

# PUBLIC SAFETY AND SECURITY FOR OLDER PEOPLE WHEN WALKING: PERCEPTIONS AND PRACTICES IN SANTIAGO DE CHILE AND GUADALAJARA, MEXICO<sup>1</sup>

SEGURIDAD PÚBLICA Y CAMINATA DE LAS PERSONAS MAYORES: PERCEPCIONES Y  
PRÁCTICAS EN SANTIAGO DE CHILE Y GUADALAJARA MÉXICO

GIOVANNI VECCHIO 2

GABRIELA OCHOA-COVARRUBIAS 3

ALEJANDRA LUNEKE 4

ALEJANDRO PÉREZ-DUARTE-FERNÁNDEZ 5

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2 Doctor en Planificación, Diseño y Políticas Urbanas  
Profesor asistente, Instituto de Estudios Urbanos y Territoriales, Centro de Desarrollo Urbano Sustentable -  
Cedeus y Centro de Estudios de Vejez y Envejecimiento UC  
Pontificia Universidad Católica de Chile, Santiago, Chile.  
<https://orcid.org/0000-0002-5920-1507>  
[giovanni.vecchio@uc.cl](mailto:giovanni.vecchio@uc.cl)

3 Doctora en Ingeniería Civil  
Coordinadora del Seminario Permanente de Estudios de Movilidad Urbana Sustentable  
Instituto Tecnológico y de Estudios Superiores de Occidente, Tlaquepaque, Jalisco, México.  
<https://orcid.org/0000-0002-2864-6634>  
[ocioagabriela@iteso.mx](mailto:ocioagabriela@iteso.mx)

4 Doctora en Sociología Profesora Asociada,  
Escuela de Gobierno y Administración Pública  
Universidad Mayor, Santiago, Chile  
<https://orcid.org/0000-0002-6580-4582>  
[glunek@uc.cl](mailto:glunek@uc.cl)

5 Doctor  
Catedrático, Departamento del Hábitat y Desarrollo Urbano.  
Coordinador del Laboratorio del Hábitat para Personas Mayores  
Instituto Tecnológico y de Estudios Superiores de Occidente (ITESO), Guadalajara, México  
<https://orcid.org/0000-0001-5500-9828>  
[apdf@iteso.mx](mailto:apdf@iteso.mx)

La seguridad es una variable importante, pero poco explorada, que puede condicionar la decisión y la experiencia de caminar. Esta influencia puede ser especialmente cierta en el caso de grupos de la población que, por su edad, pueden necesitar más la caminata para mantenerse autónomos y, al mismo tiempo, perciben mayores niveles de inseguridad. Este artículo propone analizar de qué manera la percepción de (in)seguridad influye en la decisión de caminar y las experiencias de caminata de las personas mayores, comparando barrios que envejecen en Guadalajara, México, y Santiago de Chile. A través de una encuesta con 44 participantes, el análisis evidencia que la percepción de inseguridad influye en la decisión de caminar y en las experiencias de movilidad de las personas mayores, que generan prácticas adaptativas que restringen la movilidad sin por esto impedir que la población mayor siga moviéndose a pie.

**Palabras clave:** accesibilidad, envejecimiento de la población, espacio público, seguridad

Safety and the feeling of security are essential but underexplored variables that may condition the decision to walk and the experience of walking. This influence may be especially true for population groups who, because of their age, may have a greater need to walk to remain autonomous and, at the same time, perceive greater insecurity. This paper proposes analyzing how perceptions of (in)security influence walking decisions and experiences among older people, comparing aging neighborhoods in Guadalajara, Mexico, and Santiago de Chile. A survey of 44 participants shows that perceptions of insecurity influence decisions to walk and mobility experiences among older people, leading to adaptive practices that restrict mobility without preventing them from continuing to walk.

**Keywords:** accessibility, population aging, public space, security/safety

## I. INTRODUCTION

Public security is a relevant but underexplored variable that influences both the decision and the experience of walking. By security, we mean the protection of people from threats of criminal and violent activities. The United Nations acknowledges that crime and violence affect the security of urban inhabitants and identifies them as a priority for policies aimed at creating safer human settlements (United Nations Human Settlements Programme [UN-Habitat], 2007). The decision to walk can be negatively influenced by perceived insecurity and crime levels in a given place. While perceiving a place as safe encourages the decision to move around on foot to places that allow daily needs to be met (Loukaitou-Sideris, 2006; Ceccato & Loukaitou-Sideris, 2020), perceiving a place as unsafe can negatively condition the very decision to participate in activities outside the home and use public spaces (Marquet et al., 2019). Research in criminology shows that age significantly influences perceptions of insecurity (Köber et al., 2022). For example, perceptions of insecurity can generate the fear of walking in public spaces, a reaction that tends to increase with age (Roman & Chalfin, 2008) and in contexts of inequality (Luneke Reyes, 2021). Despite the evidence, the role that perceived or objective (in)security can play in the walking mobility decisions and experiences of older people has received little investigation, even though this group is increasingly relevant in light of the rapid demographic aging in Latin American countries (United Nations, 2017).

This article proposes analyzing how perceptions of (in) security influence older people's decisions to walk and their walking experiences. In particular, the influence of perceived (in)security on the mobility practices of older people in neighborhoods with a high proportion of older residents and high levels of proximity accessibility is considered, where residents' predisposition to walk and head to relevant places on foot should be greater. The paper proposes a comparison of neighborhoods in the cities of Santiago, Chile, and Guadalajara, Mexico, two cities with similar population and aging rates but different crime rates. By comparing the results of a survey conducted with 44 older people, the analysis characterizes the mobility practices of the participants, identifies the relevance of walking and proximity to respond to their daily needs, considers exposure to different types of incivilities, and identifies the perception of insecurity associated with them, in addition to shedding light on preventive practices to reduce exposure to insecurity.

## II. THEORETICAL FRAMEWORK

### Older people, walking, and insecurity

Walking is a relevant mobility alternative for older people to move short distances and take advantage of proximity, especially for short trips and access to urban opportunities near their residences. Walking is an important activity for older people, as it contributes to active and healthy aging, helps them remain autonomous and visit nearby destinations, and keeps them involved in the community (Sugiyama et al., 2019). The positive effects of walking involve physical health, by reducing the risk of disease and helping retain autonomy (Paterson et al., 2007), and mental health, helping to conserve cognitive functions and reduce the prevalence of depression (Blazer, 2003). The likelihood of older people walking is higher in areas with greater walkability and accessibility to relevant opportunities on foot, showing a clear relationship between the likelihood of walking and the decision to walk (Marquet et al., 2017).

However, the likelihood of walking and gaining access to relevant opportunities varies by neighborhood location and characteristics. For example, older people can easily access opportunities in their neighborhood or may need to travel to other areas to access basic services; in addition, depending on the available modes, reaching other areas may be more or less feasible (Vecchio et al., 2025). Neighborhoods with higher density and mixed land uses make it easier for people to move to the places they need. In addition, higher-quality public spaces encourage people to walk more for recreational purposes (Diez Roux & Mair, 2010). The built environment also influences the decision to walk. On one hand, the quality of the public space (including streets and sidewalks) affects the walking experience, while, on the other, the surrounding elements - such as certain activities, areas with different uses or buildings with different characteristics - can be associated with positive or negative sensations when walking (Herrmann-Lunecke et al., 2020a). Finally, specific social dimensions are also relevant, as people who feel a stronger connection to their neighborhood and community tend to move more (Kaczynski & Glover, 2012).

The possibility for older people to walk to the places they need, and the influence that perceived safety can have on this, pose specific challenges for Latin American cities. Walking is the predominant mode of transport, accounting for most daily commutes (Herrmann-Lunecke et al., 2020b). While in car-dependent contexts (such as North America and non-urban areas of Europe), an aging person loses considerable autonomy when they stop driving,

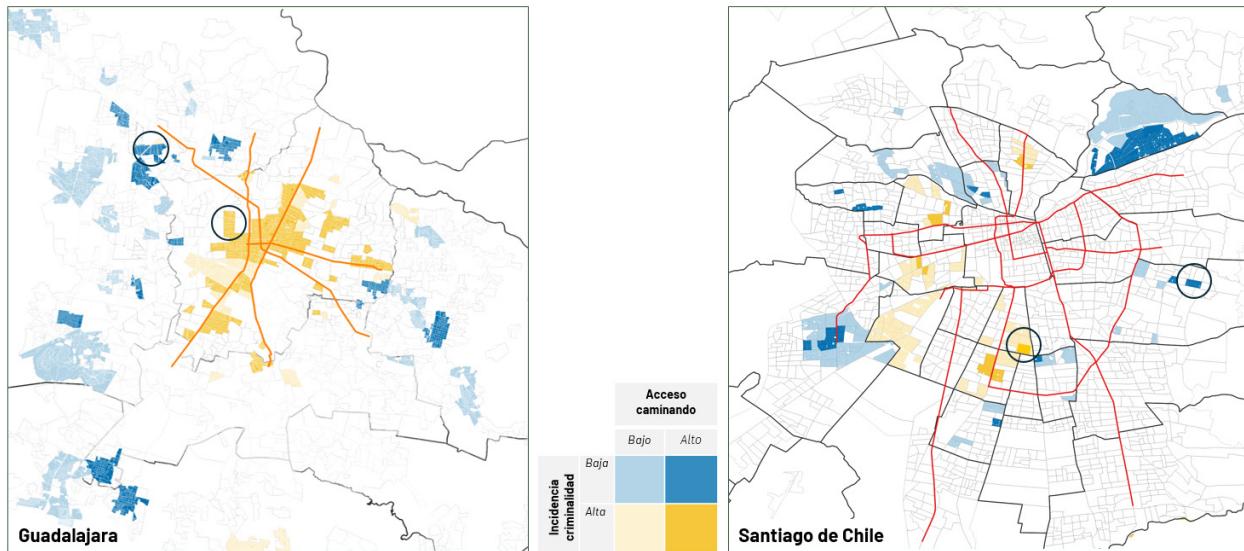


Figure 1. Aging neighborhoods, walkable access, and crime rate in Guadalajara and Santiago de Chile. Source: Prepared by the authors.

older people living in Latin American cities can continue to get around on foot or by public transport (Villena-Sánchez & Boschmann, 2022). The marked inequalities that affect Latin American urban contexts also determine different levels of pedestrian accessibility to opportunities and affect the quality of public spaces, conditioning the possibility of walking to meet most everyday needs. Finally, due to the high crime rate and perceived insecurity, security itself can represent an additional barrier, reducing the potential benefits of streets, neighborhoods, and cities that, given their characteristics, could promote walking among their inhabitants. This is relevant for the adult population, as older adults experience higher levels of perceived insecurity (Ferraro, 1995), a perception exacerbated in segregated urban neighborhoods (Lunek et al., 2021).

### III. METHODOLOGY

#### Case studies

The work is based on a comparative analysis of the metropolitan areas of Santiago de Chile and Guadalajara, Mexico, two comparable cities by population (with 6,160,040 inhabitants in Santiago and 5,268,642 in Guadalajara) and presence of older people (11% of the population in Santiago and 17% in Guadalajara), but with different crime rates (the homicide rate in Santiago is

4.7 while in Guadalajara is 10.04). Both Guadalajara and Santiago are significant case studies: Guadalajara has a high rate of crime, with a third of its homes victims of at least one crime in 2021 (Strickland, 2022); Santiago is the capital of a country with a high perception of insecurity despite the low occurrence of crimes (Ipsos, 2023), and its older adults increasingly fear being assaulted while walking down the street (Centro Estudios de la Vejez y Ageimiento UC [CEVE UC], 2023 ).

#### Methods

A mixed-methods approach was used in two stages: spatial analysis to select two neighborhoods in each city, and conducting an initial survey. A daily survey conducted over a week and an on-the-road interview were added to these, but their results will not be presented on this occasion. In the former, two neighborhoods with a high older adult population and high accessibility on foot were selected in each city. However, these had different levels of criminal activity, as determined through spatial analysis of public or community-created data sources (OpenStreetMap). Based on a taxonomy that classifies neighborhoods by considering the presence of an older population and the level of accessibility on foot (see Vecchio et al., 2025 for a more detailed discussion of the methodology used), neighborhoods were considered that 1. had a higher percentage of the population than the average of each country, 2. that have high levels of accessibility on foot to

relevant services and equipment for older people (such as commerce, health services, green areas, among others) and 3. that had different numbers of reported crimes, as reported by official statistics. The analysis allowed identifying different types of neighborhoods in both cities (Figure 1).

The second stage involved conducting a survey. Through contacts with local institutions, two aging neighborhoods with the highest percentage of older population (11% in Santiago and 17% in Guadalajara) and that had a high number of opportunities and contrasting crime rates were selected in each city. The four neighborhoods are predominantly residential, with commercial activities and low-rise buildings. In each neighborhood, spaces where older people were concentrated, such as clubs and day centers, were visited, and a total of 44 surveys were conducted. Each survey allowed identifying mobility habits and perceptions of insecurity during movements. The participants (70% women and 30% men; average age 72.7 years) were surveyed about their general profile, the condition of their housing, their sense of belonging to the neighborhood, their health status, their reasons and frequency of travel, and the types of transportation used. In addition, questions related to the ease or difficulty of movement were incorporated into the instrument. Finally, general perceptions of security in each neighborhood were integrated with perceptions of incivility, the insecurity it provokes, and the preventive practices put in place.

## IV. RESULTS

### Older people and walking

Walking is a relevant mode of transport for the older people who participated in the study. When asked about the frequency of use of specific modes of transport, 90% of the participants stated that they often move around on foot (i.e., every day or almost every day), with a much higher frequency compared to public transport: about half of the respondents (51%) mentioned often traveling by bus, while a quarter (25%) said they did so by subway. On the other hand, the use of the car shows a more balanced distribution: 39% do not use it, 26% use it occasionally, and 34% use it often. This frequency demonstrates the car's important role, but also the absence of a systematic dependence on the private vehicle, as could occur in less-dense contexts such as suburban areas. Although some differences are observed between the analyzed neighborhoods of Guadalajara and Santiago de Chile, the frequency of

walking is slightly lower in the Mexican case; therefore, it is possible to confirm that walking trips are relevant for older people in both countries.

The older people who participated in the study walk mainly within their neighborhood, where they perform activities related mainly to everyday needs. The closer the proximity, the more frequently participants use certain spaces: thus, 79% of participants frequently carry out activities within their neighborhood, 48% within their commune or district, and 39% in other nearby communes or districts. On the other hand, only 2% frequently engage in activities in other states or regions, and no one does so outside the country. The relevance of the neighborhood scale is also evident in the types of activities participants often engage in. 65% of respondents mention traveling frequently to make purchases, while 47% do it occasionally for errands. Caregiving is another important purpose of travel, with 45% of participants taking trips to care for others (22% occasionally and 22% frequently) or to accompany them (54% take these trips occasionally). Trips to receive health care are more sporadic, with 64% of participants making them occasionally. 58% of respondents reported frequent visits to recreational and socialization spaces, which are important for autonomy and community bonding. Finally, almost all participants do not work and state they do not make work-related trips. Thus, walking is an essential mode of transport for older people who, after leaving the labor market, maintain a certain level of autonomy and participation in their community, especially within the neighborhoods where they reside.

### Older people and perceived insecurity

Perceptions of safety are determined by both the built environment and the presence of incivility, although participants in the study most often mention the physical environment (Table 1). 43% of people report that garbage accumulation in vacant lots is commonplace or constant. Similarly, 50% report annoying noises as frequent or permanent. Other forms of deterioration, such as graffiti or marks on public or private property, are indicated as frequent or permanent by 52% of the sample. In more serious terms, 36% report damage to private property as frequent or permanent, and 46% report damage to public infrastructure (such as traffic lights, street lights, public transport stops, and other elements).

Instead, the incivility appears with varying intensity. Some elements are indicated by participants as common. The most frequently observed activities fall into two areas. The first has to do with problematic

	How often do you think the following situations happen or exist in your neighborhood?							Does this cause you insecurity?		
	Often/Always			Never/ Sometimes			Yes			
	Chile	Mexico	% of the total sample	Chile	Mexico	% of the total sample	Both countries	Chile	Mexico	
Neglected vacant lots/ accumulation of garbage	2	17	43%	18	7	57%	50%	20%	30%	
Annoying noises	9	13	50%	11	11	50%	30%	11%	18%	
Graffiti or marks on public or private property	6	17	52%	14	7	48%	32%	7%	25%	
Damage to private property	1	15	36%	19	9	64%	25%	9%	16%	
Presence of people sleeping on the street and/or asking for money	12	20	73%	8	4	27%	52%	11%	41%	
Damage to public infrastructure, such as traffic lights, street lights, sports courts, or others	4	16	45%	16	8	55%	25%	9%	16%	
Alcohol consumption/drug use on public streets	11	22	75%	9	22	70%	52%	20%	32%	
Sexual harassment or assault	0	2	5%	20	22	95%	14%	7%	7%	
Illegal trade (sale of pirated, stolen goods, others)	2	11	30%	18	13	70%	27%	7%	20%	
Illegal sale of alcohol	2	13	34%	18	11	66%	30%	7%	23%	
Prostitution/sex trade	0	2	5%	20	22	95%	9%	2%	7%	
Sale of drugs	14	17	70%	6	7	30%	45%	18%	27%	
Threats between neighbors	1	5	14%	19	19	86%	18%	7%	11%	
Presence of gangs or violent groups	2	3	11%	18	21	89%	20%	36%	11%	
Street fights	1	2	7%	19	22	93%	16%	48%	5%	
Robbery or assault on public streets	3	14	39%	17	10	61%	45%	16%	30%	
Have heard gunshots or gunfights	16	11	61%	4	13	39%	45%	23%	23%	

Table 1. Frequency of incivilities and perception of insecurity mentioned by the respondents. Source: Prepared by the authors

behaviors, such as the presence of people sleeping on the street or asking for money (frequently observed by 72% of the participants) and the consumption of alcohol or drugs on public roads (frequently observed by 75% of the participants). The second is related to criminal activities: the presence of drug sales is indicated as frequent by 70% of the participants, who also mention with high frequency that they hear gunfights or shots (61%). Other elements appear with less intensity, without this seeming less relevant, as is the case with sexual harassment or assault (95% of the participants report not having witnessed or experienced situations like these). A third of the participants (31%) indicate that robberies or assaults on public roads are frequent or permanent, while the presence of gangs or violent groups (14%) or street fights (7%) is less common. However, these elements can generate a sense of latent threat, which can be associated with some specific sectors of the analyzed places. Even when it comes to perceived indicators and not objective records, these elements often show exposure to situations that generate insecurity and that, due to their symbolic and emotional weight, can directly affect the decision to leave the house, walk down the street of the neighborhood in which one resides to do certain activities relevant to the person's autonomy and well-being.

### Perceptions and preventive practices

When asked about situations that generate fear or insecurity, there is no clear consensus on the incivilities that make the older population uncomfortable. In general, participants from the two neighborhoods of Guadalajara report a higher frequency of incivility and perceive greater insecurity than participants from the two neighborhoods of Santiago de Chile. One of the factors that causes the most insecurity is the presence of people sleeping on the street or asking for money, with 52% of respondents stating that they feel unsafe in this situation. The same percentage is repeated in the case of alcohol or drug consumption on public roads, which suggests a strong association between the perception of social disorder and the feeling of insecurity. Other elements that generate a high perception of risk are robberies or assaults on public roads, the sale of drugs, and the fact of having heard gunshots or gunfights, all with 45% of affirmative answers. In contrast, situations such as prostitution or sex trade (9%), sexual harassment or assault (14%), and street fights (16%) are perceived as less threatening by the majority of respondents. This could be due to reduced direct exposure or to normalization of certain behaviors in the public space. Regarding elements of the built environment,

vacant lots with garbage piled there are unsafe for half of the participants (50%), while graffiti on public or private property (32%) and illegal trade (27%) generate a more moderate perception of insecurity. Finally, phenomena such as damage to public infrastructure and private property, as well as the presence of gangs or threats among neighbors, are seen as less alarming, with percentages ranging between 18% and 25%. These elements show that the perception of insecurity associated with incivility and the physical environment is not homogeneous and does not necessarily negatively affect the experience of older people living in the analyzed neighborhoods.

The adoption of some preventive practices helps partially understand the impact of perceived insecurity on the mobility and walking of older people. The participants mainly mentioned, as preventive practices, some restrictions on their own mobility. In general, 45% report modifying their routines and schedules to avoid risks. Specifically, an even higher percentage of respondents (61%) avoid going out at night, and 43% avoid walking alone. Two-thirds of participants (66%) avoid withdrawing money at certain ATMs. However, only a small percentage reports that perceived insecurity affects the domestic sphere, with 18% avoiding leaving their home alone. Finally, 15% mention requesting help from neighbors to watch their homes; this reflects community strategies in the face of a perceived threat. Although not all participants adapt their mobility practices, the significant presence of restrictions on personal mobility shows how an environment perceived as unsafe significantly reduces the autonomy of many older people, limiting the possibility of moving to certain places or at certain times, or linking it to the presence of other companions.

## V. DISCUSSION

The results of the study confirm that walking is a fundamental mode of transport for older people, especially in urban contexts with good proximity accessibility. The high frequency of walking trips compared to other modes of transport suggests that walking not only meets a functional need but also plays a key role in the autonomy and social participation of this age group. This centrality of the walk, also observed in other Latin American contexts (Ardila-Pinto et al., 2024), is reinforced by the concentration of activities within the neighborhood, underscoring the importance of the neighborhood scale as a daily space of mobility. However, this practice is conditioned by contextual factors, including perceptions of safety, which can act as a barrier to everyday mobility and add to factors such as urban

vitality and the quality of public space (Akinci et al., 2021; Akinci et al., 2022).

In this sense, the perception of insecurity appears as a relevant factor affecting the mobility decisions of older people in the neighborhoods of Guadalajara, Mexico, and Santiago de Chile. Although not all elements of the environment generate the same level of concern, those such as the presence of people on the street, substance use on public streets, drug sales, and shootings are perceived as significant threats. These perceptions not only reflect evaluations of the physical and social environment but are also mediated by previous experiences and collective imaginaries, elements that were not explicitly addressed in this analysis. However, the coexistence of high levels of walking with perceptions of insecurity suggests that, although older people continue to walk, they do so in a context of tension, where mobility is constantly negotiated in the face of perceived risks – risks that refer not only to public safety, but also to eventual health problems and social isolation (Camacho Doyle et al., 2025). These results align with international evidence indicating that urban incivility, deterioration, and disorder directly affect people's perceptions of insecurity (Makita et al., 2020; Marquet et al., 2019).

Finally, the preventive strategies adopted by participants demonstrate how perceived insecurity shapes mobility practices. The modification of routines, the avoidance of certain times or places, and the need for company to walk are adaptive responses that, although they allow maintaining a certain level of activity, also imply a loss of autonomy. These restrictions disproportionately affect those who rely more on walking to meet their daily needs, exacerbating existing inequalities in access to urban opportunities and the ability to age autonomously.

## VI. CONCLUSIONS

The analysis shows that perceptions of (in)security influence decisions to walk and mobility experiences among older people, though its impact must be nuanced. Relevant findings are identified that are common in the neighborhoods of Mexico and Chile and may be useful for other Latin American urban contexts. Firstly, walking is a key mode of transport for older people, underscoring the importance of ensuring proximity to essential services and activities. Secondly, although exposure to incivility is commonplace in Guadalajara and Santiago, it does not always translate into a feeling of insecurity, suggesting that familiarity with the surroundings can mitigate fear. Thirdly, perceived insecurity gives rise to adaptive practices that restrict mobility in both

spatial and temporal terms and increase dependence on others. Although the study could be enriched with more cases, a larger sample, and qualitative methods, the results provide a basis for identifying key elements to promote the autonomous mobility of older people. Improving perceptions of safety is essential to ensuring that everyone can move freely and access the benefits of urban life without the barriers imposed by fear.

## VII. CONTRIBUTION OF AUTHORS CRedit:

Conceptualization, G.V., G.O., A.L., A.P.; Data curation, G.V., G.O., A.L., A.P.; Formal analysis, G.V., G.O., A.L., A.P.; Acquisition of financing, G.V., G.O., A.L., A.P.; Research, G.V., G.O., A.L., A.P.; Methodology, G.V., G.O., A.L., A.P.; Project management, X.X.; Resources, X.X.; Software, X.X.; Supervision, G.V., G.O., A.L., A.P.; Validation, G.V., G.O., A.L., A.P.; Visualization, G.V., G.O.; Writing – original draft, G.V., G.O.; Writing – revision and editing, G.V., G.O., A.L., A.P.

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