



Dipartimento
Architettura
Ferrara

BOOK OF PROCEEDINGS

2nd INTERNATIONAL CONFERENCE ON HOUSING, PLANNING, AND RESILIENT DEVELOPMENT OF THE TERRITORY

TOWARDS EURO-MEDITERRANEAN PERSPECTIVES

OCTOBER 16th-17th, 2025

ISBN: 9789928347237

DOI: 10.37199/c41000900



CIP Katalogimi në botim BK Tiranë

2nd international conference on housing, planning, and
resilient development of the territory : towards
euro-mediterranean perspectives : october 16th-17th, 2025 :
book of proceedings. - Tiranë : Universiteti Polis, 2026.

... f.

ISBN 9789928347237

1.Urbanistika 2.Planifikimi i qytetit dhe ligji i

rizhvillimit 3.Konferenca

711 (062)



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2nd International Conference on Housing, Planning, and Resilient Development of the Territory

Towards Euro-Mediterranean Perspectives

Conference Theme and Rationale

This conference returned for the second time within the Albanian and Mediterranean academic context, aiming to build a tradition of collaboration centered on scientific research and academia. Following the success of the first edition held on October 13th-14th, 2023, where proceedings were published in the Book of Proceedings, Albanica journal, and various international academic platforms, POLIS University and the Academy of Sciences of Albania relaunched this important event. The 2025 edition focused on housing, urban planning, and resilient territorial development, offering a platform for researchers, policymakers, and experts from the region and beyond.

Albania and the Western Balkans have faced major transformations in urbanization, spatial planning, and environmental management. Demographic changes, economic pressures, and environmental challenges created a need for new strategies in architecture, planning, and governance. This conference brought together diverse voices to explore these themes and promote resilient and sustainable development.

Key topics included architecture and the city, with emphasis on urban form, housing typologies, and the role of cultural heritage in modern urban design; urban mobility, addressing traffic challenges, public transport, and the use of technologies like GIS and AI in planning; and new housing models, focusing on affordability, energy efficiency, and innovative materials.

Discussions also covered demography and economy, exploring territorial governance, smart cities, social enterprises, and digital technologies such as AI, VR, and the Metaverse in urban management. Finally, the urban and natural environment was addressed through topics like pollution, adaptive planning, and nature-based solutions for climate resilience.

Through this conference, POLIS University and the Academy of Sciences of Albania aimed to foster a broad interdisciplinary debate on these pressing issues, combining academic and practical perspectives to offer concrete recommendations for future urban and territorial development policies and projects.

Organizers' Announcement

The International Scientific Conference on Housing, Urban Planning, and Resilient Territorial Development: Toward Euro-Mediterranean Approaches was held on October 16th-17th, 2025, in Tirana, Albania. Organized by POLIS University in collaboration with the Academy of Sciences of Albania and supported by national and international partners, including the University of Ferrara and Co-PLAN, Institute for Habitat Development, the event brought together researchers, academics, policymakers, and professionals to address key challenges in urban development, with a focus on resilience and sustainability in the Euro-Mediterranean region. The first day of the conference took place at the Academy of Sciences, while the second day was hosted at POLIS University.

The conference explored five main themes:

- I. Architecture and the City, which investigated the typological and morphological dimensions of urban form, the evolution of collective and individual housing types, the relationship between architectural design and urban identity, and the role of historical and cultural heritage in shaping contemporary cities;
- II. Urban Mobility and Resilient Cities, which addressed traffic congestion, infrastructure challenges, and public transportation, while also promoting the redesign of public spaces – such as streets, squares, and pedestrian zones – to improve accessibility and mobility; it also explored the integration of digital technologies like GIS, AI, and simulation tools to enhance planning, automation, and infrastructure management;
- III. New Housing Models, which examined innovative approaches to affordable and social housing in response to demographic shifts and technological change, along with energy efficiency strategies, passive energy systems, and the application of new sustainable materials and construction technologies;
- IV. Demography and Economy, which focused on macro-regional and national dynamics impacting territorial development, including urban governance, disaster risk reduction, and the rise of smart and inclusive cities; it also explored how emerging technologies – such as AI, VR, and the Metaverse – along with social enterprises and circular economy practices, could foster more equitable and adaptive urban systems; and
- V. Urban and Natural Environment, which analyzed environmental degradation in urban settings, including air, water, and soil pollution, and promoted nature-based solutions, ecosystem-based planning, and adaptive strategies to enhance environmental sustainability and climate resilience.

The conference was conducted in English and Albanian (with self-translated texts where applicable) and was free of charge, with all registration fees fully covered by POLIS University in support of open academic exchange. Key deadlines included abstract submission by June 15th, acceptance notification by June 30th, first draft of papers by September 15th, and final submissions by October 31st.

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V. Urban and Natural Environment: Environmental Problems, Climate Issues and Other Environmental Challenges

Sustainability and resilience in the natural environment / Adaptive planning / Complexity in territorial development.

Air, water, and soil pollution / Ecosystem services for protected and urban areas / Strategic environmental assessments / Nature-based solutions / Urban biodiversity assessment.

Children and Public Space

The Role of Urban Structure in Safety, Mobility, and Play in Residential Areas of Tirana

DOI: 10.37199/c41000936

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Abstract

The urban environment is undergoing transformation in both its physical form and social dynamics due to rapid urban development and demographic change. Focusing on the residential areas of Tirana, this research analyses public spaces to examine perceptions of safety and to explore how they can be readapted to encourage children's inclusion as rightful users of urban space. The methods employed include structured questionnaires with parents, video recordings from the children's perspective, open interviews with children, and on-site observations. Applied in two selected case studies, the analysed data reveal the spatial attributes that make public spaces child-friendly and demonstrate how they can be adapted to support children's development and independent play. The identified attributes are: (a) active edges and visual interaction; (b) visibility and continuity of movement; (c) urban forms with pockets, courtyards, and in-between spaces; (d) integration of parents' activities with children's play; and (e) spatial variety and diversity of urban elements. The research argues that urban planning, which considers children's physical scale, perspective, and creativity, can make public spaces more inclusive for all. Recommendations include interventions related to urban form, material use, and the promotion of mixed-use environments to foster flexible spaces within the shared fabric of community life.

Keywords

Children, inclusive planning, independent mobility, public space, safety, unstructured play

1. Introduction

Experiences and interactions within cities spark curiosity about how urban form and design influence daily life. This research focuses on children's relationships with public space in residential areas, where they spend a significant portion of their daily time. Public space is essential to urban life, serving as a setting for interaction, communication, and exchange (Moroni & Chiodelli, 2014), while also providing a stage for play and exploration for children. Through play, children engage with their surroundings, while developing imagination, as well as cognitive, motor, and emotional skills (Ginsburg et al., 2007). Unlike adults, however, children's mobility is often limited to their immediate "neighbourhood" – a space they are familiar with, where they are recognized, and where a sense of community is established.

1.1. Play and mobility

In Tirana, concerns regarding children's use of public space have become increasingly urgent. The city has undergone a rapid transformation in recent years, both in its physical and social composition of residential areas. Nearly one-third of Albania's population now resides in Tirana (INSTAT, 2024), whose growth has been described as a "turbo engine", where the human being is not considered a central dimension in urban planning and redevelopment (Aliaj, 2009). Three decades ago, neighbourhoods were more homogeneous, and children's play culture was significantly different. In the process of city development, children's independence in public spaces has decreased, while reliance on parental supervision and structured environments such as after-school programs, gyms, or learning centres has increased. Technology and extracurricular activities have further enclosed play in indoor or adult-controlled contexts, highlighting a growing detachment from outdoor play. Nevertheless, the need to experience the city's public spaces remains unchanged.

Parallel to these shifts, international attention to the rights and needs of children has grown. The UNICEF Child-Friendly Cities Initiative emphasises that children should have access to safe mobility, green spaces, and opportunities for participation in civic life (UNICEF, 2009). However, this right is often not guaranteed in cities where space prioritises economic over social use. As Ward (1978, p.25) argued, urban planning has long assumed that the city exists primarily for "the adult, male, white-collar, out-of-town car-user". In contrast, children spend more time in residential areas and are more exposed to the surrounding environment (Egli et al., 2019), making inclusivity and safety essential conditions.

1.2. Safety

Safety is a crucial concept in postmodern cities. Jacobs (1961) highlighted the role of "eyes on the street", referring to the spontaneous supervision provided by people present in public spaces. Gehl (2010) expanded this perspective, stressing that safety at the human scale is fundamental for social interaction and freedom. In Tirana, however, urban development often neglects this scale, leaving residential streets dominated by cars and parents hesitant to allow children to play independently outdoors. Therefore, this research approaches safety not only as a protective condition, but also as an enabler of children's autonomy and inclusivity in public space.

1.3. Play space

Although playgrounds are the most common form of “space for children”, studies show that they do not always guarantee children’s presence (Egli et al., 2019), who often prefer informal spaces such as sidewalks or courtyards, which they adapt for play. Ward (1978) similarly argued that children play “anywhere and anytime”, redefining ordinary urban elements as play opportunities. Gibson’s (1979) theory of affordances explains how such possibilities for action are perceived directly in the environment rather than the qualities of objects themselves. Heft (1988) applied this concept to children’s play, showing how benches, trees, fences, stones, sticks, and other everyday objects provide opportunities for climbing, jumping, and imaginative uses. This demonstrates how children reinterpret urban elements, assigning them new functions. Children’s independent mobility and the presence of affordances are indicators of two important criteria for child-friendly cities: diversity and accessibility (Kyttä, 2004).

These insights challenge the logic of functional zoning that separates playgrounds from other urban spaces. Nicholson (1971) introduced the concept of “loose parts” for elements that can be modified and rearranged to stimulate creativity. Franck and Stevens (2006) expanded this idea with the notion of “loose space”, highlighting flexible environments shaped by users of public space, rather than by rigid design. This perspective particularly challenges the concept of predetermined, traditional playgrounds. In this context, free, spontaneous, and “unstructured play” – including activities involving a certain healthy level of risk, such as climbing or independent exploration – is crucial for children’s emotional, physical, and social development, while overprotectiveness can limit their freedom and growth (Lester & Russell, 2010; Brussoni et al., 2012).

1.4. Existing initiatives and gaps

In the last decade, several initiatives in Tirana have aimed to improve public spaces for children. The municipality’s *Play Tirana* initiative (2015) improved or constructed nearly 50 playgrounds across the city, beginning with the large linear playground in the Artificial Lake Park (Kuris, 2019). More recently, in the context of post-pandemic recovery, Qendra Marrëdhënie (Relationship Centre) has requalified school zones through the *Tirana School Streets* program, restricting car use and creating safer gathering spaces for children and parents (Qendra Marrëdhënie, 2023). While these efforts mark progress, they remain focused on designated areas rather than the everyday shared spaces where children’s right to the full spectrum of public space should be recognized. Tirana’s rapid urban transformation provides an important context in which to test theories of affordances, play, mobility, and safety, and to understand how children adapt urban environments to their needs.

1.5. Research question and objectives

The main hypothesis assumes a positive relationship between the perception of physical safety in public spaces and their use for activity and play, suggesting that readapting public spaces to support safe movement fosters inclusion and social interaction. Specifically, this study asks how spatial elements influence children’s mobility, play, and the transformation of urban spaces into play areas.

Objectives:

1. To analyse spatial factors that support children's independent mobility at the human scale.
2. To identify urban elements that invite children's play and interaction.
3. To interpret how children adapt and transform public space through play.

By examining children's experiences, this study contributes both theoretically and practically: it situates international concepts within Tirana's unique urban context, while proposing child-centred principles that can inform inclusive planning in other rapidly urbanizing cities.

2. Methodology

This research adopts a mixed-methods approach to investigate how perceived safety influences children's use of public space in residential areas of Tirana. Safety is examined through three complementary lenses: the researcher's perspective, parents' perceptions, and children's lived experiences. The researcher provides systematic observations grounded in planning theory, parents express concerns and protective behaviours, and children reveal how they perceive and adapt their surroundings. Each lens generates distinct but intersecting insights, enabling a cross-analysis of subjective perceptions and objective spatial characteristics.

2.1. Researcher's lens

The researcher observed and documented spatial and social conditions of the selected case studies – Administrative Unit 7 and Unit 14 – through maps, sketches, on-site notes, and photographs. Within each unit, four 100 x 100 metre grid squares were defined for analysis, following Gehl's (2010) observation that people can perceive and interact within these distances. The grid squares were selected for their proximity to main movement corridors (Kavaja Street and Tom Plezha Street), their housing typologies, and the presence of at least one playground within each residential block.

On-site observations were guided by a checklist organised into four categories:

1. Sidewalk structure – width of 2 meters based on Road Code (1998), lighting, signage, pedestrian crossings.
2. Pedestrian movement and barriers – visual obstructions, continuity, orientation.
3. Edges of public space – façades, seating areas, transitions between private and public space, drawing on Jacobs (1961) and Gehl (2010).
4. Free play and spatial experience – children's presence, play types, and interaction with urban elements, based on Heft (1988).

The observational data were thematically analysed, informed by theory, to identify attributes that encourage child-friendly urban life.



Figure 1. Grid with highlighted playgrounds in Unit 7 (a) and Unit 14 (b).

Source: Author's annotations on Google Earth (April 9, 2025).

2.2. Parents' lens

Parents' perspectives were collected through an online survey distributed across Tirana, obtaining 120 responses in two weeks. The survey consisted of 11 structured questions divided into three sections: demographic and residential characteristics, children's use of public space, and perceptions of safety. Parents' perceptions were compared with on-site observations to examine how subjective feelings of safety align with, or diverge from, spatial realities.

Two administrative units of Tirana – Unit 7 and Unit 14 – were selected as case studies based on survey-derived criteria: high response rates, family-oriented social composition, frequent use of public space by children, different periods of urban development, and geographic proximity, allowing systematic comparison.

2.3. Children's lens

Children's lived experiences were documented using the walk-along video recording method with a GoPro camera, moving through the selected grids of the case studies. This approach emphasised how body size and perception shape children's spatial experience: surfaces, obstacles, and small-scale details such as paving textures or stair edges appear more significant to them than to adults (Ward, 1978). Filming was first piloted with a three-year-old and later conducted with two participants: a 14-year-old in Unit 7 and a 10-year-old in Unit 14. The children were instructed only on starting and ending points, and were then allowed to choose their own routes.

Following this method, short open-ended interviews were conducted to interpret the recordings and clarify children's feelings during their movement. Still images were extracted from the video material to highlight key spatial moments, such as encounters with barriers, diversions in movement, or spontaneous play interactions.

3. Results

The results are presented through the three complementary perspectives: those of the parents, the researcher, and the children. Drawing on data collected from two selected case studies, the analysis illustrates how safety, urban form, and social life influence children's use of public space in Tirana's residential areas.

Unit 7 serves as an example of an older, consolidated neighbourhood shaped by the Regulatory Plans of the mid-20th century and later transformations, where prefabricated housing, private dwellings, and recent residential complexes coexist. In contrast, Unit 14 represents a more recently developed area that was rapidly urbanized after the 1990s, evolving from agricultural land and informal housing into dense multi-storey blocks arranged along an orthogonal grid.

3.1. On-site observations

Observations within the eight grid squares across both units highlighted contrasts in mobility, visibility, and play. Sidewalks were generally narrow and frequently obstructed by kiosks, trees, or parked cars, often forcing pedestrians into the street. In more than half of the quadrants, blind spots caused by buildings and vehicles reduce visibility, confirming parents' concerns regarding safety.

The edges of public space influenced activity levels. In areas with active façades (shops, cafés, or mixed uses), both children and adults were more present, and seating areas were frequently occupied. In contrast, areas with lower activity or single-use residential edges were quieter and less inviting. Jacobs' (1961) notion of "street ballet" was observed in several quadrants, particularly around the school (Unit 7) and commercial areas, although activity levels varied throughout the day.



Figure 2. Active façades and presence of children (a) Unit 7, and (b) Unit 14.

Source: Author's elaboration.

Play was observed in both designated and improvised spaces. In Unit 7, the Magnet residential complex (Quadrant D) supported constant child activity, while the school zone (Quadrant B), developed through the *School Block* project by Qendra Marrëdhëniet, was lively only during specific hours. In Unit 14, the

large municipal playground (Quadrant C), part of the 2015 *Play Tirana* project, attracted children of all ages. Equally high levels of play were noted in shared squares, where boys turned flowerpots into goalposts and girls rode bicycles or played in enclosed passageways. Higher activity levels were also observed in areas where courtyards were formed within the urban fabric, compared to linear spaces.

In both units, fenced playgrounds or sports fields that required a small fee were less frequently used than open spaces, confirming that children more often prefer shared, accessible environments over limited-access ones.

3.2. Parents' perceptions

The parents' survey (120 responses) revealed that most families live in post-1990 multi-storey buildings or newer residential complexes. Housing type influenced parents' involvement: 30% of parents in multi-storey buildings reported allowing their children to play independently, while 37% in residential complexes supervised them closely.

In Unit 7, most parents (41.2%) accompanied their children but stayed at a distance, while in Unit 14, parents engaged more often in play with their children (35.3%). In both areas, the youngest children (3-5-year-olds) spent the most time outdoors, whereas lower secondary school-age children (12-15-year-olds) had the lowest activity levels in residential areas, spending time there only "sometimes" (47%) or "rarely" (30%). During the transition from primary to lower secondary education, children begin to gain independence and make joint decisions with their parents (Wray-Lake, Crouter, & McHale, 2010). As a result, their mobility patterns and preferred spaces change.

Parents identified two main concerns: the lack of dedicated children's spaces (69%) and traffic/pedestrian safety (15.8%).

On a safety scale from 1 to 5, Tirana as a whole received a rating of 2.27, with Unit 7 rated slightly higher (2.53) than Unit 14 (2.17). These findings underline the influence of safety perceptions on the use of public space, particularly at young ages.

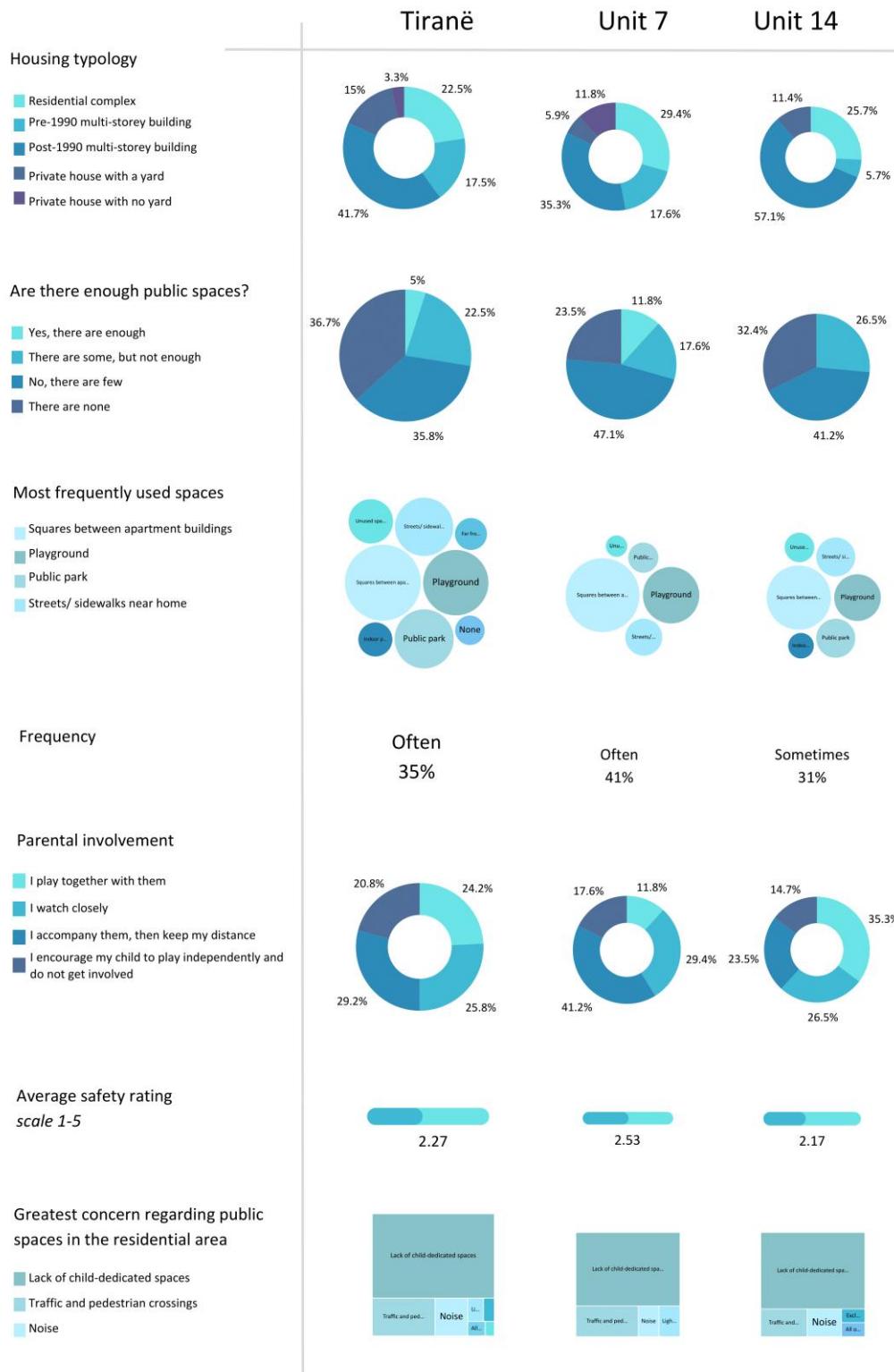


Figure 3. Matrix of survey results.

Source: Author's elaboration.

3.3. Children's video walk-alongs

The concept of a “mental map”, introduced by Lynch (1960), refers to how individuals create cognitive representations of their surroundings. Children, as users of space, similarly develop their own mental maps of the neighbourhoods in which they live. The GoPro recordings illustrated how children experience mobility at their scale. Obstacles such as air conditioning units, raised manholes, and parked cars forced walking onto the street, where children felt that movement was more continuous and visibility better than on the obstructed sidewalks.

In Unit 7, the older child covered a longer route with fewer distractions, whereas in Unit 14, the younger child travelled a shorter distance with more detours. In Unit 7, the child moved beyond the study squares, following a continuous and uninterrupted route. However, the school and private housing forced movement around them, as they were not passable for pedestrians.



Figure 4. Video-recording results from Unit 7 and Unit 14.

Source: Author's elaboration.

The 3-year-old child's footage revealed a different focus: walking on the patterns of the sidewalk pavement, balancing along the edge of a tree base, or noticing a red plastic cap on the ground. This illustrated children's tendency to reinterpret urban elements.



Figure 5. Frame from video-recording of the 3-year-old (a) walking along the pavement, and (b) stopping to look at the red cap.

Source: Author.

The interviews following the recordings exposed tension between children's play and adult expectations of order. In both units, flowerpots had been placed in squares to discourage noisy play, reflecting attempts to exclude children from shared urban spaces. Similarly, a parent from Unit 14 noted in the survey that sometimes adults forbid children from playing because the noise disturbs older residents in seating areas or simply out of concern for potential damage to the greenery.

4. Discussion

The findings reveal that children's presence in public space and their engagement with it are closely linked to urban structure, perceptions of safety, and opportunities for interaction. Both parents' and children's sense of safety determines not only whether public spaces are used, but also how long and how freely children stay there.

4.1. Movement and visibility

Survey data indicate that fewer than 20% of parents allow children to play unsupervised, reflecting a general sense of insecurity. However, observational data showed that children were active in areas with clear visibility and overlapping uses, supporting the idea that "eyes on the street" (Jacobs, 1961) is a key condition for perceived safety.

It's important to note that visibility does not necessarily mean wide, linear, or empty spaces. Rather, it involves the removal of physical or visual barriers that hinder orientation and fluid movement. In this context, permeability and the sequential discovery of public space through "serial vision" (Cullen, 1961) contribute to a sense of safety, offering richer experiences than monotonous, open corridors.

The visibility and permeability of the urban form were directly linked to parental comfort and children's independence. Courtyards and mixed-use edges supported higher levels of play and social interaction, while obstructed or mono-functional areas had lower activity levels.

4.2. Play spaces and integration with public life

Although playgrounds and designated child areas exist in both study sites, they were not always the most frequented places. Instead, children gravitated toward shared residential courtyards (sometimes near the café where their parents sat), pathways, and zones of pedestrian movement. Play was most vibrant in places where children's presence overlapped with their parents' or community activities.

This supports earlier findings that children do not necessarily prefer playgrounds (Egli et al., 2019), and echoes Gehl's (2010) observation that "people gather where things happen". Integrating children's spaces with wider urban life not only supports inclusion but also ensures natural surveillance, which makes parents more comfortable granting independence.

4.3. Attributes of child-friendly environments

The overlay of thematic analyses identified five recurring attributes of public space that supported children's presence and play:

- Active edges – balconies, shops, or entrances enhanced safety and invited social interaction.
- Visibility and continuity – unobstructed routes allowed children to orient and move intuitively.
- Courtyards and in-between spaces – provided semi-privacy and enclosure without isolation, encouraging socialization.
- Integration with parents' activities – enabled casual supervision while adults engaged in their own routines.
- Variety of urban elements – encouraged creative affordances: benches became platforms, steep paths became slides, flowerpots became goalposts.

These findings highlight that children thrive in flexible and multifunctional environments, rather than rigid, single-purpose playgrounds.

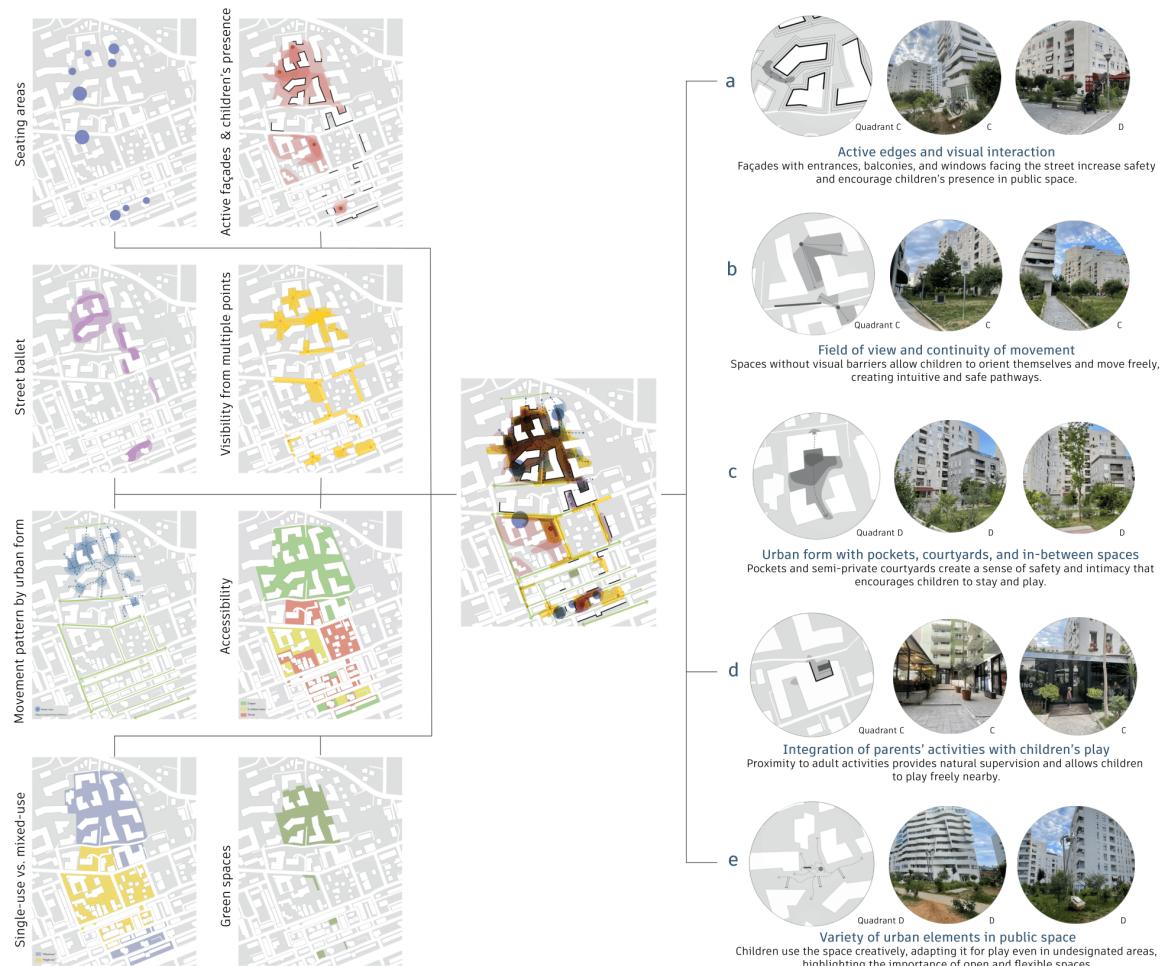


Figure 6. Urban attributes derived from overlapping thematic analyses, shown for Unit 7.

Source: Author's elaboration.

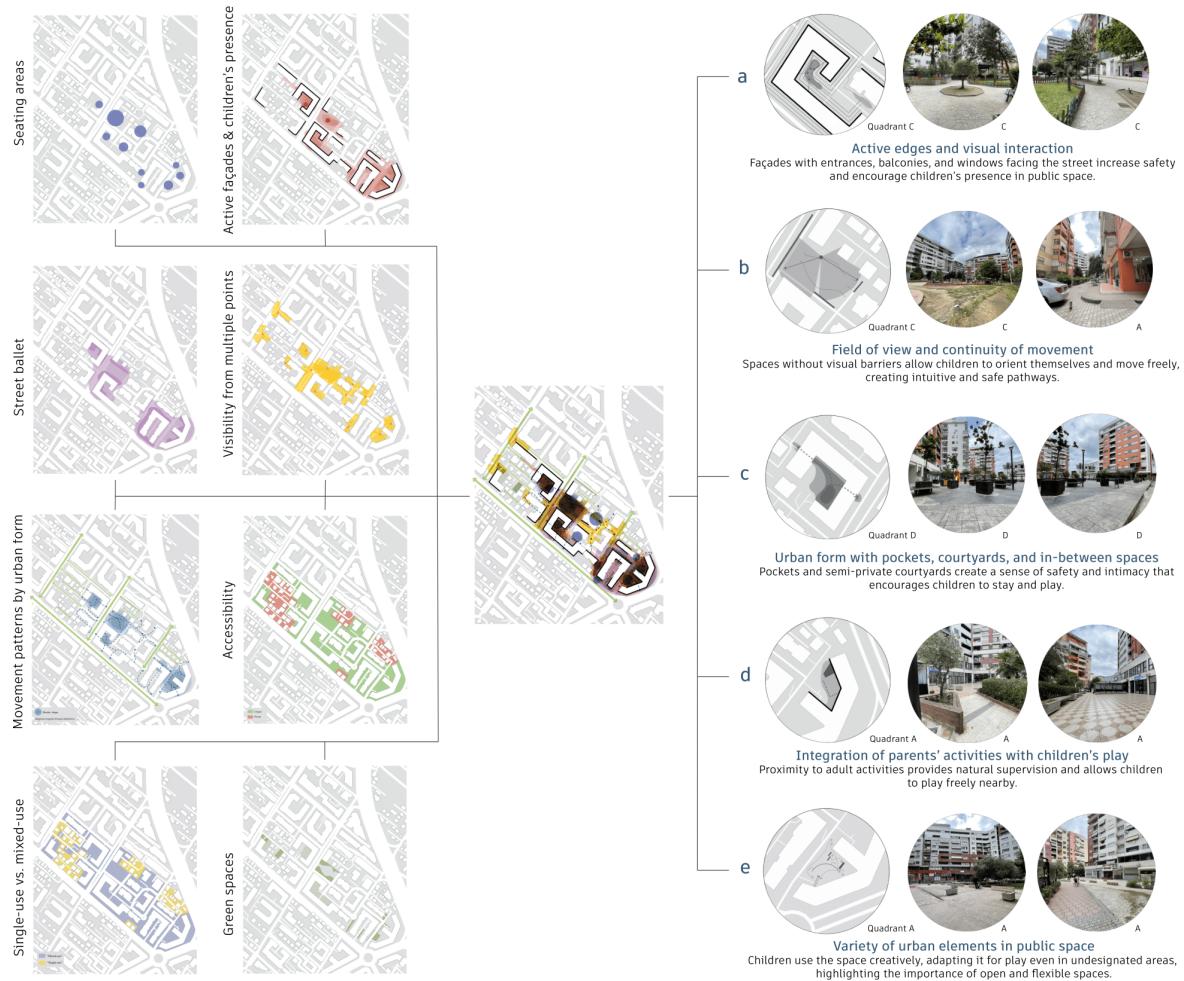


Figure 7. *Urban attributes derived from overlapping thematic analyses, shown for Unit 14.*

Source: Author's elaboration.

4.4. Implications for planning

The comparison of Units 7 and 14 shows that both older and newer neighbourhoods can support children's activity when these five attributes are present, even if their urban forms differ. Children's creative use of elements demonstrates their resilience, while at the same time highlighting the gap in planning that often restricts rather than supports it. As Frost (1992) and Brussoni et al. (2012) argue, play requires a balance of safety and risk; overprotective design may reduce spontaneity and learning opportunities. In Tirana, this suggests that future interventions should move beyond the construction of isolated playgrounds toward the creation of legible, permeable, and socially integrated spaces where children and adults coexist.

Overall, the results affirm that safety in children's environments cannot be reduced to technical standards alone. Instead, it emerges from the combination of urban form, social interaction, and children's own ability to adapt and reinterpret their surroundings. Designing for these dynamics requires rethinking residential areas not only as places of housing, but also as everyday social and play

environments, where the youngest citizens are recognized as active participants in shaping urban life. Taking children's needs into account in city design means creating cities that are more liveable for everyone (Tonucci, 1996).

5. Conclusion

This research explored the relationship between perceptions of safety and children's experiences in residential public spaces in Tirana, focusing on how urban structure and social dynamics shape children's mobility and play. Using on-site observations, surveys with parents, and children's video walk-alongs, the study revealed that children's inclusion is not solely dependent on playgrounds, but also on specific spatial attributes that support safety, creativity, and social interaction:

- active edges that ensure surveillance;
- visibility and unobstructed movement paths;
- in-between spaces such as courtyards and pockets that provide semi-private but connected play environments;
- integration of children's play with adult's activities; and
- diversity of elements that encourage creative uses.

These confirm that urban design at the human scale, with incorporated affordances, creates safer and more inclusive public spaces for children and the wider community.

5.1. Design recommendations

- Promote active edges with balconies, windows, visible entrances, and service units overlooking public space.
- Ensure continuous pedestrian pathways, free from fences, parked vehicles, or blind corners, using paving that enables intuitive movement.
- Create small pockets and courtyards with low fences, greenery, benches, or flowerpots to provide semi-private play areas.
- Place play elements near cafés, benches, and sidewalks so children's play overlaps with adult activities.
- Introduce varied materials and surfaces – stones, sand, ramps, reliefs, and low walls – that allow creative and unstructured play.

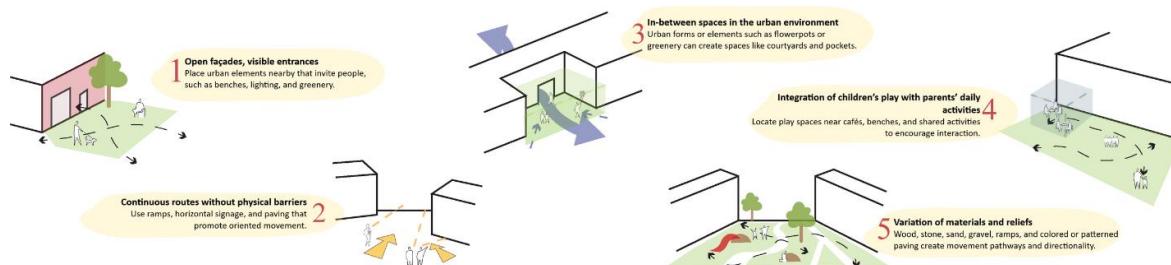


Figure 8. Recommendations.

Source: Author's elaboration.

5.1. Limitations and future research

Although observations took place during the rainy season, children were still present in public spaces, demonstrating their strong need for outdoor play. Most parents in the survey had younger children, offering a valuable but partial view of age-specific experiences.

Future research could expand to include different neighbourhood typologies, economic contexts, and especially gender differences in spatial use, as it was observed that boys and girls use space differently. As “digital natives” (Prensky, 2001), children’s interactions with the urban environment are also evolving, calling for updated, participatory approaches.

5.2. Final contribution

The research demonstrates that children are active interpreters of public space, whose perspectives can reshape how urban safety and inclusiveness are understood. If cities are designed and readapted to meet the needs of children, they become safer, healthier, and more vibrant for all citizens.

Acknowledgements

Gratitude is extended to the children, parents, and families who generously contributed their time and perspectives to this research. Appreciation is also expressed to colleagues at Polis University for their valuable insights and support.

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