









Perspective

Fostering an Age-Friendly Sustainable Transport System: A Psychological Perspective

Luigi Tinella ¹, Andrea Bosco ¹, Sergio Traficante ¹, Rosa Napoletano ¹, Elisabetta Ricciardi ¹,
Giuseppina Spano ¹, Antonella Lopez ^{1,2}, Giovanni Sanesi ³, Angela Stefania Bergantino ⁴
and Alessandro Oronzo Caffò ^{1,*}

¹ Department of Educational Sciences, Psychology, Communication, University of Bari, 70121 Bari, Italy; luigi.tinella@uniba.it (L.T.); andrea.bosco@uniba.it (A.B.); sergio.traficante@uniba.it (S.T.); rosa.napoletano@uniba.it (R.N.); elisabetta.ricciardi@uniba.it (E.R.); giuseppina.spano@uniba.it (G.S.); antonella.lopez@uniba.it (A.L.)

² Faculty of Law, Giustino Fortunato University, 82100 Benevento, Italy

³ Department of Agricultural and Environmental Sciences, University of Bari, 70121 Bari, Italy; giovanni.sanesi@uniba.it

⁴ Department of Economics, Management and Business Law, University of Bari, 70121 Bari, Italy; angelastefania.bergantino@uniba.it

* Correspondence: alessandro.caffo@uniba.it

Abstract: The aging population is rapidly growing across the world, with the number of people aged 65 or older projected to reach 1.6 billion by 2050. As such, it is essential to consider how to develop sustainable transport systems that are age-friendly. This perspective paper investigates how to foster an age-friendly transport system with a particular focus on public and sustainable transport options for the elderly. Existing transport systems are evaluated to determine their adherence to an effective age-friendly transport system in terms of three main requirements, namely affordability, accessibility and safety. Then, a psychological perspective is introduced by considering the psycho-physical needs and preferences of the elderly as well as individual factors affecting them. Four areas are considered: (a) independence and autonomy, (b) comfort and convenience, (c) social inclusion and ageism, (d) physical health and well-being, especially injuries due to mobility and fear connected with them. Finally, a proposal is made about psychological training programs directed to both elderly users and transport workers to overcome concerns for an age-friendly transportation system. Such programs could effectively support the age-friendly use of public transport systems simply by increasing the age-friendly skills of both users as well as transport workers.

Keywords: aging; transportation; mobility aids; psychological training



Citation: Tinella, L.; Bosco, A.; Traficante, S.; Napoletano, R.; Ricciardi, E.; Spano, G.; Lopez, A.; Sanesi, G.; Bergantino, A.S.; Caffò, A.O. Fostering an Age-Friendly Sustainable Transport System: A Psychological Perspective. *Sustainability* **2023**, *15*, 13972. <https://doi.org/10.3390/su151813972>

Academic Editor: Federica Biassoni

Received: 23 July 2023

Revised: 7 September 2023

Accepted: 19 September 2023

Published: 20 September 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The growing aging population is a widespread phenomenon across the world with several implications. This demographic trend has occurred in both developed and developing countries. The aging population reflects the accomplishment of the 20th century in the rise of life expectancy and the recent decline in fertility rates. According to the United Nations [1], the worldwide global population aged over 65 years will increase to reach 16.4 percent by 2050. Concerning Europe, the growth forecast indicates that one out of four persons will be aged over 65 years within the next 30 years. This demographic shift implicates several challenges for human society, and one of the most relevant is developing solutions to support healthy aging, which is defined by the World Health Organization (WHO) as the process to enhance well-being in older age. It is crucial to forecast and provide innovative solutions to address older people's needs, including increased risks of social isolation and injuries.

Following the definition of the EU Transport Council, a sustainable transport system: (a) encourages the secure fulfillment of society's basic needs, considering health and

fairness across generations; (b) is affordable, operates equitably and efficiently, provides transportation options, fosters a competitive economy, and supports balanced regional growth; and (c) reduces emissions and waste, employs electric or alternative-fuel vehicles, and minimizes land use and noise generation impacts [2]. Sustainable transportation should also offer safe and eco-friendly transport modalities ensuring mobility and accessibility to all community dwellers [3]. In light of the above, sustainable transportation systems could be especially beneficial for older adults, enabling them to preserve their autonomy, independence, and engagement in social life. Moreover, such systems might prove to be beneficial to the wider community, as even older adults, a growing population of transport users, would contribute to environmental sustainability with their mobility. Such systems can be designed to be age-friendly by taking into account the specific needs of elderly people. For example, public transportation can be designed to be more accessible to the elderly, with the addition of ramps, handrails, and seating. Mobility aids can be designed to be more lightweight and portable [4,5]. As such, sustainable transport systems can be designed to provide universal access for all.

Through this perspective paper, we sought to shed light on the characteristics of a sustainable transportation system, trying to offer insights for its age-friendly development from a psychological point of view. Perspective/conceptual papers focus on one or more concepts aiming to extrapolate or build upon existing research, leveraging the authors' professional knowledge base and imagination, in order to formulate novel concepts/perspectives in a non-empirical way [6]. Unlike other kinds of non-empirical studies (i.e., literature reviews), a perspective paper provides a more refined and intricate understanding of a phenomenon or concept [7]. In particular, the present perspective paper aims to: (a) analyze the main barriers to the development of a sustainable and age-friendly public transportation system; (b) identify the key psychological factors influencing the transport behavior of elderly users; and (c) propose psychologically oriented training programs for users and transport workers to promote the growth of an age-friendly transportation system.

2. Requirements of an Age-Friendly Sustainable Transport System

Several studies tried to define specific requirements of a sustainable transportation system focusing on older users' needs. Literature reviews on this topic as well as national survey reports have also provided convergent evidence on those factors which are considered essential for elderly users' mobility. Some authors have referred to these factors in terms of requirements (i.e., of an effective system), whereas alternative perspectives have characterized them as barriers (i.e., unmet requirements). According to the European Metropolitan Transport Authorities (EMTA), six thematic fields can be identified: (a) affordability, (b) safety, security, and attitudes, (c) accessibility, (d) schedules and network, (e) comfort, (f) information, and ease of use [8]. Similarly, the English Longitudinal Study of Ageing (ELSA) highlighted that accessible, affordable, and convenient transport is fundamental to make older users able to access those vital services (e.g., the post office, the hospital, etc.) [9]. Again, the review of Shrestha and colleagues [10] focused on the results of the GOAL (Growing Older and staying mobile) project, funded within the European context by the European Commission, has highlighted four main requirements: affordability, availability, accessibility, and acceptability. A more recent literature review has proposed a framework of transport and mobility for older adults highlighting the role of (a) housing and transport (i.e., neighborhood), which influences travel behaviors, (b) availability, (c) accessibility, and (d) affordability, which affects equity, comfort, convenience, independence, wellbeing, and aspects of (e) transport safety. These five main factors are suggested as key policy areas which deserve more attention.

As stated above, some older adults' travel needs are unmet by the public transport system. According to Siren et al. [11], older adults may be expected to remain active and independent and continue to use the transport system until the age of 80. The rapid aging of the population has significant social and economic consequences as people now have a longer life expectancy, increasing the burden of dependency [12]. Investigating the current

transportation system's barriers for most older adults can be challenging as their needs are not homogeneous [11,12]. Individual differences in lifestyle, socio-demographic factors, and cognitive and mobility functioning can differentially affect transport needs. Sundling [13] demonstrated that functional limitations partially determine the traveling barriers that older users encounter on a specific trip. For instance, a fear of falling may be experienced when reaching the exit of a moving bus by those with restricted mobility [13]. When unmet, the transportation system's requirements determine barriers limiting older adults' mobility by restricting, partially or completely, their participation in social life [8]. The main findings related to the above mentioned factors of transport provision are described separately in the following sections. For the sake of clarity, we narrowed the focus on affordability, accessibility, and safety aspects following the recently proposed framework by Lin and Cui [14].

2.1. Affordability

Improving the affordability of age-friendly transportation should be considered the main way to encourage elderly people to prefer a public transportation system (e.g., bus, train) despite ownership of a private car [14]. Relating to transport context, affordability refers to the financial capacity to access public transport any time when required [15]. Following this, in different local public transportation systems, the practice of offering discounted fares to the elderly is widespread, especially in the UK. For this reason, these discounted rate bus services have grown significantly since the mid-1990s. Indeed, the elderly can enjoy free public transportation tickets and can travel throughout Wales. Moreover, in Scotland, public transport for the elderly is totally free during the weekend [16]. The Concessionary Travel Passes (CTP) ensures all people living in England who have reached state retirement age (65 for men, 60 for women) and people with disabilities are entitled to a free bus pass entitling them to half-price bus travel within their local area [17]. The CTP has improved elderly people's access to basic services related to health care and shops, reducing social exclusion and maintaining wellbeing for older people. Finally, the CPT has improved public transport usage by elderly people with low incomes.

Considering the above, and according to Guzman and Oviedo [18], affordability is an integral part of transport equity. In Hong Kong, there is a model of a sustainable transportation system called "transport for all", designed primarily for the mobility of elderly people who lack the capacity to navigate the urban environment with ease and elderly people with financial difficulties [19]. For instance, elderly people enjoy discounted public transportation tickets that cost only HK \$2 per trip at any time [19]. The introduction of this age-friendly solution, aimed at improving the affordability, was a political decision with the stated aims of increasing the use of public and sustainable transportation by the elderly, improving their access to services and increasing social equity.

2.2. Accessibility

Geurs and Ritesma Van Eck [20] defined accessibility as "the extent to which land-use and transport systems enable (groups of) individuals to reach activities or destinations by means of a (combination of) transport mode(s)" (p. 36). The elderly frequently use buses as a public transportation modality because it is more widespread than subways and trains, especially in rural areas. Public transportation accessibility involves a number of factors whose main aim is to promote mobility, wellbeing, and social inclusion in the elderly. Considering the latter, despite the growing research interest in social exclusion in transportation, there has been much less progress in terms of policy implementation [21]. To this end, according to Martens [22], transportation planning needs to be based on principles of justice.

Several studies have mainly investigated two dimensions related to public transportation accessibility: (1) ease of physical access to public transportation services; and (2) the availability of information about public transportation schedules and means of transportation [23,24]. Indeed, typically, mobility declines gradually with advancing age and

distances traveled, decreasing when passengers are older than 65. According to several authors [14,25], this decreased mobility in aging can be associated with difficulty in accessing public transportation services. This is mainly related to poor access to bus stops, long walking distances, inadequate facilities (e.g., seating), and the burdens associated with public transportation exchanges (e.g., getting information about the exchanges, carrying luggage, and finding the way). Indeed, according to the elderly people's perspective, an accessible public transport should include a bus/metro stop near to the residence, visible, clean, and with weather protection, provision of seating facilities, and information point [10]. Another crucial factor that needs to be considered regarding accessibility is the opportunity for older people to access transportation information; in fact, this issue is reported by older people as a substantial barrier to transportation use [26]. Different authors [9,23] conducted several studies to verify the quality of age-friendly bus information. To be effective for elderly users, bus information should consider: (1) the use of printed timetables, telephone information lines, and internet websites; (2) printed timetables with vivid colors; (3) printed timetables with maps; (4) printed timetables available at all bus stops and posted in places frequented by older people; (5) training for telephone operators and drivers oriented to age-awareness; (6) to communicate promptly any changes; (7) expansion of real time audio information on buses (especially for elderly with hearing impairment); (8) increased use of age-friendly journey planners (e.g., digital billboards at bus stops areas that inform older people of the status of their ride bus). Considering all these points, the improvement of several aspects of accessibility to sustainable public transportation should be an important factor to promote elderly people's mobility. Indeed, reaching accessibility also means helping older people to participate in social, work, and civic activities, providing them equal opportunities to maintain an active lifestyle [27].

2.3. Safety

Safe transportation for the elderly remains a matter of debate. The European Commission [28] and Transportation Research Board [29] defined three crucial aspects referring to public transportation safety; (1) safety from crime (e.g., staff/police presence; lighting; visible monitoring; layout; identifiable help points); (2) safety from accidents (e.g., presence/visibility of supports; avoidance/visibility of hazards; active safeguarding by staff); and (3) perceptions of security (e.g., conspicuousness of safety measures). The perception of security was studied by Lattman et al. [30]. The authors highlighted that the perception of travel safety depends on the quality of service. For instance, unclean and cluttered buses or not on schedule, leading to extended waiting times during which the traveler feels exposed, are defined as unsafe and unreliable [31]. Older people often link public transportation systems with the inability to access services easily, quickly, and efficiently. As a consequence, older people prefer to use private cars to access services [32]. However, after age 55, it was found that car use steadily decreases, while walking increases and public transportation becomes a more widely used alternative for people aged 75 and older. The decline in car use can be associated with physical, cognitive, and social impairments that occur in this life stage, leading to older people no longer being fit to drive [33]. Being unfit to drive is often associated with loss of autonomy and independence in the elderly and, for this reason, they are reluctant to leave the car, often incurring dangerous driving situations. Indeed, older people are considered to be more vulnerable to being fatally injured in a road accident due to their frailty [9]. Following Lin and Cui [14], revoking driver's licenses from unsafe elderly drivers can be seen as advantageous for both the elderly drivers themselves and other road users. Therefore, it is important to assist the elderly in ceasing to drive when necessary by promoting their transition to alternative and sustainable modes of transportation.

3. The Development of an Age-Friendly Transportation System: A Psychological Perspective

The issue of age-friendly transportation systems can be addressed from a psychological perspective by considering the psycho-physical needs and preferences of the elderly as well as individual factors affecting them. Following a theoretical framework proposed by Lin and Cui [14], it is plausible to identify the subsequent dimensions which have a relevant psychological impact on the transportation needs of elderly users: (a) independence and autonomy, (b) comfort and convenience, (c) social inclusion and the Ageism, (d) physical health and well-being. The following sections provide a brief and non-exhaustive overview of evidence related to each dimension.

3.1. Independence and Autonomy

It is well known that mobility represents a key factor in successful aging and can positively impact physical and mental health and overall well-being. Conversely, limited mobility and transportation options can lead to social isolation, decreased physical activity, and reduced access to health care services [34]. A study by Lang et al. [35] examined the mobility and transportation needs of older adults and found that most participants preferred to maintain their independence and autonomy in this area. The study highlighted the importance of accessible and affordable transportation options that meet the unique needs of older adults, such as wheelchair accessibility and driver assistance. Another study by Shoal et al. [36] investigated the role of technology in promoting independence and autonomy in mobility and transportation for older adults. The study found that technology-based solutions, such as ride-sharing apps and real-time public transportation information, can improve access to transportation and promote independence. However, the study also highlighted the need for technology to be accessible and user-friendly for older adults, who may have limited technological literacy. Community-based interventions can also promote independence and autonomy in mobility and transportation for older adults. Liao et al. [37] examined the impact of a community-based transportation program on older adults' mobility and social participation. The program included transportation assistance, social activities, and health education. The study found that this type of program significantly improved participants' mobility and social participation, highlighting the importance of community-based interventions in promoting independence and autonomy in mobility and transportation for older adults. Overall, since maintaining independence in mobility is crucial for older adults' well-being, a detailed assessment of an elderly person's fitness-to-drive, considering physical and cognitive abilities [38,39] medical conditions, and available transportation options, is warranted.

3.2. Comfort and Convenience

Slater [40] defined comfort as "a pleasant state of physiological, psychological, and physical harmony between a human being and the environment" (p. 4). Thus, it is possible to identify three main dimensions which need to be taken into account and assessed separately in order to maintain the complexity of the construct. Other than this seminal definition, several aspects related to comfort have been identified when dealing with vulnerable road users [41]. For example, the TeleFOT [42] framework for assessing mobility and comfort proposes a model of comfort in which the journey quality can be assessed by some indicators, namely the workload and the stress related to travel, the adverse condition (e.g., weather), the level of uncertainty in relation to traffic and route choice, and the feeling of safety in relation to traffic. For example, considering private transportation, many older adults first cautiously restrain driving by traveling only during daylight hours, avoiding driving in bad weather, using only familiar routes, visiting destinations near home, or making only essential trips [43]. In some cases, older adults often depend on family and friends or public transportation to satisfy their mobility needs [44]. However, public transportation is a common source of anxiety and fear, becoming a trigger that produces symptoms such as accelerated heartbeat, hyperventilating or having trouble breathing,

sweaty palms, or feeling nauseous [45]. These psychological constraints are common due to the fear of falling and accidents, rude behavior by staff and other passengers, waiting at a deserted bus stop at night, being surrounded by strangers, navigating unfamiliar routes and schedules, and being in a confined space [46]. This point is related to the fact that elderly users are less flexible and able to adopt new behaviors and technologies. Older people can start to feel stress and insecurity, and this type of anxiety or low confidence, in the most severe cases, may lead to hodophobia, namely an extreme irrational fear of traveling encompassing fears of all forms of transportation, especially exploring new destinations or routes [47]. Finally, sometimes physical limitations and difficulties in reaching appointments make it difficult to use fixed-line transportation. Paratransit systems, particularly dial-a-ride, aim to make the transportation service age-friendly, with vehicles specially adapted to older user's physical and health conditions [35]. These vehicles, also called STS (Special Transportation Systems), have been adopted in many countries in order to facilitate the transportation of the elderly and/or people with disabilities. Several studies have compared STS with fixed transport services, showing that, for older people, special transport services were less demanding, showing a good level of satisfaction and perceived comfort among users [48]. With regard to convenience, fair transport policies should become widespread, especially for low- and middle-income countries and especially for the elderly and disadvantaged users who cannot rely on growing incomes over time. For example, Vecchio and colleagues [49] assessed accessibility to public transport in Santiago de Chile by simulating different policy scenarios, with a particular focus on elderly people. Authors compared alternative accessibility policies based on two parameters, namely expansion of the Metro network and a reduction in public transport fares. Results showed that subsidized fares for public transport services were more beneficial to expand the accessibility of elderly people with lower incomes, while middle- and high-income older people would have benefited from the expansion of the Metro network. According to these findings, it is relevant to make the transportation services tailored for the needs of elderly people, removing barriers and using new technological systems to make transport services more accessible, comfortable, and convenient.

3.3. Social Inclusion and the Ageism

Although driving one's own vehicle is the most preferred transportation solution for the elderly [50], an efficient and inclusive transportation system must also ensure alternatives that involve safe and age-friendly means of public transportation. Indeed, public transport is an integral part of the mobility for older people to remove barriers and to improve social inclusion [51]. However, often public transport is not age-friendly; in fact, there are reserved seats for women and disabled people on buses but, often, there is not this possibility for older people [52]. According to WHO [53], transport inequalities among older people are a global and actual issue, particularly in developed countries. Therefore, the inefficacy of transport services could cause social exclusion of non-driving older people [54]. These aspects introduce the problem of age discrimination. Ageism is defined by Butler [55] as a "process by which stereotyping and discriminating against individuals or groups occurred because of their age". Related to public transport, discriminatory behaviors toward older people have been found. Firstly, older people with disabilities declared feelings of unsafety and unacceptance caused by rude behavior of professional drivers [49]. A second aspect concerns older women who had often felt insecure due to harassing behaviors of men when they claim the seats [44]. Considering these aspects, the authors emphasize the importance of promoting friendly behaviors toward older people to ensure social inclusion; in this perspective, it might be useful to reserve seats for older people and to promote courtesy of passengers and drivers [44]. Finally, Broome et al. [26] recommended some behaviors of professional drivers to reassure older people such as friendliness, helpfulness, being aware of invisible disabilities, giving time in getting in and out of the vehicle, communication and information, and stopping near the sidewalks [53].

3.4. Physical Health and Well-Being

Falls are one of the most common causes of injuries, especially among older adults. As mentioned above, older road users are worried about the possibility of falls or injuries related to advanced age and their frailty. For this reason, public transportation systems often are not considered by older people for mobility purposes. Therefore, reducing falls and the fear associated with them is essential for maintaining independence and quality of life in older people. One way to reduce falls is to identify and address underlying risk factors [56]. First of all, physical factors such as muscle weakness, balance problems, and medication side effects can increase the risk of falls during, for example, a bus ride. Previous studies showed the effectiveness of exercise programs focusing on improving strength and balance to reduce the risk of falls in older adults [57]. The use of assistive devices, such as canes or walkers, can provide additional support and stability and reduce the risk of falls [58,59]. Another important factor is related to environmental conditions. Elderly people are afraid of falling and getting injured due to the deteriorated condition of the sidewalks and roads near to the bus stops [10]. In light of this, the fear of falling can lead to a reduction in mobility, which in turn can negatively affect the overall health and wellbeing. Addressing the fear of falling through education, cognitive and behavioral therapy, as well as through exercise programs (e.g., focused on building confidence and reducing anxiety), can help to both reduce the risk of falls and improve the overall quality of life [60]. Indeed, different travel training programs have been implemented in order to develop the confidence and skills in individuals that are required to travel by public transportation [10]. Examples of programs in this area include: the UK DfT's Travel Training Good Practice Guide, the Bus Buddying program in Leeds, and the CityBee program in Barcelona [61,62].

4. Psychological Training to Promote an Age-Friendly Transportation System: A Proposal

As mentioned in the preceding paragraphs, innovating an age-friendly sustainable transportation system necessitates addressing specific requirements and needs to be conceptualized within a psychological perspective. To achieve this, an age-friendly transportation system should be training-based as well. Mainly, psychological training refers to structured programs designed to promote awareness, management, and skills. In this instance, psychological training may be adapted to overcome concerns for an age-friendly transportation system and may be appropriate for older adult users and transport workers.

4.1. Program to Train Elderly People on the Use of Transportation Services and Mobility Aids

Travel training programs may be implemented to enable older people to independently use public transport without fears, stereotypes, and concerns [63]. One of the biggest barriers to using public transportation is the social stigma attached to using community transport and a lack of information about public transport. To improve the knowledge and skills of elderly people when traveling by public transportation, travel training programs may be useful [64]. Moreover, travel training provides a lot of benefits such as expanding travel options to increase trip-making, leading to enhanced mobility, and to provide improved travel attributes, such as less dependence on family and friends for rides [65]. Moreover, by accomplishing this kind of training, older adults can improve their quality of life, such as increasing social connections and social support, both of which are related with better mental health [66], and traveling independently, according to individual needs [67]. These training programs can be especially effective for elderly people who may face diminishing driving skills but still need or desire independent access to the resources of their broader communities [68]. Finally, physical difficulties and lack of comfort and familiarity with technology could be the reason why older adults are disconnected from new transport technology [69]. It is known that older adults are often not proficient at using smartphones or phone applications. In the study of Liu and colleagues [70] conducted during the first two months of the COVID-19 pandemic, it was demonstrated that elderly users who were less technology-savvy faced increased social exclusion, which in turn

hindered their ability to regain mobility once emergency-related restrictions were lifted. On the other hand, some studies highlighted that generations of elderly individuals who may have previously faced resistance or difficulties in using technology are gradually making way for those who are more engaged in the use of these devices. It has been previously demonstrated, for example, that the digital divide between older and younger users of healthcare technology is strongly affected by ageism and other incorrect beliefs towards the aging [71]. In their study on digital health, Mace et al. [71] suggested three strategies against the ageism: (a) education and training for professionals; (b) improvement in practice (i.e., encouraging clinicians to follow standardized guidelines for implementing digital health interventions); (c) inclusion of older adults in research studies focused on digital health. New generations of elderly individuals were already adults when technology was widely introduced in workplaces. Thus, they may tend to be more open and proficient in using technological devices. Anyway, specific training can enable older adults to interact with new technologies in order to break down digital and environmental barriers [72].

4.2. Programs to Train Transport Workers on Age-Related Needs

The current transportation policy for addressing the mobility needs of elderly transport users tends to focus on those who are less able-bodied, according to Marin-Lamellet et al. [73]. Therefore, implementing an efficient program to train transport professionals in age-related needs requires considering the broad population of older adult transport users, including people with very different characteristics. On the other hand, the transport sector includes workers who together may shape an age-friendly system (i.e., policymakers, planners, service operators, and frontliners) but have very different roles and educational backgrounds. Therefore, the training of transport workers requires different strategies aimed at different goals.

Considering policymakers and planners, most of the effort has been focused on social inclusion in general. For example, since 2006, the UK has implemented a systematic process of accessibility planning [74], forcing transport authorities to undertake both strategic and local accessibility evaluations as a part of the transport plan [75]. Moreover, in the Victoria state in Australia, up to 2005 the government campaigned on a platform ('A Fairer Victoria') focused on social sustainability and trying to address social disadvantages in transportation [76]. Among the aims of the Victoria program were to reduce barriers to opportunity and strengthen assistance to disadvantaged users (including users aged 60 years or above) through a funded increase in public transport [77,78]. These intervention examples aim to make transport policies more age-friendly by establishing expert task forces, investing economically in enhancing the quality of public transportation services, and enriching the educational background of policymakers and planners (most of them trained as civil engineers and economists) with an age-friendly outlook.

More results are available concerning training aimed at service operators and frontliners as these categories of transport workers are the ones whose individual characteristics (i.e., personality, attitudes, behaviors) and job performance can have a more direct psychological and/or physical impact on elderly users. In light of the aforementioned literature, it is crucial to develop, set up, and test psychological training for preparing these workers to effectively interact with and support elderly people before, during, and after traveling. Some basic points could be envisaged:

- Empathy towards the needs of elderly people. Service operators and drivers should develop empathy towards the specific needs and challenges faced by elderly passengers. This includes understanding their physical limitations, cognitive changes, and emotional well-being. Empathy training programs can enhance the ability of workers to provide an understanding of care for elderly passengers [79];
- Recognizing and responding to age-related issues. Frontliners should be trained to recognize and respond promptly to age-related issues that may arise during transportation, such as falls or health emergencies. Training programs should cover basic first aid, Cardiopulmonary resuscitation (CPR), and effective communication

strategies to ensure a quick and appropriate response to emergencies involving elderly passengers [80];

- Creating a safe and comfortable environment. Training should focus on creating a safe and comfortable environment for elderly passengers. This includes knowledge of proper vehicle maintenance, addressing environmental factors that may pose risks (e.g., slippery floors), and ensuring appropriate temperature and lighting conditions [81];
- Addressing age-related mobility needs. Both service operators and frontliners should be equipped with the knowledge and skills to recognize and respond to age-related mobility needs. This involves providing assistance with boarding and alighting, helping passengers with mobility aids, and ensuring accessibility features are in place, such as ramps and handrails [5,82];
- Responding to age-related discrimination. Training programs should address age-related discrimination and educate these workers on the importance of treating all passengers with respect and dignity. This includes being aware of and addressing discriminatory behaviors from other passengers, such as not offering seats to elderly individuals [83];
- Ensuring safety and reliability. Frontliners should receive training on maintaining safety and reliability within the transportation system. This includes techniques for smooth acceleration and deceleration, proper handling of sudden gear-stop changes, and ensuring passenger safety through clear communication and adherence to protocols [84];
- Providing information and support. Training should focus on effective communication techniques for providing clear and adequate information to elderly passengers. This includes speaking slowly and clearly, using visual aids when necessary, and offering assistance with directions or connections [85];
- Implementing age-friendly transport solutions. Workers should become familiar with age-friendly transport solutions and understand their importance in accommodating elderly passengers. Training programs should cover topics such as installing ramps, handrails, and seating options that cater to the specific needs of elderly individuals, and accommodating and assisting passengers with mobility aids, such as wheelchairs and walkers. This includes knowledge of proper handling and securing mobility aids, and ensuring accessibility throughout the journey [86].

Examples of such programs have been implemented in the UK [32] and South Korea [87] and included training components on how to assist with boarding and alighting from vehicles, helping with luggage, and navigating the built environment. The Travel Training Program promoted by the National Aging and Disability Transportation Center (NADTA) is another example of such programs. It is designed to train transportation staff in how to assist older adults and people with disabilities. Several studies suggested that training programs for transportation workers on older user's transportation needs can be effective in improving their knowledge and attitudes towards older passengers and increasing their willingness to provide assistance to older passengers. For example, Kim et al. [87] found that the training program significantly increased the bus driver's attitudes towards older passengers. Similarly, Fialho et al. [88] found an increased knowledge of aging, age-related disabilities, and strategies for providing better service to older passengers in a sample of Brazilian bus drivers. A study by Yang et al. [89] highlighted similar results in taxi drivers in China. Prospectively, there is a need for more research on the effectiveness of these programs, as well as the specific components that are most effective in improving the knowledge, attitudes, and behaviors of transportation workers. Finally, it may be useful to explore the potential of technology-based solutions, such as virtual reality training programs, to enhance the effectiveness of training programs and provide more immersive learning experiences for transportation workers.

5. Discussion

The present perspective paper aimed to briefly analyze the main requirements of a sustainable public transport system for elderly people and to propose a series of psychological training in order to foster it. With regard to the first aim, three main dimensions were identified from previous literature which can account for a sustainable transport system specifically for elderly people: affordability, accessibility, and safety.

Considering affordability, a reduction in travel cost is a crucial aspect to encourage elderly mobility through a public transport system. Several countries gave attention to programs aimed at reducing the cost of travel, such as Hong Kong with the “transport for all” program and England with the Concessionary Transport Free (CTF) program. These initiatives have improved older people’s access to basic services and have reduced social exclusion, contributing to their overall well-being. Considering future perspectives, we would be able to ensure a universal transportation system in response to the multiple needs of the elderly, for instance, implementing dynamic pricing models that offer customized discounts to older people according to their individual requirements and income levels. Finally, the improvement of dial-a-ride services (e.g., Flexible Transport System) for the elderly can be considered a great alternative to private cars, also providing more flexibility in reservations and lower costs compared to traditional cabs or ride-sharing services.

The accessibility of a public transportation system aims to facilitate individuals’ access to activities and destinations using various transport modes. Two key dimensions are studied: (a) physical access, such as distant bus stops and inadequate facilities, and (b) the availability of transportation information [10,23,24]. Improving these aspects, including providing visible, safe, and clean bus stops, accessible timetables, and age-friendly information channels, is essential for enhancing the elderly’s mobility, social integration, and overall well-being. In this way, a transport system allows older people to participate actively in various aspects of life. For instance, the promotion of awareness campaigns aimed at (a) informing older people of the most effective way to benefit from public transportation and (b) making public transportation staff more aware of elderly needs have proved to be effective ways to enhance the accessibility of these services to users.

The elderly represent a vulnerable group in transportation, demanding prioritized attention in transport policies for safety and mobility. Following Lin and Cui [14], a comprehensive approach balancing the needs and desires of older individuals with safety and environmental concerns is essential in transportation policy for the elderly. Some European countries like the Netherlands and Germany have established safe walking and cycling options for the elderly, with traffic regulations protecting pedestrians and cyclists often placing responsibility on motorists in accidents. New alternative transport modes, such as e-scooters and e-bikes, are seen as a potential benefit for the elderly but face challenges due to inadequate infrastructure and deserve greater attention by policy makers.

Concerning the second aim, the present paper tried to define the contribution of psychological sciences to the topic of promoting a sustainable public transportation for elderly people. Several points have been identified on which psychological sciences can provide input. Cognitive sciences, cognitive neurosciences, neuropsychology, and psychometrics can provide support in the development of training and services that can facilitate (a) the autonomy of individuals from a deeper assessment of available physical and mental resources [38,39,90], (b) comfort [14], the management of (c) the fear of the unfamiliar [13], and of (d) the risk of falls and the fear associated with falls [58], but most importantly can (e) contribute to the psychological training of transport service providers and workers, who will be called upon to recognize the needs of older people and the nature of various factors, including: motor (e.g., appropriate times for getting in and out of cars, avoiding abrupt changes in speed or direction), sensory (e.g., speaking up, making use of large visual aids), psychological (e.g., giving time to ask questions, practicing listening, treating with kindness), technological (e.g., knowing how to use assistive devices for movement). Simultaneously, it is also necessary to envision a redefinition of schedules that will necessarily affect travel times so that the greater commitment required by age-friendly behaviors

will not be the sole responsibility of transportation workers. It should also be a commitment of companies, who should be incentivized to think of sustainability policies from an age-friendly perspective as an added value to corporation targets. Moreover, in a recent review, Patil et al. [91] reviewed 36 papers regarding mobility and active aging in many low- and middle-income countries around the world. The authors highlighted: (a) The need for policy makers to evaluate interventions and policy measures. Consequently, they must be called to use the collected evidence from previous interventions to support planning of the next one, preventing economic resources from being misused. (b) To promote the participation of older people in the society, it is necessary to re-think transportation policies and re-design the current transport infrastructure to fulfill their mobility needs. (c) The awareness of individuals regarding safety and the reduction in road traffic injuries is benefitted by informing individuals of the advantages of behavioral change. This kind of guidance is even more effective when shared with institutional stakeholders such as local governments, non-governmental organizations, etc. (d) Improving public transport and ecologic vehicles led to a move from individual to collective modes of transportation. Therefore, worthy governance, a strict harmonization between institutions, trained personnel, suitable funding for project sustainability, and stakeholder as well as end user consultation before planning any intervention will result in developing sustainable, cost effective, and inclusive, active-aging-compatible urban transport infrastructure, also in low- and middle-income countries.

6. Conclusions

We are at the end of the first third of the United Nations Decade of Healthy Ageing (2021–2030), a program which pursues changes in different sectors aimed to align the healthy aging agenda with the United Nations' Sustainable Development Goals (SDG). A recent review of Shevelkova et al. [92] summarizes the actions directed at addressing these goals in the five years prior to the mentioned decade. The authors found several documents (i.e., reports, policy documents and appraisals, non-systematic reviews) regarding initiatives targeting the support of older adults in a sustainability perspective and mainly aimed to fight poverty (SDG1), support good health and wellbeing (SDG3), reduce inequality (SDG 10), and promote sustainable cities and communities (SDG 11). The review also documented the available initiatives and research representing a sort of baseline for developing plans. In essence, sustainable age-friendly cities and communities, together with a sustainable transport system, seem to be an accessible outcome, although more research is needed to identify and overcome the dynamic transformation of the barriers characterizing transportation systems from the point of view of the elderly. To this end, as emphasized in this work, the role of psychological sciences can be multifaceted, encompassing the analysis of needs, psychological assessment, and the proposal of training and interventions for both elderly users and transport workers.

Author Contributions: Conceptualization, A.B., A.O.C. and L.T.; investigation, A.B., A.O.C. and L.T.; writing—original draft preparation, A.B., A.O.C., L.T., A.L., G.S. (Giuseppina Spano), E.R., S.T. and R.N.; writing—review and editing, A.B., A.O.C., L.T., A.L., G.S. (Giuseppina Spano), E.R., S.T., R.N., A.S.B. and G.S. (Giovanni Sanesi); visualization, L.T.; supervision, A.O.C. and A.B.; A.B. and L.T. share first authorship. All authors have read and agreed to the published version of the manuscript.

Funding: A.B., G.S. (Giovanni Sanesi), A.S.B., and A.O.C. were supported by the project “GAME: Green, smArt and Mobile urban communitiEs: promotion of inclusive, equitable and integrated social policies for human well-being in cities” funded by the Horizon Europe SEEDS (2022–2023)—University of Bari Aldo Moro. E.R. was supported by the project “EN.G.AGE.—The linking between ENvironment and coGnitive AGEing”. Action was cofounded by POR Puglia FESR FSE 2014–2020-Asse X-Azione 10.4. (CUP Code: H96D20000320008). G.S. (Giuseppina Spano) was supported by the project “Role of PSychological and social factors in the conservation of biodivErsity and the ECOsystemic heritage for the fight against climate change (PsEEco)”. Action was cofounded by Programma Operativo (PON) Ricerca E Innovazione 2014–2020-Azione IV.6 “Contratti di ricerca su tematiche Green” (CUP H95F21001420006). A.L. was supported by the project “A-WAND! Strengthening the Skills of Self-

Monitoring and Preventing the Risk of Accidents in and outdoors in a Population of Elderly People in the South of Italy.” Action funded by Research for Innovation (REFIN)-POR Puglia FESR FSE 2014-2020—Asse X—Azione 10.4. (Grant Code 8C40CDAA).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: There are no data to be made available since this is a perspective paper.

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

References

1. United Nations Department of Economic and Social Affairs, Population Division. World Population Prospects 2022: Summary of Results. UN DESA/POP/2022/TR/NO.3. 2022. Available online: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf (accessed on 15 June 2023).
2. European Commission, COM. 370 Final, WHITE PAPER European Transport Policy for 2010: Time to Decide. 2001. Available online: https://ec.europa.eu/transport/sites/transport/files/themes/strategies/doc/2001_white_paper/lb_com_2001_0370_en.pdf (accessed on 15 June 2023).
3. Mohan, D.; Tiwari, G. *Sustainable Transport Systems: Linkages between Environmental Issues, Public Transport, Non-Motorized Transport and Safety*; Transportation Research and Injury Prevention Programme Indian Institute of Technology: New Delhi, India, 2000.
4. Unshwort, C.; So, M.H.; Chua, J.; Gudimetla, P.; Naweed, A. A systematic review of public transport accessibility for people using mobility devices. *Disabil. Rehabil.* **2019**, *43*, 2253–2267. [[CrossRef](#)]
5. Noor, N.F.M.; Kadir Shahar, H.; Hamid, T.A.; Zainalaludin, Z.; Ahmad, S.A.; Rokhani, F.Z.; Ujang, N.; Yusoff, I.S.M.; Akahbar, S.A.N. Understanding travel behavior and sustainability of current transportation system for older adults in Malaysia: A scoping review. *Sustainability* **2022**, *14*, 14140. [[CrossRef](#)]
6. Rocco, T.S.; Plakhotnik, M.S.; Silberman, D. Differentiating Between Conceptual and Theory Articles: Focus, Goals, and Approaches. *Hum. Resour. Dev. Rev.* **2022**, *1*, 113–140. [[CrossRef](#)]
7. Jaakkola, E. Designing conceptual articles: Four approaches. *AMS Rev.* **2020**, *10*, 18–26. [[CrossRef](#)]
8. Fiedler, M. Older People and Public Transport. In *Challenges and Changes of an Ageing Society*; EMTA: Cologne, Germany, 2007.
9. Holley-More, G.; Creighton, H. Future of Transport in an Ageing Society, Age UK. 2015. Available online: http://www.somersetintelligence.org.uk/files/Future_of_Transport_in_an_Ageing_Society_Jun2015-AgeUK.pdf (accessed on 15 June 2023).
10. Shrestha, B.P.; Millonig, A.; Hounsell, N.B. Review of Public Transport Needs of Older People in European Context. *J. Popul. Ageing* **2017**, *10*, 343–361. [[CrossRef](#)] [[PubMed](#)]
11. Siren, A.; Haustein, S. Baby boomers’ mobility patterns and preferences: What are the implications for future transport? *Transp. Policy* **2013**, *29*, 136–144. [[CrossRef](#)]
12. Wright, S.; Emele, C.D.; Fukumoto, M.; Velaga, N.R.; Nelson, J.D. The design, management and operation of flexible transport systems: Comparison of experience between UK, Japan and India. *Res. Transp. Econ.* **2014**, *48*, 330–338. [[CrossRef](#)]
13. Sundling, C. Travel behavior change in older travelers: Understanding critical reactions to incidents encountered in public transport. *Int. J. Environ. Res. Public Health* **2015**, *12*, 14741–14763. [[CrossRef](#)]
14. Lin, D.; Cui, J. Transport and Mobility Needs for an Ageing Society from a Policy Perspective: Review and Implications. *Int. J. Environ. Res. Public Health* **2021**, *18*, 11802. [[CrossRef](#)]
15. Litman, T. Transportation Affordability Evaluation and Improvement Strategies. 2016. Available online: https://www.researchgate.net/profile/Todd-Litman-2/publication/37183850_Transportation_Affordability_evaluation_and_improvement_strategies/links/57d6ade408ae601b39ac0736/Transportation-Affordability-evaluation-and-improvement-strategies.pdf (accessed on 30 June 2023).
16. Mackett, R. Impact of Concessionary Bus Travel on the Well-Being of Older and Disabled People. *Transp. Res. Rec.* **2014**, *2*, 114–119. [[CrossRef](#)]
17. Mackett, R. Has the policy of concessionary bus travel for older people in Britain been successful? *Case Stud. Transp. Policy* **2014**, *2*, 81–88. [[CrossRef](#)]
18. Guzman, L.A.; Oviedo, D. Accessibility, affordability and equity: Assessing ‘pro-poor’ public transport subsidies in Bogotá. *Transp. Policy* **2018**, *68*, 37–51. [[CrossRef](#)]
19. Wong, R.C.P.; Szeto, W.Y.; Yang, L.; Li, Y.C.; Wong, S.C. Public transport policy measures for improving elderly mobility. *Transp. Policy* **2018**, *63*, 73–79. [[CrossRef](#)]
20. Geurs, K.; Ritsema van Eck, J. Accessibility Measures: Review and Applications. Evaluation of Accessibility Impacts of Land-Use Transport Scenarios, and Related Social and Economic Impacts. *RIVM Report*. 2001. Available online: <http://www.rivm.nl/bibliotheek/rapporten/408505006.pdf> (accessed on 30 June 2023).
21. Lucas, K. Transport and social exclusion: Where are we now? *Transp. Policy* **2012**, *20*, 105–113. [[CrossRef](#)]
22. Martens, K. *Transport Justice: Designing Fair Transportation Systems*; Routledge: London, UK, 2016.
23. Broome, K.; Worrall, L.; Fleming, J.; Boldy, D. Evaluation of flexible route bus transport for older people. *Transp. Policy* **2012**, *21*, 85–91. [[CrossRef](#)]

24. Borges, I. The Added Value of Accessible Public Transport for All in the Context of Demographic Ageing. AGE Presentation at XXIII World Road Congress, Paris, France. 2012. Available online: <http://www.age-platform.eu/en/age-policy-work/accessibility/age-position-statements/496-age-the-added-value-of-accessible-public-transport-for-all-in-the-context-of-demographic-ageing> (accessed on 30 June 2023).
25. Broome, K.; Worrall, L.; McKenna, K.; Boldy, D. Priorities for an age-friendly bus system. *Can. J. Aging* **2010**, *29*, 435–444. [CrossRef]
26. Broome, K.; Worrall, L.; Fleming, J.; Boldy, D. Evaluation of age-friendly guidelines for public buses. *Transp. Res. Part A* **2013**, *53*, 68–80. [CrossRef]
27. Lamanna, M.; Klinger, C.A.; Liu, A.; Mirza, R.M. The Association between Public Transportation and Social Isolation in Older Adults: A Scoping Review of the Literature. *Can. J. Aging* **2020**, *39*, 393–405. [CrossRef]
28. European Commission. QUATTRO Final Report: Synthesis and Recommendations. 1998. Available online: http://europa.eu.int/comm/transport/extra/final_reports/urban/quattro.pdf (accessed on 30 June 2023).
29. Transportation Research Board. *A Guidebook for Developing a Transit Performance-Measurement System*; Transit Cooperative Research Program, Report 88; Transportation Research Board: Washington, DC, USA, 2003.
30. Lättman, K.; Friman, M.; Olsson, L.E. Perceived accessibility of public transport as a potential indicator of social inclusion. *Soc. Incl.* **2016**, *4*, 36–45. [CrossRef]
31. Friman, M.; Lättman, K.; Olsson, L.E. Public transport quality, safety, and perceived accessibility. *Sustainability* **2020**, *12*, 3563. [CrossRef]
32. Metz, D. Transport policy for an ageing population. *Transp. Rev.* **2003**, *23*, 375–386. [CrossRef]
33. Devlin, A.; McGillivray, J. Self-regulatory driving behaviours amongst older drivers according to cognitive status. *Transp. Res. Part F Traffic Psychol. Behav.* **2016**, *39*, 1–9. [CrossRef]
34. Michael, Y.L.; Whitlock, E.P.; Lin, J.S.; Fu, R.; O'Connor, E.A.; Gold, R.; Zuber, S.P. Primary care-relevant interventions to promote physical activity and mobility in older adults: A systematic review for the U.S. Preventive Services Task Force. *Ann. Intern. Med.* **2021**, *174*, 1039–1046.
35. Lang, A.; Edwards, N.; Fleisig, A.; King, R. Transportation and mobility of older adults in Canada: Understanding issues, needs, and contexts. *JAH* **2017**, *29*, 1095–1113.
36. Shoal, N.; Auslander, G.; Freidman, B.; Cohen-Mansfield, J. Technology-based solutions for promoting mobility and transportation among older adults. *J. Appl. Gerontol.* **2020**, *39*, 591–601.
37. Liao, Y.C.; Chen, I.J.; Yeh, T.L.; Chen, C.Y. Community-based transportation program: Effects on mobility, social participation, and well-being of older adults. *JCOP* **2019**, *47*, 1663–1673.
38. Tinella, L.; Lopez, A.; Caffò, A.O.; Grattagliano, I.; Bosco, A. Spatial Mental Transformation Skills Discriminate Fitness to Drive in Young and Old Adults. *Front. Psychol.* **2020**, *11*, 604762. [CrossRef] [PubMed]
39. Tinella, L.; Lopez, A.; Caffò, A.O.; Nardulli, F.; Grattagliano, I.; Bosco, A. Cognitive Efficiency and Fitness-to-Drive along the Lifespan: The Mediation Effect of Visuospatial Transformations. *Brain Sci.* **2021**, *11*, 1028. [CrossRef]
40. Slater, K. Discussion Paper The Assessment of Comfort. *J. Text. Inst.* **1986**, *77*, 157–171. [CrossRef]
41. Malone, K.; Silla, A.; Johanssen, C.; Bell, D. Safety, mobility and comfort assessment methodologies of intelligent transport systems for vulnerable road users. *Eur. Transp. Res. Rev.* **2017**, *9*, 21. [CrossRef]
42. Innamaa, S.; Axelson-Fisk, M.; Borgarello, L.; Brignolo, R.; Guidotti, L.; Martin Perez, O.; Morris, A.; Paglé, K.; Rämä, A.; Wallgren, P.; et al. *Impacts on Mobility: Results and Implications*; TeleFOT Deliverable D4.4.3; European Commission, Information Society and Media, 7th Framework Programme; European Commission: Brussels, Belgium, 2013.
43. Ang, B.H.; Oxley, J.A.; Chen, W.S.; Yap, K.K.; Song, K.P.; Lee, S.W.H. To reduce or to cease: A systematic review and meta-analysis of quantitative studies on self-regulation of driving. *J. Saf. Res.* **2019**, *70*, 243–251. [CrossRef]
44. Kostyniuk, L.P.; Shope, J.T. Driving and alternatives: Older drivers in Michigan. *J. Saf. Res.* **2003**, *34*, 407–414. [CrossRef]
45. Sheikh, J.I. Anxiety disorders and their treatment. *Clin. Geriatr. Med.* **1992**, *8*, 411–426. [CrossRef] [PubMed]
46. Luo, J.M.; Lam, C.F. Travel anxiety, risk attitude and travel intentions towards “travel bubble” destinations in Hong Kong: Effect of the fear of COVID-19. *Int. J. Environ. Res. Public Health* **2020**, *17*, 7859. [CrossRef] [PubMed]
47. Korstanje, M.E. The fear of traveling: A new perspective for tourism and hospitality. *Anatolia* **2011**, *2*, 222–233. [CrossRef]
48. Mercado, R.; Páez, A.; Newbold, K.B. Transport policy and the provision of mobility options in an aging society: A case study of Ontario, Canada. *J. Transp. Geogr.* **2010**, *18*, 649–661. [CrossRef]
49. Vecchio, G.; Tiznado-Aitken, I.; Castillo, B.; Steiniger, S. Fair transport policies for older people: Accessibility and affordability of public transport in Santiago, Chile. *Transportation* **2022**. [CrossRef]
50. Musselwhite, C.B.A.; Shergold, I. Examining the process of driving cessation in later life. *Eur. J. Ageing* **2012**, *10*, 89–100. [CrossRef]
51. Jahangir, S.; Bailey, A.; Hasan, M.U.; Hossain, S.; Helbich, M.; Hyde, M. When I Need to Travel, I Feel Feverish: Everyday Experiences of Transport Inequalities Among Older Adults in Dhaka, Bangladesh. *Gerontologist* **2022**, *62*, 493–503. [CrossRef]
52. Islam, M.R. Ageism and Age Discrimination in Old Age: An Overview. *Philos. Prog.* **2014**, *55–56*, 92–108. [CrossRef]
53. World Health Organization. World Report on Ageing and Health. 2015. Available online: <https://www.who.int/ageing/events/world-report-2015-launch/en/> (accessed on 10 July 2023).
54. Engels, B.; Liu, G.J. Social exclusion, location and transport disadvantage amongst non-driving seniors in a Melbourne municipality, Australia. *J. Transp. Geogr.* **2011**, *19*, 984–996. [CrossRef]

55. Butler, R.N. The Life Review: An Interpretation of Reminiscence in the Aged. In *Neugarten Middle Age and Ageing: A Reader in Social Psychology*; Bernice, L., Ed.; University of Chicago Press: Chicago, IL, USA, 1968.
56. Grundstrom, A.C.; Guse, C.E.; Layde, P.M. Risk factors for falls and fall-related injuries in adults 85 years of age and older. *Arch. Gerontol. Geriatr.* **2012**, *54*, 421–428. [[CrossRef](#)]
57. Sherrington, C.; Fairhall, N.J.; Wallbank, G.K.; Tiedemann, A.; Michaleff, Z.A.; Howard, K.; Clemson, L.; Hopewell, S.; Lamb, S.E. Exercise for preventing falls in older people living in the community. *Cochrane Database Syst. Rev.* **2019**, *1*, CD012424. [[CrossRef](#)]
58. Khosravi, P.; Ghapanchi, A.H. Investigating the effectiveness of technologies applied to assist seniors: A systematic literature review. *Int. J. Med. Inform.* **2016**, *85*, 17–26. [[CrossRef](#)]
59. Spano, G.; Caffò, A.O.; Bosco, A. Cognitive functioning, subjective memory complaints and risky behaviour predict minor home injuries in elderly. *Aging Clin. Exp. Res.* **2018**, *30*, 985–991. [[CrossRef](#)]
60. Clemson, L.; Mackenzie, L.; Roberts, C.; Poulos, R.; Tan, A.; Lovarini, M.; Sherrington, C.; Simpson, J.M.; Willis, K.; Lam, M.; et al. Integrated solutions for sustainable fall prevention in primary care, the iSOLVE project: A type 2 hybrid effectiveness-implementation design. *Implement. Sci.* **2017**, *12*, 12. [[CrossRef](#)]
61. Pt Access. Report on Good Practice Examples of Accessible Public Transport. In *Deliverable D2.1 of Project titled Public Transport Systems' Accessibility for People with Disabilities in Europe (pt access)*; Patient Access: Atlanta, GA, USA, 2008.
62. DfT, Department for Transport. Annual Bus Statistics 2010/11. 2011. Available online: <https://assets.dft.gov.uk/statistics/releases/annual-bus-statistics-2010-11/busstats20.10.pdf> (accessed on 15 June 2023).
63. Cvitkovich, Y.; Wister, A. The importance of transportation and prioritization of environmental needs to sustain well-being among older adults. *Environ. Behav.* **2001**, *33*, 809–829. [[CrossRef](#)]
64. Smith, N.; Beckhelling, J.; Ivaldi, A.; Kellard, K.; Sandu, A.; Tarrant, C. Evidence Base Review on Mobility: Choices & Barriers for Different Social Groups. Retrieved from Department for Transport Website. 2007. Available online: <https://dspace.lboro.ac.uk/dspace-jspui/handle/2134/2985> (accessed on 20 August 2023).
65. Cobb, R.W.; Coughlin, J.F. How will we get there from here? Placing transportation on the aging policy agenda. *J. Aging Soc. Policy* **2000**, *11*, 201–210. [[CrossRef](#)] [[PubMed](#)]
66. Ricciardi, E.; Spano, G.; Tinella, L.; Lopez, A.; Clemente, C.; Bosco, A.; Caffò, A.O. Perceived Social Support Mediates the Relationship between Use of Greenspace and Geriatric Depression: A Cross-Sectional Study in a Sample of South-Italian Older Adults. *Int. J. Environ. Res. Public Health* **2023**, *20*, 5540. [[CrossRef](#)]
67. Babka, R.J.; Cooper, J.F.; Ragland, D.R. Evaluation of urban travel training for older adults. *Transp. Res. Rec.* **2009**, *2110*, 149–154. [[CrossRef](#)]
68. Rittner, B.; Kirk, A.B. Health care and public transportation use by poor and frail elderly people. *J. Soc. Work* **1995**, *40*, 365–373.
69. Jiang, W.; Zhang, L. The impact of the transportation network companies on the taxi industry: Evidence from Beijing's GPS taxi trajectory data. *IEEE Access* **2018**, *6*, 12438–12450. [[CrossRef](#)]
70. Liu, Q.; Liu, Y.; Zhang, C.; An, Z.; Zhao, P. Elderly mobility during the COVID-19 pandemic: A qualitative exploration in Kunming, China. *J. Transp. Geogr.* **2021**, *96*, 103176. [[CrossRef](#)] [[PubMed](#)]
71. Mace, R.A.; Mattos, M.K.; Vranceanu, A.M. Older adults can use technology: Why healthcare professionals must overcome ageism in digital health. *Transl. Behav. Med.* **2022**, *12*, 1102–1105. [[CrossRef](#)] [[PubMed](#)]
72. Hickman, J.M.; Rogers, W.A.; Fisk, A.D. Training older adults to use new technology. *J. Gerontol. Ser. B Psychol. Sci. Soc. Sci.* **2007**, *62*, 77–84. [[CrossRef](#)] [[PubMed](#)]
73. Marin-Lamellet, C.; Hausteine, S. Managing the safe mobility of older road users: How to cope with their diversity? *J. Transp. Health.* **2015**, *2*, 2–31. [[CrossRef](#)]
74. Social Exclusion Unit. Making the Connections: Final Report on Transport and Social Exclusion, Office of the Deputy Prime Minister, London. 2003. Available online: <http://www.socialexclusion.gov.uk/downloaddoc.asp?id=229> (accessed on 20 August 2023).
75. Department for Transport. Full Guidance on Accessibility Planning. 2006. Available online: <http://www.dft.gov.uk/pgr/regional/ltp/accessibility/guidance/gap/nicalguidanceonaccessibi3641.pdf> (accessed on 20 August 2023).
76. Victoria Department of the Premier and Cabinet. A Fairer Victoria: Creating Opportunity and Addressing Disadvantage Department of Premier and Cabinet, Melbourne. 2005. Available online: <http://nla.gov.au/nla.cat-vn3549878> (accessed on 20 August 2023).
77. State of Victoria. Improving Options and Reducing Barriers—Addressing Transport Disadvantage: A Status Report Melbourne, Australia, The Department of Transport. 2008. Available online: [http://www.transport.vic.gov.au/DOI/DOIElect.nsf/\\$UNIDS+for+Web+Display/A99556E30A86CB71CA25743B0009F008/\\$FILE/Addressing_transport_disadvantage.pdf](http://www.transport.vic.gov.au/DOI/DOIElect.nsf/$UNIDS+for+Web+Display/A99556E30A86CB71CA25743B0009F008/$FILE/Addressing_transport_disadvantage.pdf) (accessed on 20 August 2023).
78. Loader, C.; Stanley, J. Growing bus patronage and addressing transport disadvantage. The Melbourne experience. *Transp. Policy* **2009**, *16*, 90–96. [[CrossRef](#)]
79. Gholamzadeh, S.; Khastavaneh, M.; Khademian, Z.; Ghadakpour, S. The effects of empathy skills training on nursing students' empathy and attitudes toward elderly people. *BMC Med. Educ.* **2018**, *18*, 198. [[CrossRef](#)] [[PubMed](#)]
80. Ambrose, A.F.; Paul, G.; Hausdorff, J.M. Risk factors for falls among older adults: A review of the literature. *Maturitas* **2013**, *75*, 51–61. [[CrossRef](#)]

81. Edrees, A.M.; Kamel, S.; Sabry, H.; Nessim, A. Visual Comfort in Elder Care Facilities: Promoting Environmental Gerontology Theory. In *Towards Implementation of Sustainability Concepts in Developing Countries*; Springer: Berlin/Heidelberg, Germany, 2021; pp. 227–241.
82. Mitchell, C.G.B.; Suen, S.L. Urban travel, intelligent transportation systems, and the safety of elderly and disabled travelers. *J. Urban Technol.* **1998**, *5*, 17–43. [[CrossRef](#)]
83. Rychtařiková, J. Perception of population ageing and age discrimination across EU countries. *J. Popul. Econ.* **2019**, *3*, 1–29. [[CrossRef](#)]
84. De Felice, F.; Petrillo, A. Methodological approach for performing human reliability and error analysis in railway transportation system. *Int. J. Eng. Technol.* **2011**, *3*, 341–353.
85. Wong, R.C.P.; Szeto, W.Y.; Yang, L.; Li, Y.C.; 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](#)]
86. Doukas, C.; Metsis, V.; Becker, E.; Le, Z.; Makedon, F.; Maglogiannis, I. Digital cities of the future: Extending @home assistive technologies for the elderly and the disabled. *Telemat. Inform.* **2011**, *28*, 176–190. [[CrossRef](#)]
87. Kim, M.; Yoon, D.; Lee, C. The effects of a training program on bus drivers' attitudes towards older passengers in South Korea. *Sustainability* **2020**, *12*, 9509. [[CrossRef](#)]
88. Fialho, F.A.; Vasconcelos, R.B.; Oliveira, M.C. The effect of a training program on bus drivers' knowledge of aging and disability. *Work* **2017**, *57*, 99–105. [[CrossRef](#)]
89. Yang, Y.; Zhu, J.; Shang, Y. Effects of taxi driver training on knowledge, attitude and behavior toward elderly passengers. *Transp. Res. F Traffic Psychol.* **2019**, *66*, 77–87. [[CrossRef](#)]
90. Tinella, L.; Caffò, A.O.; Lopez, A.; Nardulli, F.; Grattagliano, I.; Bosco, A. Reassessing Fitness-to-Drive in Drinker Drivers: The Role of Cognition and Personality. *Int. J. Environ. Res. Public Health* **2021**, *18*, 12828. [[CrossRef](#)]
91. Patil, D.S.; Bailey, A.; Yadav, U.N.; George, S.; Helbich, M.; Ettema, D.; Ashok, L. Contextual factors influencing the urban mobility infrastructure interventions and policies for older adults in low- and middle-income countries: A realist review. *BMC Public Health* **2022**, *22*, 1489. [[CrossRef](#)]
92. Shevelkova, V.; Mattocks, C.; Lafortune, L. Efforts to address the Sustainable Development Goals in older populations: A scoping review. *BMC Public Health* **2023**, *23*, 456. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.