2003.
48. World Health Organization (WHO). *Global Age-Friendly Cities: A Guide*; World Health Organization: Geneva, Switzerland, 2007; Available online: https://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf (accessed on 11 May 2021).
49. Iwarsson, S.; Wahl, H.-W.; Nygren, C.; Oswald, F.; Sixsmith, A.; Sixsmith, J.; Széman, Z.; Tomsone, S. Importance of the home environment for healthy aging: Conceptual and methodological background of the European ENABLE–AGE Project. *Gerontology* **2007**, *47*, 78–84. [CrossRef]

50. Howden-Chapman, P.; Signal, L.; Crane, J. Housing and health in older people: Ageing in place. *Soc. Policy J. N. Z.* **1999**, *13*, 14–30.
51. Lai, M.-M.; Lein, S.-Y.; Lau, S.-H. Modeling age-friendly environment, active aging, and social connectedness in an emerging Asian economy. *J. Aging Res.* **2016**, *2016*, 1–14. [CrossRef] [PubMed]
52. Rowe, J.W.; Kahn, R.L. Human aging: Usual and successful. *Science* **1987**, *237*, 143–149. [CrossRef]
53. Buffel, T.; Phillipson, C.; Scharf, T. Ageing in urban environments: Developing 'age-friendly' cities. *Crit. Soc. Policy* **2012**, *32*, 597–617. [CrossRef]
54. Golant, S.M. *Age-Friendly Communities: Are We Expecting Too Much?* Institute for Research on Public Policy: Montreal, QC, Canada, 2014; Available online: http://irpp.org/wp-content/uploads/2014/02/insight-no5.pdf (accessed on 11 May 2021).
55. Shea, A.; Evans, L. Traffic Safety and the Driver. *J. Oper. Res. Soc.* **1992**, *43*, 728. [CrossRef]
56. European Commission. *ElderSafe—Risks and Countermeasures for Road Traffic of the Elderly in Europe*; European Comission: Brussels, Belgium, 2015; Available online: https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/studies/eldersafe_final_report.pdf. (accessed on 11 May 2021).
57. European Commission. *Traffic Safety Basic Facts 2018. Pedestrians*; European Comission: Brussels, Belgium, 2015; Available online: https://ec.europa.eu/transport/road_safety/sites/roadsafety/files/pdf/statistics/dacota/bfs20xx_pedestrians.pdf (accessed on 11 May 2021).
58. Van Kamp, I.; Leidelmeijer, K.; Marsman, G.; De Hollander, A. Urban environmental quality and human well-being. Towards a conceptual framework and demarcation of concepts; a literature study. *Landsc. Urban Plan.* **2003**, *65*, 5–18. [CrossRef]
59. Du Toit, L.; Cerin, E.; Leslie, E.; Owen, N. Does walking in the neighbourhood enhance local sociability? *Urban Stud.* **2007**, *44*, 1677–1695. [CrossRef]
60. Hanibuchi, T.; Kondo, K.; Nakaya, T.; Shirai, K.; Hirai, H.; Kawachi, I. Does walkable mean sociable? Neighborhood determinants of social capital among older adults in Japan. *Health Place* **2012**, *18*, 229–239. [CrossRef] [PubMed]
61. Maggino, F. Developing indicators and managing the complexity. In *Complexity in Society: From Indicators Construction to Their Synthesis*; Maggino, F., Ed.; Springer: Cham, Switzerland, 2017; pp. 87–114.
62. Maggino, F. Dealing with syntheses in a system of indicators. In *Complexity in Society: From Indicators Construction to Their Synthesis*; Maggino, F., Ed.; Springer: Cham, Switzerland, 2017; pp. 115–137.
63. Seghieri, C.; DeSantis, G.; Tanturri, M.L. The richer, the happier? An empirical investigation in selected European countries. *Soc. Indic. Res.* **2006**, *79*, 455–476. [CrossRef]
64. Currie, G.; Delbosc, A. Exploring public transport usage trends in an ageing population. *Transportation* **2009**, *37*, 151–164. [CrossRef]
65. Haustein, S. Mobility behaviour of the elderly—An attitude-based segmentation approach for a heterogeneous target group. *Transportation* **2012**, *39*, 1079–1103. [CrossRef]
66. Ouali, L.A.B.; Graham, D.J.; Barron, A.; Trompet, M. Gender differences in the perception of safety in public transport. *J. R. Stat. Soc. Ser. A* **2020**, *183*, 737–769. [CrossRef]
67. Doi, K.; Kii, M.; Nakanishi, H. An integrated evaluation method of accessibility, quality of life, and social interaction. *Environ. Plan. B Plan. Des.* **2008**, *35*, 1098–1116. [CrossRef]
68. Burlando, C.; Ivaldi, E.; Musso, E. An indicator for measuring the perceived quality of local public transport: Relationship with use and satisfaction with the ticket price. *Int. J. Transp. Econ.* **2016**, *XLIII*, 451–474.
69. Burlando, C.; Ivaldi, E. Perceived quality of urban public transport: Use and willingness to pay in Italian regions. *Int. J. Transp. Econ.* **2017**, *XLIV*, 473–490.
70. Wong, R.; Szeto, W.; Yang, L.; Li, Y.; Wong, S.C. Elderly users' level of satisfaction with public transport services in a high-density and transit-oriented city. *J. Transp. Health* **2017**, *7*, 209–217. [CrossRef]
71. Broome, K.; Nalder, E.; Worrall, L.; Boldy, D. Age-friendly buses? A comparison of reported barriers and facilitators to bus use for younger and older adults. *Australas. J. Ageing* **2010**, *29*, 33–38. [CrossRef] [PubMed]
72. Cantril, H.; Free, L.A. Hopes and fears for self and country: The self-anchoring scale in cross-cultural research. *Am. Behav. Sci.* **1962**, *6*, 1–30.
73. Bruzzi, C.; Ivaldi, E.; Landi, S. Non-compensatory aggregation method to measure social and material deprivation in an urban area: Relationship with premature mortality. *Eur. J. Health Econ.* **2019**, *21*, 381–396. [CrossRef]
74. Ciacci, A.; Ivaldi, E.; Soliani, R.A. Ootential business environment of a smart cities: A subjective approach. In *Strategic Outlook in Business and Finance Innovation: Multidimensional Policies for Emerging Economies*; Dinçer, H., Yüksel, S., Eds.; Emerald: Bingley, UK, 2021; ISBN 9781800043445.
75. Ivaldi, E.; Ciacci, A.; Soliani, R. Urban deprivation in Argentina: A POSET analysis. *Pap. Reg. Sci.* **2020**, *99*, 1723–1747. [CrossRef]
76. Pampalon, R.; Hamel, D.; Gamache, P. Health inequalities in urban and rural Canada: Comparing inequalities in survival according to an individual and area-based deprivation index. *Health Place* **2010**, *16*, 416–420. [CrossRef]
77. Freudenberg, M. Composite indicators of country performance: A critical assessment. *STI Work. Pap.* **2003**, *16*, 1–34.
78. Alaimo, L.S.; Ciacci, A.; Ivaldi, E. Measuring sustainable development by non-aggregative approach. *Soc. Indic. Res.* **2020**, *2020*, 1–22. [CrossRef]

79. Carlsen, L.; Fattore, M.; Brüggemann, R. Partial ordering and metrology analyzing analytical performance. In *Partial Order Concepts in Applied Sciences*; Springer Science and Business Media: Berlin/Heidelberg, Germany, 2016; pp. 49–70.
80. Fattore, M.; Brüggemann, R. Functionals and synthetic indicators over finite posets. In *Complexity in Society: From Indicators Construction to Their Synthesis*; Maggino, F., Ed.; Springer: Cham, Switzerland, 2017; pp. 71–86.
81. Fattore, M. Synthesis of indicators: The non-aggregative approach. In *Complexity in Society: From Indicators Construction to Their Synthesis*; Maggino, F., Ed.; Springer: Cham, Switzerland, 2017; pp. 192–212.
82. Ivaldi, E.; Saiani, P.P.; Primosich, J.J.; Bruzzi, C. Health and Deprivation: A New Approach Applied to 32 Argentinian Urban Areas. *Soc. Indic. Res.* **2020**, *151*, 155–179. [CrossRef]
83. Annoni, P.; Carlsen, L.; Fattore, M.; Brüggemann, R. Peculiarities in multidimensional regional poverty. In *Partial Order Concepts in Applied Sciences*; Springer Science and Business Media: Berlin/Heidelberg, Germany; pp. 121–133.
84. Davey, B.A.; Priestley, B.H. *Introduction to Lattices and Order*; CUP: Cambridge, UK, 2002.
85. Schröder, B.S.W. *Ordered Set. An Introduction*; Birkhauser: Boston, MA, USA, 2002.
86. Neggers, J.; Kim, S.H. *Basic Posets*; World Scientific: Singapore, 1998.
87. Arcagni, A.; DI Belgiojoso, E.B.; Fattore, M.; Rimoldi, S.M.L. Multidimensional analysis of deprivation and fragility patterns of migrants in Lombardy, using partially ordered sets and self-organizing maps. *Soc. Indic. Res.* **2018**, *141*, 551–579. [CrossRef]
88. Pantelaki, E.; Maggi, E.; Crotti, D. Mobility impact and well-being in later life: A multidisciplinary systematic review. *Res. Transp. Econ.* **2021**, *86*, 100975. [CrossRef]
89. Banister, D.; Bowling, A. Quality of life for the elderly: The transport dimension. *Transp. Policy* **2004**, *11*, 105–115. [CrossRef]
90. Rambaldini-Gooding, D.; Molloy, L.; Parrish, A.-M.; Strahilevitz, M.; Clarke, R.; Dubrau, J.M.-L.; Perez, P. Exploring the impact of public transport including free and subsidised on the physical, mental and social well-being of older adults: A literature review. *Transp. Rev.* **2021**, 1–17. [CrossRef]
91. Mariotti, I.; Burlando, C.; Landi, S. Is Local Public Transport unsuitable for elderly? Exploring the cases of two Italian cities. *Res. Transp. Bus. Manag.* **2021**, 100643. [CrossRef]
92. Fobker, S.; Grotz, R. Everyday mobility of elderly people in different urban settings: The example of the city of Bonn, Germany. *Urban Stud.* **2006**, *43*, 99–118. [CrossRef]
93. Colleoni, M. La mobilità quotidiana delle popolazioni anziane. *Salut. Soc.* **2015**, *XV*, 116–134. [CrossRef]
94. Harper, C.; Hendrickson, C.T.; Mangones, S.; Samaras, C. Estimating potential increases in travel with autonomous vehicles for the non-driving, elderly and people with travel-restrictive medical conditions. *Transp. Res. Part C Emerg. Technol.* **2016**, *72*, 1–9. [CrossRef]
95. Reimer, B. Driver assistance systems and the transition to automated vehicles: A path to increase older adult safety and mobility? *Public Policy Aging Rep.* **2014**, *24*, 27–31. [CrossRef]
96. Brickman, J.; Campbell, D.T. Hedonic relativism and planning the good society. In *Adaptation Level Theory*; Appley, M.H., Ed.; Academic Press: New York, NY, USA, 1971.
97. Veenhoven, R. Happiness in Nations: Pursuit of Greater Happiness for a Greater Number of Citizens. In *The Oxford Handbook of Positive Psychology*, 3rd ed.; Snyder, C.R., Lopez, S.J., Edwards, L.M., Marques, S.C., Eds.; Oxford University Press: Oxford, UK, 2018. [CrossRef]
98. Easterlin, R.A. Income and happiness: Towards a unified theory. *Econ. J.* **2001**, *111*, 465–484. [CrossRef]