



Sustainable Accessible Future Environments

SAFE HANDBOOK
Sustainable Accessible Future Environments

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PROLOGUE

It is an honour and a privilege to present the "SAFE Handbook: From Sustainable Accessible Future Environments," a publication that condenses the valuable work and findings of the European SAFE project.

As Vice-Rector for Equality, Inclusion, and Social Engagement at the University of Granada, I enthusiastically welcome the release of this handbook, which represents a fundamental milestone in our collective commitment to building a more just, equitable, and accessible urban environment for all.

This handbook is much more than a compilation of data; it is a living tool that compels us to reflect on the inherent diversity of our cities and the imperative need to design spaces that embrace every individual, regardless of their abilities or circumstances.

As Oscar Wilde reminded us, "Life is too important to be taken seriously,..." and in that playful seriousness, this book invites us to play with the possibilities of a future where every street, every square, every urban corner is a space for encounter, not exclusion.

The SAFE project, in which our University of Granada has played a crucial role, demonstrates how international and interdisciplinary collaboration can generate innovative solutions to complex challenges. This is perhaps one of the greatest contributions of this book which invites us to understand the importance of working internationally and interdisciplinarity in an increasingly complex world, which also requires ever-increasingly complex solutions.

The participation of researchers from five European universities, including the University of Ljubljana (Slovenia), Laurea University of Applied Sciences (Finland), Kiel University of Applied Sciences (Germany), WSG University in Bydgoszcz (Poland), and the University of Granada (Spain), has enriched the perspective, allowing urban accessibility to be addressed from angles as diverse as urban planning, sociology, technology, tourism, security, and inclusive design. This institutional and professional diversity has been key to providing richer and more comprehensive diagnoses.

The "SAFE Handbook" invites us to a profound transformation in the way we conceive of and use our public spaces. It reminds us that more than 25% of the European population lives with some form of disability, with a higher incidence among women and older adults-underscoring the urgency of action in urban design. The SAFE project emerged as an interdisciplinary and multinational response to this issue."

In this sense, the work addresses key methodologies presented in its first part: "Mapping Accessibility," which introduces a graphic tool to comprehensively analyze urban spaces from seven different perspectives; "Accessibility and Sense of Safety," which examines the perception of safety as an essential component of accessibility, using methods such as participatory walks (Jane's Walk and Safety Walks); "Social Policy and Open Spaces," which analyzes how social policies influence the use of public open spaces, highlighting their value in terms of health, well-being, and inclusion; "Urban Planning from a Gender Perspective," which proposes a critical look at how urban spaces have traditionally been designed without incorporating the experiences of women and other identities, advocating for feminist urban planning and co-creation; and "Accessible Tourism," which reflects on tourism as a driver of inclusion and sustainability, emphasizing the need to move from universal design to permanent co-design with people with accessibility needs.

As Italo Calvino, the great author of *Invisible Cities*, taught us in his eponymous work, "cities, like dreams, are built of desires and fears." This manual guides us in the task of building cities that reflect our desires for inclusion and dispel our fears of exclusion.

The vision of this manual goes beyond the mere elimination of physical barriers. It is about fostering a culture of social inclusion that recognizes diversity as a value and accessibility as a fundamental right.

The project aims to equip professionals, students, and communities with practical tools to foster safe and accessible urban environments. It is essential that all citizens, from professionals and students to associations and communities, be empowered with the tools and knowledge this book offers to promote safe and accessible environments.

The special emphasis on groups with fewer opportunities, including people with disabilities, migrants, the elderly, families with children, and people with Asperger's, reflects the project's commitment to equity and social justice.

The second part of the manual, "Knowledge Transfer on Accessibility and Urban Safety," presents the project's experiences and results, such as lessons learned from the surveys conducted in the five countries, the development of an accessible online learning community, and the evaluation of the intensive training programs. It also offers policy recommendations derived from the project as a whole, highlighting the importance of interdisciplinary training and community engagement.

For the University of Granada, it is a source of immense satisfaction to have been part of such a significant project and to have contributed to the creation of this "SAFE Handbook." This publication not only disseminates the knowledge generated by the project but also makes it available to a wide audience, from academia to the general public. The project demonstrates that the transformation of urban spaces is possible when technical knowledge is combined with active listening and citizen participation.

We hope this handbook serves as an inspiring and practical guide as we continue working together to build cities that are truly sustainable, accessible, safe, and inclusive for all. Because in the end, as Jane Jacobs (Jane's Walk), a citizen committed to the pleasure of being able to enjoy public spaces in the daily life of neighborhoods, said in *The Death and Life of Great American Cities*, "cities have the capacity to provide something for everyone, only because, and only when, they are created for everyone."

With these guidelines and principles, with a firm commitment to diversity, inclusion, equal opportunity, and sustainability that make greater and better accessibility possible for all citizens, this book is a roadmap for that.

With my sincere thanks to the entire research team that made this work possible,

Mar Venegas

Vice-Rector for Equality, Inclusion and Social Commitment

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References:

Calvino, I. (1972). *Las ciudades invisibles*. Einaudi editore.

Jacobs, J. (1961). *The Death and Life of Great American Cities: 50th Anniversary Edition*. Random House.

Wilde, O. (1891). *El retrato de Dorian Gray*. Ward, Lock & Co.

SUSTAINABLE ACCESSIBLE FUTURE URBAN ENVIRONMENTS

CHAPTER 1. ACCESSIBILITY AND SAFETY OF OPEN SPACES AND SERVICES IN EU URBAN AREAS

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ABSTRACT

This chapter aims to introduce the reader to the current context in which European cities find themselves regarding full inclusion, accessibility, and perceived safety. It serves as a starting point to understanding what achieving more inclusive and secure societies means for the European Union. Additionally, the main initiatives being developed within the EU and the countries participating in the SAFE project are explained. Despite the efforts made, it is evident that further work is required to achieve full inclusion, which is precisely the goal of the SAFE project. This chapter also outlines the project's objectives, participants, and results while providing an overview of the various sections and chapters included in this handbook.

Keywords:

Accessibility, Safety, Future, Environments, European Union

1. Introduction

Accessibility and safety for vulnerable groups are matters of significant interest for the European Union. According to Eurostat (2025), 27% of the EU population over the age of 16 has some form of disability. This equates to 101 million people, meaning that one in four adults has specific access needs. When analysed by gender, the percentage of adult women with disabilities (29.2%) is higher than that of men (24.3%).

More than half of the people with disabilities are aged 65 or older, indicating that the risk of developing a disability increases with age. This is particularly relevant in the EU, where an ageing population is a growing reality. By 2050, it is estimated that people over 65 will make up 30% of the population (European Commission, 2024b). As a result, the number of EU citizens with accessibility needs is constantly increasing and will continue to grow in the future.

Individuals with disabilities face different challenges, including (European Council, 2025):

- Discrimination: Half of people with disabilities feel they are treated unfairly.
- Unemployment: One in five people with disabilities is unemployed.
- Poverty or social exclusion: One in three people with disabilities are at risk of poverty or social exclusion.
- Early school dropout: One in five people with disabilities leaves school prematurely.
- Unmet healthcare needs: Healthcare for people with disabilities is often more expensive, harder to access, and involves long waiting times.
- Violence: One in five people with disabilities (particularly women, older people, and children) is a victim of some form of violence.

Moreover, the 2023 Eurobarometer on discrimination in the EU highlights the challenges the region faces in building more inclusive societies. More than half of respondents considered discrimination to be widespread in their country, and 21% reported experiencing discrimination or harassment in the past year. The most common reasons for discrimination included ethnic origin (60%), disability (49%), age (45%), and gender (38%) (European Union, 2023). Similarly, in March 2021, the European Commission conducted its first survey on diversity, inclusion, and workplace respect among its staff. The results showed that individuals with disabilities or from ethnic minorities were less satisfied in their workplaces than the average (European Commission, 2024a).

Regarding perceived safety in Europe, the Eurobarometer on European attitudes towards security reveals that although most Europeans feel safe in their city and neighbourhood, they are less convinced that the EU is a safe place to live. Specifically, 90% of Europeans consider their neighbourhood and city safe. However, when asked about their country, this figure drops to 82%, and when asked about the EU, only 68% believe it is a safe place to live. There are significant regional, educational, and employment-related differences in perceived safety. Additionally, older individuals (55+) and women tend to feel less safe than younger people and men (European Union, 2017).

This information aligns with Sustainable Development Goal (SDG) number 11 (Towards sustainable cities and communities), which aims to ensure cities provide opportunities and security for all in terms of access to basic services, energy, housing, transport, and public green spaces. While progress is being made towards achieving this goal in the EU, much remains to be done (Eurostat, 2024).

Based on the above, the EU must make further efforts to fully integrate all members of society in urban areas. In other words, cities must protect all individuals, regardless of their condition, and can safely enjoy the resources and services they offer. The purpose of this chapter is to illustrate what achieving more inclusive and secure societies means for the EU by exploring the policies currently in place and explaining the contributions of the SAFE Project and this handbook towards that objective.

2. EU Initiatives for Achieving Accessibility and Safety in Cities

Achieving inclusive and safe societies is a key objective of the EU. The EU Urban Agenda prioritizes the creation of cities where all citizens, regardless of origin, social status, gender, age, physical abilities, or economic situation, can equitably access urban resources, opportunities, and services (European Commission, n.d.a).

Several EU-level initiatives aim to build fully inclusive societies. Some of the most significant ones are described below:

European Pillar of Social Rights (European Commission, n.d.b)

Officially launched on November 17, 2017, this framework establishes twenty fundamental principles and rights to ensure that labour markets and social protection systems are fair and function properly. These principles are grouped into three main areas:

- **Equal opportunities and access to the labour market:** Covers access to education and vocational training, gender equality in employment, and the integration of people with disabilities.
- **Fair working conditions:** Includes principles related to secure and adaptable employment, minimum wages, and work-life balance.
- **Social protection and inclusion:** Covers access to healthcare, social assistance, and the inclusion of the most vulnerable.

New European Bauhaus (European Union, 2024)

Launched in 2020, this initiative calls on Europeans to build a sustainable and inclusive future. This political and funding initiative seeks to bridge the gap between the worlds of science, technology, art, and culture by leveraging ecological and digital challenges to improve urban quality of life and fostering co-creation among the various stakeholders involved. Its goal is to develop solutions that are not only sustainable but also beautiful and inclusive. Regarding the latter, the initiative aims to both value diversity and to ensure accessibility and affordability. Specifically, this initiative focuses on:

- Engaging the **entire population**, focusing on local communities.
- Providing **tools and guidance**.
- Offering **tailored solutions** for different communities.
- Incorporating the **perspectives of various stakeholders** in the design and the implementation process.
- Prioritizing people and social inclusion while **also considering the economy** to boost the EU's competitiveness and strategic autonomy.

Access City Award (European Commission, 2025)

Since 2010, the European Commission has organized the Access City Award in collaboration with the European Disability Forum. This award aims to recognize European Union cities that prioritize accessibility. A city is considered accessible when individuals with access needs can obtain information both online and offline, use public transport, and independently enjoy public and private spaces and services. Major cities such as Warsaw, Berlin, and Milan have won this award.

Union of Equality: Strategy for the rights of persons with disabilities 2021-2030 (European Commission, n.d.c).

Perhaps the most ambitious European Union initiative on inclusion is the Strategy for the Rights of Persons with Disabilities 2021-2030. This strategy, a continuation of the 2010-2020 strategy, seeks to continue addressing the barriers faced by people with accessibility needs. Its objective is to tackle the challenges encountered by people with disabilities, ensuring that everyone, regardless of gender, origin, religion, or age:

- Enjoys their **human rights**.
- Has **equal opportunities and access** to participate in society and the economy.
- Can decide **where, how, and with whom** to live.
- Can move **freely across** the EU, regardless of their support needs.
- No longer faces **discrimination**.

This strategy includes various initiatives aimed at prioritizing accessibility, quality of life, independent living, rights, and equality for people with disabilities.

In addition to these initiatives, the European Commission has adopted other policies promoting integration in more specific contexts, such as the Diversity and Inclusion Plan in the Workplace, a program that aims to make EU workplaces more inclusive with zero tolerance for any form of discrimination (European Commission, 2024a).

Within the European Union, the countries participating in the SAFE Project have implemented and continue to implement notable accessibility initiatives that reflect their commitment to equal opportunities. These include:

- **Germany**: Has implemented the National Action Plan (NAP 2.0), focusing on the accessibility of buildings and streets, as well as the employment integration of young people with disabilities (Federal Ministry of Labour and Social Affairs, 2024).
- **Slovenia**: Has improved major tourist infrastructure, ensuring adapted access in locations such as Lake Bled and Triglav National Park (Slovenia Tourist Board, n.d.).
- **Spain**: Has developed the Spanish Disability Strategy 2022-2030, covering aspects from urban environments to education and employment (Ministry of Social Rights and 2030 Agenda, 2022).
- **Finland**: Has enhanced the accessibility of its national parks and natural spaces, creating accessible trails and providing detailed route descriptions (Nationalparks, n.d.).
- **Poland**: Has funded over 200 initiatives through the "Accessibility Plus" program, improving accessibility in multiple areas (The Ministry of Investment and Economic Development, 2018).

3. The Role of the SAFE Project

Despite the efforts of the European Union and its member states to create more inclusive and safer cities, there is always more work to be done. In fact, the Strategy for the Rights of Persons with Disabilities 2021-2030 (European Commission, n.d.c) acknowledges that vulnerable individuals of various identities and conditions continue to face significant access barriers in all areas of urban life. To address this, it calls for professionals to receive training in accessibility due to a widespread lack of skills and knowledge.

In this context, the SAFE project was established to **provide interdisciplinary training on how to make services and open spaces more accessible, inclusive, and safe for everyone**. Specifically, the primary goal of SAFE is **to raise awareness about safe accessibility, diversity, and inclusion in urban areas, promoting the right to feel safe in cities. It focuses on including people with fewer opportunities, those with disabilities, and individuals from different cultural and socio-economic backgrounds within the European Union**. The project, therefore, addresses the need to inform, share knowledge, and provide pathways to fulfilling UN Sustainable Development Goal (SDG) number 11: ensuring safe, accessible, inclusive, and diverse urban spaces for all by 2030.

To achieve its objectives, SAFE engages citizens, stakeholders, cities, and students in developing innovative ways to create accessible, inclusive, and safe urban spaces and services, with the support of digital technology. The SAFE Project Consortium consists of the following universities:

- **University of Ljubljana (Slovenia):** Conducts and promotes basic, applied, and development research, striving for excellence, the highest quality, and the strictest ethical standards in all scientific and artistic fields.
- **Laurea University of Applied Sciences (Finland):** A distinguished and award-winning university that trains future professionals in security management, business management, healthcare and nursing, ICT, service innovation and design, as well as tourism and hospitality.
- **Kiel University of Applied Sciences (Germany):** The largest university in the federal state of Schleswig-Holstein, focused on applied research and teaching with a strong practical and business-oriented approach.
- **WSG University in Bydgoszcz (Poland):** A university of applied sciences with a strong practical orientation, recognized as the largest private higher education institution in northern Poland.
- **University of Granada (Spain):** A prestigious public university with approximately 56,000 students and nearly five centuries of history, playing a key role in various international networks.

Each university within the SAFE project contributes key expertise in different areas. The University of Ljubljana: Leads in urban planning and architecture; Laurea University: Brings expertise in security studies and sustainable tourism development; Kiel University: Focuses on sociology, social work, and working with immigrant groups; WSG University: Contributes knowledge in socioeconomics, IT, and creative industries; and University of Granada: Provides expertise in tourism and working with individuals on the autism spectrum.

The project primarily targets higher education students, raising awareness and providing training. However, it also considers various target groups, including seniors, people with reduced mobility, migrant women, families with children, and individuals with Asperger's syndrome.

Closely linked to these target groups, the associated partners represent one of the project's greatest assets. Each country involved has one or more associated partners:

- Slovenia: Municipality of Kranj, Urban Planning Institute of the Republic of Slovenia, and Geodetic Institute of Slovenia.
- Finland: Municipality of Vantaa and Kanta Helsinki National Seniors Association.
- Germany: Socially Integrative City Garden.
- Spain: Granada City Council, Asperger Syndrome Association of Granada, and Civic Association La Ciudad Accesible.
- Poland: Gaudeamus Foundation and The Foundation for the Promotion of Culture and Tourism "Nad Rzeką."

Among the results of the SAFE Project that have contributed to achieving its objectives, several tangible and intangible results can be highlighted:

- Intangible Results:
 - **Increased awareness of the role of individuals** in developing accessible, inclusive, diverse, and safe urban areas.
 - **Enhanced knowledge in regional, international, and intercultural cooperation** through joint activities, workshops, multiplier events, policy recommendations, and dissemination activities.
 - **Skills improved and learned through future scenario's methodology employed** through joint activities, workshops, learning activities and in the online training community.
 - **A higher level of digital competence** through various activities.
- Tangible Results:
 - **Data for sharing in open access repositories**, such as ZENODO. Specifically, data was collected on perceptions of accessibility, security and future visions in countries that are part of the project.
 - **A set of digital tools** to make communities more accessible and inclusive.
 - **Development of an online community** for students, businesses, and other stakeholders to improve their skills and competences in inclusion and diversity.
 - **At least 100 people trained** in scenario workshops and Intensive Study Programs (ISP).
 - **Improved solution concepts** to the problems discovered in each location, analysed, and further developed.
 - **Recommendations** for policy makers and other actors.
 - **Local scenario books**, so that users can both acquire basic knowledge and learn how to transfer and apply it in practice with concrete guidelines and recommendations.
 - **Handbook and Case studies book**, which bring together all the information and experience (analyses, surveys, etc.) of the target groups that have participated in the project to provide information and learning material on how to engage in

democratic activities and influence communities in cooperation with Higher Education and public bodies, such as cities.

4. A tour through the handbook

As mentioned in the previous section, the SAFE Project handbook is one of the main results of the project that condenses a large part of the project's work. This handbook gives a general idea of the various tools that contribute to making urban spaces and services more accessible and safer and shows how the SAFE Project, through the activities carried out, contributes to this objective. This is done through two main sections of chapters:

Firstly, the section **'Tools and orientations for more accessible and safer open spaces and services in urban areas'** is composed of five chapters that introduce us to different methodologies and themes addressed by the SAFE Project, defining them, explaining their relationship with the project, and discussing the role they play in European urban spaces.

The chapter *Mapping accessibility of public open spaces and services in urban areas* shows how mapping, which is a graphic tool that allows to represent any kind of information, fact, concept, or idea, has been applied within the SAFE Project. This tool, based on its eight key aspects (morphology, traffic connectivity, open spaces, public spaces, programmes and services, accessibility assessment, behavioural observation, and urban safety) allows the understanding of the spatial dimension of urban areas, as well as benchmarking and monitoring the conditions, and quantitative and qualitative elements of their design throughout the future work development of the area. Furthermore, the value of this tool applied to the SAFE project lies in the fact that it allows the analysis of space from an inter- and multidisciplinary perspective, being able to analyse it from contributions from the fields of urban design and planning, social sciences, economic sciences, tourism, and safety.

The chapter *Accessibility and sense of safety* delves into the concepts of safety and accessibility and discusses various aspects developed in the SAFE Project along these lines. More specifically, this chapter introduces the relevance of the perception of safety and how it is affected by the opinions and experiences of the community. It also highlights the importance of considering the feeling of safety when planning accessibility, explains the safety studies carried out in two cities that are part of the project (Granada and Vantaa) and makes an important effort to explain participatory walking as a method to understand the safety needs of special groups, as well as the results of using this methodology in the SAFE Project.

The *Social policy* chapter explores the relationship between social policy and the use of open spaces. It sheds light on the important role that public open spaces play for society, highlighting their social, environmental, economic and health and well-being benefits for citizens. The importance of these spaces is reflected in their interest in scientific literature and the need to understand the drivers of their use. One clear driver for the use of public open spaces is social policy. This chapter therefore shows how social policy drives the use of open spaces and creates better cities. However, this chapter doesn't stop there, it also looks at two related case studies: the Open Spaces Society (OSS) and Bryant Park in New York.

The chapter *Urban planning of public open spaces from a gender perspective* gives us clues on how to analyse urban environments considering the various ways in which men, women and non-binary people experience and use public spaces, i.e. with a gender perspective. Starting from the recognition that traditional urban planning has neglected the gender perspective, resulting in urban spaces that have mainly focused on meeting men's needs and routines and the lack of inclusiveness of urban spaces, this chapter addresses interesting aspects such as

feminist urbanism, gender mainstreaming and the importance of listening to women's voices to create inclusive and safe public spaces for women through co-design.

Finally, the chapter *Accessible Tourism* explains the concept of accessible and inclusive tourism and its current relevance as a driver for the social and economic sustainability of European cities. It also delves into the current barriers to accessible tourism and how they can be overcome. In this regard, the chapter places special emphasis on the role of universal design in making tourism more accessible and inclusive and on policy initiatives carried out to achieve this universal design. Finally, this chapter explains the relevance of continuous co-design as an approach that goes beyond universal design and seeks to involve people with access needs in the creation and design of tourism products so that these are not only created for them, but also with them.

The section **‘Transfer of knowledge about more accessible and safer open spaces and services in urban areas’**, on the other hand, is made up of four chapters summarising the results and implications of the SAFE Project.

The chapter *‘Learnings from accessibility and safety of open spaces and services in urban areas in different locations’*, based on surveys carried out in urban environments in the five countries that are part of the project (Slovenia, Finland, Germany, Poland, and Spain), analyses the perceptions that residents and visitors have regarding accessibility, safety, transport, and mobility in urban spaces and how they see the future of these spaces. This chapter applies a variety of qualitative analysis techniques, making a significant contribution to the existing literature on accessibility, safety, mobility, and the development of urban spaces. It also concludes with important implications for the management of urban environments to make them more accessible and safer for all citizens.

The chapter *‘Developing SAFE’S accessible online learning community’* describes in detail the creation of one of the main outcomes of the SAFE project: an online community, an online course accessible to anyone and a toolbox for learning how to develop accessibility. More specifically, the chapter explains the objectives of the community, the different stages involved in its creation and the learning process carried out by its users, presenting different profiles of potential users, such as seniors or neurodivergent people. Finally, it shows the learning outcomes of the community.

The chapter *‘Assessment of the experience on accessibility and safety of open spaces and services in urban areas: alternative approaches’* has its focus on the Intensive Study Programs (ISP) of the SAFE Project. In this sense, this chapter deals with the description of the training plan of these programmes, explains the multidisciplinary methodologies carried out during the programmes, such as future scenarios, behaviour mapping, Jane’s and Safety Walks and role plays, and, above all, describes the evaluation of the programme results by its protagonists: the participants. It thus describes the participants’ level of satisfaction with different aspects of the programme and their assessment of how the ISPs have contributed to improving their knowledge about the need for accessibility and safety in urban environments and how this knowledge will be useful in their academic, working and, above all, personal future. The chapter concludes with several conclusions and implications for the improvement of such programmes in the future.

Finally, the last chapter of the book *‘Policy recommendations based on the experiences of SAFE Project’* goes through not only the handbook, but also the whole project to explain the conclusions, implications, and transferability of the project results.

Conclusions

This chapter aims to shed light on the current situation in which the European Union finds itself about the accessibility and safety of its cities, showing the challenges it faces and the solutions it is trying to find to these challenges. Firstly, statistics on the inclusiveness of European cities are presented, with a special focus on the challenges faced by people with accessibility needs in the European Union, a segment that is constantly growing, and the safety perceived by Europeans. Subsequently, a series of initiatives carried out by the European Union to achieve more inclusive societies are described, such as *the European Pillar of Social Rights*, *the New European Bauhaus*, *the Access City Award*, *Union of Equality: Strategy for the rights of persons with disabilities 2021-2030*. Other initiatives promoted in the member countries of the SAFE project are also highlighted: Slovenia, Finland, Germany, Poland, and Spain.

However, this chapter shows that although the European Union and its member states are working hard to make urban environments more accessible and safer, there is still a lot of work to be done. This is where the SAFE Project emerges as a project that seeks to advance the goal of making cities more accessible, inclusive, and safe through awareness raising, training and the development of various tools that can be used to ensure the development of cities towards full inclusion. The chapter therefore proceeds by describing the main objectives, members, and outcomes of the project and by going through the different parts and chapters that are part of the handbook, which is one of the main tangible results of the project.

In conclusion, this chapter shows the relevance of the SAFE Project in today's European society and how this project, through its different results, among which this handbook undoubtedly stands out, seeks to do its bit to ensure that all people, regardless of their characteristics and circumstances, can enjoy the cities of the European Union under equal conditions and, above all, with dignity.

Bibliographical references

European Commission. (2021). *The European Pillar of Social Rights in 20 principles*. <https://ec.europa.eu/social/main.jsp?catId=1606&langId=en>

European Commission. (2024a). *Diversity and inclusion*. https://commission.europa.eu/about/service-standards-and-principles/modernising-european-commission/diversity-and-inclusion_en

European Commission. (2024b). *The effects of demographic change in Europe*. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/new-push-european-democracy/impact-demographic-change-europe_en

European Commission. (2025). *Access City Award*. https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/disability/access-city-award_en

European Commission. (n.d.-a). *EU Urban Agenda*. https://commission.europa.eu/eu-regional-and-urban-development/topics/cities-and-urban-development/urban-agenda-eu_en

European Commission. (n.d.-b). *European Pillar of Social Rights: Building a fairer and more inclusive European Union*. https://employment-social-affairs.ec.europa.eu/policies-and-activities/european-pillar-social-rights-building-fairer-and-more-inclusive-european-union_en

European Commission. (n.d.-c). *Union of Equality: Strategy for the rights of persons with disabilities 2021–2030*. https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/disability/union-equality-strategy-rights-persons-disabilities-2021-2030_en

Council of the European Union. (2025). *Disability in the EU: Facts and figures* [Infographic]. <https://www.consilium.europa.eu/en/infographics/disability-eu-facts-figures/>

European Union. (2017). *Special Eurobarometer 464b: Europeans' attitudes towards security*. https://data.europa.eu/data/datasets/s1569_87_4_464b_eng?locale=en

European Union. (2023). *Discrimination in the European Union*. <https://europa.eu/eurobarometer/surveys/detail/2972>

European Union. (2024). *New European Bauhaus*. https://new-european-bauhaus.europa.eu/about/about-initiative_en

Eurostat. (2024). *SDG 11: Towards sustainable cities and communities*. <https://ec.europa.eu/eurostat/web/products-eurostat-news/w/edn-20241009-1>

Eurostat. (2025). *Level of disability (activity limitation) by sex, age, and income quintile*. https://ec.europa.eu/eurostat/databrowser/view/hlth_silc_12/default/table?lang=en

Federal Ministry of Labour and Social Affairs. (2024). *BMAS – The United Nations*. <https://www.bmas.de/EN/Europe-and-the-World/International/International-Organisations/united-nations.html>

Ministry of Social Rights and 2030 Agenda. (2022). *Spanish disability strategy 2022–2030* [in Spanish]. <https://www.mdsocialesa2030.gob.es/derechos-sociales/discapacidad/docs/estrategia-espanola-discapacidad-2022-2030-def.pdf>

Metsähallitus. (n.d.). *Torransuo National Park*. <https://www.nationalparks.fi/torransuonp>

Slovenian Tourist Board. (n.d.). *The official travel guide to Slovenia*. <https://www.slovenia.info/en>

The Ministry of Investment and Economic Development. (2018). *Accessibility Plus 2018–2025*. https://www.funduszeuropejskie.gov.pl/media/72628/Dostepnosc_angielski.pdf

TOOLS AND ORIENTATIONS FOR A MORE ACCESSIBLE AND SAFER OPEN SPACES AND SERVICES IN URBAN AREAS

CHAPTER 2. MAPPING ACCESSIBILITY OF PUBLIC OPEN SPACES AND SERVICES IN URBAN AREAS

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ABSTRACT

Providing equitable access to urban programmes and services has been a top priority of public open spaces (POS) and policies worldwide, especially from an inclusive design point of view. POS is a place that should be accessible to everyone, regardless of their religion, economic circumstances, age, sexual identity, gender, nationality, ethnicity, and disability. Everyone must be allowed to fully participate in the cultural, economic, political, and social opportunities that a certain urban area or city offers. However, as each urban space is its own story and emerges and develops under different conditions, mapping is the first step towards identifying the specificities and opportunities that the space offers to an individual. Mapping is a graphic method used for the representation of any kind of information, facts, specifics, concepts, or ideas. It is an “urban thinking” tool for identification, recording and valorisation of spatial data and features. In the project SAFE mapping is one of the tools which include field-work, spatial data analysis and interpretation in understanding inclusive and accessible POS in urban areas. The SAFE mapping method focuses on seven key aspects, so-called mapping approaches: morphology, traffic connectivity, POS, programmes and services, accessibility assessment, behaviour observation, and urban safety. All collected data is crucial to understand the spatial dimension of a selected urban area: from analysing different features to planned interventions. It also enables comparative assessment and monitoring of quantitative and qualitative design conditions and elements, all over the work on future development of selected areas.

Keywords:

Mapping, accessibility, public open space (POS), urban area

1. Introduction

Public space is a mirror of every city and the people who live in it. Every experience of a public space defines the character of, not only the city, but also the country in which it is located. In reflecting about the social and cultural background, it is crucial that the public open space (POS) is accessible to everyone regardless of their religion, age, sexual identity, economic circumstances, gender, ethnicity, nationality, and disability. When the UN adopted Agenda 2030 (in the year 2015 oriented in sustainable development) it committed itself, and the member states, to work on achieving a social, environmental, and economically sustainable world by the year 2030 (Iqbal, 2023). While we have the knowledge, available technology, and different goals for the future we must also take into consideration the fact that we are living in a time of rapid changes. Technological advancement, environmental changes and socio-cultural shifts are transforming the POS faster than ever before. In the time of pandemic Covid-19 we realized that POS were essential for providing health, space movement, fresh air, opportunities for recreation, responsible gatherings, escape from isolation and new typology of workspace. Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody (Jacobs, 1993). That is why it is crucial to involve as many different participants as possible from different backgrounds to participate in collaborative design of the POS. One of the approaches on how to define characteristics of different POS was developed as part of the Sustainable Accessible Future Environments (SAFE) project with the method and handbook toll called “Mapping”. The goal was to create a method of interdisciplinary systematic approach to define different aspects of the POS and space and create a spatial assessment with the intent of designing possible scenarios for future strategies on how to establish accessible and inclusive POS that welcomes all groups of people.

2. Method

Identification, recording and valorisation of spatial data and features are important tools to work on quality assessment of a selected urban space. Further urban analyses about location are needed for knowledge and awareness for the future interventions. The method used in the project SAFE is called “Mapping”. It focuses on a study of seven different aspects of the space: morphology, traffic connectivity, POS, programmes and services, accessibility assessment, behaviour observation and safety. It is a direct transfer of information from field experience in the form of a map on paper. The method is useful for the first “impression” of selected urban areas, and it creates some knowledge for possible upgrading at a later stage. It also represents a combination of digital data processing with a wide range of urban programmes and services, and data observed in field work for further data analysis and models. Each of the aspects considered in the method was studied in five different cities, with selected different POS, and in five different European countries. A major challenge of the analysis of an individual urban area was how to involve mixed groups of students from fields, like social sciences, tourism, management, economy, but also urban designers and architecture. The short-term involvement within the selected urban area to work on, as the analysis of each set of urban areas took place in the form of a one-week workshop called “Intensive study program” (ISP), was also one of the most important milestones.

Citizen participation has emerged as a crucial concept in identifying the social, economic, and political needs of cities (Mitlin, 2021). Therefore, the key to the successful method of “Mapping” was inclusion and participation among the people with different backgrounds, cultures, working methods and disciplines in each selected location. The method adopted Malone's (2019) two distinct approaches for spatial observation: participant and non-participant (or naturalistic). In participant approach project members collaborated face to face with the citizens, different

vulnerable groups, associated partners, and municipality members. They performed “Jane's Walk”¹ “and “Safety Walk” (defined in the project SAFE) to obtain the most accurate data possible. In a non-participant approach they made the behaviour observations and gathered data on their own. The collaboration is/and was important between different groups involved in creating a working community where everyone contributed with their knowledge and experiences directly in the selected urban area to explore.

FIGURE 2.1

Example of the tour for Janes' walk in Kranj Intensive study week (ISP)



2.1. Morphology

The concept of morphology was introduced by Johann Wolfgang von Goethe in the early 19th century, and it was used to designate the ‘science that deals with the essence of forms’ (Olivera, 2018). Goethe was convinced that this science could reveal the general laws according to which organisms and inorganic objects are shaped. Morphology is concerned with understanding the structure, essence, and constitution of “things”, focusing on the internal forces and impulses that shape them.

Urban morphology is the science that studies the physical form of cities, as well as the main agents and processes shaping it over time (ibid.). This analysis focuses on the structure and organisation of cities and settlements and explores how physical characteristics influence the use and experience of space. Key elements in the definition of urban morphology are street network, block structure, building forms and POS. It examines how these components are organised and how they impact the social, economic, and environmental aspects of urban areas

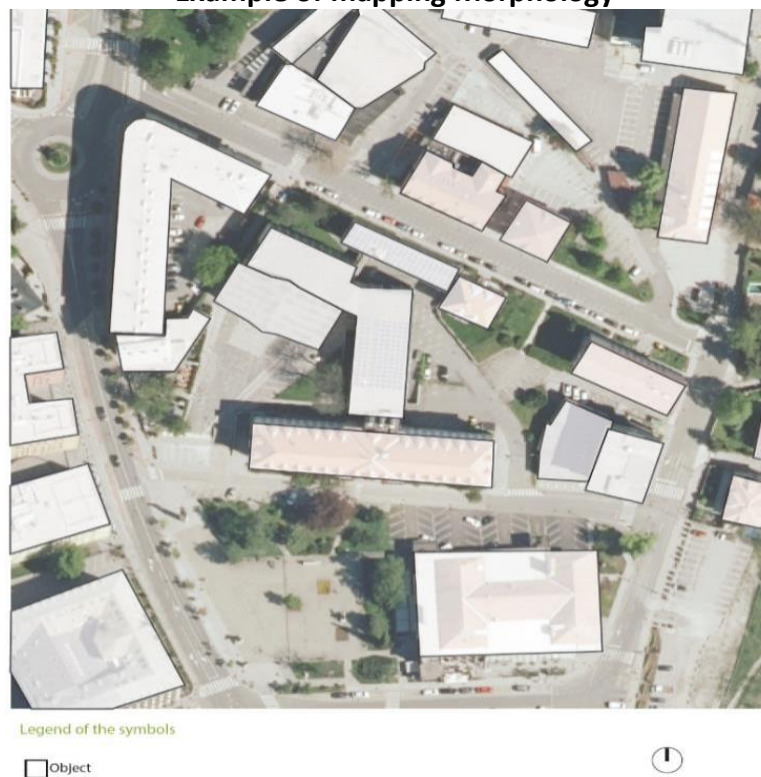
¹ <http://www.janejacobswalk.org/home>

(Batty & Longley, 1994). In the process of analysing the physical form of cities, issues of functionality, aesthetic appeal, accessibility, and sustainability are examined. It explores how the physical form of cities affects people's movement, access to services and overall quality of life. This includes an analysis of how different components in the urban environment relate to each other and evolve over time.

Urban morphology plays a key role in the planning and development of urban areas. Understanding it allows planners and designers to create efficient and functional urban spaces that meet the needs and desires of users. This includes the design of new urban areas, revitalisation of existing areas, and addressing problems such as traffic congestion, lack of green space and social inequality etc. In planning and designing of new urban areas it involves considering various factors, such as: population density, infrastructure needs, accessibility to programmes and services, sustainability, and resilience. Effective planning involves engaging with the community (including participatory approaches) and incorporating their needs and aspirations into the planning process. Revitalisation of existing areas involves the renovation and renewal of existing urban areas; the focus of improvement is on their better functionality, aesthetic appeal, and quality of life.

The “Mapping” method enables the visualisation of different aspects of urban areas, such as: building distribution, population density and service accessibility. Analysing urban morphology helps individuals to understand how space evolves, what it has to offer and how it affects its citizens. It also serves as a key input for developing future strategies to improve and re-think about the future use of POS in urban tissue.

FIGURE 2.2
Example of mapping Morphology



Source: Pia Mišič, Satu Väättäinen, Uresa Pacoll, Eva Juan, Julia Nowacka (2023). Morphology [Computer sketch]

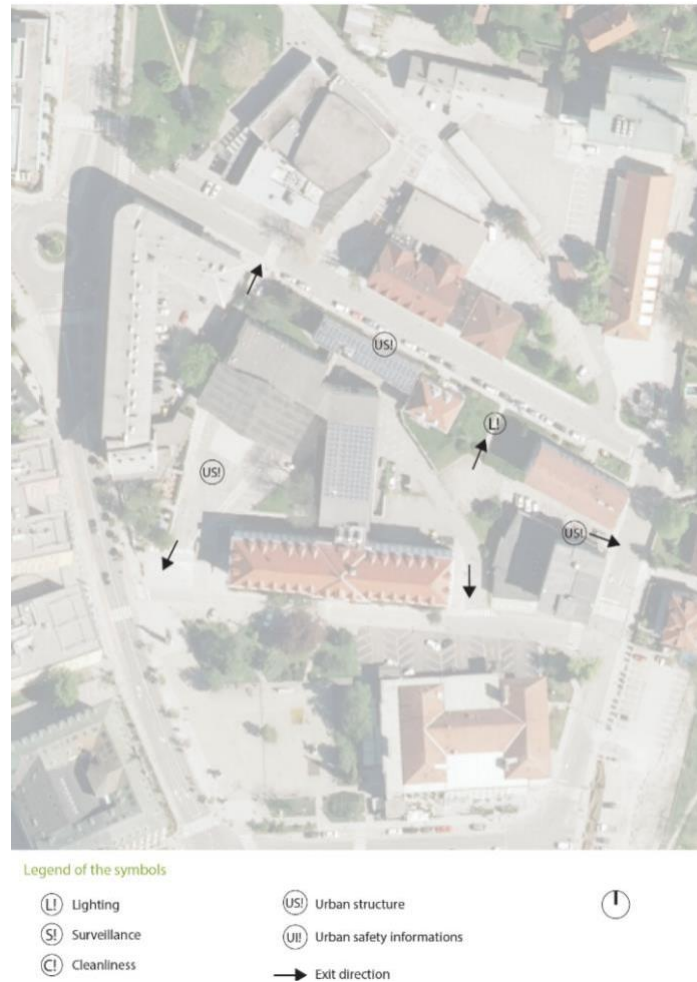
2.2 Urban Safety

Urban safety is a multifaceted phenomenon, involving events, such as natural disasters, and continuous processes, like social cohesion and polarization. Moreover, safety threats can be caused intentionally and accidentally, and safety involves both the 'objective' likelihood of becoming a victim of such diverse events, and subjective perceptions of their occurrence (Piètre-Cambacédès & Bouissou, 2013). In ongoing debates about the future of cities in an urbanizing world, *urban safety* is considered a key challenge, demanding innovative approaches by city planners, administrators and safety organizations (Prislan & Slak, 2017). It is one of people's fundamental psychological needs, essential for their life quality and one of the most important factors in cities nowadays where the number of people is increasing. Large cities play an extremely important role in this theme. Because of their roles as cultural and economic hubs attracting large population sizes, cities are often thought to be particularly vulnerable to such manifold safety aspects (Murray, 2017). Urban safety is a challenging issue, because of its unpredictable and varying risk. It is also a subjective experience that differs from person to person. The "feeling" of safety is different *person by person, city by city, culture by culture* etc. For example, one person's unsecured space can be a refuge for another person.

In understanding and creating a favourable and safe environment it is necessary to identify the components of urban safety. Factors can be divided into the following categories: natural, architectural, social, environmental, technogenic, infrastructural and urban, and others. The assessment of urban safety, in terms of the above categories, is possible to be understood generally, as: only conditionally as a favourable, adverse and partially favourable urban area.

The "Mapping" method, from the focus of safety, involves an assessment of the urban area to determine the factors that influence its actual and perceived feeling of safety. This helps to identify the increase of actual and perceived vulnerability of the users in the selected urban area. The urban safety assessment covers analysis of various data, such as: lighting, surveillance, cleanliness, human danger, urban hazards and the availability of information during the emergencies, etc. Typical for this type of analysis is the variety of the assessment and field-data collected, as some of the field-data are highly dependent on the time, day and hour of the field observation. The participatory methods play a crucial role in the urban safety analysis. By involving all stakeholders and by visiting the site together, the assessor obtains more accurate assessment of the area. At the same time the first-hand experiences show us the doubts and problems its users are facing. By carrying out a comprehensive urban safety assessment of a selected urban area, it is possible to identify the measures and strategies to improve the feeling of safety in the area from the perspective of its users.

FIGURE 2.3
Example of mapping Urban safety



Source: Pia Mišič, Satu Väättäinen, Uresa Pacoll, Eva Juan, Julia Nowacka (2023). Morphology [Computer sketch].

2.3. Behaviour observation

Behaviour is what an individual or group of people is always doing in a certain environment (Goličnik Marušić & Ward-Thompson, 2002). It is also a fact that people never stop to behave and the link between the environment and their behaviour is always established. In recent years, people's behaviour has become attractive not only for psychologists and sociologists but also for urban planners, architects, landscape architects, and all those involved in designing people's environment (Ittelson et al., 1970). The increasing heterogeneity of cities, which is intensifying and changing rapidly due to global migrations and other events, means that various research and related models can represent a key contribution to the design of POS.

One of the approaches is called "Behavioural mapping", which is a method of identifying behaviour of people (individual or a group) by observing them, with the use of pre-defined different quantitative parameters. At the same time, behavioural maps can show the differences between the purpose of the designed idea and actual use of a selected space. The approach can be a tool for spatial modelling, as it provides direct data from space. Ittelson et al. (1970) have developed and defined spatial behaviour mapping. It includes manual mapping by observation and pre-prepared tables with the help of which we determine individual parameters for a

selected area. With the development of technology, this type of mapping has been upgraded with Geographic Information System (GIS). In GIS we can build and develop different empirical data gained from various behavioural maps, detected in the fieldwork. Its database offers a transparent examination of places through different combinations of behaviour pattern attributes e.g. the type of activity, gender, age, etc. (Goličnik Marušić, 2011). Future methods of capturing and processing this type of data are advancing very fast. One of the newer ways is through applications or web-based platforms, such as Cyberparks², which aims to create a research platform on the relationship between information and communication technologies and the design of POS as well as their role in sustainable urban development. In the future, the processing of this data will certainly be significantly accelerated and enhanced by the use of an artificial intelligence interface, which is already being implemented by many industries for model production and future predictions.

In the context of the “Mapping” method, behaviour observation is carried out using the well-established behavioural observation method. Based on a non-participant approach, the movement, use and individuals’ interaction in space are physically monitored and recorded through observation in selected areas. It is crucial that the users are unaware of the observation to keep their use of the space as natural as possible. This provides a deeper understanding of how the physicality of the built environment influences an individual's activities and behaviour in space. Understandings gained through these observations can help to set guidelines for further development.

FIGURE 2.4
Example of mapping Behaviour observation



Source: Pia Mišič, Satu Väättäinen, Uresa Pacoll, Eva Juan, Julia Nowacka (2023). Morphology [Computer sketch]].

² <https://cyberparks-project.eu/app/monitoring-tool>

2.4. Accessibility assessment

Everyone should have the right to easily accessible POS, just as they have a right to clean water (Gehl, 2010). Independent movement and mobility are basic needs for everyone. POS plays an important role here because they ensure the equal social integration and guarantee accessibility and usability for all users, regardless their age, gender, ethnicity or socio-economic status. It is a space where people can meet, socialise, participate in public activities or spend leisure time (Gehl, 2010). Accessibility is a quality concept that is interpreted differently depending on the design approach used for the development (Persson et al., 2015). It is not only about physical adaptations, but also about changes in society, and is crucial, not only for the current population of people with disabilities, but also for society as a whole, especially due to global demographic changes. The concept appears in various forms depending on occupation, culture, time, location and interest group. The most common names used are Barrier-free design, design for all, universal design, inclusive design and accessible design. These approaches all take the needs of a broader spectrum of people into account, in the design process, to ensure that mainstream equipment and services can be used by a wide range of users, including older people and those with disabilities (Persson et al., 2015). One of the basic skills of urban design and planning is understanding the relationship between people and space, how people move, use and experience it. While the physical accessibility of a space is crucial, equally important is how the space influences the feelings of the user, and what experience the user brings. Therefore, the question is not so much about whether it is necessary to achieve accessibility, but more about how to achieve it (Persson et al., 2015). By integrating features that ensure accessibility for all types of user needs (physical, sensory, cognitive and inclusive) within POS, these spaces become more attractive and welcoming to everyone. As a result, the space not only meets technical requirements, but needs more inclusiveness and connectiveness in society in which every individual has the potential to succeed.

The “Mapping” method addresses the spatial specificities of accessibility as part of the analysis of the space. The assessment criteria are accessibility to activities, programmes, services and facilities, physical barriers, legibility of the space, information access and accessibility from the perspective of vulnerable user groups, etc. To provide a more detailed picture of the users’ experience, specially from the perspective of vulnerable groups, the method can be enhanced with an approach of “reality” where each person is confronted with the reality of the situation through simulation. Through this type of experience, a healthy individual can be pushed into the role of a person with disabilities, either through simulation or simply by physically limiting certain human senses. This allows individuals to experience it in a different, personal way.

FIGURE 2.5
Example of mapping Accessibility assessment



Source: Pia Mišič, Satu Väättäinen, Uresa Pacoll, Eva Juan, Julia Nowacka (2023). Morphology [Computer sketch].

2.5. Public open spaces (POS)

A public space is mostly a social space, created and defined by different practices of users (Lehrer, 2007). Therefore, POS is crucial for urban areas and plays a key role in shaping the identity and values of a city. Through appropriate density, built form, a mix of activities and amenities, it influences how people perceive urbanity. Its physical appearance is determined by the elements present in the space, which are: position in terms of the traffic, materiality of the surfaces, illumination, the presence of greenery, its position within the morphology and size of the surrounding buildings, etc. One of the major factors in the perception of POS is also its size. Regardless of their physical appearance, they co-create the character of a city and contribute to many improvements within cities that are “not visible to the eye”. In this sense POS, such as parks and squares, are particularly important for mitigating climate change and enhancing mental and physical health (Brander & Koetse, 2011). On the other hand, “urban POS are highly contested areas where different interests and desires meet, which is why they are an ideal arena for considering such questions” (Nikšič et al., 2018). With the rapid growth of urbanization and related environmental challenges, there is increasing interest in effective urban planning strategies and their impact on human well-being (Croce & Vettorato, 2021; Mouratidis, 2021). Within this POS also has a major impact. By incorporating elements to mitigate climate change and urban overheating, such as: water fountains, vegetation and shading; we not only reduce

the harmful effects of overheating, but also encourage social interaction and relaxation within these spaces. This approach shifts the way space is perceived, leading to greater acceptance. Thoughtful and high-quality design of POS enhances the attractiveness of the surrounding areas, services and buildings, bringing numerous social, environmental and economic benefits.

Within the “Mapping” method, the analysis of POS includes evaluating their design, functionality and relationship to environmental needs. This helps to clarify how each POS interacts with its environment. An important part of the analysis is the aesthetic assessment, where the assessor examines the materials used in selected POS, their treatment and aesthetic qualities, such as: colour texture, reflectivity, etc.; all these elements significantly influence the aesthetic appeal of the POS, and the larger scale of the space.

FIGURE 2.6
Example of mapping



Source: Pia Mišič, Satu Väättäinen, Uresa Pacoll, Eva Juan, Julia Nowacka (2023). Morphology [Computer sketch].

2.6. Traffic connectivity

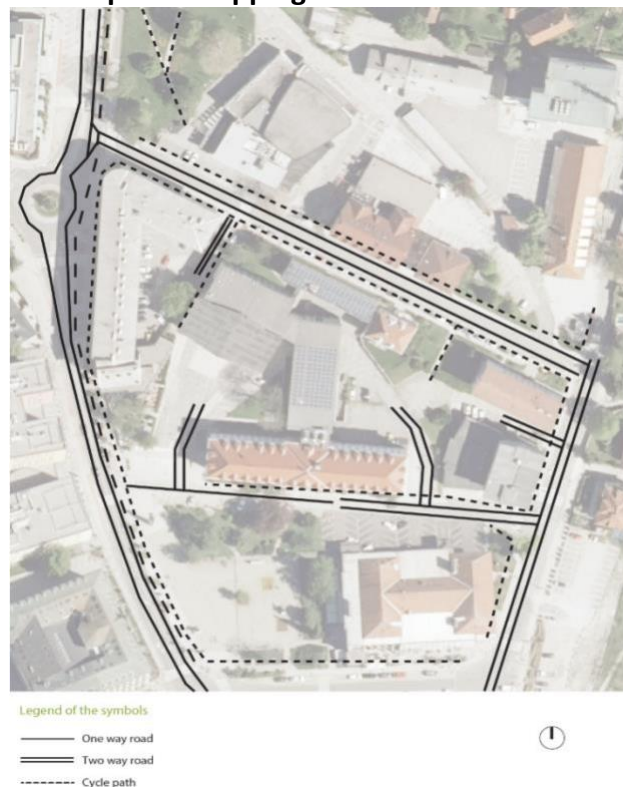
The relation of the city to its parts is like that of the human body to its parts; the streets are the veins (Kostof, 1991). Traffic infrastructure is a key factor in the structure and development of cities. Analysing it allows us to better understand how the urban area was developed and how it functions. Street-space represents more than 80 percent of all public space in cities and has the potential to foster business activity, serve as a front yard for residents, and provide a safe place for people to get around, whether on foot, by bicycle, car, or transit (NACTO, 2013). In the past, streets and roads primarily served as functional links between spaces within towns and cities. Most of the technical solutions are focused on accommodating motor traffic. Over time, however, their “technical part” evolved into urban design solutions for the needs of non-

motorised users. This led to incorporation of new elements which were hardly seen in the more motorized era in the past. The “road” is a traffic experience, the “street” is all users POS. Streets have gained many urban design features, greenery, and traffic-calming elements. The function of the street has been upgraded with increasing attention to creating spaces that not only serve for functional needs but also for social interaction. Many cities around the world significantly changed categorisation of the road structure within city centres implementing measures that prioritize calm traffic, less cars and expanded POS for human interaction and socialisation. This transformation is particularly evident in lower and medium category streets, while higher category roads, outside urban areas, continue to serve as routes for heavy traffic. The interconnectedness of transport systems, squares, streets, highways, rivers, railways, and bike paths, is essential to achieving the intermediary scale – the human scale-ratio – which can make the difference between a good piece of city and a bad one (Makover, 2014). In addition, detailed attention to the local scale of urban form demonstrates the significance of interaction of street spaces, the street system and traffic, pedestrian accessibility, and flows (Oliveira, 2016).

As part of the morphological structure in urban systems the streets are reflecting the ‘white’, a ‘no-place’ structure in urbanity, a line or way to move from one point to the other and certainly not an POS to stay in for a long term, to sit and observe the surrounding, to read a book, to talk with a friend etc. But as a part of the POS system, they create a backbone to ‘share values of community members’, the stage for the life of the users (Fikfak et al., 2018).

In the mapping analysis, the categories of streets and roads, within the urban area, are determined through observation. This creates a broader picture of the road/street network that shows the established system of spatial functionality. By analysing traffic lines, it is possible to assess the connectivity or dysconnectivity of streets and POS. Further analysis can help identify area/s where accessibility, safety and functionality of the space can be improved.

FIGURE 2.7
Example of mapping Behaviour observation



Source: Pia Mišič, Satu Väättäinen, Uresa Pacoll, Eva Juan, Julia Nowacka (2023). Morphology [Computer sketch].

2.7. Programmes and services

The functionality of POS is closely linked to the presence of different programmes and services. Every POS has a defined programme or purpose when it is created, developed, replaced, re-arranged etc., as a vital, everyday change. A successful programme and service design serves the needs of the POS users as well as the requirements of spatial planners and designers. However, often no single design can fully satisfy all the needs of every individual at the same time. In order to have effective design and management of public spaces it is essential to understand the role that those places play in people's lives, and why spaces are used or ignored (Carr et al., 1992). From the perspective of POS usage, we can distinguish between intentional and accidental use, where the established programmes and services are playing a key role. By creating a programme or service which is both diverse and appropriate to POS, individuals are provided with opportunities for both active and passive involvement. Inadequate programme design is most often reflected in terms of vibrancy of a particular POS. The emptiness or fullness of POS is not an equal criterion for users. The functionality and usability of the programmes and services are undoubtedly key factors, but we should not forget the experiential aspect, which provides the individuals a sensual connection with the space. The planning phase, when designing and establishing new programmes and services is close to future scenario thinking that can have a key impact on the function of POS, where the planners can include decisions-making process on a wide range of surveys, spatial observation, participatory approaches and other methods that allow capture quality data and also "senses in space".

In this context, the "Mapping" method follows a similar approach. During the programme and services analysis, the type and quantity of existing programmes within each POS are analysed. This helps to identify the concentration or lack of certain programmes and services in the area, and also provide an overview of the development process of the area. With the interactive approach with users of POS, a very useful tool for gathering information, the mapping method includes interviews and questionnaires conducted directly in the selected urban area. The wide range of data collected, along with its subsequent analysis, can help define guidelines for future development, or define the problems and needs of users, which can be used to revitalise the POS in the future.

FIGURE 2.8
Example of mapping Programme and services



Source: Pia Mišič, Satu Väättäinen, Uresa Pacoll, Eva Juan, Julia Nowacka (2023). Morphology [Computer sketch].

Conclusions

Urban analysis is a crucial component of urban planning. However, due to the involvement of a large number of stakeholders, and the complexity of issues within each POS, it is a process that addresses various other areas. To conduct this type of analysis effectively, it is essential to integrate interdisciplinarity with other disciplines to create comprehensive insights. This multi-layered research serves as an excellent starting point for designing new POS and revitalizing existing ones.

Presented “Mapping” method, developed as part of Sustainable Accessible Future Environments (SAFE) project, seeks to address spatial principles by analysing the space from inter- and multidisciplinary perspective. Like the participating institutions in SAFE, which cover the fields of urban planning and design, social sciences, economics, tourism and security, the method itself relies on the analysis of a particular POS from multi-diverse perspectives. The process is further enriched by various participatory approaches, offering everyone a deeper understanding of the current situation of POS. Through a set of seven different analyses: morphology, traffic connectivity, POS, programmes and services, accessibility assessment, behaviour observation and urban safety; each individual, regardless of their area of his/her expertise, can understand the design and functionality of the POS in question.

The process of “Mapping” was demonstrated through the implementation of field workshops called the ISP in five different countries. Students from different disciplines and nationalities used the “Mapping” method to produce qualitative analyses and assessments of selected POS within one week: to develop concepts and scenarios for the future based on their findings. It is certain that the understanding of the POS will become increasingly complex in the future due to the many factors, technologies and events that are evolving at an unprecedented speed. Alongside these advancements, the rapid development of technology will lead to the development of more and more sophisticated tools for analysing, not only individual spaces, but entire cities. By combining different digital and non-digital tools and technology with field-work and observation, we will be able to understand and experience POS more quickly and accurately, paving the way for the creation of sustainable, resilient, and inclusive cities in the future.

Bibliographical references

Batty, M., & Longley, P. A. (1994). *Fractal cities: A geometry of form and function*. Academic Press.

Brander, L. M., & Koetse, M. J. (2011). The value of urban open space: Meta-analyses of contingent valuation and hedonic pricing results. *Journal of Environmental Management*, 92(10), 2763–2773. <https://doi.org/10.1016/j.jenvman.2011.06.019>

Carr, S., Francis, M., Rivlin, L. G., & Stone, A. M. (1992). Needs in public space. In S. Carr (Ed.), *Public space* (pp. 87–136). Cambridge University Press.

Croce, S., & Vettorato, D. (2021). Urban surface uses for climate resilient and sustainable cities: A catalogue of solutions. *Sustainable Cities and Society*, 75, 103313. <https://doi.org/10.1016/j.scs.2021.103313>

Fikfak, A., Grudina, P., & Grom, J. P. (2018). The street, a future of connectivity between two cities, Nova Gorica, Slovenia and Gorizia, Italy. In *Transitional streets: Narrating stories of convivial streets: Conference proceedings* (pp. 324–335). [Plus+1fa.uni-lj.si+1](https://doi.org/10.1016/j.plus.2018.10.011)

Gehl, J. (2010). *Cities for people*. Island Press.

Goličnik Marušić, B., & Ward Thompson, C. (2002). Opazovanje in vedenjski zemljevidi: Metoda raziskovanja javnega odprtega prostora v mestu. *Urbani izziv*, 13(1), 82–89. <https://doi.org/10.5379/urbani-izziv-2002-13-01-011>

Goličnik Marušić, B. (2011). Analysis of patterns of spatial occupancy in urban open space using behaviour maps and GIS. *Urban Design International*, 16, 36–50.

Goličnik, B., & Marusic, D. (2012). Behavioural maps and GIS in place evaluation and design. In B. M. Alam (Ed.), *Application of geographic information systems*. InTech. <https://doi.org/10.5772/47940>

Goličnik, B., & Ward Thompson, C. (2010). Emerging relationships between design and use of urban park spaces. *Landscape and Urban Planning*, 94(1), 38–53. <https://doi.org/10.1016/j.landurbplan.2009.07.016>

Ittelson, W. H., Rivlin, L. G., & Proshansky, H. M. (1970). The use of behavioural maps in environmental psychology. In H. M. Proshansky, W. H. Ittelson, & L. G. Rivlin (Eds.), *Environmental psychology: Man and his physical setting* (pp. 658–668). Holt, Rinehart & Winston.

Iqbal, A. (2023). Inclusive, safe and resilient public spaces: Gateway to sustainable cities? In M. Wallhagen & M. Cehlin (Eds.), *Urban transition—Perspectives on urban systems and environments*. IntechOpen. <https://doi.org/10.5772/intechopen.97353>

- Jacobs, J. (1993). *The death and life of great American cities*. Vintage Books.
- Kostof, S. (1991). *The city shaped: Urban patterns and meanings through history*. Thames & Hudson.
- Makower, T. (2014). *Touching the city: Thoughts on urban scale* (1st ed.). Wiley. <https://doi.org/10.1002/9781118947692>
- Malone, L. (2019). *Desire lines: A guide to community participation in designing places*. RIBA Publications.
- Mitlin, D. (2021). Editorial: Citizen participation in planning: From the neighbourhood to the city. *Environment and Urbanization*, 33(2), 295–309. <https://doi.org/10.1177/09562478211035608>
- Murray, S. (2017). *Safe Cities Index 2017: Security in a rapidly urbanising world*. The Economist Intelligence Unit. <https://impact.economist.com/projects/safe-cities/assets/documents/safe-cities-index-eng-web.pdf> Economist Impact
- National Association of City Transportation Officials. (2013). *Urban street design guide*. Island Press.
- Nikšič, M., Ragozino, S., & Fikfak, A. (2018). Public spaces and local life: Questioning the participatory approaches. *Urbani Izziv*, 29(Supplement), 3–8. <https://doi.org/10.5379/urbani-izziv-en-2018-29-supplement-000>
- Oliveira, V. (Ed.). (2018). *Teaching urban morphology*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-76126-8>
- Persson, H., Åhman, H., Yngling, A. A., & Gulliksen, J. (2015). Universal design, inclusive design, accessible design, design for all: Different concepts—one goal? On the concept of accessibility—historical, methodological and philosophical aspects. *Universal Access in the Information Society*, 14(4), 505–526. <https://doi.org/10.1007/s10209-014-0358-z>
- Piètre-Cambacédès, L., & Bouissou, M. (2013). Cross-fertilization between safety and security engineering. *Reliability Engineering & System Safety*, 110, 110–125. <https://doi.org/10.1016/j.ress.2012.09.011>
- Prislan, K., & Slak, B. (2017). Analysis of the relationship between smart cities, policing and criminal investigation. *Varstvoslovje: Journal of Criminal Justice and Security*, 20(4), 389–413.
- Simoneti, M., Peterlin, M., & Očkerl, P. (Eds.). (2012). *Jane's Walk: Urbani sprehodi za prijaznejša mesta*. Inštitut za politike prostora.

CHAPTER 3. ACCESSIBILITY AND SENSE OF SAFETY

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ABSTRACT

Chapter Three discusses the concept's sense of safety and accessibility. Sense of safety is a personal experience and feeling, which can differ from person to person. However, when designing accessible services and accessibility, a sense of safety is an important element of the total understanding and experience of accessibility. The chapter also discusses various tools the project has developed, such as the evacuation plan and travel safety game.

The significance of incorporating safety measures in the design and operation of various spaces, facilities, and services is paramount. Studies suggest that sense of safety greatly enhances the satisfaction levels of customers and citizens, playing a pivotal role in promoting autonomy and functionality.

Methods used to collect experiences and perspectives of end-users of services in urban areas are introduced in the chapter. These include, for example, Jane's Walk, safety walk and participatory walk.

Keywords:

Sense of safety, participatory walk, Jane's Walk, safety walk, accessibility.

1. Introduction

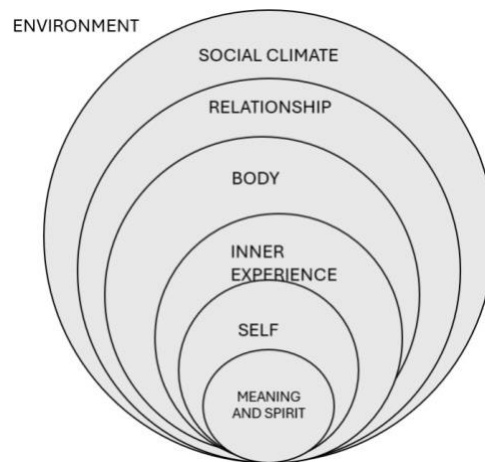
This chapter discusses the concept of sense of safety and how taking it into account is useful in planning open spaces and their services. It underscores the value of incorporating safety considerations into the design and operation of these spaces. In addition, it also introduces two recent studies on the sense of safety and the feeling of being unsafe, one carried out in Granada, Spain, and the other in Vantaa, Finland. Thereafter, the chapter also describes participatory walking as a way to understand the needs of different target groups, specifically from the perspective of a sense of safety. Engaging in outdoor walking activities enhances participation and bolsters functional capabilities. This approach is particularly beneficial in understanding safety requirements from the perspective of these groups, thereby fostering a more accessible and safer environment. The importance of maintaining a safe environment in this context is underscored (Barclay et al., 2018, p. 1). Therefore, in improving urban areas, one should consider matters that deal with the sense of safety in order to impact how people view it (Henriksson et al., 2023).

2. Introduction to safety issues

This section introduces the concept of sense of safety. Safety is a crucial part of people's lives; "One of the fundamental psychological needs for people is the sense of safety. It improves the quality of life when the sense of safety is at a level that satisfies the person" (Henriksson et al., 2023). Sense of safety can refer to personal security (Rangajeewa, 2017, p. 74). For example, knowing the neighbourhood and residents can give a sense of safety (Leverentz et al., 2018, pp. 972-973). Sense of safety can differ between individuals, which means that a risk can be frightening for one individual, and the same threat is insignificant for another person. Therefore, a sense of safety is a subjective matter for individuals, and it can fluctuate quickly (Henriksson et al., 2023).

Sense of safety consists of different aspects. It is a personal feeling and experience about us in our current surroundings. It is affected by our community's opinions and experiences and the feeling can change depending on location, age, knowledge and many other variables. The feeling of safety and sense of security mean also rather the same as sense of safety. The Australian Bureau of Statistics (2025) measures the feeling of safety with a number of people who feel safe walking alone during the day and night. Boström et al., (2013) write about the sense of security that is an outcome resulting from the question "Do you feel secure in your everyday life?" This definition offers a wide perspective to the individual's experience since it leads one to also consider situations other than walking outside. Lynch et. al., (2025) have researched the concept of sense of safety in personal care and found out that it is affected by and practically influences the whole person. A person's life story, relationships, meaning and their sense of themselves and their own physical self together form their sense of safety.

FIGURE 3.1
A comprehensive understanding of sense of safety



Source: Modified from Lynch (2019).

According to Lynch, one can understand sense of safety as an evaluation process that consists of the person herself, others and the context. This contains the understanding of the processes where the person has felt being safe. On the other hand, other matters and contents are connected to a sense of safety by building and maintaining it. In addition, the understanding also includes how the person is aware of her own abilities and possibilities to assess and survive when her sense of safety is shaken (Lynch, 2019, p. 2). The above Figure 3.1 illustrates how a person's meaning and spirit is included in oneself. Looking from outside, from the environment, social climate includes relationships, which influence one's body, inner experiences, self and meaning and spirit.

Sense of safety is a combination of our living surroundings, our own health and experiences mixed with knowledge and expectations. It can be tied to Maslow's (1943) theory of fulfilling needs. Sense of safety requires a certain level of fulfilment of different needs. Lynch & co (2025) present a model where a person's meaning and spirit, self, inner experience, body, relationships, social climate and environment form layers that construct the sense of safety.

An insufficient sense of safety can lead to different negative outcomes. Bindreiff (2023) writes how feeling unsafe and not belonging affects learning results at schools. Sense of safety builds on the feeling of belonging, a positive sense of community and the feeling of safety in general. Gallo (2023) explains psychological safety in teams as a shared belief to express ideas and concerns without fear of negative consequences. This also increases the sense of safety among the team members.

The importance of safety considerations in the planning of various areas, facilities, and services cannot be overstated. Research indicates that a sense of safety significantly contributes to the satisfaction of customers and citizens, and it plays a crucial role in enhancing independence and functionality (Su et al., 2021). The population in cities is ever growing, which can lead to different matters that can disrupt the safety of the areas (Henriksson et al., 2023).

Safety considerations are particularly vital for special groups, as they support their ability to lead a full and equal life compared to the mainstream population. It is worth noting that by ensuring accessible and safe services and environments for these special groups, we often meet the needs of the general public as well. This principle aligns with the Design for All approach, which aims

to make products and services accessible and usable by as many people as possible (AAL Persona, n.d.).

3. Sense of safety in planning accessibility

Next, this section discusses the importance of safety when planning accessibility. Safety is a basic need when visiting an unfamiliar area (Xie et al., 2021, p. 1). It is essential to understand that the feeling of safety is a central factor in aging. Decreasing the ability to function can lead to situations that cause negative experiences for the individual, narrow their sphere of life, and affect their wellbeing. The experience of safety is influenced by both the challenges of the physical environment and movement and the factors of the social environment and interaction. The siloing of social and health services and inconsistent service paths can also increase an elderly person's sense of insecurity (Ristolainen et al., 2021, p. 225).

For the user of the services, a smooth everyday life means safety (Ristolainen et al., 2021, p. 229). Safety is understood more widely than ever; it is not only about responding to problems but preventing problems is at least as necessary. In addition to this, as a feeling safety is also emphasized along with objective observations. Conceptualizing wellbeing as a whole forms a strong connection between accessibility and safety (Rappe, 2021, p. 9). Users' safety is also increased by supporting their ability to act (Ristolainen et al., 2021, p. 230).

When looking at the accessibility of services for the elderly, attention often focuses on physical safety. In addition, safety can also focus on psychosocial aspects, such as trust (Ristolainen et al., 2021, p. 234). The functional and mobility ability of the aging population decreases. It emphasizes the importance of the facilities being accessible and the availability of services. An age-friendly environment links together accessibility, safety, and design that serves all users (Rappe, 2021, p. 62). Age-friendly facilities and services that support remembering enable activity, even if physical condition deteriorates, which can lead to a decrease in movement and impaired sensory function. Age-friendliness is supported by accessibility, which in turn enables functionality and inclusion (STM, 2020, p. 40).

Equality and inclusion support the customer's sense of safety (Ristolainen et al., 2021, p. 230). The safety aspect related to this, i.e., social security, consists of community spirit, supporting crime prevention, and the area's versatility. Community spirit is promoted by an environment where it is possible to meet different people, barrier-free spaces to move around, encouraging responsible activities, and supporting participation, for example, by participating in decision-making. Instead of guarding, community action is more effective in increasing the feeling of security. A diverse environment provides stimulation (Rappe, 2021, pp. 46-48).

4. Recent studies in safety in two cities of the project partners

Two studies have recently been carried out in the cities of project partners: Granada, Spain and Vantaa, Finland. These studies focus on a sense of safety and feeling unsafe in one's neighbourhood.

In the city of Granada, Spain, an important study on the sense of safety or the feeling of being unsafe was carried out. According to Lizárraga et al. (2025), there were 383 participants in the study, who were also students in the city. The study made use of a two-part questionnaire, which inquired about socioeconomic information on the participants as well as how they experienced how safe or unsafe their neighbourhood was during different times of the day. Furthermore, the respondents needed to estimate their understanding of risks of various crimes, for example, robbery. As the city has a low crime rate in Spain, it is seen as a rather safe environment where

walking is promoted for moving around the city centre and to and from the campuses of the university (Lizárraga et al., 2025).

The results of the survey carried out by Lizárraga et al. mapped out 413 unsafe locations in the city. Based on the results, one can conclude that most female students experienced their neighbourhood as unsafe, especially at night time, in comparison to male students. The study specifically notes that females are body-victimized, but males deal with crimes focused on property.

Even though the study addressed the feeling of being unsafe in the city of Granada among students, the results indicate that females are more prone to face harassment or criminal behaviour than male students. As the target groups of the SAFE project include people with special needs, depending on health or age issues, the results of the study by Lizárraga et al. do suggest that unsafe areas exist in the city as well as that women might be at risk of criminal behaviour especially at night-time in the centre of the city.

The other city, where the sense of safety among residents was studied, was the city of Vantaa in Finland. There are approximately 250,000 residents in the city, with 27% of them having another mother tongue than Finnish or Swedish, which are the official languages in Finland (InfoFinland, n.d). The main airport of Finland, Helsinki Airport, is situated in Vantaa. In October 2024, a total of 1683 respondents participated in the survey carried out in Vantaa both by Feedback for the city and as a linked questionnaire openly available on the website of Vantaa (Vantaa, 2025).

The study focused on finding out how the inhabitants of the city saw safety in their neighbourhood and in Vantaa as well as the risks. The results indicate that one felt safer in their own neighbourhood than the district of the city where they lived. Closeness and familiarity to neighbours and local services created a significant sense of safety, according to the findings. The biggest concerns of the respondents of the city itself with regard to safety and feeling unsafe were juvenile delinquency, marginalisation, and the amount of police surveillance. The biggest problems of the respondents' own quarters were the selling of illegal drugs, drug abuse, and trouble making in public spaces. Approximately half of the respondents noted that their own neighbourhood suffers from substance abuse, messing up spaces, and untidiness in general. There were significant differences in the impressions of safety and feeling unsafe in one's neighbourhood between different residential areas.

More than half of the respondents found that there has been a change in the safety of the city. The most unsafe places were train stations and the vicinity of the stations due to criminal activities, insufficient lighting and gangs and other people threatening, according to the respondents. Many respondents mentioned the residential areas of Myyrmäki and Kivistö as places that are unsafe. These areas were also studied in the participatory walks discussed in the next subsections.

Suggestions to improve the safety of the city and residential areas included, for example, more events, places to spend time in, and free hobby activities for the young, more waste bins, more green areas and cleaning of spaces more often were suggested to make the environment better. Police surveillance and presence were suggested to improve the feeling of safety in the city and especially near and at the train stations.

The two studies discussed here are relevant also for the SAFE project. The reason is that SAFE aims to improve accessibility in urban areas in the partners' countries, and accessibility also includes a sense of safety. The methods implemented in SAFE are, for instance, different walking methods, during which observations have been collected. The following sections discuss walking methods as well as the results from some of the walks.

5. Participatory walking as a method to understand the needs of special groups

During the SAFE project lifecycle, several participatory walks were organized with interest group representatives. These walks took place in all partner countries, which are Finland, Poland, Germany, Slovenia and Spain. In addition, numerous walks were organized in Finland with student groups carrying them out. The walks were part of the study unit implementation *Exerting Influence in Social Care* at Laurea University of Applied Sciences (Henriksson et al., 2023).

Walking alongside individuals is a natural participatory activity that underscores the importance of active involvement in the design process. The concept of Design with the Feet is widely recognized and utilized. Participatory design hinges on professionalism merging the natural activity of walking with a professional perspective and necessitating reflective participation. It is essential to consider the effectiveness of participatory design methods, particularly in terms of resource allocation for their implementation and the outcomes they yield. Ultimately, these methods should facilitate and promote effective planning (Kanstrup et al., 2014, pp. 51-52).

Kanstrup et al. (2014, pp. 52-56) have classified participatory walks into several categories, including walking observations, walking interviews, bimbling walks, proto walks, and transect walks (TW). Numerous walking methodologies are rooted in an ethnographic approach. The Walking Interview method underscores the researcher's role as a conduit between the interview process and the physical act of walking. Bimbling refers to a leisurely, relaxed walk, often undertaken in a tourist setting. This form of ambulation is designed to stimulate thought and facilitate observation. Protowalks provide an opportunity for real-world testing and immediate feedback. Lastly, the Transect Walk guides participants through a specific area, enabling the identification of resources pertinent to both the environment and the local community (Kanstrup et al., 2014, pp. 52-56).

Usually, the process includes several steps. The first one is to plan the walk as a whole. Thereafter, one needs to recruit the participants to the walk. The participants represent a target group or several, depending on the needs and aims of the walk. The following step consists of making a map and a route for the participants to walk. Then, the participants walk the route, and at the end, there will be an individual reflecting as a check-out, while documenting the results, and lastly the analysis (Kanstrup et al., 2014, pp. 57-58).

Walkability is defined by how pedestrian-friendly the urban environment is. By measuring it, planning professionals may be able to address the quality of the pedestrian environment by supporting more objective, effective and comprehensive strategies and interventions related to walking (Moura et al., 2017, p. 282).

IMAGES 3.1
Walkability issues of sideways



Source: SAFE project (2024)

Use Images 3.1 presents authentic images taken during ISP in the SAFE project of sidewalks that are not completely walkable.

IMAGES 3.2
Walkable paths



Source: SAFE project (2024).

Images 3.2 presents authentic examples of walkable paths in urban areas. Photos taken during ISP in the SAFE project.

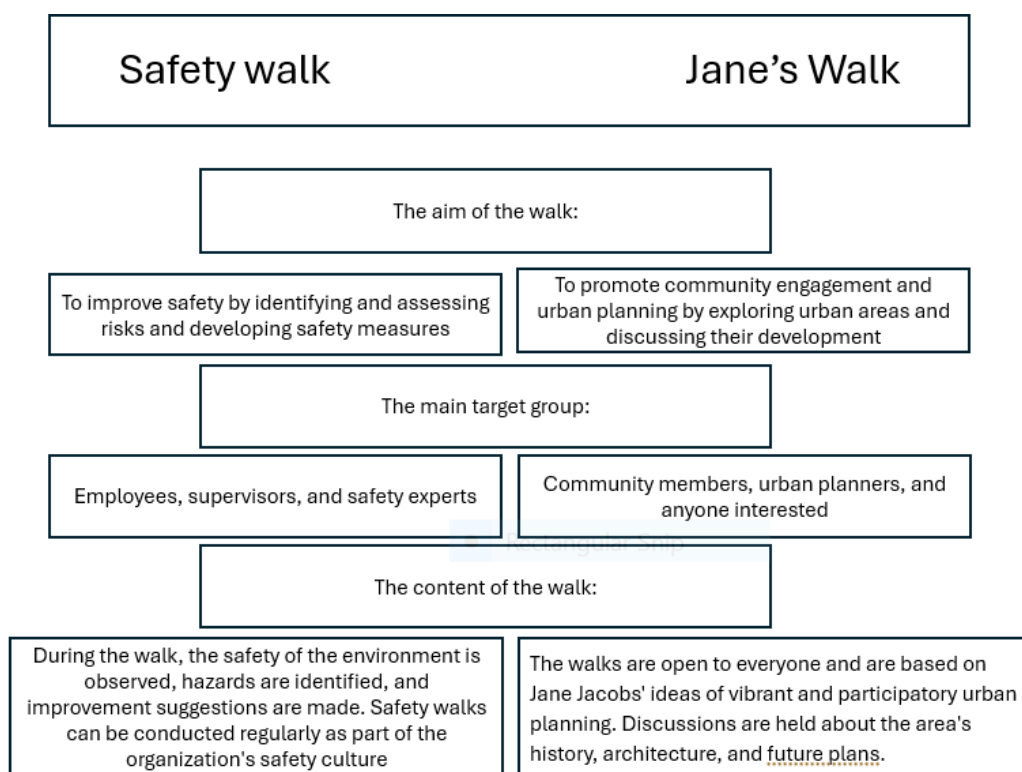
The images above show both unwalkable and walkable areas in urban areas. When considering the various target groups with special needs, the images illustrate how the unwalkable places can create problems for the individuals with special needs. The walkable paths, on the other hand, seem pleasant areas with nature present. One can also note the handles in the last photo above. Handles can offer a sense of safety when walking down the stairs.

From the users' point of view, there are differences in the adequacy of the accessibility of the environment. Facilities and environments suitable for a fit adult do not necessarily meet the needs of special groups. By exploring the means of co-creation and a participatory walk, the environment can be described in detail. Then it can show what kind of improvements are needed in urban planning to improve accessibility (Moura et al., 2017, p. 295).

Safety walks are integral to planning processes with a focus on enhancing safety. These walks involve the participation of citizens, authorities, and other stakeholders. Participants evaluate environments and public spaces through the lens of safety, transforming security-related concerns into tangible, manageable elements. Furthermore, these walks foster the development of communities rooted in self-governance (Brandén & Sandberg, 2021, p. 1).

During the planning phase of the walks, organizers meticulously identify and document any potential issues. The aspect of visibility plays a crucial role in safety walks. For instance, observation points can be highlighted on a map or photograph for easy reference. Additionally, problems are articulated verbally, often accompanied by potential solutions and developmental strategies (Brandén & Sandberg, 2021, p. 8).

FIGURE 3.2
Comparison between Safety Walk and Jane's Walk



Source: Adapted based on Oikeusministeriö & Suomi.fi

In Figure 3.2, one can see the differences between the two walks, Safety walk and Jane's walk. Both have their own aims. Safety walks aim to improve safety while Jane's Walk strives to enhance community engagement. The target groups can vary between the two different walks. Also, the content of the walks is different. Safety walk focuses on finding hazards in the environment. Jane's walk aims to engage people in the community and to get them to participate in urban planning and future plans, for example.

The SAFE project organized five intensive study programmes (ISP) in different cities and countries: Ljubljana, Slovenia; Klei, Germany; Bydgoszcz, Poland; Vantaa, Finland; and Granada, Spain. During the week-long events, teachers and students carried out participatory walks, Jane's walks, and safety walks combined together and separately as well. Students walked with local residents who represented target groups of the project. In addition, target group representatives from the partner countries joined the walks with the local residents as well as with students. These target groups included both city representatives of the partners' cities and representatives of the special needs target groups. Together they examined the potential problems on their walks of the areas and documented them. These problems were looked into after the walks in the student teams, where they tackled the problems using different methods and came up with improvement suggestions for the city areas to which they had been assigned to explore. The improvement suggestions were developed with Scenario building to look into the future for three different points of time during the intensive week.

6. Results of the walking activities

This section introduces different results obtained in the walks organized in the SAFE project. During the project, a sense of safety was studied in multiple ways, engaging both interest groups, students, teachers, and city representatives. Different ways to carry out walks, such as participatory walks, Jane's walks, and safety walks were carried out in collaboration with students from each country of the project and target group representatives. Even city representatives participated in the walks. These were done to collect information on problems in the urban areas which could be improved to make the areas more accessible and safer. Thereafter, various products and product ideas were developed in student teams using a variety of methods to help improve the sense of safety among people who move in these areas and might have special needs. All of this has been carried out to improve accessibility in the urban areas.

The results from the Finnish participatory walks carried out with the students of social services are discussed next. There were 180 students participating in more than 30 walks carried out, in total. Students walked with target group representatives in various areas in Finland, also in the capital region as well as in the city of Vantaa. The students wrote reports of their experiences and walks, including assessments of the findings. The assessments aimed to evaluate the inclusivity and accessibility of public spaces, including museums, shopping centres, train stations, urban environments, and areas catering to specific demographics such as the elderly and individuals with disabilities.

The reports with the assessments by the students indicated many themes that need attention to improve the environments studied during the walks. Common themes emerged across locations, highlighting prevalent accessibility concerns such as mobility, sensory needs, and cognitive abilities. Safety emerged as another significant theme in most reports, with participants expressing concerns about lighting, uneven surfaces, and personal security. Moreover, consultation and inclusion emerged as critical factors in assessing accessibility, with several reports questioning the extent of consultation with relevant communities in the development of accessibility guidelines or urban planning initiatives (Helsinki, Munkkivuori area

student group 2024; Haukipudas, Outokumpu, and Hyvinkää student group 2024; Helsinki Mall of Tripla student group 2 2024; Helsinki from railway station to Oodi – path student group 2024; Helsinki, Mall of Tripla student group 1 2024; Vantaa, Kivistö area student group 2024; Helsinki Amos Rex student group 2024; City of Hämeenlinna student group 2024 & City of Lahti student group 2024).

Despite the diverse range of locations and demographics assessed, several similarities and differences were observed. Across all locations, accessibility challenges were evident, emphasizing the need for clear signage, proper lighting, and physical accommodations. However, the specific challenges varied based on the characteristics and demographic makeup of each location. The focus on specific demographics varied across assessments, with some reports addressing accessibility issues for a broad range of demographics and others focusing on specific groups. Additionally, assessments conducted in specific regions provided insights into the accessibility and safety concerns specific to those areas (Helsinki, Munkkivuori area student group 2024; Haukipudas, Outokumpu, and Hyvinkää student group 2024; Helsinki Mall of Tripla student group 2 2024; Helsinki from railway station to Oodi – path student group 2024; Helsinki Mall of Tripla student group 1 2024; Vantaa, Kivistö area student group 2024; Helsinki Amos Rex student group 2024; City of Hämeenlinna student group 2024 & City of Lahti student group 2024).

In addition to the key findings, the assessments provided valuable insights into the importance of community engagement and holistic approaches to accessibility. Collaborative projects emphasized the need for involving diverse stakeholders, including residents, experts, and local authorities, in the planning process. Moreover, continuous improvement was highlighted as essential, with feedback from customer panel walks guiding future actions to enhance accessibility and inclusivity (Helsinki, Munkkivuori area student group 2024; Haukipudas, Outokumpu, and Hyvinkää student group 2024; Helsinki Mall of Tripla student group 2 2024; Helsinki from railway station to Oodi – path student group 2024; Helsinki Mall of Tripla student group 1 2024; Vantaa, Kivistö area student group 2024; Helsinki Amos Rex student group 2024; City of Hämeenlinna student group 2024 & City of Lahti student group 2024).

The findings of the accessibility assessments conducted in various Finnish locations provide valuable insights for policymakers, urban planners, and community stakeholders to prioritize accessibility and inclusivity in future initiatives. By addressing the specific needs of different demographics and engaging stakeholders in the planning process, communities can work towards creating more inclusive and welcoming environments for all. This aggregation of the accessibility assessments underscores the importance of promoting accessibility and inclusivity, not just as an ethical imperative, but also as a social and economic necessity (Helsinki, Munkkivuori area student group 2024; Haukipudas, Outokumpu, and Hyvinkää student group 2024; Helsinki Mall of Tripla student group 2 2024; Helsinki from railway station to Oodi – path student group 2024; Helsinki Mall of Tripla student group 1 2024; Helsinki, Kivistö area student group 2024; Helsinki Amos Rex student group 2024; City of Hämeenlinna student group 2024 & City of Lahti student group 2024).

The benefits of cooperation have been manifold. Based on participatory walks, it is possible to make visible themes that are important from the point of view of accessibility. The inclusive walk, as its name suggests, actively involves representatives of the target group in examining accessibility and promoting social influence. This approach is a key part of our project's strategy. Students concretely learn participation and influence. Furthermore, they gain expertise, knowledge, and understanding of themes necessary at the EU level, such as inclusion, accessibility, safety, and equality. Lastly, cooperation increases teachers' and project staff's

understanding and knowledge of things that should be developed in urban areas and their services (Henriksson et al., 2024).

Conclusions

The SAFE project looked into various ways on how to improve the sense of safety and accessibility in the urban areas that were designated as targets for the project. The urban areas consisted of Vantaa, Finland; Kiel, Germany; Bydgoszcz, Poland; Granada, Spain; and Kranj and Ljubljana in Slovenia. In each location during the project, partners participated actively in the ISPs carried out together with teachers, students, as well as with target group representatives from various partner countries. City representatives joined the activities as well during the ISP weeks in the different locations.

One can conclude that the students, target group representatives, and city representatives both collected and received a lot of information on what could be improved in the areas to make them safer and more accessible. Student teams worked on the various findings, discussed them, implemented various methods to both develop solutions and ideas for the future. These suggestions on improvements were tied into different periods of time in the future, focusing on which improvements should be carried out first, and which later.

One of the aims of the SAFE project was to improve the sense of safety for people visiting urban areas that were uncommon for them. After the experiences and hard work of the project partners, it is obvious that all participants in the project have learned how to improve accessibility and the sense of safety in strange urban areas, where one does not live. Furthermore, participants have learned how to discover issues to improve in one's environment, how to collaborate in international settings with people unfamiliar to them, and how to see matters from the perspective of other people. They have also learned about the needs of the different target groups of this project. This is a valuable skill set that will definitely be of use in the future of the developing urban areas in the European Union.

As an interdisciplinary international project SAFE has succeeded in creating an impact among the participants to see the world with the eyes of other people, to take the needs of others into consideration, and to work together across borders and disciplines. SAFE has also impacted the locations of the project where the project partners with their students and target group representatives have worked together for one intensive week in each place. They have met local people, worked together with local target group representatives, have created poster exhibitions to illustrate the future versions of the location for the residents with accessibility and safety in mind, and participated briefly but actively in supporting the community spirit by collaborating with locals.

Bibliographical references

AAL Persona. (n.d.). *Designing for all: The key elements of inclusive design*. <https://www.aal-persona.org/designing-for-all-the-key-elements-of-inclusive-design/>

Australian Bureau of Statistics. (2025). *Feeling of safety*. <https://www.abs.gov.au/statistics/measuring-what-matters/measuring-what-matters-themes-and-indicators/secure/feeling-safety>

Barclay, R., Webber, S., Ripat, J., Grant, T., Jones, C. A., Lix, L. M., Mayo, N., van Ineveld, C., & Salbach, N. M. (2018). Safety and feasibility of an interactive workshop and facilitated outdoor walking group compared to a workshop alone in increasing outdoor walking activity among older adults: A pilot randomized controlled trial. *Pilot and Feasibility Studies*, 4, 179. <https://doi.org/10.1186/s40814-018-0367-4>

- Bindreiff, D. (2023). *How a sense of safety shapes student learning and behaviour*. Education Week. <https://www.edweek.org/leadership/opinion-how-a-sense-of-safety-shapes-student-learning-and-behavior/2023/05>
- Boström, M., Bravell, M., Lundgren, D., & Björklund, A. (2013). Promoting sense of security in old-age care. *Health, 5*(6B), 56–63. <https://doi.org/10.4236/health.2013.56A2009> University of Portsmouth+1
- Brandén, J., & Sandberg, L. (2021). Governing safety through the politics of community? A governmentality analysis of the practice of ‘safety walks’ in three Swedish cities. *Space and Polity, 25*(1), 1–19. <https://doi.org/10.1080/13562576.2021.1894916> Taylor & Francis Online+3EBSCO OpenURL+3OUCI+3
- City of Vantaa. (2025). *Vantaan kaupungin turvallisuuskysely 2024*. <https://www.vantaa.fi/sites/default/files/document/Vantaan%20kaupungin%20turvallisuuskysely%202024.pdf>
- European Parliament & Council. (2019). *Directive (EU) 2019/882 on the accessibility requirements for products and services*. <https://eur-lex.europa.eu/eli/dir/2019/882/ojEUR-Lex+1EUR-Lex+1>
- Henriksson, K., Mantere, P., & Ruoslahti, H. (2023). Sense of safety and exploring accessibility with ageing people in Finland. *Laurea Long, 16*. <https://urn.fi/URN:NBN:fi:amk-2023122038744>
- Henriksson, K., Iisakkila Rojas, H., Kärkkäinen, K., Mantere, P., & Pelkonen, E. (2024). Laurealaiset tutkivat kaupunkialueiden saavutettavuutta – Asiakkaiden osallistaminen paljastaa kehittämistarpeita. *Laurea Journal*. <https://journal.laurea.fi/laurealaiset-tutkivat-kaupunkialueiden-saavutettavuutta-asiakkaiden-osallistaminen-paljastaa-kehittamistarpeita/>
- Gallo, A. (2023). What is psychological safety? *Harvard Business Review*. <https://hbr.org/2023/02/what-is-psychological-safety>
- InfoFinland. (n.d.). *Information about Vantaa*. <https://www.infofinland.fi/en/vantaa/information-about-vantaa>
- Jane’s Walk. (n.d.). *Jane’s Walk*. <https://janeswalk.org/>
- Jane’s Walk Ottawa. (2023). *Jane’s Walk Ottawa* <https://www.janeswalkottawa.ca/en/about-janes-walk>
- Kanstrup, A. M., Bertelsen, P., & Madsen, J. Ø. (2014, October). Design with the feet: Walking methods and participatory design. In *Proceedings of the 13th Participatory Design Conference: Research Papers - Volume 1* (pp. 51–60). ACM. <https://doi.org/10.1145/2661435.2661441>
- Kasala, V., & Smatanova, K. (2019, September). Community engagement as a sustainable tool in transforming mass housing urban structures: Case study of Petržalka estate, Bratislava, Slovakia. In *IOP Conference Series: Materials Science and Engineering* (Vol. 603, No. 3, p. 032063). IOP Publishing. <https://doi.org/10.1088/1757-899X/603/3/032063>
- Leverentz, A., Pittman, A., & Skinnon, J. (2018). Place and perception: Constructions of community and safety across neighbourhoods and residents. *Urban Studies, 55*(4), 825–843. <https://doi.org/10.1177/0042098016686534>
- Lizárraga, C., Castillo-Pérez, I., & Grindlay, A. L. (2025). Capturing what statistics miss: Mapping unsafe places and victimisation experiences in the City of Granada, Spain. *Cities, 156*, 105501. <https://doi.org/10.1016/j.cities.2024.105501>

- Lynch, J. (2019). Sense of safety: A whole person approach to distress in primary care. *British Journal of General Practice*, 69(680), 228–229. <https://doi.org/10.3399/bjgp19X702221>
- Lynch, J., Stange, K., Dowrick, C., Getz, L., Meredith, P., Van Driel, M., Harris, M., Tillack, K., & Tapp, C. (2025). The sense of safety theoretical framework: A trauma-informed and healing-oriented approach for the whole person. *Frontiers in Psychology*, 15, 1441493. <https://doi.org/10.3389/fpsyg.2024.1441493>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
- Moura, F., Cambra, P., & Gonçalves, A. B. (2017). Measuring walkability for distinct pedestrian groups with a participatory assessment method: A case study in Lisbon. *Landscape and Urban Planning*, 157, 282–296. <https://doi.org/10.1016/j.landurbplan.2016.07.005>
- Oikeusministeriö. (2024). *Tietoa turvallisuskävelyistä*. <https://rikoksentorjunta.fi/tietoa-turvallisuskävelyistä>
- Rangajeewa Ratnayake, R. (2017). Sense of safety in public spaces: University student safety experiences in an Australian regional city. *Rural Society*, 26(1), 69–84. <https://doi.org/10.1080/10371656.2017.1284616>
- Ristolainen, H., Tiilikainen, E., Tarvainen, M., Nikumaa, H., Sointu, R. T., Niemi, M., & Seppänen, M. (2021). Vammaisten ja ikääntyneiden palvelut: Asiakasturvallisuus sosiaali- ja terveysalalla. In *Asiakasturvallisuus sosiaali- ja terveysalalla* (pp. 225–249). Gaudeamus.
- Su, D. N., Nguyen-Phuoc, D. Q., & Johnson, L. W. (2021). Effects of perceived safety, involvement and perceived service quality on loyalty intention among ride-sourcing passengers. *Transportation*, 48(1), 369–393. <https://doi.org/10.1007/s11116-019-10038-0>
- Suomi.fi. (2024). *Turvallisuskävely työpaikalle*. <https://kehittajille.suomi.fi/palvelut/digiturva/osaamisen-kehittaminen/oppaat-organisaatioille/turvallisuskävely-tyopaikalle>
- World Health Organization. (2002). *Towards a common language for functioning, disability and health: ICF*. <https://www.who.int/classifications/icf/en/>
- Xie, C., Zhang, J., & Morrison, A. M. (2021). Developing a scale to measure tourist perceived safety. *Journal of Travel Research*, 60(6), 1232–1251. <https://doi.org/10.1177/0047287520938863>
- Unpublished references:
- Reports by the following student groups:
- Helsinki, Munkkivuori area student group 2024.
- Haukipudas, Outokumpu, and Hyvinkää student group 2024.
- Helsinki Mall of Tripla student group 2 2024.
- Helsinki from railway station to Oodi – path student group 2024.
- Helsinki Mall of Tripla student group 1 2024.
- Helsinki, Kivistö area student group 2024.

CHAPTER 4. SOCIAL POLICY

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ABSTRACT

This chapter explores the intricate relationship between social policy and the utilization of open spaces, encompassing public spaces, public services, and private services accessible to the general public. It delves into how social policies may shape the development, maintenance, and accessibility of these spaces, highlighting their significance in fostering community well-being and social cohesion. The analysis addresses the roles of various stakeholders, including government agencies, private enterprises, and community organizations, in creating inclusive environments that promote well-being and safety. By examining case studies and policy frameworks, the chapter illustrates the challenges and opportunities in balancing the interests of diverse populations while ensuring equitable access to open spaces. Ultimately, it underscores the importance of strategic social policy in enhancing the quality and functionality of open spaces as vital components of urban and rural landscapes.

Keywords:

Social policy, open spaces, accessible spaces, well-being, community, stakeholders.

1. Introduction

Close your eyes and try to imagine your favourite open, public space...

bright, eco, safe, relaxing...?

How is it?

It is important to know that public open space (POS) is a valuable resource from human, social and ecological perspectives. It is also strictly connected with the sustainability of human society, the economy, and the environment (Dietsch, 2018). There is not just one golden definition for POS, as it is connected with the specific function and characteristic for the local society.

Usually, public open space is planned and managed for current and future generations for the purpose of public protection and pleasure of unique values (Nochian et al., 2015). It is also emphasized that POSs played an important role in improving the quality of life for the urban populations and in supporting urban inhabitants (Martinelli et al., 2014).

What is more, it is important to shout out that POSs should be supported by Social Policy as well-designed and planned spaces help to enhance the quality of retail, business and leisure developments, making them more attractive to potential investors, users and customers (Wu & Plantinga, 2003). Open spaces may define the landscape and townscape structure and identity of settlements. Well-designed networks of spaces help to encourage people to travel safely by foot or bicycle (Brander & Koetse, 2011).

So, the crucial question is how Social Policy may shape the development, maintenance, and accessibility of these spaces, highlighting their significance in fostering community well-being and social cohesion?

2. The role of Public Open Spaces for Society

*"A good city is like a good party — people stay longer than really necessary,
because they are enjoying themselves"*

Jan Gehl

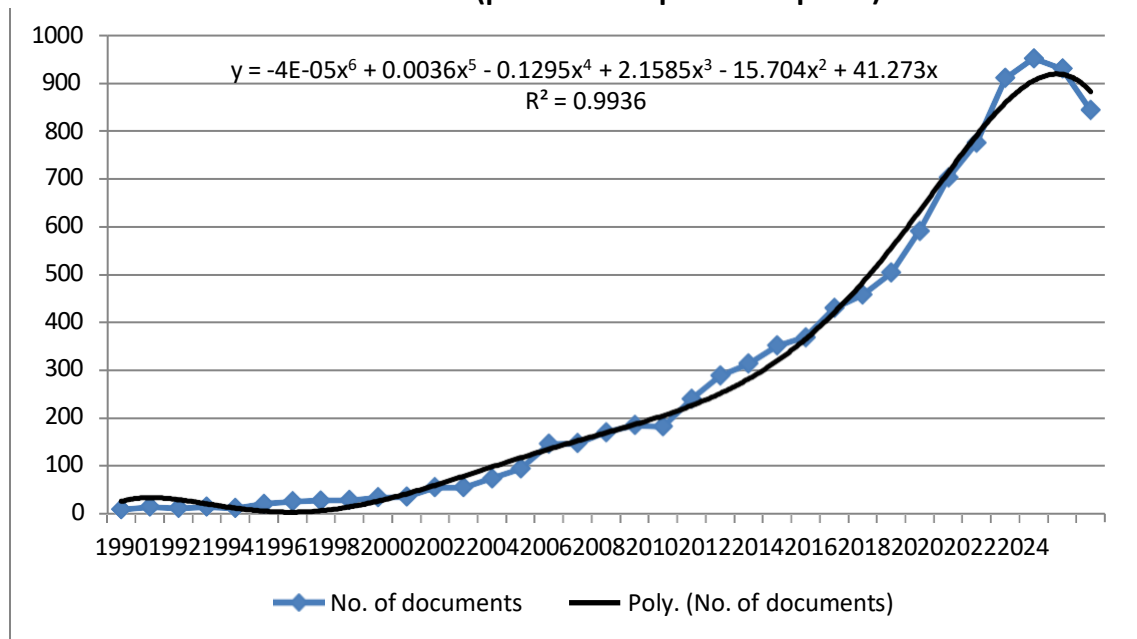
Public, open spaces are an important asset to cities. There are many roles of POS for Society, selected in the literature, but the most important areas where the support is needed are:

- social benefits;
- environmental benefits;
- health and well-being;
- economic benefits.

Currently, not only architecture aspects are the most important, but joining it with more interdisciplinary aspects like sustainability and safety.

Interest in the proper management of public open spaces has been significantly increasing in recent years, which confirms importance for the whole world. Based on the Scopus database it is seen that the number of scientific documents about POS rapidly increased last years. The analysis of Scopus database using filter: TITLE-ABS-KEY (public AND open AND spaces) presents that the topic starts to be extremely important after year 2000. Data is presented in Figure 4.1.

FIGURE 4.1
Number of scientific documents in Scopus database for filter:
TITLE-ABS-KEY (public AND open AND spaces)



Source: own study based on Scopus data base:
<https://www.scopus.com/results/results.uri?st1=public+open+spaces&st2=&s=TITLE-ABS-KEY%28public+open+spaces%29&limit=10&origin=searchbasic&sort=plf-f&src=s&sot=b&sdt=b&sessionSearchId=2032776b3f2c8ca249ad897bfd75b894>

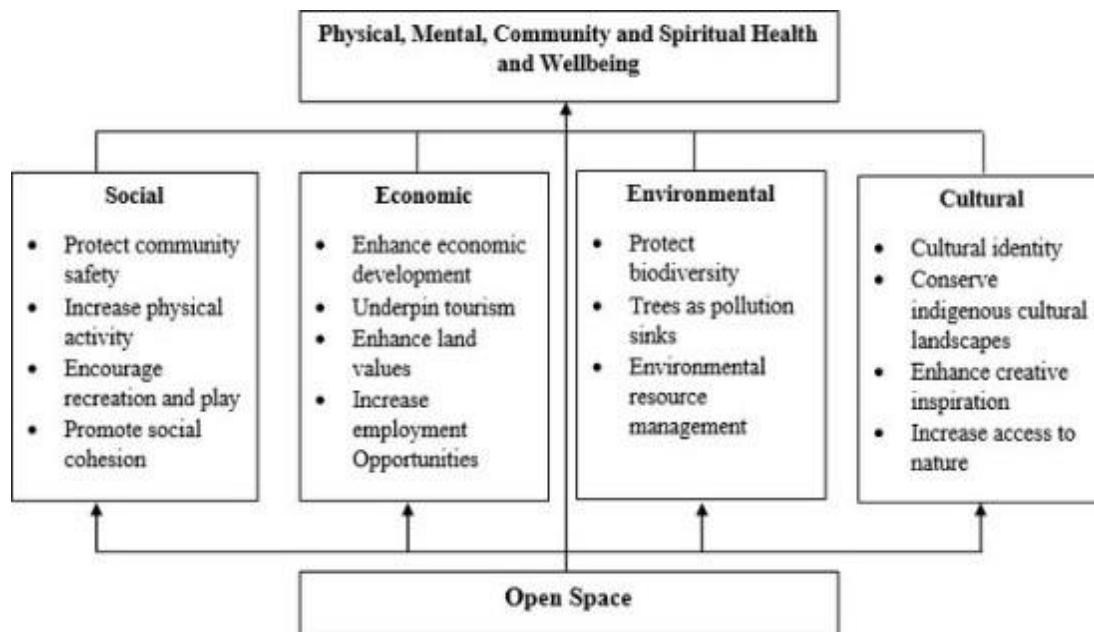
The trend confirms that the POS are currently a dynamic and evolving field of research and improvements with a stabilization phase in the last 2 years. The increase of scientific documents about POSs address urban challenges to meet the needs of society and also take care about safety and sustainable urban development.

Since the importance of the issue has been proven, it is necessary to move on to explaining the roles that POSs play in society. Some of the research papers present the importance and structure of the open spaces quality for society's wellbeing. The relations between open space and social, economic, environmental and cultural factors that have an influence on physical, mental, community and spiritual health and wellbeing is presented in Figure 4.2. What is more, well-designed POSs help lower rates of crime and violence, making space friendly for diversity of users.

Figure 4.2 presents a structured, conceptual framework for the benefits of POSs on physical, mental, community, and spiritual health and well-being, that makes people feel safe and sustainability for the environment. It is observed that usually POSs promote physical activity, reduce crime rates, and enhance mental well-being by providing areas for recreation and relaxation.

On the other hand, green infrastructure contributes to sustainable urban development by attracting businesses and residents. Also, open spaces serve as venues for artistic inspiration and cultural expression, reinforcing the need for equitable access to nature.

FIGURE 4.2
The Impact of Open Space Factors on Society and Their Interconnections



Source: Kafy, Faisal, Ferdous, A Participatory Assessment to Identify the Causes and Impacts of Open Space Reduction in Rajshahi City Corporation (RCC) Area, Bangladesh, International Journal of Environmental Planning and Development Vol. 4: Issue 2, 2018.

https://www.researchgate.net/publication/328601168_A_Participatory_Assessment_to_Identify_the_Causes_and_Impacts_of_Open_Space_Reduction_in_Rajshahi_City_Corporation_RCC_Area_Bangladesh

Figure 4.2 synthesizes the diverse roles of open space in enhancing societal well-being, safety and taking into account also eco-friendly initiatives that contribute to sustainability. For sure, in the future the integration of multidisciplinary approaches will be required. Currently, the sustainable urban planning strategies are considering all those aspects to work out better solutions in the future.

As cities grow and environmental challenges increase, having well-designed and accessible public open spaces is more important than ever. These spaces bring communities together, improve quality of life, and make cities more sustainable and resilient. Investing in public open spaces is not just an urban planning consideration but a fundamental strategy for creating healthier, more connected, and sustainable societies.

Strengthening the effect, better planning and creating more accessible spaces should be supported through social policy. To go further, it is important to emphasize that only effective social policies give positive effect. Effective means well-designed for the society's needs. That is why social policy is called the driver of open space utilization!

3. Social Policy as a DRIVER of Open Spaces Utilization

The University of Strathclyde Glasgow presents a highly insightful and precise definition of social policy, capturing its role in shaping societal well-being and addressing key public needs.

Firstly, it is emphasized that social policy refers to any government action aimed at addressing social needs, such as issues of employment, education, healthcare, housing and sustenance. Moreover, social policy refers to the study of how societies distribute resources to address the

aforementioned social needs and as an interdisciplinary subject, it draws upon elements of economics, history, politics, psychology and sociology (The University of Strathclyde, 2025).

Secondly, well-designed and effective utilization of open spaces requires researching the needs of the society using these spaces and excellent knowledge of the architectural possibilities of the area. Only gathering all those aspects together may bring excellent effect.

Gehl presents strong arguments about social policy influence for right open space utilization by addressing key societal needs, such as urban liveability, community engagement, and public health. The goal is to integrate social policy to ensure green spaces serve as inclusive environments for recreation, social interaction, and mental well-being. Gehl also suggests that those cities which support active transport infrastructure, such as pedestrian pathways and cycling lanes, further enhance the accessibility and usability of open spaces (Gehl, 2013).

Social policy may also correct imbalances that are observed in marginalized communities. Those areas may be prioritised for development. Studies indicate that lower-income neighborhoods frequently lack sufficient public open spaces, contributing to health inequalities and reduced quality of life (Wolch et al., 2014).

Accessible and welcoming open spaces for all is also a challenge raised by Imrie and Hall. They conclude that social policies should consider the diverse needs of different demographic groups (for example children, the elderly, individuals with disabilities, families), because it is essential for maximizing the benefits of open spaces (Imrie & Hall, 2001).

Mitchell and Popham, present that social policy plays a crucial role for supporting public health, because access to green areas is linked to lower stress levels, improved mental health, and higher physical activity rates (Mitchell & Popham, 2008). Moreover, based upon the findings, green space plays a remarkable role in increasing the attendance of residents and social interactions, such that the mean of these two variables in the neighborhoods having green space is greater than those lacking green space (Aram et al., 2019).

3.1. How Social Policy May Help for Effective Open Spaces Utilization?

“Tactical Urbanism” is a relatively new trend that first emerged as a concept in North America, particularly in the United States in the early 2000s. Tactical urbanism offers a flexible, inclusive, and cost-effective approach to revitalizing open spaces and what is important is that it is integrated into social policy. The main idea is to strengthen community engagements, increase liveability and work on long-term urban transformative. Currently this trend is supported also by such aspects as: sustainability and safety for transformed areas.

Lydon and Garcia in their book explain the “Tactical Urbanism” phenomenon as an effective process for open spaces utilization and improvements according to the needs of the society. The support of social policy is crucial for effective, durable and long-lasting benefits. They explain that: “Short-term, community-based projects—from pop-up parks to open streets initiatives—have become a powerful and adaptable new tool of urban activists, planners, and policymakers seeking to drive lasting improvements in their cities and beyond. These quick, often low-cost, and creative projects are the essence of the Tactical Urbanism movement. Whether creating vibrant plazas seemingly overnight or re-imagining parking spaces as neighbourhood gathering places, they offer a way to gain public and government support for investing in permanent projects, inspiring residents and civic leaders to experience and shape urban spaces in a new way.” (Lydon & Garcia, 2015). The concept of “Tactical Urbanism” is presented in Figure 4.3.

FIGURE 4.3
The Impact of Open Space Factors on Society and Their Interconnections



Source: Lydon, M., Garcia, A. (2015). Tactical urbanism: Short-term action for long-term change. Page 11.

Tactical urbanism works as a continuous cycle, going in two ways as both top-down and bottom-up efforts to reshape urban spaces. This is the process of collaboration between city governments, advocacy groups, private developers, and local communities. While policymakers and municipal departments set the stage for large-scale change, grassroots activists, neighbourhood organizations, and businesses bring creativity and local insight to the process for the whole success. This shared approach ensures that urban improvements are shaped by the people who use these spaces every day for their comfort, safety and sustainability. By encouraging experimentation, flexibility, and public engagement, tactical urbanism makes cities more inclusive, dynamic, and people centered. When different stakeholders work together, small interventions can lead to long-term transformations, creating cities that truly reflect the needs and aspirations of their communities. There are many actors playing important roles for the whole success. That is why, “Tactical Urbanism” is called a new generation of engaged citizens, urban designers, land use planners, architects, and policymakers to become key actors in the transformation of their communities.

The role of social policy seems to be crucial nowadays because social policy can enhance the effective utilization of open spaces by promoting accessibility, sustainability, and community engagement. Through inclusive urban planning, participatory decision-making, and environmental regulations, governments can ensure that public spaces serve diverse social, cultural, and recreational needs. By fostering public-private partnerships, safety measures, and

green initiatives, social policies create vibrant, well-maintained, and multifunctional spaces that improve urban living and well-being.

3.2. How Social Policy May Help to Make a Great Place?

The great challenge is to adequately encapsulate the sustainability dimensions of the complex social-ecological behavioural patterns of POS consumption and management, hence resulting in space mismanagement, underinvestment, and quality degradation. This phenomenon is particularly true and relevant in the context of government/state-owned POS (Ling et al., 2019).

Social policy may have a strong influence on how the POS is organized and managed. To be successful in this race there are four qualities that should be fulfilled. Cross-disciplinary enthusiasts of public spaces during the project called “Project for Public Spaces” worked out a diagram that is a tool for judging if the place is good or bad or what to change!

They have evaluated thousands of public spaces around the world, and have found that to be successful, it is needed to consider following four qualities:

- they are accessible;
- people are engaged in activities there;
- the space is comfortable and has a good image;
- it is a sociable place, which means it is the place where people meet each other and take people when they come to visit.

Considering those four aspects they developed “The Place Diagram” which is a tool to help in judging any place, good or bad. This is very helpful also for designing good social policy for selected areas.

The authors of “The Place Diagram” explain how to understand all four sections.

Starting from **Access & Linkages** it is important to judge the accessibility of a place by its connections to its surroundings, both visual and physical. A successful public space is easy to get to and get through; it is visible both from a distance and up close. The edges of a space are important as well. For instance, a row of shops along a street is more interesting and generally safer to walk by than a blank wall or empty lot. Accessible spaces have a high parking turnover and, ideally, are convenient to public transit (PPS, 2009).

Going through **Comfort & Image**, it is crucial to take into account that comfort includes perceptions about safety, cleanliness, and the availability of places to sit - the importance of giving people the choice to sit where they want is generally underestimated (PPS, 2009).

Thirdly, part of **Uses & Activities**, present the role of activities that are the basic building blocks of great places. They are the reasons why people visit in the first place, and why they continue to return. They are also what makes a place special or unique. When there is nothing to do in a place, it will sit empty and unused—a sure sign something needs to change (PPS, 2009).

Last, but not the least is **Sociability**. This is a difficult quality for a place to achieve, but once attained it becomes an unmistakable feature. When people see friends, meet and greet their neighbours, and feel comfortable interacting with strangers, they tend to feel a stronger sense of place or attachment to their community - and to the place that fosters these types of social activities (PPS, 2009).

Those four parts of “The Place Diagram” in details are presented in Figure 4.4.

FIGURE 4.4
The Place Diagram



Source: 'What Makes A Great Place?' (Project for Public Spaces 2009b, fourth paragraph).

<https://www.pps.org/article/grplacefeat>

There is also a practical list of questions connected to each part of the diagram to help prepare the diagnosis of the place that might constitute the drivers for building social policy for the place that is tailored to the needs of local society. Pointed out areas should be considered to be supported by social policy. The list of questions is presented in Table 4.1.

TABLE 4.1
Questions as a tool for building tailored social policy

Section	Questions
Access & Linkages	1. Can you see the space from a distance? Is its interior visible from the outside? 2. Is there a good connection between the space and the adjacent buildings, or is it surrounded by blank walls? Do occupants of adjacent buildings use the space? 3. Can people easily walk to the place? For example, do they have to dart between moving cars to get to the place? 4. Do sidewalks lead to and from the adjacent areas? 5. Does the space function for people with special needs? 6. Do the roads and paths through space take people where they actually want to go? 7. Can people use a variety of transportation options - bus, train, car, bicycle, etc. - to reach the place? 8. Are transit stops conveniently located next to destinations such as libraries, post offices, park entrances, etc.?

Comfort & Image	1. Does the place make a good first impression? 2. Are there more women than men? 3. Are there enough places to sit? Are seats conveniently located? Do people have a choice of places to sit, either in the sun or shade? 4. Are spaces clean and free of litter? Who is responsible for maintenance? What do they do? When? 5. Does the area feel safe? Is there a security presence? If so, what do these people do? When are they on duty? 6. Are people taking pictures? Are there many photo opportunities available? 7. Do vehicles dominate pedestrian use of the space, or prevent them from easily getting to the space?
Uses & Activities	1. Are people using the space or is it empty? 2. Is it used by people of different ages? 3. Are people in groups? 4. How many different types of activities are occurring - people walking, eating, playing baseball, chess, relaxing, reading? 5. Which parts of the space are used, and which are not? 6. Are there choices of things to do? 7. Is there a management presence, or can you identify anyone in charge of the space?
Sociability	1. Is this a place where you would choose to meet your friends? Are others meeting friends here or running into them? 2. Are people in groups? Are they talking with one another? 3. Do people seem to know each other by face or by name? 4. Do people bring their friends and relatives to see the place, or do they point to one of its features with pride? 5. Are people smiling? Do people make eye contact with each other? 6. Do people use the place regularly and by choice? 7. Does a mix of ages and ethnic groups generally reflect the community at large? 8. Do people tend to pick up litter when they see it?

Source: own study based on: 'What Makes A Great Place?' (Project for Public Spaces 2009b, fourth paragraph).
<https://www.pps.org/article/grplacefeat>

It is also crucial “to hear” the voice of stakeholders, especially those who are locally involved in the POS that is considered for improvements. Stakeholders play a crucial role in shaping the social policy according to the needs of local society and care about sustainability at the same time. The list of stakeholders depends individually on the project, but typical stakeholders that are mentioned in literature about social policy are: governments and other public authorities, community, society and public users, private sector and businesses, environmental and advocacy groups, research and education institutions, infrastructure and utility providers. It is wise to encourage all groups that might be interested in the improvements of the area to discuss before making changes in the POS. Thanks to working together, stakeholders help build tailored social policies that prioritize inclusivity, sustainability, and community well-being. Their

collaboration ensures open spaces serve diverse groups while aligning with environmental, economic, and social goals.

Concluding, it is a great challenge to build tailored social policy that requires a holistic approach that balances accessibility, engagement, comfort, and sociability. Social policies play a crucial role in addressing space mismanagement, underinvestment, and quality degradation. By integrating these principles into urban planning and policymaking, social policies can enhance connectivity, improve safety, encourage diverse activities, and foster community bonds. Tools like diagnostic questions help policymakers tailor interventions to local needs, ensuring that public spaces remain inclusive, vibrant, and sustainable. A well-designed social policy transforms public spaces into thriving community hubs, enriching the quality of urban life encouraging all stakeholders that are interested in the POS.

4. Case Studies

4.1. Open Spaces Society

Open Spaces Society (OSS) is an example of society that is dedicated to protecting open spaces and public paths in England and Wales. The society was established in 1865 and it is Britain's oldest national conservation charity for POS. Their main activities are:

- legal help - to protect threatened open spaces and public paths;
- public education - to raise awareness about the importance of open spaces;
- policy influence – society advocates or policy changes at local and national levels to strengthen the protection of open spaces.

The Open Spaces Society exemplifies how dedicated advocacy and community engagement can effectively influence social policy to protect and enhance public open spaces (OSS, 2025).

4.2. Bryant Park in New York

In the 1980s, Bryant Park in Manhattan was unsafe, poorly maintained, and underutilized. To address these issues, the city partnered with the Bryant Park Corporation (BPC), a non-profit organization, to revitalize the space. In the 1970's, the park was suffering from deferred maintenance by a beleaguered City Parks Department and had deteriorated into a haunt of drug dealers and users. Beginning in 1980, the park underwent extensive redesign and restoration, and is now one of the most active and loved spaces in New York City.

IMAGE 4.1

Bryant Park in New York 1984



Source: <https://umusama2015.wordpress.com/2015/04/11/case-study-bryant-park-new-york-city/>

Bryant Park is New York City's only 100% privately funded and managed 'public' park, making it an oft looked-to model of public-private partnerships. Kaufman, raises that in this case social order is produced through elements in the conceptual categories of visibility, emplacement, predictability, vulnerability, and empowerment. This innovative combination ensures safety without militarization, and an overall pleasant stay for all (Kaufman, 2015).

Nowadays, Bryant Park features a great lawn, framed by flowers, trees, and a gravel walkway, among its amenities are benches, movable chairs, six kiosks, 11 entrances, ornate lighting, two monuments, restrooms, tables for chess and backgammon, a petanque area (boules), and the historic Josephine Shaw Lowell Fountain. The park also has two restaurants, one of which is located on a terrace (PPS, 2008).

The investment was huge, but it was worth it! The \$18 million park redesign/restoration was completed in 1995, after almost 15 years of planning. It was funded from a combination of grants, BID assessments, state bond funds, city capital funds, and private venture capital. More recent improvements of the park include a \$160,000 restroom renovation and a \$5 million investment in construction of the Bryant Park Grill. On a yearly basis, 400 chairs must be replaced from wear-and-tear, as well as the 6-8 that are stolen. BPRC keeps the number of chairs in the park stable at around 2,000. In addition, it has also undertaken the task of improving park elements long left in disrepair, including sidewalks, bluestone paths, limestone balustrade, etc. (PPS, 2008).

IMAGES 4.2

Bryant Park in New York 2008



Source: PPS, Bryant Park, NY: Publicly Owned, Privately Managed, and Financially Self-Supporting (2008), <https://www.pps.org/article/mgmtbryantpark>



Source: PPS, Bryant Park, NY: Publicly Owned, Privately Managed, and Financially Self-Supporting (2008),
<https://www.pps.org/article/mgmtbryantpark>



Source: PPS, Bryant Park, NY: Publicly Owned, Privately Managed, and Financially Self-Supporting (2008),
<https://www.pps.org/article/mgmtbryantpark>



Source: Bryant Park, Awards + Press, <https://bryantpark.org/about-us>



Source: Bryant Park, Awards + Press, <https://bryantpark.org/about-us>

It is a perfect example that given the right location and design, a public space with professional programming and management can be self-supporting and even profitable.

Bryant Park has consistently been credited as an innovator in the realm of public space management, winning awards and garnering mentions in some of New York's most prominent media outlets (Bryant Park, 2024).

Conclusions

Undoubtedly, the role of social policy cannot be overestimated in building the effective management of public open spaces. Social policy's main roles are shaping, maintaining, and enhancing public open spaces for safety, well-being, usability and sustainability. Nowadays, urban planning helps to achieve accessibility, and the functionality of open spaces, at the same time ensuring that they serve diverse social, environmental, and economic needs. Presented participatory approaches in “tactical Urbanism” present how bottom-up and top-down initiatives can collaborate to create dynamic and people-centered environments. It also emphasizes the participation of shareholders, especially those local ones.

The part of case-studies present variety of activities, from small one initiative to huge investments and they all have a deep sense for building the environment the most tailored to the local society needs.

Presented tools like Place Diagram or list of crucial questions are the examples of practical tools that might be implemented to improve POS of all kinds.

The main goal of this chapter is to emphasize that social policy may act as a driver of open space utilization by addressing disparities, promoting sustainability, and enhancing overall well-being. Future urban planning and policy frameworks must continue to integrate multidisciplinary approaches, ensuring that open spaces remain equitable, resilient, and adaptable to evolving societal needs. Investing in effective social policies today is a crucial step toward creating healthier, more connected, and sustainable communities for future generations.

Bibliographical references

Aram, F., Solgi, E., & Holden, G. (2019). The role of green spaces in increasing social interactions in neighbourhoods with periodic markets. *Habitat International*, 84, 24–32. <https://doi.org/10.1016/j.habitatint.2018.12.004>

Brander, L. M., & Koetse, M. J. (2011). The value of urban open space: Meta-analyses of contingent valuation and hedonic pricing results. *Journal of Environmental Management*, 92(10), 2763–2773. <https://doi.org/10.1016/j.jenvman.2011.06.019>

Bryant Park Corporation. (n.d.). Awards & press. <https://bryantpark.org/about-us/awards-and-press>

Dietsch, W. S. (2018). *State-reinforced self-governance of community-managed open spaces in Chicago, IL and Louisville, KY* [Master's thesis, University of Louisville]. University of Louisville Institutional

Repository. <https://ir.library.louisville.edu/cgi/viewcontent.cgi?article=4081&context=etd>

Gehl, J. (2013). *Cities for people*. Island Press.

Imrie, R., & Hall, P. (2001). *Inclusive design: Designing and developing accessible environments*. Spon Press.

Kaufman, E. (2015). Bryant Park as a site of production: Revenue and social control. *Oñati Socio-Legal Series*, 5(5), 1236–1260. <https://ssrn.com/abstract=2655507>

Ling, G. H., Ho, C. S., & Tsau, K. Y. (2019). Adequately encapsulate the sustainability dimensions of the complex social-ecological behavioural patterns of POS consumption and management, hence resulting in space mismanagement, underinvestment, and quality degradation. *International Journal of Built Environment and Sustainability*, 6(2), 13–21. <https://doi.org/10.11113/ijbes.v6.n2.384>

Lydon, M., & Garcia, A. (2015). *Tactical urbanism: Short-term action for long-term change*. Island Press. <https://doi.org/10.5822/978-1-61091-567-0>

Martinelli, L., Battisti, A., & Matzarakis, A. (2014). Multicriteria analysis model for urban open space renovation: An application for Rome. *Sustainable Cities and Society*, 14, e10–e20.

Mitchell, R., & Popham, F. (2008). Effect of exposure to natural environment on health inequalities: An observational population study. *The Lancet*, 372(9650), 1655–1660. [https://doi.org/10.1016/S0140-6736\(08\)61689-X](https://doi.org/10.1016/S0140-6736(08)61689-X)

Open Spaces Society. (2025). *Open Spaces Society*. <https://www.oss.org.uk>

Project for Public Spaces. (2008). *Bryant Park, NY: Publicly owned, privately managed, and financially self-supporting*. <https://www.pps.org/article/mgmtbryantpark>

Project for Public Spaces. (2009). *What makes a great place?* <https://www.pps.org/article/grplacefeat>

University of Strathclyde. (n.d.). *What is social policy?* <https://www.strath.ac.uk/courses/undergraduate/politicsinternationalrelations/socialpolicy/whatissocialpolicy/>

Wolch, J. R., Byrne, J., & Newell, J. P. (2014). Urban green space, public health, and environmental justice: The challenge of making cities ‘just green enough’. *Landscape and Urban Planning*, 125, 234–244. <https://doi.org/10.1016/j.landurbplan.2014.01.017>

Wu, J., & Plantinga, A. J. (2003). The influence of public open space on urban spatial structure. *Journal of Environmental Economics and Management*, 46(2), 288–309. [https://doi.org/10.1016/S0095-0696\(02\)00036-0](https://doi.org/10.1016/S0095-0696(02)00036-0)

CHAPTER 5. URBAN PLANNING OF PUBLIC OPEN SPACES FROM A GENDER PERSPECTIVE

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ABSTRACT

The article looks at urban planning from a gender perspective, a critical lens through which urban environments are analysed, taking into account the different ways in which men, women, and non-binary individuals experience and use public spaces. Such an approach recognises that traditional urban planning has often been gender-blind, resulting in spaces that cater more to men's needs and routines, neglecting the specific requirements, safety concerns, and behaviours of other genders. Integrating a gender perspective into urban planning involves considering factors such as the distribution of public services, transportation needs, safety in public spaces, and the accessibility of childcare facilities or public toilets. By acknowledging and addressing these diverse needs, cities can become more inclusive, equitable, and responsive to all its residents, ensuring that urban development benefits everyone, regardless of their gender.

Keywords:

Gender, Feminist Urbanism, Gender Mainstreaming

1. Introduction

*“Adopting a gender lens in urban development processes actively challenges gender norms, the gender binary, and hierarchical approaches to gender.”
(Cosgrave, 2022, p. 19)*

Urban planning is inherently gendered; the prevailing perspective is predominantly male at both the executive and decision-making level, while women have been historically excluded from these processes. The gendered nature of urban planning and the historical neglect of women's perspectives have contributed to the development of urban environments that are, in many respects, inadequate in meeting the diverse needs of people. By contrast, a shift towards gender-inclusive urban planning would enhance the overall urban experience for all genders.

This article focuses on the connection between public (open) spaces and gender issues in urban development, based on the assumption that urban planners and decision-makers overlooked perspectives, requirements, and conditions of women, girls, and gender-diverse individuals for a long time, a significant omission in the development of inclusive cities. Such neglect not only leads to an “under-provision of basic facilities that make public spaces truly accessible” (Cosgrave, 2022, p. 15) but creates environments that systematically exclude or disadvantage certain populations, exacerbate social inequities, and affect the overall well-being of the community (Navarrete-Hernandez et al., 2021). However, public open spaces, such as for example parks, squares, streets, and playgrounds, are essential for the social life of a community. Addressing gender in public open spaces involves recognising and responding to the ways in which different genders experience and use these spaces. Notably, there are gender-specific differences, especially in terms of access, safety, and security. In order to make cities more inclusive and equitable in its designs, infrastructures, facilities, and services, it is “necessary to challenge the current male-dominated traditional approach to urban planning (...), because only with inclusive cities for all, we will have real development, fairer societies, more social justice and solid democracy” (Podestà, 2023, p. 41).

Before taking a closer look at some of these aspects, it is important to clarify the meaning of public space. The Charter of Public Space (Biennial of Public Space, 2013, p. 5), for instance, defines public space as

“all places publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive. Each public space has its own spatial, historic, environmental, social and economic features.”

Furthermore, the Charter recognises it as

“a key element of individual and social well-being, the places of a community's collective life, expressions of the diversity of their common natural and cultural richness and a foundation of their identity” (Biennial of Public Space, 2013, p. 5)

and that public spaces

“consist of open environments (e.g. streets, sidewalks, squares, gardens, parks) and in sheltered spaces created without a profit motive and for everyone's enjoyment (e.g. public libraries, museums)” (Biennial of Public Space, 2013, p. 5).

According to UN-Habitat (2018, p. 11)

“public space is defined as all places of public use, accessible by all and comprises streets and public open spaces. It excludes the non-built-up parts of public facilities and public commercial spaces.”

A public space is thus an area accessible to the general public that contributes to the environmental and social sustainability of cities and communities. It offers opportunities for physical activity, relaxation, social interaction, cultural engagement, or interaction with nature. Whereas public spaces are areas that encompass both indoor and outdoor settings, public open spaces, on the other hand, specifically refer to outdoor areas. Overall, public spaces have the potential to improve the quality of urban life. However, access to and safety and security within public open areas are unevenly allocated among individuals and are significantly influenced by gender. Women not only have different perceptions and experiences of these places compared to men, but also use public spaces in different ways (Burgess, 2008; Jaeckel & van Geldermalsen, 2006; Greed, 2005). Several factors contribute to the lack of inclusivity concerning gender, which emphasises the importance of thoughtful urban planning and design that considers people's diverse needs. Key issues that can make a city and its public places less inclusive are:

- Neglect of safety: The perception and feeling of being safe plays a critical role in shaping women's choices regarding the physical spaces they visit, the paths they take for daily errands, commuting to work, or going to school, and their preferred modes of transportation for these purposes. The risks of violence and gender-based harassment significantly contribute to women's reluctance to frequent certain public places.
- Limited or no restroom accessibility: The absence of restrooms can lead to discomfort for numerous individuals, including women, the elderly, and those who are ill. For trans, inter and non-binary people in particular, the shortage of all-gender toilets in public spaces creates a critical everyday situation in which they are exposed to the risk of misunderstandings, hostility or even violence.
- Absence of safe spaces for the LGBTIQ+ community: The lack of designated safe spaces where LGBTIQ+ community members can freely express themselves without fear of judgment or violence is a critical indicator of a city's commitment to inclusivity.
- Inadequate walkways: Streets and pathways are not designed to accommodate parents with strollers. This oversight affects not just on those with young children but also on individuals with disabilities, making navigation through the city more difficult and less welcoming.

The neglect of diverse needs and the experiences of women has prompted feminist criticism in particular (Brown, 2011; Greed, 1994; Hayden, 1980; Jacobs, 1961; Massey, 1994). Two viable approaches that address gender bias in traditional urban planning and design and aim to create cities that are safe, inclusive, and equal for women and members of the LGBTIQ+ community are Feminist Urbanism and Gender Mainstreaming.

2. Feminist Urbanism and Gender Mainstreaming

*"The gender perspective is, as well as an aim, the means to improve the city."
(Ibanez O'Donnell, 2019, p. 13)*

There is a wide range of conceptual frameworks of various disciplines that aim to design cities to be more inclusive and equitable. A prominent approach that integrates feminist theories into urban planning and design is Feminist Urbanism, highlighting the intersectionality of gender with other social factors such as race, class, age, and disability. Feminist urbanism challenges inequality in cities, that particularly affects women, taking into account the heterogeneity of their living conditions, as well as other marginalised groups and thrives to create more inclusive and equitable urban environments that meet the needs of all members of society, regardless of their identity or background (Falú, 2023; Haas & Mehaffy, 2024). One of the most important representatives of Feminist Urbanism is Ana Falú, an Argentine architect, academic, and activist.

She has made significant contributions to the field of gender, architecture, and urban planning, bridging these areas with a strong focus on human rights and women's rights. Her work is particularly innovative in highlighting the concept of “women’s right to the city” (Beebeejaun, 2017; Falú, 2009), a perspective that emphasises how gender-based inequalities manifest in urban spaces and affect women’s experiences and access to city resources. According to Falú (2023)

Feminist Urbanism does not only focus on inclusive social and gender policies but also on the visibility of social subjects and the location of housing, services, and facilities. Furthermore, the concept puts the vitality of public spaces, streets, and squares at the centre of its attention by promoting a greater perception of security in the face of the violence that pushes women out of the public space back into their homes. Finally, including a feminist perspective in urban planning also means taking accessibility, mobility as well as travel costs, distances, and times into consideration.

Feminist Urbanism emphasises participatory planning processes where women in particular and other marginalised groups have a voice in decision-making and is as much about changing societal norms and behaviours within urban spaces as it is about altering the physical landscape.

A good-practice model of Feminist Urbanism in Europe is represented by the city of Barcelona (Ibanez O’Donnell, 2019, p. 2). Under its first female mayor, Ada Colau, Barcelona implemented progressive urban design initiatives to improve women’s urban experience (e.g., pedestrian super blocks without cars, an orthogonal bus network complementing the subway, measures to increase women’s safety, ‘anti-sexist’ stands against violence and harassment, streets named after women, installation of murals and public art, which pay tribute to feminist values and the contributions of women) (Seitz, 2020). Moreover, the collective Col·lectiu Punt 6³, consisting of feminist architects, sociologists, and urban planners, was committed to the development of public spaces that effectively catered to women’s needs. Their work went beyond merely enhancing lighting, accessibility, and overall safety. It also aimed at increasing the visibility and acknowledgment of women in public spaces (Chalaby, 2017). As indicated above, participatory methods were crucial to their approach.

Whereas Feminist Urbanism advocates for a more radical restructuring of urban spaces and participation processes, focusing on the lived experiences of women and other marginalised genders, the concept of Gender Mainstreaming wants to achieve gender equity through the systematic integration of the gender perspective within existing frameworks ensuring that gender considerations are part of all stages of planning and policy-making. Gender Mainstreaming is an internationally embraced strategy and approach to policy-making used to promote gender equality and combating discrimination by integrating a gender perspective into all decision-making processes by questioning how an intended measure affects women and how men, whether the specific needs and interests of both genders are equally addressed, and if the intended measure contributes to improving gender equality (European Institute of Gender Equality, 2023).

A ground-breaking pioneering example from the early 1990s of the inclusion of a Gender Mainstreaming perspective in urban planning and development to improve social justice and access to communal spaces and urban services for all residents is the so-called Women's Work

³ Col·lectiu Punt 6 rethinks domestic, community, and public spaces from an intersectional feminist perspective through community participation. They work on mobility, public spaces, housing, community facilities and services, and urban safety. The collective published six methodological guides to apply a feminist perspective in different aspects of urban planning: <https://www.punt6.org/mediterranean-network-feminist-urbanists/> (accessed 12 June 2024).

City (Frauen-Werk-Stadt) in Vienna⁴. Based on sex-disaggregated data revealing that men and women live and move in the city in very different ways, and therefore have different needs, linked to the traditional division of labour between paid work and family care work, the project had according to Podestà (2023, p. 32) two main objectives: to promote female architects and increase their recognition and influence, and to show how the theoretical aims of gender sensitive design could be translated into practice. With 360 flats the Frauen-Werk-Stadt is still the largest residential complex planned by female architects in Europe. There are pram parking spaces on each floor and a spacious stairwell, which is designed to facilitate contact with neighbours. In connection with care work, which to this day is predominantly carried out by women, the laundry room is located on the roof rather than in the dark basement, as was common for a long time. There are lightweight walls in the flats that can be easily removed. Great importance was also attached to the surrounding infrastructure: A kindergarten, a pharmacy and a general practitioner's surgery are located in the building, a supermarket is right next door, as is a tram stop (Lehner, 2021).

The real revolutionary aspect of Frauen-Werk-Stadt project was fore-fronting the role of women in the urban planning and development process and highlighting the urge for women to be involved and heard, putting their needs, experiences and desires in the urban areas – that had previously been omitted – at the centre of the process (Podestà, 2023, pp. 36-37).

Since then, Vienna has implemented over 60 initiatives guided by Gender Mainstreaming principles, encompassing projects like enhanced street lighting, expanding sidewalks for stroller access, augmenting additional seating areas, designing apartment complexes and social housing with a focus on women's needs, and boosting the safety of passageways and lanes through the installation of mirrors. In one project, adding footpaths and space for activities other than football to urban parks led to an increase in usage by girls (McManus, 2020).

In line with these approaches, urban public spaces that are women- and all gender-friendly are those that are deliberately designed and managed to address and cater to the specific needs and safety concerns. These spaces prioritise inclusivity, accessibility, and security, aiming to create environments where women and members of the LGBTIQ+ community of all ages feel comfortable, and valued. Key aspects of women- and all gender-friendly urban design include:

- *Safety and Security:* When spaces lack safety, it negatively affects everyone. Studies indicate that women are more likely to experience feelings of unsafety in public areas, often feeling that these spaces do not cater to their needs (Navarrete-Hernandez et al., 2021; Polko & Kimic, 2022). This is especially true for women facing additional layers of discrimination, including those in the LGBTIQ+ community, migrant women, elderly women, or women with disabilities. Typical places that cause fear and insecurity for women are dark doorways, parks at night, empty and badly lit streets, underground car parks, and pedestrian underpasses (UN-Habitat, 2012, p. 33). As already mentioned, women's perceptions and experiences of public spaces differ from men's, making it crucial to consider these differences in space planning and design. Factors of insecurity, including the perception of danger at night, sexual violence, and harassment, have a significant impact on women's mobility, leading to restrictions, limitations, and modifications in their

⁴ „In 1991, Eva Kail, at the time a junior district planner at Vienna Municipality, and today senior urban planner at the city's strategic planning unit, and one of the world's pre-eminent experts in gender mainstreaming, organized the photo exhibition 'Who Does Public Space Belong to – Women's Everyday Life in the City', documenting a day in the lives of eight different women and girls, from a young kid to a woman in wheelchair, from a migrant woman to an active retiree. This exhibition, in its simple documentation of women's daily life in the city, revealed the female's experience of the urban area that has always been omitted or not considered, such as all the unpaid labour women carry out daily, as with childcare or elderly care.” (Podestà, 2023, p. 29)

movements, building “invisible walls” around women, prompting them to adopt a variety of avoidance tactics to navigate the city more safely (Deswelle, 2020, p. 15). Applying an intersectional gender perspective allows the unique experiences, requirements, and concerns of women to guide the creation of public spaces that are safe and welcoming for all. Enhanced lighting, clear signage, well-maintained paths, and visible emergency services play a crucial role in ensuring women feel safe in urban spaces. Design strategies also include creating transparent pathways and avoiding hidden or secluded areas that might pose risks.

- *Accessibility and connectivity:* Due to traditional gender roles women tend to perform a greater portion of unpaid household tasks and often serve as the primary caregivers for both children and the elderly. Additionally, they frequently manage a range of activities including part-time work, childcare responsibilities, and household needs. Research has shown that because of these responsibilities, women and men often exhibit distinct patterns of movement throughout the day: many men typically travel straightforward to work and back, whereas women’s routes tend to be more varied, incorporating multiple stops such as dropping children off at school, heading to work, picking up children, running errands like grocery shopping, visiting family members, and then returning home (Women’s Health East, 2020, p. 7; WomenWatch, 2009). Having less access to private cars, women are also more likely to walk or take public transport than men (Whitzman, 2013). Therefore, it is essential to ensure that public transportation, walking paths, and biking lanes are safe, reliable, and conveniently connect women to essential services like healthcare, childcare, education, and work, without long commutes.
- *Inclusive public facilities:* Historically, women’s access to public spaces was restricted also due to the lack of public toilets for women (Mitra, 2017). The United Nations General Assembly has underscored the importance of accessing sanitation facilities not only at home but also in public spaces, identifying it as an issue with gender implications. Their systematic review sheds light on the significant gaps in public toilet availability also in the global North and how these gaps disproportionately affect women, girls, transgender, and gender-nonconforming individuals. An insufficiency of available, accessible, clean, safe, and affordable public toilets restricts these groups’ ability to fully utilise public spaces. The global North exhibits a shortage of quality public toilets (Hinckers, 2022), often relying on the private sector to fill this basic human necessity. Providing amenities like clean, safe restrooms; baby care facilities; and benches for resting caters to the specific needs of pregnant women, mothers and fathers with young children and the elderly. “Good toilet provision needs to be done in the context of a full gender and equity-based planning approach that takes into consideration community needs, demographics, zoning, and mobility patterns” (Lewkowitz & Gilliland, 2024, p. 24).
- *Community and social spaces:* Interacting with public areas has a beneficial effect on social, mental, and physical well-being. These spaces promote social interactions and motivate physical and leisure activities, playing a crucial part in the vitality of community life and enhancing the bond within neighbourhoods (Women's Health East, 2020, p. 23). Designing public spaces, such as parks, community gardens, public squares and multipurpose spaces encourage social interaction and community-building activities and foster a sense of community and belonging, which can be beneficial for those seeking social support networks.

Gender-sensitive planning would include implementing policies and practices that consider the different ways women and men use urban spaces, including considerations for mobility

patterns, time of day usage, and the need for secure, child-friendly environments.⁵ By focusing on these and other relevant factors, cities can move towards creating more women-friendly environments that not only benefit women but also enhance the overall quality of life for all residents.

3. Bringing women's voices to the table

"Women need to be leading the charge and bringing their voices, perspectives and experiences to the table"
(Women's Health East, 2020, p. 10)

In order to create safe and inclusive public spaces for women, it is essential to place their insights and knowledge at the heart of every planning phase through co-design practices, i.e. bringing women's voices to the front. This means engaging with the community on the one hand and actively promoting women in urban design leadership on the other. Such interventions allow women's experiences and viewpoints to play a central role in the creation of public spaces, making sure they have a significant impact on the design outcomes, and that their voices are not just acknowledged but key in guiding the process (Women's Health East, 2020, p. 23).

To ensure that women's experiences are collected and analysed, and are used to shape the way that spaces are planned to make them safer and more inclusive, Women's Health East (2020, pp. 11-13) outlines some effective initiatives, for instance *crowd mapping*:

Using crowd mapping tools to make cities safer and to promote gender equity is a relatively new concept, and there are a number of technology based, geo-mapping applications that have been developed so that women can report their experiences of cities as they happen. This data is then analysed, and the information is used by councils to plan urban spaces and cities with women in mind (Women's Health East, 2020, p. 11).

Developed by Plan International Australia, Crowdspot, and Monash University's XYX Lab, *Free to Be*⁶ is a pioneering online digital mapping tool, which gathers authentic experiences from women and girls regarding their navigation through urban environments. It allows them to identify and mark public areas (including universities, streets, and public transportation) with pins to signify public locations where they feel content and secure or otherwise uncomfortable and unsafe. The data is then utilised "to advocate to key decision-makers at the planning level, using these stories from women and girls to help to create a safer and more inclusive city for everyone" (Women's Health East, 2020, p. 11). Similar to the Free to Be map is the Gender Equality Map, which has a slightly different focus. It offers users the opportunity to mark locations based on their personal experiences with gender equality, whether positive or negative. For instance, users can pinpoint on locations for their availability of baby changing facilities, the accessibility for prams, or sexist advertising. The map enables users to pinpoint specific places (such as infrastructure, public amenities, and public transport) as well as share story spots, where individuals share their personal experiences or observations in a particular place (Women's Health East, 2020, p. 12).

⁵ Huning (2014) identifies three different concepts for gender-focused planning: 1. planning that is oriented towards specific target groups, 2. "performative" planning which addresses urban residents as "multiplicities", and 3. planning aimed at preventing discriminatory practices. For Hunting continuous feminist mobilisation is crucial not only to challenge and reshuffle the entrenched collective norms and perceptions regarding gender but also for creating planning methodologies that embrace more complex, deconstructive viewpoints.

⁶ The tool was initially launched in Melbourne in 2016 and has subsequently been expanded to five additional global cities: Sydney, Lima, Madrid, Kampala, and Delhi (Women's Health East, 2020, p. 11).

By involving diverse groups of local women in *participatory walks*, local governments collect valuable qualitative data regarding women's experiences with public spaces. These participatory (or gender) walks entail inviting women from diverse backgrounds to explore an area or public space. During these walks, participants are encouraged to identify what makes them like or dislike a space, so that with these insights public spaces can be improved for all (Women's Health East, 2020, p. 13).

For instance, streets, parks, bus stops, sports fields, squares, parking lots, and other public spaces that are carefully planned and designed with the safety of women and girls in mind share several distinguishing features. These spaces ensure easy access and easy movement within the area, coupled with adequate lighting to enhance visibility, allowing users to both see and be seen effectively. Clear, user-friendly signage aids in navigation, while open, well-maintained paths promote interaction and visibility among users. A key aspect of these areas is their comprehensive visibility, eliminating potential hiding spots and fostering a sense of security. They incorporate a variety of uses to attract a diverse group of people throughout the day, including spaces for socialising, walking, playing, eating, and exercising. Additionally, these designs consider the needs of all seasons, offering shade to escape the summer heat and protection from the cold in winter months. Recognising that women often assume caregiving, these spaces are also thoughtfully equipped for young children and the elderly, featuring amenities such as wide, low sidewalks suitable for strollers, wheelchairs, and walkers, as well as zones with slow-moving traffic to ensure safety. Moreover, access to clean, secure, and easily accessible toilet facilities that cater to the needs of changing children's diapers underscores the comprehensive approach to accommodating the specific safety requirements of women and girls, making these spaces more inclusive and welcoming for everyone (UN-Habitat, 2012, pp. 47-48).

Conclusions

A gender perspective in urban planning acknowledges the different ways women, men, trans*inter and non-binary individuals (which may overlap) or members of the LGBTIQ+ community experience and use public spaces. They all often face distinctive challenges in public spaces, including higher risks of harassment and violence. Incorporating gender considerations into urban planning, design and development can therefore significantly enhance the safety, accessibility, and overall quality of public environments, whereas gender-blind urban planning approaches can inadvertently reinforce societal inequalities, making public spaces less accessible and safe for everyone. In order to educate and advocate for the benefits of gender-sensitive planning addressing concerns such as lighting, visibility, and creating spaces that promote a sense of security and well-being, the integration of the gender perspective into Architecture and Urban Planning studies is therefore a critical point and actually indispensable. "The architects and planners of the future will then have the gender perspective that has been missing until now, closing the gender gap knowledge and creating more diverse and inclusive development projects and cities." (Podestà, 2023, p. 42).⁷

Bibliographical references

Beebeejaun, Y. (2017). Gender, urban space, and the right to everyday life. *Journal of Urban Affairs*, 39(3), 323–334. <https://doi.org/10.1080/07352166.2016.1255526>

⁷ The World Bank (2020) has published a comprehensive handbook for gender-inclusive urban planning and design to assist in the inclusion of women, girls, as well as sexual and gender minorities of all ages and abilities in urban planning and design processes across all World Bank regions.

- Biennial of Public Space. (2013). *Charter of Public Space*. http://www.biennalespaziopubblico.it/wp-content/uploads/2013/11/CHARTER-OF-PUBLIC-SPACE_June-2013_pdf.pdf
- Burgess, G. (2008). Planning and the Gender Equality Duty – why does gender matter? *People, Place & Policy Online*, 2(3), 112–121. <https://doi.org/10.3351/ppp.0002.0003.0001>
- Brown, L. A. (2011). *Feminist Practices: Interdisciplinary Approaches to Women in Architecture*. Routledge.
- Chalaby, O. (2017, August 23). *How Vienna designed a city for women. Urban design has improved safety and ease of movement*. <https://apolitical.co/solution-articles/en/vienna-designed-city-women>
- Cosgrave, E. (2022). *Safety in Public Space: Women, Girls and Gender Diverse People*. Good Growth by Design. <https://www.london.gov.uk/media/99003/download?attachment%20>
- Deswelle, E. (2020). How does gender shape social relations in urban spaces? <https://doi.org/10.13140/RG.2.2.19646.92487>
- European Institute of Gender Equality. (2023). *What is gender mainstreaming?* <https://eige.europa.eu/gender-mainstreaming/what-is-gender-mainstreaming>
- Falú, A. (2023, July 11). *Feminist Urbanism – Confronting Patriarchal Living Conditions in Urban Spaces*. Urbanet. <https://www.urbanet.info/feminist-urbanism-confronting-patriarchal-living-conditions/>
- Falú, A. (Ed.). (2009). *Women in the City: On Violence and Rights*. Women and Habitat Network, Editions Sur.
- Greed, C. (1994). *Women and Planning: Creating Gendered Realities*. Routledge.
- Greed, C. (2005). Overcoming the factors inhibiting the mainstreaming of gender into spatial planning policy in the United Kingdom. *Urban Studies*, 42(4), 719–749. <https://doi.org/10.1080/00420980500060269>
- Haas, T., & Mehaffy, M. (2024). Achieving Humanist Cities: Learning From Urban Feminism and Feminist Planning. *Global Journal of Cultural Studies*, 3, 29–41.
- Hayden, D. (1980). What would a non-sexist city be like? Speculations on housing, urban design, and human work. *Signs: Journal of Women in Culture and Society*, 5, 170–187.
- Hinckes, J. (2022, August 29). *A public toilet shortage*. Hygiene Hub. <https://news.ophardt.com/en/public-toilet-shortage>
- Huning, S. (2014). Deconstructing space and gender? Options for "gender planning". *Les cahiers du CEDREF*, 21, Article 21. <https://doi.org/10.4000/cedref.973>
- Ibanez O'Donnell, S. (2019). Feminist Urbanisms in Barcelona: Rethinking public space and the right to the city through a gender lens. *Transcultural Studies Symposium*, 1–19. https://www.researchgate.net/publication/339003976_Feminist_Urbanisms_in_Barcelona_Rethinking_public_space_and_the_right_to_the_city_through_a_gender_lens
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. Vintage Books.
- Jaeckel, M., & Van Geldermalsen, M. (2006). Gender equality and urban development: Building better communities for all. *Global Urban Development*, 2(1), 1-7.
- Lehner, K. (2021, March 12). *Wien als Vorreiterin: Stadtplanung ist nie geschlechtsneutral*. ORF.at. <https://orf.at/stories/3204407/>

- Lewkowitz, S., & Gilliland, J. (2024). A feminist critical analysis of public toilets and gender: A systematic review. *Urban Affairs Review*, 0(0), 1–28. <https://doi.org/10.1177/10780874241233529>
- McManus, K. (2020, September 1). Planning for inclusivity: How Vienna built a gender-equal city. LGIU. <https://lgiu.org/planning-for-inclusivity-how-vienna-built-a-gender-equal-city/>
- Massey, D. (1994). *Space, Place, and Gender*. University of Minnesota Press.
- Mitra, R. (2017, November 19). 100 Women: How the 'urinary leash' keeps women at home. BBC.com. <https://www.bbc.com/news/world-41999792>
- Navarrete-Hernandez, P., Vetro, A., & Concha, P. (2021). Building safer public spaces: Exploring gender difference in the perception of safety in public space through urban design interventions. *Landscape and Urban Planning*, 214, 104180. <https://doi.org/10.1016/j.landurbplan.2021.104180>
- Podestà, L. (2023). Gender equality in urban planning: A crucial factor for real inclusive development [Master's thesis, Malmö University]. Malmö University Institutional Repository. <https://www.diva-portal.org/smash/get/diva2:1764964/FULLTEXT02>
- Polco, P., & Kimic, K. (2022). Gender as a factor differentiating the perceptions of safety in urban parks. *Ain Shams Engineering Journal*, 13, Article 101. <https://doi.org/10.1016/j.asej.2021.09.032>
- Seitz, A. (2020, May 22). *Designing cities for women: Lessons from Barcelona's 'Feminist City'*. Streets.mn. <https://streets.mn/2020/05/22/how-can-cities-be-designed-for-women/>
- UN-Habitat. (2012). *Gender Issue Guide: Urban Planning and Design*. United Nations Human Settlements Programme. <https://unhabitat.org/sites/default/files/download-manager-files/Gender%20Responsive%20Urban%20Planning%20and%20Design.pdf>
- UN-Habitat. (2018). *SDG Indicator 11.7.1 Training Module: Public Space*. United Nations Human Settlements Programme. from https://unhabitat.org/sites/default/files/2020/07/indicator_11.7.1_training_module_public_space.pdf
- Whitzman, C. (2013). Women's safety and everyday mobility. In C. Whitzman, C. Legacy, C. Andrew, F. Klodowsky, M. Shaw, & K. Viswanath (Eds.), *Building Inclusive Cities: Women's Safety and the Right to the City* (pp. 35–52). Routledge.
- Women's Health East. (2020). *Creating Safe and Inclusive Public Spaces for Women*. <https://whe.org.au/wp-content/uploads/WHE-Creating-Safe-and-Inclusive-Public-Spaces-for-Women-Report-V2-September-2021.pdf>
- World Bank. (2020). *Handbook for Gender-Inclusive Urban Planning and Design*. <https://openknowledge.worldbank.org/handle/10986/33197>

CHAPTER 6. ACCESSIBLE TOURISM

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ABSTRACT

Accessible tourism is an essential component of ensuring social inclusion and sustainability in the tourism sector. This concept addresses not only the removal of physical barriers, but also the creation of experiences that respond to sensory, cognitive, and emotional needs. Despite progress, significant challenges remain, including a lack of awareness and training in the sector and limited attention to invisible disabilities. To overcome these, this chapter proposes key strategies such as Universal Design for Learning (UDL), co-design and the implementation of ISO 21902, which provides guidelines for ensuring comprehensive accessibility. These approaches enable the design of inclusive, customised, and sustainable solutions, benefiting both tourists and the industry. This chapter discusses these strategies and provides practical tools for destinations and businesses to move towards more inclusive, equitable and globally competitive tourism.

Keywords:

Accessible Tourism, Inclusive Tourism, Social Inclusion, Universal Design for Learning, UDL, co-design, ISO 21902.

1. Introduction

Accessible tourism represents an essential pillar in the transformation of destinations towards an inclusive, equitable and sustainable model. In a world where more than one billion people live with some form of disability and considering the ageing population and the increase in diverse needs (WHO, 2023), ensuring accessibility in the tourism sector is not only a human rights issue, but a strategic opportunity for destinations and businesses. This approach goes beyond the removal of physical barriers: it focuses on the creation of inclusive experiences that enable all people, regardless of their abilities, to fully participate in the enjoyment of leisure and culture.

The challenges of accessible tourism today are multiple and complex. While significant progress has been made in removing architectural barriers, challenges related to sensory, cognitive, and emotional accessibility persist (Nielsen et al., 2024). In addition, invisible disabilities, such as autism spectrum disorders or chronic conditions, pose specific needs that are often overlooked. Moreover, social, and economic barriers, such as lack of awareness and training among tourism service providers, reinforce the exclusion of vulnerable groups (Halpern et al., 2024). In this context, the adoption of innovative strategies is essential to move towards truly accessible and inclusive tourism.

Among the key strategies is Universal Design for Learning (UDL), which proposes flexible and adaptable solutions to meet the diversity of tourists' needs (Prescott, 2024). This approach not only ensures accessibility but also enriches the tourism experience for all, and its principles can be adapted to the context of accessible tourism. Equally important is co-design (Nielsen et al., 2024), a collaborative process in which people with disabilities, businesses and authorities work together to design customized and effective solutions. Finally, the implementation of international standards such as ISO 21902, which establishes guidelines for accessible tourism, which provides a solid framework for ensuring quality and accessibility standards throughout the tourism value chain (ONCE Foundation, 2022).

This chapter aims to explore the potential of accessible and inclusive tourism as a driver of social and economic sustainability, analysing current barriers to overcome them and opportunities that arise. Throughout the text, strategies are proposed that can contribute to the development of more accessible tourism based on universal design, co-design, and certification standards as an accessible destination. In addition, recommendations will be offered for destinations, companies and public bodies seeking to adopt an inclusive approach in their tourism offer.

With this contribution, we hope not only to raise awareness of the importance of accessible tourism, but also to offer practical tools for its implementation, promoting a fairer, more equitable and competitive tourism sector on the global stage.

2. Accessible tourism

The aspects of accessibility and inclusion in tourism are commonly known as 'accessible tourism'. Accessible tourism can be considered as that which 'enables people with accessibility needs, including mobility, vision, hearing, and cognitive dimensions, to function independently and with equity and dignity through the provision of universally designed tourism products, services, and environments. This definition includes everyone, including those travelling with children in pushchairs, people with disabilities and the elderly' (Darcy and Dickson, 2009, p. 34). As for inclusive tourism, we can adopt the interpretation of Scheyvens and Biddulph who define it as 'transformative tourism in which marginalised groups participate in the production or ethical consumption of tourism and in the distribution of its benefits' (2018, p. 592). This focuses

on not only physical accessibility, but also social, cultural, and economic inclusion, ensuring that products and services are accessible to a wide variety of tourists.

Addressing inclusive tourism is an important orientation that destinations must consider carefully and holistically to analyse in terms of who is included or excluded from the destination (Scheyvens & Biddulph, 2018). An accessible and inclusive destination management strategy is one that challenges existing assumptions about barriers to participation in tourism and replaces them with awareness-raising and education, information, and the ability to provide access and inclusion at all stages of the visitor's (or customer's) journey to create opportunities for all (UNWTO, 2018).

According to the United Nations World Tourism Organization (UNWTO), a destination can be considered inclusive when: it offers a tourism experience based on its own unique attributes, transforms the industry by increasing its competitiveness, creating decent employment and promoting equal opportunities for everyone, especially the most vulnerable groups, to participate in and benefit from tourism activity, all in line with the principles of sustainable development (2018, p. 26).

Accessible and inclusive tourism is a key pillar in the creation of sustainable and responsible destinations, being an essential part of the social sustainability of a destination. This approach not only focuses on the elimination of physical barriers, but also seeks to integrate all people, regardless of their abilities, into tourist experiences (Halpern et al., 2024).

In the context of tourism, social sustainability involves ensuring equal access to recreational, tourist and leisure activities. This is in line with the United Nations Sustainable Development Goals (SDGs), particularly SDG 10 (reduction of inequalities) and SDG 11 (creation of sustainable communities). These goals seek not only the integration of people with disabilities, but also their active participation in the co-creation of tourism experiences.

According to the World Health Organisation (WHO), 1.3 billion people, approximately 16% of the world's population, live with some form of disability (WHO, 2023). This percentage is increasing due to the aging population and the increase in chronic diseases. In this sense, it is estimated that between 2015 and 2050, the percentage of the planet's inhabitants over 60 years of age will almost double, from 12% to 22% (WHO, 2022). In addition to people with physical disabilities and those due to ageing, there are other people with hidden disabilities, such as autism spectrum disorders (ASD) or other disorders or illnesses, who face barriers that are significantly different from typical physical barriers. These include sensory, emotional, and social challenges that are not easily identifiable by tourist staff and are often not considered in accessibility efforts (Nielsen et al., 2024). Therefore, one of the biggest challenges is that people with disabilities face restrictions that go beyond physical barriers. These include intrapersonal barriers (personal perceptions of ability), interpersonal barriers (social relationships and acceptance) and structural barriers (lack of economic resources) (Halpern et al., 2024).

Inclusive tourism should not only focus on the elimination of physical barriers, but also on other types of barriers such as social barriers that prevent people with disabilities or other needs from fully participating. For example, social exclusion and a lack of understanding of invisible disabilities among service providers can be significant barriers that must be addressed to achieve inclusive tourism (Nielsen et al., 2024). In addition, people with disabilities may experience intrinsic barriers, such as anxiety or stress, caused by tourist environments that are not adapted to their needs. Furthermore, environmental factors, such as excessive noise, bright lighting, or a lack of quiet spaces, can aggravate these challenges, reducing their ability to enjoy the tourist experience (Nielsen et al., 2024).

Although accessible tourism has made progress in eliminating physical barriers, the uniqueness of the needs that a person with a disability may experience poses demanding challenges to the development of inclusive tourism. Disabilities (and even more so hidden disabilities) present a wide range of needs that cannot be easily segmented. One of the dilemmas in inclusive tourism is to avoid oversimplifying the needs of people with disabilities. Segmenting them into groups (such as, for example, based on the diagnosis of autism or ADHD) can lead to ignoring the coexistence of several challenges that the same person must face to enjoy a tourist experience. Therefore, accessibility solutions must be personalised, making it difficult for destinations to offer general guidelines for inclusion. In view of this reality, two strategies that destinations can adopt to move towards inclusive tourism are proposed, namely universal design and co-design.

3. Universal Design for Accessible and Inclusive Tourism

Universal design has emerged as a key approach in the planning of accessible and inclusive tourist destinations, seeking to create environments and services that can be used by everyone, regardless of their abilities or disabilities (Prescott, 2024). Universal design is based on seven fundamental principles that seek to maximize the accessibility of the destination without compromising its functionality and attractiveness for people without disabilities (Mace, 1997). These principles are:

- Equitable use: The design should be useful and marketable to people with different abilities.
- Flexibility in use: The design should be suitable for people with different preferences and abilities.
- Simple and intuitive use: It should be easy to understand, regardless of the user's experience or skills.
- Perceptible information: The design must communicate necessary information effectively, using more than one sense.
- Error tolerance: It should minimize the risks and adverse consequences of accidental actions.
- Low physical effort: It should allow for efficient and comfortable use by the user.
- Appropriate space for use: It should provide adequate space for access and use by different users on their own.

Applying these principles effectively in a tourist environment requires a comprehensive approach that focuses on the entire cycle of the travel experience. This implies taking on the challenge of implementing the principles of universal design in a complete system such as tourist destinations (in which many elements are involved, such as infrastructures, services, or service providers, among others). Different levels of accessibility are required for each of these elements and services (such as those related to transport, accommodation, catering, leisure, etc.), often requiring personalized and adaptive solutions (Prescott, 2024). In turn, the application of these principles must also consider the entire travel value chain, from travel planning to the return home:

- Pre-trip planning phase. In this phase, tourists look for accessible information about destinations, services, and activities. Booking platforms and websites must be accessible, with clear and adapted formats, such as screen readers or plain language texts. Several studies suggest that most promotional materials are difficult to access for people with sensory or cognitive disabilities (Halpern et al., 2024).

- Journey to the destination. The journey to the destination presents challenges for people with disabilities. A lack of accessibility at airports, train stations and means of transport can make the journey an uncomfortable or even dangerous experience. Universal design applied at this stage can include accessible assistance services, clear signage, and adapted transport.
- Arrival and stay at the destination. Upon arrival at their destination, travellers need accommodation and catering services to meet accessibility standards. This includes ramps, accessible toilets and a design that allows easy access to all facilities without the need for additional adaptations. In addition, destination staff should be trained in inclusive communication and assistance to people with disabilities.
- Cultural, social, sporting and leisure activities at the destination. Universal design can have a big impact on the way tourists experience activities during their trip. Whether it's a visit to a tourist attraction or participation in recreational events, it is essential that physical, social, psychological, and sensory barriers are removed. For example, with initiatives such as the installation of tactile or audio signage, and accessibility to sites of interest.
- Returning home. On the journey back home, the person with a disability may experience the same barriers that they encountered on the way to their destination. Involving travellers with disabilities in a feedback system that allows information to be shared and areas for service improvement to be identified for future users can be an important initiative.

However, it must be considered that people with disabilities do not form a homogeneous group. Tourists with disabilities have very diverse needs ranging from physical barriers to sensory, cognitive, and emotional challenges. A universal design approach that does not consider this diversity may not offer comprehensive solutions for all travellers. Universal design, although useful, is not enough to solve all accessibility problems in tourism. Solutions must be dynamic and personalized, considering the needs of each traveller. A more flexible and adaptable approach, allowing for real-time adjustments, can significantly improve the tourist experience (Prescott, 2024).

Because of the relevance of universal design in the tourism sector, UNE-ISO 21902 Accessible Tourism for All has been developed. This standard, which establishes requirements and guidelines with the aim of guaranteeing equal access to and enjoyment of tourism for the greatest number of people of all ages and abilities, establishes a regulatory framework that helps the different actors in the value chain to carry out actions to make their infrastructures, products, and services accessible (ONCE Foundation, 2022).

In general terms, the ISO 21902 standard provides tools to eliminate all kinds of barriers for tourists and locals, guarantee the integrity of the tourism value chain, raise public awareness, train tourism professionals, research competitors offer and the market itself, learn about the benefits and business opportunities of accessible tourism, optimize customer service in information centres, improve the design, product promotion and marketing, offering quality accessible experiences, designing economic and tax incentives for companies that implement accessibility and saving costs through improvements in coordination and planning by including accessibility in the planning (ONCE Foundation, 2022).

The standard proposes action in different areas depending on the agent involved (destination, cultural resource managers, natural resource managers, accommodation, and catering companies...). However, there are some common points that are considered, among which the following stand out (ONCE Foundation, 2022):

- Accessibility diagnosis. This involves identifying the most frequent concerns and the main barriers faced by visitors with physical, sensory, or intellectual disabilities, the elderly, and families with young children.
- Sensitivity and training. This involves training workers in accessibility, undertaking awareness-raising campaigns, demonstrating why a more accessible destination leads to business improvements, etc.
- Elimination of barriers. This includes applying the principles of universal design in the planning of works, establishing protocols and technical guidelines to eliminate barriers, starting with prejudices towards disability and barriers in communication, proposing alternatives to, with the help of innovation and new technologies, bring the resources of the destination closer to the greatest possible diversity of users, etc.
- Labour inclusion. This involves evaluating current policies for attracting, hiring, and training staff to see to what extent they lead to inclusive jobs, hiring staff, suppliers and service providers with disabilities and adapting jobs to achieve lasting labour inclusion of people with disabilities.
- Monitoring and evaluation. This consists of creating monitoring and evaluation indicators, promoting systems for surveys, audits, complaints, and feedback, measuring, and communicating specific achievements and suggesting corrective actions to improve interventions.

If we look at the more specific contributions of the standard for certain stakeholders, we can highlight the following (ONCE Foundation, 2022):

- For public administrations and tourist destinations: they are asked to adopt legislation to implement accessibility requirements, to establish sanctions for non-compliance or false advertising, to ensure budget allocations for accessibility, to support companies with incentives to boost their accessibility conditions, to provide information on accessible tourist resources and to work hand in hand with the private sector to design accessible tourism, etc.
- For accommodation, catering and MICE companies: it is requested that accessibility be prioritized as a fundamental requirement driving quality, that budget allocations be dedicated to accessibility, that an assessment be made of how many customers are lost because they are not accessible, that accessible itineraries be created in the busiest spaces, designing spaces suitable for everyone, that simple registration forms be designed, that customers with disabilities are not discriminated against by charging higher prices, etc.
- For the actors in the cultural tourism ecosystem: there is a demand for accessible itineraries, for spaces reserved for people with some kind of disability, for 'slow tours' for people with intellectual disabilities, for 'equal ticketing' so that customers with disabilities can buy tickets online quickly and independently, etc.
- For the main actors in the management and promotion of natural resources: information on accessible services and environments should be in accessible formats and clear language; cultural or linguistic distances should be shortened through practical demonstrations, animations, gestures, body language or illustrations; accessible routes should be mapped out on beaches, promenades, protected natural areas and gardens; reserving shaded areas for disabled people on beaches, designing 'quiet routes' for users with intellectual disabilities or people with sensory integration difficulties, etc.

Based on the contributions of universal design and those found in UNE-ISO 21902, a key strategy is to involve people with disabilities in the planning process from the outset. The ‘continuous co-design’ approach, where travellers with disabilities collaborate at all stages of tourism development and destination planning, can better ensure that their needs are understood and met (Nielsen et al., 2024). This approach allows the various participants in the tourism experience to work directly with the people affected to create solutions that meet their specific needs.

Co-design in tourism goes beyond traditional collaboration, as it not only involves key stakeholders, but also ensures that people with disabilities are involved in decision-making from the outset. This approach ensures that destinations are designed and developed with them, not just for them, promoting more inclusive and socially sustainable tourism. This allows those responsible for the tourist destination and service providers to gain a greater understanding of the needs of people with disabilities, equipping them with the knowledge and tools necessary to achieve this (Nielsen et al., 2024).

Conclusions

Accessible and inclusive tourism is not only a right, but also an economic and social opportunity for the sector. Despite its benefits, accessible and inclusive tourism faces challenges that include rethinking what the destination itself offers, to adopt reorientations that enhance the uniqueness of the destination and improve the value chain, in which people from vulnerable groups can participate (Hayden et al., 2024). The management and implementation of this approach requires an understanding of the current situation of the destination in terms of accessibility and inclusivity, investment in adaptations, and the need to address the lack of awareness and training, the limited implementation of regulations and the lack of labour integration of people with accessibility needs.

As a starting point, the following recommendations can help to overcome these challenges:

- **Start by analysing the situation in terms of accessibility and inclusivity:** The first step towards achieving accessible and inclusive tourism is to analyse the current state of the destination, service, or resource in terms of accessibility, for which the perspective of visitors with some kind of accessibility need is essential.
- **Tax incentives and subsidies:** So that tourism companies can implement adaptations without this implying an excessive financial burden.
- **Public-private collaboration:** Involving the entities responsible for tourism development in each area, service providers and associations representing groups with special needs in the creation of inclusive and accessible solutions.
- **Awareness-raising and training campaigns:** Involve the entities responsible for tourism development in each area, service providers, associations representing groups with special needs and society in the creation of a culture of inclusion and respect for all people.
- **Development of legislation** for the implementation of accessibility requirements that establishes sanctions for those who fail to comply with such requirements or falsely promote them.
- **Labour inclusion:** The creation or adaptation of jobs for people with accessibility needs is an essential requirement for achieving full accessibility and inclusion.

In addition, strategies are needed to reorient the offer of destinations towards accessibility and inclusion, such as universal design and co-design.

Universal design not only improves the accessibility of a destination, but also strengthens the tourism value chain and can increase its competitiveness. Improvements in infrastructure and the provision of accessible services can attract a wider clientele, since in addition to people with a physical or permanent hidden disability, it can also attract older people, families with young children and people with temporary disabilities (Prescott, 2024). The following recommendations are suggested for its implementation:

- **Refer to all stages of the tourism experience.** It must be understood and implemented considering all phases of the tourism experience, from planning to returning home.
- **Include all participants in the tourism experience.** It must include all the means and participants involved in providing the tourism experience, from infrastructure, transport, service providers, etc.
- **By adopting a continuous co-design approach,** involving people with disabilities in the planning and development of destinations, a more inclusive, equitable and satisfying tourism experience for all can be achieved, responding flexibly to the different needs of each person (Nielsen et al., 2024). It is useful to consider the following aspects:
 - **Encourage continuous co-design:** Involve people with ‘visible’ and hidden disabilities in the design of tourism experiences to ensure that their needs are understood and met.
 - **Train tour operators:** Provide specific training on disabilities (especially hidden ones) to reduce the fear of making mistakes and improve sensitivity to these needs.
 - **Make accessibility solutions more flexible:** Avoid rigid segmentation and develop personalized solutions that can be adapted to a variety of disabilities and needs.
 - **Promote cross-sector collaboration:** Involve those responsible for tourist destinations, service providers, associations representing vulnerable groups and society in the joint development of inclusive policies and practices.

This approach will not only ensure more inclusive tourism but will also strengthen the social cohesion and sustainability of tourist destinations in the future.

Bibliographical references

Darcy, S., & Dickson, T. J. (2009). A whole-of-life approach to tourism: The case for accessible tourism experiences. *Journal of Hospitality and Tourism Management*, 16(1), 32–44. <https://doi.org/10.1375/jhtm.16.1.32>

Halpern, N., Garrod, B., Rickly, J., & Hansen, M. (2024). Tourism promotional materials: Examining the intersections of accessibility and inclusion. In M. Pillmayer, M. Karl, & M. Hansen (Eds.), *Tourism destination development: A geographic perspective on destination management and tourist demand*. De Gruyter. <https://doi.org/10.1515/9783110794090-015>

Hayden, S., McIntosh, A., & Gillovic, B. (2024). Inclusive destination management strategies. In M. Pillmayer, M. Karl, & M. Hansen (Eds.), *Tourism destination development: A geographic perspective on destination management and tourist demand* (pp. 333–358). De Gruyter. <https://doi.org/10.1515/9783110794090-016>

Mace, R. (1997). *What is universal design*. The Centre for Universal Design at North Carolina State University. <https://disabilityandmultimodality.wordpress.ncsu.edu/universal-design-ud/>

Nielsen, S. B., Maltesen, M. V., & Blichfeldt, B. (2024). Developing social sustainable tourism for and with people with hidden disabilities: Reflections from Fyn, Denmark. In M. Pillmayer, M. Karl, & M. Hansen (Eds.), *Tourism destination development: A geographic perspective on*

destination management and tourist demand. De Gruyter.
<https://doi.org/10.1515/9783110794090-014>

ONCE Foundation. (2022). *How to apply the UNE-ISO 21902 standard. Accessible tourism for all.*
<https://biblioteca.fundaciononce.es/publicaciones/colecciones-propias/coleccion-accesibilidad/como-aplicar-la-norma-une-iso-21902>

Prescott, M. (2024). The role of universal design in the future of tourism planning and development. In M. Pillmayer, M. Karl, & M. Hansen (Eds.), *Tourism destination development: A geographic perspective on destination management and tourist demand*. De Gruyter.

Scheyvens, R., & Biddulph, R. (2018). Inclusive tourism development. *Tourism Geographies*, 20(4), 589–609. <https://doi.org/10.1080/14616688.2017.1381985>

UNWTO. (2018). *Global report on inclusive tourism destinations: Model and success stories.*
https://webunwto.s3-eu-west-1.amazonaws.com/imported_images/51310/global_report_inclusive_tourism_destinations_en_web_0.pdf

World Health Organization. (2022). *Ageing and health.* <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>

World Health Organization. (2023). *Disability.* <https://www.who.int/news-room/fact-sheets/detail/disability-and-health>

TRANSFER OF KNOWLEDGE ABOUT MORE ACCESSIBLE AND SAFER OPEN SPACES AND SERVICES IN URBAN AREAS

CHAPTER 7. EARNINGS FROM ACCESSIBILITY AND SAFETY OF OPEN SPACES AND SERVICES IN URBAN AREAS IN DIFFERENT LOCATIONS

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ABSTRACT

The aim of this chapter is to investigate and propose solutions that improve accessibility and safety in open urban spaces within the European Union, based on the perception and experience of users, as well as to gain an insight into the visions of the future that they express in relation to these spaces. Using a qualitative approach based on surveys of users in five European countries (Germany, Slovenia, Spain, Finland, and Poland), perceptions of accessibility, perceived safety, mobility, and future visions in these spaces are identified. The results reveal barriers in terms of accessibility, such as a lack of adapted infrastructure, and perceived safety issues related to crime and traffic. Mobility difficulties are also detected, particularly in terms of public transport, as well as concerns about gentrification and the impact of tourism, and users' desire for cities to be greener in the future.

Keywords:

Accessibility, Security, Future visions, Qualitative study, Urban open spaces

1. Introduction

In recent decades, the importance of open spaces in urban areas has been widely recognised due to their positive impact on the health, well-being, and social cohesion of city dwellers (Liang et al., 2021; Thompson, 2002). These spaces, include parks, squares, and gardens, among others, not only provide areas for recreation and leisure, but also play a crucial role in urban sustainability and resilience (Subramanian & Jana, 2018). In this context, universal design and accessibility emerge as fundamental pillars to ensure that all citizens, regardless of their abilities, can enjoy these spaces on equal terms (Story, 1998).

Universal design has become a key standard for the development of inclusive urban spaces, which seek to eliminate the physical and social barriers that prevent equitable access to urban resources (Story, 1998). Through the application of principles such as equitable use, flexibility and simplicity, universal design promotes the creation of environments that are intuitive and accessible to everyone, including children, the elderly, and people with disabilities (Senkiv et al., 2021). Accessibility in these spaces does not only involve the elimination of physical barriers, but also the inclusion of elements that facilitate their use by everyone, considering aspects from the planning stage that avoid costly and less effective modifications later (Subramanian & Jana, 2018). On the other hand, safety is an essential component to ensure both the accessibility and the proper functioning of these spaces. Well-designed spaces that integrate safety principles not only protect users, but also encourage greater use of them. The perception of safety directly influences the frequency with which people use these spaces, especially in vulnerable groups such as the elderly and women (Kimić & Polko, 2022). Transport is another aspect to consider, as it facilitates participation in urban life (Liang et al., 2021). Finally, integrating visions of the future that prioritise sustainability and inclusion promotes the creation of greener and more resilient cities, responding to both current and future needs (Michopoulou et al., 2015).

However, despite the advances in these fields, there is still a significant gap in the literature regarding how urban open spaces can be improved to be truly inclusive and safe for all. This is an aspect of great importance for the European Union, where the promotion of inclusive policies and diversity in the urban context requires effective solutions. Thus, progress in these areas not only contributes to the well-being of citizens, but also favours social cohesion, the economy, and the integration of European society (European Commission, 2021). To the best of our knowledge, research has not adequately covered users' perceptions of accessibility and safety in open urban spaces, nor has it proposed comprehensive solutions to address these challenges. Having a sample that covers different European countries highlights the importance of adapting these solutions to different national and urban realities.

Based on the above, the aim of this chapter is to investigate and propose solutions that improve accessibility and safety in open urban spaces within the European Union, based on users' perspectives and experiences, as well as to gain an insight into the visions of the future that they express in relation to these spaces.

2. Review of the literature

2.1. Urban open spaces

Urban open spaces are defined as publicly accessible areas that allow for social interaction, exercise, rest and contact with nature within the city. These spaces are essential for improving the quality of life in cities, contributing to the mental and physical health of residents, and offering a respite from the dense and often stressful built environment of urban areas (Thompson, 2002). In addition, open spaces facilitate social cohesion, encourage interaction

between different groups in the community and support urban biodiversity (Subramanian & Jana, 2018). These spaces include transport infrastructure such as ports and railway stations, streets, squares, recreational spaces, natural areas, parks, gardens, etc. (Stanley et al., 2012). The effectiveness and attractiveness of urban open spaces depends largely on the support of services for public use (Tsukahara, 1995).

According to Urban Task Force (1999), these spaces should not be considered as isolated units, but as open-air 'rooms' essential for neighbourhoods. They serve as places to relax and enjoy the urban experience, facilitating a wide variety of activities, from eating outdoors to holding sporting or civic events. The key is for these spaces to establish a direct relationship with the people who live and work around them (Thompson, 2002).

These spaces facilitate interaction between different social and ethnic groups, contribute to the physical and mental well-being of citizens and to improving their quality of life, play a fundamental role in urban sustainability and facilitate the economic development of cities, combating segregation and promoting inclusion (Liang et al., 2021; Thompson, 2002).

2.2. Study Blocks

Advancing the study of open spaces and services in urban areas from the point of view of users involves considering a series of key elements as proposed by Liang et al. (2021):

2.2.1 General perception of accessibility.

Accessibility is a crucial aspect for the inclusion of a city. According to several studies, improving urban accessibility can facilitate greater social and economic integration of all population groups (Liang et al., 2021), (Thompson, 2002). Specifically, universal accessibility should be a cross-cutting principle in all public policies, especially in the urban environment (Ministry of Social Rights and Agenda 2030, 2022). It is necessary to guarantee that infrastructures, public buildings, open-air spaces, and transport services are accessible to everyone, regardless of their physical, sensory, or cognitive abilities (United Nations, n.d.). Furthermore, the active participation of people with disabilities in the planning and decision-making process is of great importance to ensure that their needs and perspectives are adequately considered (Naya et al., 2023). Collaboration with organisations and people who require some form of accessibility is essential to identify barriers and develop effective solutions that promote true inclusion (Ministry of Social Rights and Agenda 2030, 2022).

2.2.2. Perceived safety

Perceived safety is an essential component for the quality of urban life and inclusivity. According to Kimic & Polko (2022), perceived safety is defined as the individual feeling of being safe in each space, influenced by both objective and subjective factors. This perception is formed from various elements such as available information, previous experiences, and social influences. The perception of safety is subjective and does not always reflect reality, which can complicate decision-making (Seabra et al., 2013). It is crucial to differentiate between expected and experienced safety, as expectations can differ from actual experiences, affecting the perception of the urban space (Zou & Meng, 2019).

Perceived safety plays a fundamental role in open urban spaces. A lack of safety can generate fear and anti-social behaviour, negatively affecting the use and enjoyment of these spaces by residents and visitors. Factors such as good visibility and lighting, as well as appropriate design including clear paths and well-maintained areas, are crucial for improving the perception of safety and preventing crime. For specific groups, such as older adults, the perceived safety in these spaces is even more critical, as it directly influences their physical activity and well-being (Kimic & Polko, 2022).

2.2.3. Transport and mobility.

Getting around the city is a determining factor for inclusivity and urban sustainability. An efficient and accessible transport system allows citizens to move freely, access services and opportunities, and participate fully in urban life (Liang et al., 2021). According to the Spanish Disability Strategy 2022-2030, it is essential to ensure that public transport and urban infrastructure are accessible to all, especially to people with disabilities. This includes the elimination of physical and sensory barriers, as well as the adaptation of vehicles and stations to ensure their use by people with reduced mobility or visual or hearing impairments (Ministry of Social Rights and the 2030 Agenda, 2022).

In addition, it is important to train transport personnel in caring for people with disabilities, as well as implementing assistive technologies that facilitate orientation and autonomous mobility (Senkiv et al., 2021). Finally, it is necessary to emphasise the need to design routes and services that consider the different abilities and needs of users, promoting greater equity and autonomy in urban travel (Thompson, 2002).

2.2.4. Users' vision of the future.

Users' opinions and suggestions are essential for the sustainable development and continuous improvement of cities. Citizen participation in urban planning ensures that the diverse needs and aspirations of the community are considered (Liang et al., 2021). Promoting inclusive and participatory urban planning contributes to creating cities and human settlements that are safe, resilient, and sustainable (Naya et al., 2023). Citizen participation ensures that urban projects reflect the real needs of all segments of the population, which is essential for building more inclusive and equitable communities (UN-Habitat, 2016).

Furthermore, by considering the diverse needs and aspirations of the community, progress is made towards reducing inequalities (Thompson, 2002). Initiatives that promote accessibility, equity of services and social inclusion help to create an urban environment where all people, regardless of their socioeconomic status, have equal opportunities (United Nations 2017).

Based on all the above, the literature review highlights the importance of accessibility in urban public spaces and its impact on the quality of life of citizens, revealing that significant challenges remain despite progress in the implementation of inclusive measures. In this context, this study proposes to analyse the perceptions of users from different cities in the European Union regarding accessibility, safety, mobility, and future visions in these spaces, to identify barriers and propose recommendations. This research will be based on methods that will allow for the evaluation of different perspectives on accessibility and other relevant issues and their relationship with current urban policies, with the aim of contributing to the formulation of more effective measures and the improvement of the user experience in urban open spaces.

3. Methodology

To achieve the proposed objectives, a qualitative study was carried out in this work that allowed for an in-depth look at the opinions of residents and visitors to different European urban spaces.

3.1. Questionnaire design

For this research, a semi-structured interview guide was designed with mostly open-ended questions to fully explore the experiences, perceptions, and opinions of the participants. This qualitative approach allows for a more detailed and enriching understanding of the topics studied (Creswell, 2009). The questions included in the guide were designed after an exhaustive

review of the literature and with the active collaboration of a multidisciplinary team of ten researchers from universities in the five participating countries. The guide was structured into five thematic blocks (Table 7.1)

TABLE 7.1
Thematic blocks and questions

Section 1. General context.
1. Why do you visit this area? (main purposes) 2. What are the pleasant things in this area for you? 3. And what do you not like so much/not at all? 4. What are the elements by which you recognize the area? (for example, places of worship, shops, bars, public program, schools, university, monuments, parks, other) 5. How would you rate the orderliness of the area on a scale of 1-5? 6. What elements of urban space do you think are missing in the area (green spaces, footpaths, urban equipment...)? 7. Do you usually stop in the area or is it just on your way to another destination?
Section 2. Security and perception in the area.
8. How safe do you feel in this area? 9. Why? (both negative and positive reasons) 10. What kind of differences are related to this feeling because of the time (date, time, etc.)? 11. How does traffic impact your experience and your feeling of safety in this area? 12. Are there some certain places in this area where you feel unsafe? If yes, can you mention the reason why? 13. Have you ever witnessed any kind of disturbances, harassment, or criminality in this area? If yes, can you describe what happened? 14. Have you ever experienced any disturbances, harassment, or crimes in the area personally? If yes, can you describe shortly what happened?
Section 3. Services, accessibility, and mobility.
15. Have you used some services in this area? (Any services, public, private.) 16. If yes, have there been some kind of hinders for you in accessing these services? Could you describe these? 17. How easy is it to navigate in that area for example (the visibility and readability of the signs, etc.)? 18. Are there enough car parking possibilities? 19. How easy is it to reach this area by public transport? 20. How do you experience the walkability of the area (even with a wheelchair) (how easy it is to walk around, to get inside etc.)?
Section 4. Future visions.
21. What wishes do you have for a redesign or for changes in the area (according to inclusiveness, accessibility, safety)? 22. What are ways to improve the quality of life in the area in your opinion? 23. How connected do you feel to other people in this area? 24. Do you think people care about this area? 25. How do you see this area in 2030?
Section 5. Socio-demographic classification information.
26. Gender 27. Age 28. Optional to answer: Do you have any issues that might affect you when going outside your home? 29. Do you intend to use the outdoor public space during this visit? (Choose from the dropdown menu.) 30. Visitor status 31. The way of passing the area 32. Are you a regular visitor in this area?

3.2. Selection of participants

The study was carried out with participants from the five European countries involved in the SAFE Project: Slovenia, Finland, Germany, Poland, and Spain. These countries present marked

differences in aspects such as population density, GDP, educational level, urban infrastructure, access to public services, living conditions and degree of industrialisation (Eurostat 2021). Likewise, the inclusion of countries from northern, central, eastern, and southern Europe ensures a diverse geographical representation, favouring the generalisation of the results and a more comprehensive understanding of the topics studied.

To carry out the empirical study, a city and a specific urban area were selected in each of the participating countries: Kranj in Slovenia, Vantaa in Finland, Kiel in Germany, Bydgoszcz in Poland, and Granada in Spain. This strategy allows the study participants in each city to evaluate the same area, while considering the particularities of each urban context. In each country, local interviewers administered the surveys, which were translated into the local language to ensure that the participants fully understood the questions. In total, the study collected data from 345 participants across the five countries. The personal interviews were carried out randomly in specific places in the cities, which allowed for the collection of a wide variety of opinions and experiences directly related to the urban environment. Table 7.2 presents the characteristics of the participants and their distribution according to the countries in which the surveys were carried out.

TABLE 7.2
Respondents' profile

Characteristics	Total	Germany	Slovenia	Spain	Finland	Poland
No. of participants (% of sample)	345	57 (16,5%)	34 (9,9%)	131 (38%)	104 (30,1%)	19 (5,5%)
Gender						
Male	36,3%	51,8%	33,3%	30,2%	40%	26,3%
Female	63,6%	48,2%	66,7%	69,8%	60%	73,7%
Age						
18-29	53,6%	54,4%	32,4%	98,5%	0%	73,7%
30-45	7,2%	22,8%	17,6%	0%	1,9%	21%
46-59	9%	12,3%	17,6%	0%	16,3%	5,3%
60-74	20,6%	8,8%	26,5%	0%	54,8%	0%
+75	2,6%	1,7%	2,9%	0%	6,7%	0%
Accessibility problems						
Yes	12,5%	14%	8,8%	4,6%	22,1%	15,8%
No	87,5%	86%	91,2%	95,4%	77,9%	84,2%
Status						
Local	38,8%	93%	58,8%	37,4%	5,8%	31,6%
Visitor	25,8%	1,7%	20,6%	11,4%	59,6%	21,1%

Domestic tourist	11,9%	0%	0%	29,8%	1,9%	0%
Foreign tourist	9%	0%	5,9%	16,8%	0%	36,8%
Business visitor	7%	5,3%	8,8%	3%	11,6%	10,5%

4. Results

The research included a detailed analysis of the questionnaire to explore the main topics in greater depth and to explore possible differences between the different groups of participants. The CAQDAS NVivo 14 software was used to manage and analyse the collected data, which allowed the information to be organised into thematic nodes and facilitated the identification of recurring patterns and trends. This programme is especially useful in complex qualitative studies, as it contributes to systematising the analytical process and guarantees a higher level of rigour (Bergeron & Gaboury, 2019). Based on the responses obtained, emerging themes were defined that grouped the participants' experiences and perceptions into these key topics. This deductive-inductive analytical approach made it possible to organise the data in a more structured way and to generate a deeper insight into the related trends, challenges and barriers perceived by the participants.

For the quality criteria of the qualitative study, the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist has been used (Tong et al., 2012). The COREQ checklist provides a comprehensive framework to guide reporting on important aspects of research work, study methods, as well as context, conclusions, analysis, and interpretations. By following the COREQ guidelines, researchers can improve the quality and rigour of their qualitative research by ensuring that key elements such as study design, data collection, data analysis and reporting are thoroughly documented. The use of the COREQ checklist has been shown to improve the transparency and quality of qualitative study reports, enabling readers to better assess the credibility and transferability of research results (Tong et al., 2012).

4.1. Profiles

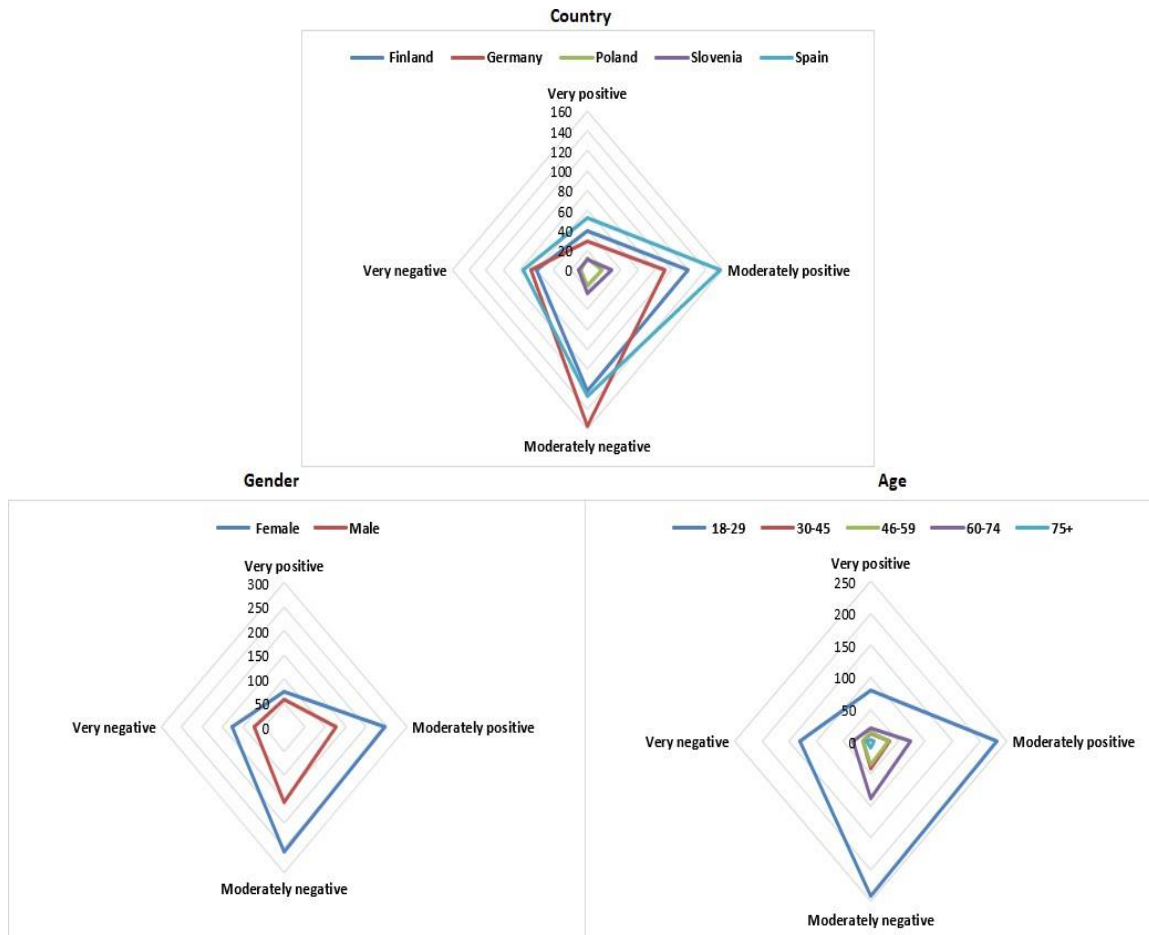
Taking advantage of NVivo's automatic sentiment coding functionality, the groups of participants were segmented according to variables such as country, gender, and age. This allowed for a detailed and accurate analysis of the emotional valence associated with the opinions collected in the survey. Respondents' comments were classified into categories of very positive, moderately positive, moderately negative, and very negative. The tool facilitated the detection of specific patterns and trends within each demographic segment, offering a clearer perspective on how different population groups perceive aspects such as accessibility, security, and their future expectations. Figure 7.1 shows the radial graphs of sentiments by country, gender, and age.

Firstly, in terms of the analysis **by country**, in Germany the general opinion is moderately more negative than positive, and also moderately more negative than the average for the countries in general. On the other hand, in Spain the opinion is moderately more positive than in the other countries, which seem to have a more similar trend among them with more positive than negative opinions.

In terms of **gender**, women's opinions are moderately positive, while men's are more neutral and even tend to be slightly negative in comparison with women's. Another noteworthy aspect is that men tend to make more comments per person than women.

Finally, in terms of **age**, in general, the opinions of all age groups are more positive than negative, although people over 75 tend more towards negativity, while the groups between 18 and 29 and between 46 and 59 are more positive.

FIGURE 7.1
Radial graph of trends by country, gender, and age



4.2. Words frequency

In order to try to identify the most recurrent themes and concepts and how these relate to the perceptions of the respondents, an analysis was carried out of the words most used by the interviewees. Table 7.3 summarises the most frequently mentioned words and the nature of the opinions associated with them. The most frequently mentioned word is 'people', which is used in both positive and negative contexts. For example, some interviewees said that the presence of many people in certain places made them feel safe, while others associated the word 'people' with drug use, crime, or dirt in certain areas.

The words 'area' and 'public' are also frequently mentioned in both positive and negative contexts. The connotation of the word 'night', meanwhile, is mainly negative, especially due to problems related to perceived safety. In contrast, 'vegetation' and 'trees' have mostly positive connotations, being considered prominent elements in urban environments. Finally, the word 'station' is negative for some interviewees, who perceive the areas around stations as dangerous, especially at night, while others mention stations positively as a reason to visit the city.

TABLE 7.3
Repetition of keywords

Word	Position	Opinion
People	1	Mixed opinion
Area	2	Mixed opinion
Public	3	Mixed opinion
Night	4	Mostly negative
Greenery	5	Mostly negative
Trees	6	Mostly negative
Station	7	Mixed opinion

4.3. Analysis of subtopics through verbatim transcripts

Based on the survey blocks, different subtopics can be identified: 1) Accessibility: Urban services and equipment; 2) Perceived safety: Crime and Discrimination; 3) Transport and mobility: Connections and connectivity and Traffic problems; and 4) Future visions: Sustainability and green spaces and over tourism, gentrification, and housing. Based on the sub-themes identified, a semantic analysis was carried out, from which the key concepts present in the data were broken down. In addition, a content analysis was carried out to indicate the frequency of occurrence of these themes, which is reflected in the number of references obtained ($n = X$ references). This combined approach makes it possible to understand the depth and meaning of the sub-themes and to quantify their relevance within the set of data analysed, offering both a qualitative and quantitative view of the results.

4.3.1 Accessibility

Accessibility is the main focus of the research and an important issue for residents and visitors to the areas ($n=64$).

- **Services and urban equipment:** public services are used on a daily basis, so they require accessibility to meet the needs of citizens ($n=72$). While in Germany and Poland there do not seem to be too many barriers in this regard, in the other countries we find different problems. In Slovenia and Finland, the biggest problem is physical barriers (excerpts 1 and 2) and in Spain it is the very high number of people that there are usually in the area (excerpt 3). This not only prevents normal mobility but can also be an impediment for people on the autism spectrum or with social anxiety, who are vulnerable in crowds.

Excerpt 1

(Female, 30-45 years old,
local, Slovenia)

**Question 16: If so, have there been any obstacles in accessing these services?
Can you describe them?**

Answer: "For a mother with two babies, some locations are more difficult to access."

Excerpt 2

(Male, 46-59 years old,
Business trip, Finland)

**Question 16: If so, have there been any obstacles in accessing these services?
Can you describe them?**

Answer: *"I have problem with my legs, so walking is difficult and there is not enough elevators or benches"*

Excerpt 3

(Woman, 18-29 years
old, local, Spain)

**Question 16: If so, have there been any obstacles in accessing these services?
Can you describe them?**

Answer: *"Yes, the amount of people there are [...]"*

4.3.2. Perceived security

Security is a very important factor for the quality of life of people living in certain areas and for their visitors. As such, it is a topic mentioned multiple times throughout the survey (n=65).

- **Delinquency and crime:** in this sub-theme, perceptions vary greatly from country to country. For example, in Germany, there seems to be a much bigger problem compared to the rest of the countries. In general, complaints tend to be related to drug use (n=79) (excerpts 7 and 8) or theft (n=29) (excerpts 8 and 9).

Excerpt 7

(Woman, 60-74 years old,
tourist from a nearby city,
Finland)

Question 13: Have you personally experienced any harassment, annoyance, or crime in the area? If so, briefly describe what happened.

Answer: *"I've seen people get beat up. Yeah, but every time when there's violence it is usually alcohol or drug related. And smoking weed and owning weed is illegal so I guess smoking in a public place would also be illegal. So just general drug use."*

Excerpt 8

(Woman, 18-29 years old,
local, Germany)

Question 13: Have you personally experienced any harassment, annoyance, or crime in the area? If so, briefly describe what happened.

Answer: *"I have also seen a lot of drug use on the street and 2 men selling an obviously stolen bike on a street corner (looking around & hiding money)."*

Excerpt 9

(Man, 18-29 years old,
Business trip, Spain)

Question 13: Have you personally experienced any harassment, annoyance, or crime in the area? If so, briefly describe what happened.

Answer: *"Some traffic violations and shoplifting."*

- **Discrimination (racial, ethnic, ableist and sexist):** some responses include comments referring to xenophobia or racism, which play a major role in determining the safety or image of the city (excerpts 10 and 11). Depending on the country, the focus of attention is on one group or another. In Slovenia the brunt of the blame is borne by the Albanians (n=5), who are blamed for the lack of security in the city, and in Spain it is mainly Roma women, who according to users try to scam tourists and locals (n=17).

Excerpt 10

(Woman, 18-29 years old,
local, Slovenia)

Questions 8 and 9: How safe do you feel in the area? Why?

Answer: *"4/5. Negative: Albanian people [...]"*

Excerpt 11

(Man, 18-29 years old,
domestic tourist, Spain)

Question 14: Have you personally experienced any harassment, annoyance, or crime in the area? If so, please briefly describe what happened.

Answer: *"Yes, the gypsies with the rosemary"*

Excerpt 12

(Woman, 18-29 years old,
local, Germany)

Question 13: Have you personally experienced any harassment, annoyance, or crime in the area? If so, briefly describe what happened.

Answer: *"I heard hate speech & racism & ableism. Some people bring dangerous dogs with them & force people out of their way by threatening."*

4.3.3. Transport and mobility

Transport and mobility play a key role in the structure and functioning of cities, as an efficient and well-connected system facilitates the movement of both inhabitants and tourists, helping to improve accessibility and reduce the time spent travelling between different points. This, in turn, has a direct impact on the quality of life of citizens, promoting greater connectivity between neighbourhoods and services, which can generate benefits in terms of economic development, sustainability and social welfare. As cities grow and diversify, mobility becomes a key factor in ensuring long-term sustainability and better integration of urban areas, improving the quality of life for residents and the experience of visitors (n=56).

- **Connections:** the use of public transport such as buses (n=83) or trains (n=153) seems to be one of the most common reasons for visiting a particular area. In addition, public transport is among the public services that people use the most when visiting these cities. This is why there are many complaints about it (excerpts 13, 14 and 15).

Excerpt 13

(Woman, +75 years old,
visitor from a nearby city,
Finland)

Question 21: What are your hopes for the transformation or change in the area (in terms of inclusion, accessibility, safety)?

Answer: *"More public transport, because I come low-populated area and the bus doesn't travel very often, [...]"*

Excerpt 14

(Man, 30-45 years old,
local Germany)

Question 11: How does the traffic affect your experience and perception of safety in the area?

Answer: *"driving a car is a disaster. Public transport is overcrowded, often too late."*

Excerpt 15

(Man, 18-29 years old,
foreign tourist, Spain)

Question 22: In your opinion, how could the Quality of life in the area be improved?

Answer: *"Improve numbers of public transports"*

- **Traffic problems:** in general, traffic is a very important issue for many people (n = 153). The interviewees perceive problems with the street infrastructure that have a negative impact on mobility in the city. There is also considerable interest in reducing traffic in certain areas of the city centre to reduce congestion (excerpts 17 and 18).

Excerpt 16

(Woman, 18-29 years old,
local, Germany)

Question 11: How does the traffic affect your experience and perception of safety in the area?

Answer: *"Streets too narrow, parking, drivers going too fast & disregarding traffic rules"*

Excerpt 17

(Woman, 60-74 years old,
local, Slovenia)

Question 11: How does the traffic affect your experience and perception of safety in the area?

Answer: *"Too much traffic, should be for residents only"*

Excerpt 18

(Woman, 18-29 years old,
domestic tourist, Spain)

Question 11: How does the traffic affect your experience and perception of safety in the area?

Answer: *"There is too much traffic since it is in the centre and too many cars pass through some streets."*

4.3.4. Future visions

Looking to the future means considering how cities can evolve to become more sustainable and liveable. This includes the creation of green spaces and traffic management, as well as responding to the challenges of over tourism and gentrification.

- **Sustainability and green spaces:** a very important factor for all countries in relation to the future is access to green areas and spaces where people can spend time (n=213) (excerpts 19 and 20). In addition, there is once again evidence of a desire to regulate traffic in certain areas of the city (excerpt 21).

Excerpt 19

(Man, 60-74 years old,
visitor from a nearby city,
Finland)

Question 25: How do you imagine this area in 2030?

Answer: *"I hope that their area be more green area and pedestrian area"*

Excerpt 20

(Woman, 30-45 years old,
local, Poland)

Question 25: How do you imagine this area in 2030?

Answer: *"hope it will be more greener with a lot of spaces to rest because of near river"*

Excerpt 21

(Woman, 46-59 years old,
business trip, Slovenia)

Question 25: How do you imagine this area in 2030?

Answer: *"A very green and tidy rea, without cars"*

- **Over tourism, gentrification, and housing:** the changes that cities have undergone due to population growth and the massive arrival of tourists are having a negative impact on the lives of their residents. In Granada, Spain, the biggest problem seems to be tourists (n=61) (excerpt 22) and how residents are losing quality of life. On the other hand, in Germany and Finland the problem is more centred on gentrification and unaffordable housing prices (n=53) (excerpts 23 and 24).

Excerpt 22

(Woman, 18-29 years old,
tourist domestic, Spain)

Question 25: How do you imagine this area in 2030?

Answer: *"More neglected due to so much tourist activity"*

Excerpt 23

(Man, 18-29 years old,
local, Germany)

Question 21: What are your hopes for the transformation or change in the area?

Answer: *"No gentrification! No rent increases! [...]"*

Excerpt 24

(Woman, 60-74 years old,
business trip, Finland)

Question 21: What are your hopes for the transformation or change in the area?

Answer: *"More affordable rental housing"*

4.4. Word cloud

A word cloud has been created with the answers to question 25: 'How do you see this area in 2030?' (Figure 7.2), with the aim of finding out the interviewees' visions and expectations for the future. From this word cloud, the following SDG-related trends can be identified:

- **Infrastructure and urban planning:** keywords such as 'area', 'centre', 'city', 'building', 'housing' or 'services' may be related to SDG 9: Industry, innovation and infrastructure and SDG 11: Sustainable cities and communities.
- **Environment and sustainability:** keywords such as 'green' or 'development' can be related to SDGs 13: Climate action and 15: Life on land.
- **Inclusion and social cohesion:** keywords such as 'people', 'tourist', 'community', 'inhabitants' or 'welcoming' are related to SDG 10: Reduced inequalities and 16: Peace, justice, and strong institutions.
- **Consumption:** key words such as 'shop', 'supermarket' or 'business' are related to SDG 12: Responsible consumption and production.

FIGURE 7.2

Word cloud



4.5. Feelings by topic

Based on the topics proposed for the questionnaire and using NVivo's automatic sentiment coding, the general reactions that stand out in each of the blocks have been analysed (Figure 7.3).

Firstly, to evaluate **accessibility**, the comments to questions 15 and 16 of the questionnaire were analysed to find out what kind of services they had used during their visit to the area and if they had encountered any barriers to their use. Most of the comments reflect a negative perception, with those of a moderately negative nature predominating. This suggests a negative opinion on the part of users in relation to their experience with the services and the problems they have encountered.

To assess **perceived safety**, comments from questions 9, 13 and 14 were examined. The aim is to determine whether or not people feel safe in specific areas of cities and whether they have had negative experiences related to accidents or crime. The results show that the majority of comments are negative, with a significant proportion of very negative comments and a very low proportion of very positive comments. This could indicate significant problems in people's perceived safety and their experiences when travelling through certain areas.

To evaluate **transport and mobility**, the comments from question 11 of the questionnaire were analysed in order to understand how traffic impacts the visitor experience and the associated perception of safety. The majority of the comments are negative, with 50% of all comments being moderately negative. This is interpreted as a problematic factor for both users and mobility in the area. Traffic seems to have a negative impact on the overall visitor experience, as well as generating a negative perception of safety.

Finally, to evaluate **future visions**, the comments from questions 21, 22 and 25 of the questionnaires were analysed, with the aim of finding out users' opinions on possible improvements and their expectations for the area. In this block, for the first time, a greater proportion of positive comments can be observed. Despite the fact that almost 40% of the comments are negative, there seems to be an optimistic vision towards the future, with favourable expectations for the areas.

FIGURE 7.3
Circular graphs of general opinions on accessibility, security, transport and mobility and future visions



Conclusions

General conclusions and contributions to the literature

The aim of this chapter was to investigate and propose solutions to improve accessibility and safety in open urban spaces within the European Union, based on the perception and experience of users, as well as to learn about their visions for the future of these spaces.

The findings of this study bring new perspectives to the existing literature on accessibility, safety, mobility, and the development of urban spaces. The need to improve physical accessibility in urban environments has been reiterated in previous research (Subramanian & Jana, 2018), but this study goes further by identifying that accessibility is also critical for groups such as families with children and the elderly (Cockburn-Wootten & McIntosh, 2020). In addition, it highlights the importance of specific elements such as accessible parking and the adaptation of means of transport, which contributes to a broader understanding of how these improvements can be effectively integrated into urban design (Stanley et al., 2012).

In terms of safety, this study reinforces the importance of the perception of safety, an already well-documented issue (Kimic & Polko, 2022), and adds a new dimension by showing how the interrelationship between safety, accessibility and mobility can have positive synergistic effects (Liang et al., 2021). On the other hand, the literature has addressed the efficiency of the transport system as key to urban mobility (Thompson, 2002). This study complements that view by emphasising that mobility must be considered within an urban ecosystem where accessibility and safety are equally essential (Senkiv et al., 2021).

The moderate optimism regarding the future development of urban spaces suggests a basis for improving public perception through policies that integrate not only accessibility, safety, and mobility, but also aspects such as green spaces and the management of gentrification. These elements are key to more inclusive and sustainable cities, aligned with citizens' expectations and current urban policies (European Commission, 2021; Naya et al., 2023). These results contribute to the line of future research proposed by Naya et al. (2023), about delving into the future visions of users to improve urban design. In addition, this study adds value by capturing these perceptions through a qualitative approach based on in-depth interviews, an approach proposed in previous research on urban sustainability (Liang et al., 2021).

Management implications

The results achieved in this research underline the importance of paying attention to improving the accessibility, safety, and future development of urban open spaces, in line with the SDGs and European Union policies. Based on the findings of the study, several relevant implications can be considered for the managers and those responsible for these urban environments, as well as for representatives of vulnerable groups.

Firstly, the results indicate the need to improve the physical infrastructure for people requiring accessibility. In this sense, it is suggested to implement policies that promote the development of adapted spaces and to improve transport services for these groups. Actively involving these groups in the design and planning of urban environments would not only improve the accessibility and safety of these spaces but would also contribute to the fulfilment of the SDGs, particularly SDG 10 (Reduced Inequalities) and SDG 11 (Sustainable Cities and Communities). With regard to accessibility of services, given that the opinion was very negative, one of the options for improving this situation is to train staff in accessibility issues, not only to improve the user experience, but also to foster a more inclusive culture within the sector. Providing clear and accessible information on infrastructure, available services and transport is crucial to ensure that all visitors can plan and enjoy their experience without barriers (Rucci & Porto, 2022). In

addition, working closely with local authorities to improve security in tourist areas could create a more welcoming environment for all visitors, which is necessary, considering that perceived security is considered a very negative factor. This includes improving infrastructure and implementing additional security measures that benefit the entire community (Liang et al., 2021; Ministry of Social Affairs, 2022).

In summary, the implications derived from this study provide clear guidance for the improvement of urban space management. These implications not only address the immediate needs of accessibility and safety, but also reinforce cities' commitment to the principles of the 2030 Agenda, ensuring that urban development is equitable, inclusive, and sustainable.

Limitations and future lines

The present study faces several limitations that should be considered when interpreting its findings. The main limitations are the difference in sample size between the countries studied, the selection of a single area and city in each participating country, and possible translation errors in the questionnaires, which could have led to incorrect interpretations of some responses, so caution is needed in generalising the results. As for future lines of research, it would be beneficial to increase the sample size in future studies to obtain more representative and comparable results between the different countries. Furthermore, it would also be interesting to explore the use of alternative methods of data collection and analysis that could complement or improve the findings obtained with current techniques, involving a greater number of *stakeholders*, including local authorities, architects, and organisations, which could provide a more complete and diverse perspective on the issues investigated.

Bibliographical references

- Bergeron, D. A., & Gaboury, I. (2019). Challenges related to the analytical process in realist evaluation and latest developments on the use of NVivo from a realist perspective. *International Journal of Social Research Methodology*, 23(3), 355–365. <https://doi.org/10.1080/13645579.2019.1697167>
- Cockburn-Wootten, C., & McIntosh, A. (2020). Improving the accessibility of the tourism industry in New Zealand. *Sustainability*, 12(24), 10478. <https://doi.org/10.3390/su122410478>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approach* (3rd ed.). SAGE Publications.
- European Commission. (2021). *The European Pillar of Social Rights in 20 principles*. <https://ec.europa.eu/social/main.jsp?catId=1606&langId=en>
- Eurostat. (2021). *Population by broad age group*. https://ec.europa.eu/eurostat/databrowser/view/cens_21ag/default/table?lang=en&category=cens.cens_21
- Kimic, K., & Polko, P. (2022). The use of urban parks by older adults in the context of perceived security. *International Journal of Environmental Research and Public Health*, 19(7), 4184. <https://doi.org/10.3390/ijerph19074184>
- Liang, D., De Jong, M., Schraven, D., & Wang, L. (2021). Mapping key features and dimensions of the inclusive city: A systematic bibliometric analysis and literature study. *International Journal of Sustainable Development and World Ecology*, 29(1), 60–79. <https://doi.org/10.1080/13504509.2021.1911873>

Michopoulou, E., Darcy, S., Ambrose, I., & Buhalis, D. (2015). Accessible tourism futures: The world we dream to live in and the opportunities we hope to have. *Journal of Tourism Futures*, 1(3), 179–188. <https://doi.org/10.1108/jtf-08-2015-0043>

Ministry of Social Rights and Agenda 2030. (2022). *Spanish strategy on disability 2022–2030* (No. 129-22-014-8). <https://www.mdsocialesa2030.gob.es/derechos-sociales/discapacidad/docs/estrategia-espanola-discapacidad-2022-2030-def.pdf>

Naya, R. B., De la Cal Nicolás, P., Medina, C. D., Ezquerro, I., García-Pérez, S., & Monclús, J. (2023). Quality of public space and sustainable development goals: Analysis of nine urban projects in Spanish cities. *Frontiers of Architectural Research*, 12(3), 477–495. <https://doi.org/10.1016/j.foar.2023.01.002>

Rucci, A. C., & Porto, N. (2022). Accessibility in tourist sites in Spain: Does it really matter when choosing a destination? *European Journal of Tourism Research*, 31, 3108. <https://doi.org/10.54055/ejtr.v31i.2165>

Seabra, C., Dolnicar, S., Abrantes, J. L., & Kastenholtz, E. (2013). Heterogeneity in risk and safety perceptions of international tourists. *Tourism Management*, 36, 502–510. <https://doi.org/10.1016/j.tourman.2012.09.008>

Senkiv, M. I., & Tserklevych, V. S. (2021). Prerequisites of development of an accessible tourism for everyone in the European Union. *Journal of Geology, Geography and Geoecology*, 30(3), 562–570. <https://doi.org/10.15421/112151>

Stanley, B. W., Stark, B. L., Johnston, K. L., & Smith, M. E. (2012). Urban open spaces in historical perspective: A transdisciplinary typology and analysis. *Urban Geography*, 33(8), 1089–1117. <https://doi.org/10.2747/0272-3638.33.8.1089>

Story, M. F. (1998). Maximising usability: The principles of universal design. *Assistive Technology*, 10(1), 4–12. <https://doi.org/10.1080/10400435.1998.10131955>

Subramanian, D., & Jana, A. (2018). Assessing urban recreational open spaces for the elderly: A case of three Indian cities. *Urban Forestry & Urban Greening*, 35, 115–128. <https://doi.org/10.1016/j.ufug.2018.08.015>

Thompson, C. W. (2002). Urban open space in the 21st century. *Landscape and Urban Planning*, 60(2), 59–72. [https://doi.org/10.1016/s0169-2046\(02\)00059-2](https://doi.org/10.1016/s0169-2046(02)00059-2)

Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Medical Research Methodology*, 12(1), Article 181. <https://doi.org/10.1186/1471-2288-12-181>

UN-Habitat. (2016). *Urbanisation and development: Emerging futures*. <https://unhabitat.org/sites/default/files/download-manager-files/WCR-2016-WEB.pdf>

United Nations. (2017). *New Urban Agenda*. <https://habitat3.org/wp-content/uploads/NUA-Spanish.pdf>

United Nations. (n.d.). *Promoting accessible tourism for all: Division for Inclusive Social Development*. <https://social.desa.un.org/issues/disability/disability-issues/promoting-accessible-tourism-for-all>

Urban Task Force. (1999). *Towards an urban renaissance*. Spon.

Zou, Y., & Meng, F. (2019). Chinese tourists' sense of safety: Perceptions of expected and experienced destination safety. *Current Issues in Tourism*, 23(15), 1886–1899. <https://doi.org/10.1080/13683500.2019.1681382>

CHAPTER 8. DEVELOPING SAFE'S ACCESSIBLE ONLINE LEARNING COMMUNITY

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ABSTRACT

Chapter Eight discusses the online learning community created in the project. The purpose of the online community, a virtual space for communal learning, is defined together with the different activities and contents the community offers.

At best, the development of online learning opportunities can benefit all kinds of learners, even individuals with special needs. Online learning is a growing phenomenon, and with the help of technology, it is possible to increase its accessibility. Thus, the number of learners can also increase, and learners can be reached more widely. However, attention must be paid to the accessibility of the online environment, as instructed by online pedagogical experts, for instance. One recommendation to remember is that it is essential to create positive learning experiences for a variety of different learners, as online learning is allowing people with different backgrounds to access learning possibilities.

The contents offer, for example, discussion areas linked to the community, an online course accessible to anyone, and a toolkit to learn about how to develop accessibility. With universal design in mind, the partners envision a futures-oriented place to develop the accessibility and inclusion of urban areas in Europe.

Keywords:

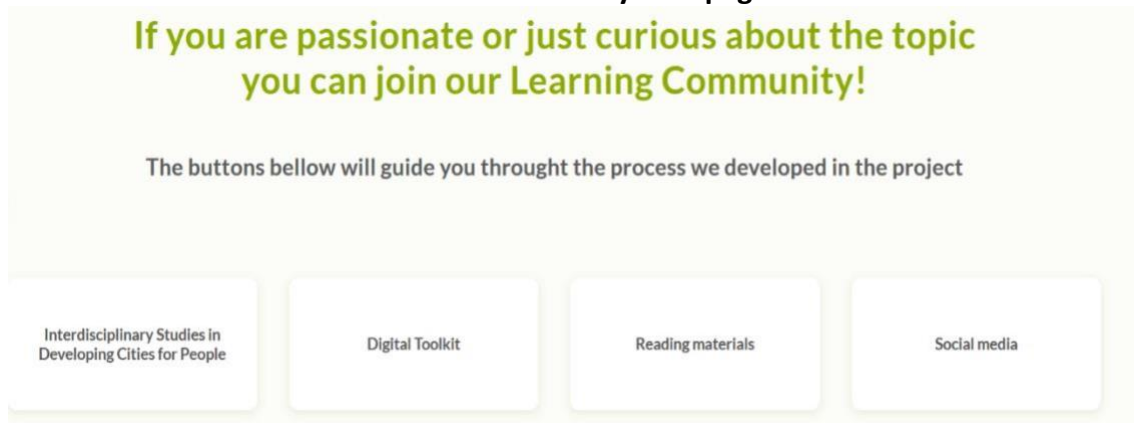
Online learning community, online community, learning process, accessibility, online learning.

1. Introduction

Chapter Eight discusses the online learning community (later called online community in the chapter) created in the project SAFE. The purpose of the online community, to be a virtual space for communal learning, is defined together with the different activities and contents the community offers. The contents offer, for example, discussion areas linked to the community, an online course accessible to anyone, and a toolkit to learn how to develop accessibility. With universal design in mind, the partners envision a futures-oriented place where to develop the accessibility and inclusion of urban areas in Europe.

In addition to discussing the aims, the chapter introduces how the learning material was developed in the project in an iterative design process. The chapter then illustrates the experiences of potential learners in the SAFE online community by using Service Design tools, such as Customer Journey Mapping, storytelling and benchmarking. The chapter ponders the learning results that are expected from the learning process. In the end, the text discusses the future of the SAFE online community.

FIGURE 8.1
Online community frontpage



Source: SAFE project webpage <https://eusafe.fa.uni-lj.si/> (2025).

Figure 8.1 indicates that discussions on accessibility themes take place on SAFE's social media channels, which makes it more accessible for people to participate in the discussions themselves. However, the social media channels are available on the page in the online community for people to follow the contents being discussed.

2. Aims for developing the online community

One of the main aims of both the online community and SAFE project is to generate learning and new knowledge for participants on furthering accessibility in urban areas in the European Union. Learning opportunities that are developed as accessible and without barriers and obstacles enable learning for all students (Baldwin & Ching, 2021, p. 73).

Universal design is the approach applied for the SAFE online community to ensure accessible learning. Eric Dolph (2021) writes in his article, "The Developing Definition of Universal Design," about the evolving definitions of universal design, pointing out that there are at least six different definitions depending on the wording of the concept itself. Dolph quotes Steinfeld & Maisel (2012) who define universal design as "A design process that enables and empowers a diverse population by improving human performance, health and wellness, and social

participation.” According to Dolph, it is important to also take into consideration the outcome of the design. Therefore, SAFE has also tested the online course several times to see how it has been received and understood.

At best, developing the opportunities for online learning can increase the learning for all people, especially considering people with special needs (Pearson & Koppi, 2002, p. 18). Online learning is a popular way to increase knowledge and skills in society because it is accessible to anyone with a device and access to the internet. Therefore, the number of learners can grow in both scope and ways. However, it is important to consider the accessibility of the online learning environment. Furthermore, it is vital to create positive learning experiences to different kinds of learners (Yang et al, 2023, p. 85). Usability of online services refers to providing a clear user interface. Furthermore, there are requirements for easy comprehension of the system (Open Science, 2022).

Navigation is a crucial aspect. As well as functions, pages need to be easily found. The project SAFE has aimed at developing a learning environment that meets the needs of the future; therefore, the online community can be seen as a future learning environment. Other aims SAFE has had as principles for the online community are that it

- Is sustainable –a green way of delivering teaching and training; it saves travel time and travel emissions when people do not need to travel or commute to class.
- Is accessible—anybody with a mobile device or computer can access the learning opportunities.
- Is an economic and adaptive mode of learning and economic mode of providing teaching and training (Panigrahi et al., 2018, p. 11).
- Saves working hours and travel time, there is less manpower (staff) to work either at the end-user organizations such as businesses but also in the delivering organizations such as universities; and the
- The interdisciplinary course provides skills that are needed in working life. Various perspectives are represented and provide insights into matters related to accessibility (Mokski et al., 2023, p. 112).
- Supports persistence that learners are able to study and complete their studies (Hart, 2012, p.39).
- In the future, people need to update their learning, competences and knowledge. Also, full degree programs might compete with tailor-trained modules for certain needs. Thus, people might carry out studies module by module and later gain the degree which previously was studied in a consequently delivered program.

Yang et al (2023) describe certain core factors that make it possible to ensure the accessibility of a learning environment. These include, for instance, holistic awareness, versatile points of view, and the engaging of interest groups. Holistic awareness refers to the designers planning the learning experience to perceive the whole entity of the learning experience. When designing the learning experience, it is useful to look at its whole entity, including the designing of the contents up to the learning experience it generates. Versatile points of view enable the richness of the design process when all team members participate in the process with their own expertise. Also, in the project SAFE, the designers represent different fields of study with different work experiences and approaches. This has meant that the project has in practice made use of the different points of view in the project team when having designed the online community and learning material. The engaging of interest groups is an important aspect, since it can ensure the creation of accessible learning materials and environment to learners with very

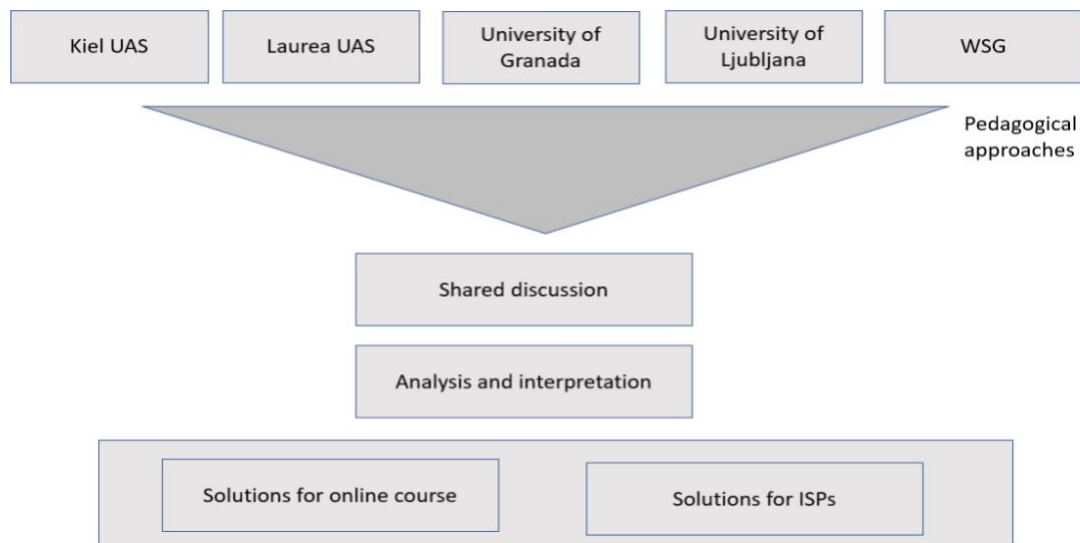
different backgrounds and skills (Yang et al., 2023, p. 85). SAFE has engaged both city representatives and different representatives of various interest groups in the process of developing the learning environment and materials.

Technical functions were also considered among the team of partners when planning the design of the online community. For example, how to create a smoothly working online study environment sets some criteria for different activities. For instance, some main functions to create an easily usable online environment are how to log in, the design of the main menu and submenus including their composition. Accessibility also plays an important role in the design when considering colours, text quality, and any sounds. Furthermore, "After the European accessibility act, digital services and Internet pages need to be accessible to everyone, including people with disabilities" (Henriksson et al., 2022).

3. Designing the learning material

It was an international mission for the partners to carry out together the design and development of the learning material for the online course in the online community. This process began with studying the pedagogical approaches used by each partner and the development of the joint pedagogical model. Thereafter, solutions for both the Intensive Study Programmes and the online course were sought. Figure 8.2. illustrates how the online community was built.

FIGURE 8.2
Process of building shared understanding



Source: SAFE project (2024).

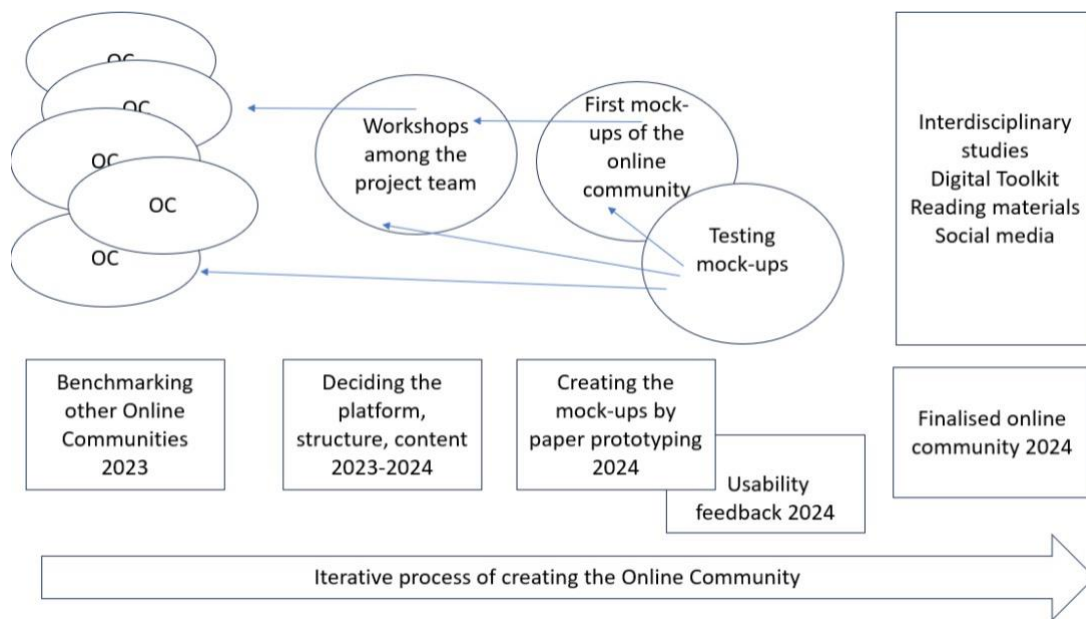
The online community is based on the joint pedagogical approach of the SAFE project. A content analysis (Patton, 2015, p. 541) was made according to the pedagogical principles of the project consortium's higher education institutions. The analysis was based on the following themes: pedagogical decisions, communication, learning spaces, channels and tools, best practices and challenges, and how to solve them.

The project consortium discussed the pedagogical solutions of each higher education institute. All the partners had the opportunity to share their own approaches and argue for their usability in this current context. In joint workshops, it was decided how pedagogical backgrounds should

affect the structure and content of the online community. Based on the collaboration, a pedagogical manuscript was created. A pedagogical manuscript generally refers to the planning of goal-oriented interaction between the parties involved in the teaching situation (Alasalmi, 2021, p. 2).

The joint pedagogical approach defined the framework for both the online community and the intensive weeks (ISP, Intensive Study Programme). ISPs form an integral part of the online course, but the online course must be applicable without any physical event, such as a physically organized face-to-face learning week, e.g. ISP.

FIGURE 8.3
Online community creation process



Source: SAFE project (2024).

The process of creating the online community was iterative. Iterativeness means that development only sometimes proceeds linearly. Based on the feedback received during the development process, it is sometimes necessary to return to earlier stages and change the direction of the development (Teixeira et al., 2019, 7).

The process started with benchmarking. Benchmarking is a method in which selected objects are systematically examined (Ojasalo et al., 2014, 43). The review is based on selected indicators to draw reasonable conclusions. Benchmarking aims to find the best practices and learn from the best. The benchmarking material was similar to online communities. Online communities that provide learning materials, learning tasks, and interactive learning were selected for review. The target was both open communities and those that required logging in.

Based on the analysis of benchmarking data, the project decided to have a SharePoint-based solution. The key determining factor was that the online community should be easily accessible. As a benchmarking result, the participants needed to be able to participate easily. A low threshold is an essential enabler for participation in education. This is extremely important for people with disabilities (Riazy et al., 2020, p. 366). The educational offer is enormous, so participation must be easily accessible.

Various applications and platforms were examined. The aim of the review was to find comparative information to support decision-making. The report examined test results of the 12 different Urban Design related applications. The test results were from the perspective of a student, with access to an android smartphone as well as computers. SketchUp Viewer, ArcGIS Collector, AutoCAD 360, iScape, GIS Cloud Mobile Data Collection, PlanGrid, Mapbox, Streetmix, Maptionnaire, What3Word, Transit, and Citymapper were tested as platforms.

Based on the results collected from the comparison, the project consortium worked together to define the basic solutions for the SAFE online community. In building an online community, it is necessary to decide on the platform, design, and create content (Henriksson et al., 2021, p. 41-42).

Mock-ups are the first versions of prototypes (da Silva Ferreira, 2019, p.2). In this development work, the first versions were built using the paper prototype method (Galey & Ruecker, 2010, p. 414; Vetterli & Roth, 2022, p. 230). The paper versions used visuality (Yu & Sangiorgini, 2018, p. 48), which made it possible to describe the structure, usability, and progress of the pages in a simple manner. With fast paper prototyping, it was also possible to practice different ways of expression.

When building an online community, users' active involvement in the feedback process is crucial. The project staff, being the key stakeholders, took the lead in providing feedback. However, the feedback from actual users, including target organizations and students, was equally important. Their suggestions for improvement, for example, the visuality and order of contents as well as the level of language used, were instrumental in shaping the versions.

The content of the actual online community was formed into entities of Interdisciplinary studies, Digital Toolkit, Reading materials, and Social Media. These are accessible in the menu, and the discussion environment is provided in the social media platforms.

Concerning the requirements for an accessible online learning environment, it is important to take digital skills into consideration, for example, following the European Digital Strategy as well as the European Skills Agenda, to offer possibilities for people to learn, leading to lifelong competitiveness in the workforce (European Commission 2020). This means that those who develop the online community with its activities, materials, and contents have to manage the principles of online studying. Possessing digital competence enables results that can lead to good learning outcomes (Henriksson & Mantere, 2023).

As the partners of the project are from different countries and represent different fields of study, the development of the learning material for the online community has been an interesting, intercultural work process. The different fields of study are important for the whole online course and materials as well as for the online community, because SAFE is an interdisciplinary development project. The fields represented by the partners, Urban Design, Tourism, Safety and Security, Social Work, Business Administration, and Marketing of tourism provide perspectives through which the partners collaborated, shared their views and knowledge, and transformed the learning materials into reflecting these different fields for people from different backgrounds. This has, in fact, created learning materials with a universal design approach.

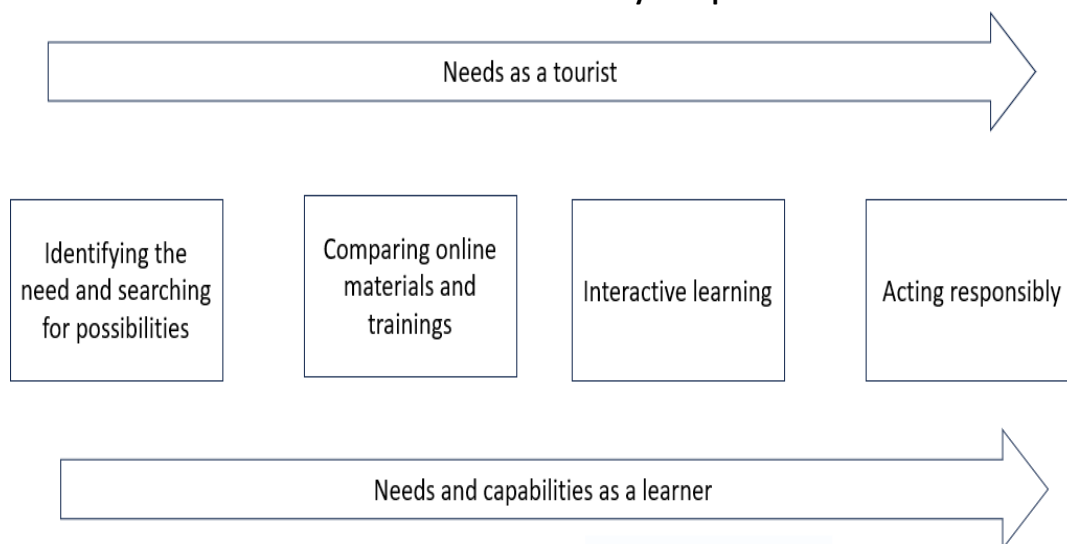
The interest groups who were involved in the project participated in developing and testing the learning materials. Students of the partners, representing also different fields of study, collaborated with representatives of the cities involved in the project as well as with representatives of the interest groups engaged with the project since the beginning.

4. The learning process of learners in SAFE online community

Since the project SAFE has focused on developing accessibility in the European Union, it has also engaged various interest groups in its activities. The interest groups include the representatives of the cities involved in the development work as well as senior citizens, disabled people, people with Asperger syndrome, families with children and immigrant women. The representatives create a multiform picture of society, which, in practice, means that when we develop accessibility for these interest groups, we also develop accessibility for everyone. This subchapter illustrates the learning process of two different learners representing two different interest groups. The learning process will make use of the Service Design tool, Customer Journey Mapping, to pinpoint potential learning highs. It describes the needs users have for the online community and their activities as users of the online community. The descriptions are based on interviews, blog posts and diverse studies (Nori et al., 2020).

The Customer Journey method describes the service experience through the eyes of the customer. It is a useful tool that can present success and failures. It visualizes the service experience and enables the illustrating of the challenges in the encounters (Kurtmollaiev et al., 2018, p. 65; Sangiorgini et al., 2019, p.154; Yu & Sangiorgini, 2018, p.43).

FIGURE 8.4
General online community user profile



Source: SAFE project (2024).

Figure 8.4. illustrates the user experience of a learner in the online community. The learner's process as a user of the online community is triggered by the need to get information, learn, or solve a problem. The impetus for using the online community can arise from a personal need, either to learn about the theme, from an interest in the topic, or concretely because of the arrangements for the trip.

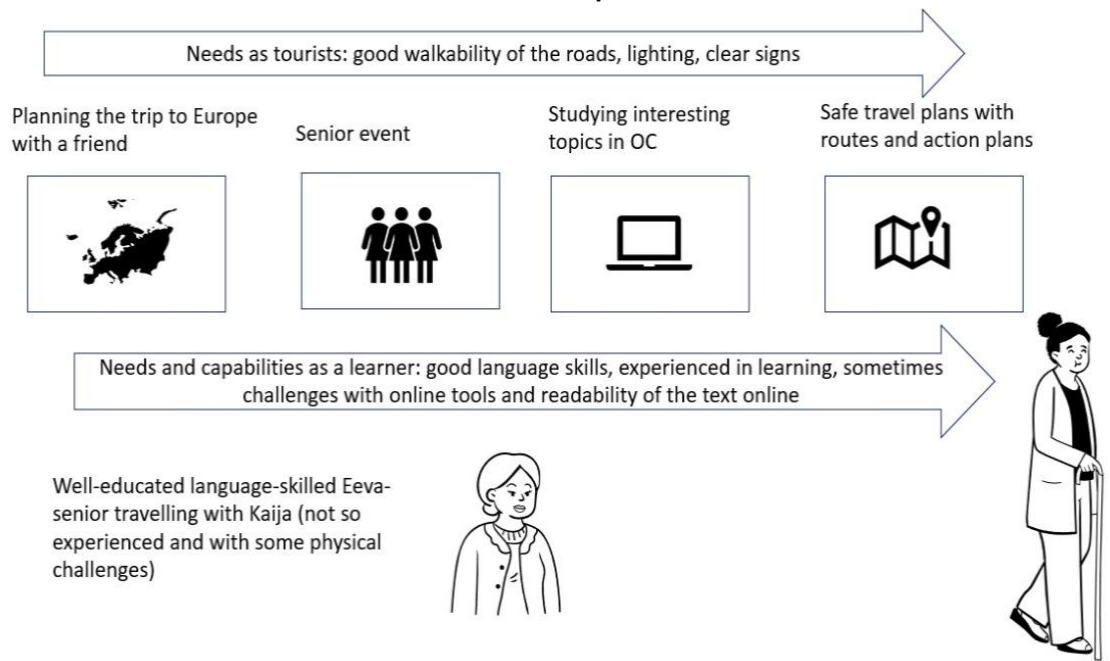
There is an abundance of educational material available. Nevertheless, the SAFE project needed to consider how to stand out from the rest of the material. What makes a learner stop browsing the web and get engaged with the SAFE online community? Or what makes the material interesting and also educational?

In the SAFE online community, learners familiarize themselves with the materials. Tasks support responsible thinking and sustainable actions. Interaction is essential, enabling learning among other international learners.

The online community offers additional information on accessible open urban areas and related services. It contains information about safe and sustainable travel and tourism. Responsible travel supports sustainable development and encourages companies and public organizations to align with common goals.

When describing the learners' path in the online community, it is essential to consider their needs as travellers and learners. SAFE focuses on the accessibility of areas and services through the needs of special groups. It is useful to consider these different needs as a learner and a consumer of tourism services.

FIGURE 8.5
Senior user profile



Source: SAFE project (2024).

Figure 8.5 presents the story of a senior who can benefit from an online community. Considering seniors is important because they are a growing segment of tourists. They are also often active in many different areas of life. The changing needs related to aging should be taken into account in the planning of learning and developing platforms, i.e. what kind of needs they have, what kind of abilities and wishes they have (Boot et al., 2020, p. 10-11).

Senior story:

"Eeva is a 73-year-old pensioner from Helsinki and a translator and interpreter by training; during her active career, her life was full of social life and international contacts. She used to work both in the municipal sector and in large global companies. She lived abroad during several periods of time, both in Europe and America. After her career, Eeva has continued to be an active traveller; she is used to moving both alone and in company. She has enough energy to travel, and her finances are in order, so she still makes several annual trips abroad."

Eeva is leaving to travel around Europe for two weeks with a senior interrail ticket. She is not leaving alone this time; her friend Kaija is joining the trip, too. Kaija is retired but has had a long career as a school cook. She has participated in some organized trips but is less experienced than

Eeva. In addition, Kaija's previous physical work has left its mark, and her hip is in bad shape. Kaija needs a walking stick for the most demanding walking sections.

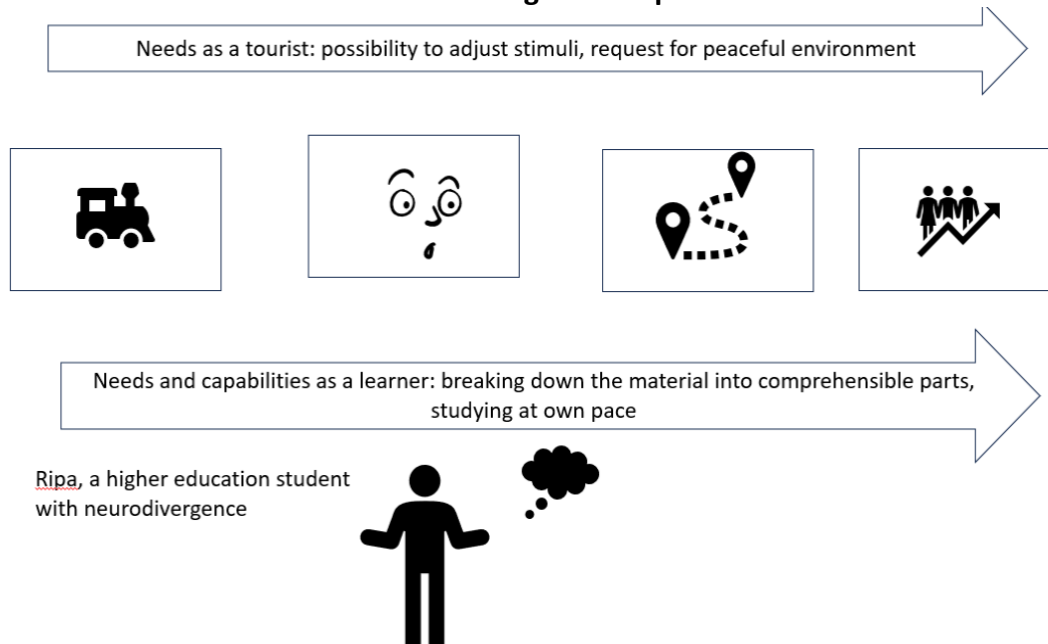
Eeva is excited about going on a trip with Kaija, and she hears about the online service of the SAFE project at a senior event. Eeva gets interested in trying SAFE's travel safety game. She remembers how unpleasant it felt to walk once in Urbanville City to the hotel through an area without proper lighting. In hindsight, she would have preferred to pay more for the hotel had she known the area felt unsafe. She started to think about how she could prepare herself in advance to avoid ending up in a similar situation. Especially now that Kaija, in a slightly weak condition, is coming along. Eeva wondered, "How could I find out which areas to book accommodation in along the route." Many questions crossed Eva's mind: is the route from the train station to the hotel easy to walk? Do we two dare to walk the route if we arrive late in the evening? Which regions are worth visiting? How do I know if others moving in the area give us a sense of safety or fear?

Eeva plays the SAFE safety game. The thought is confirmed for her that they will be fine on the trip! Eeva has always been interested in maps and has a desk drawer full of maps from her travels. That is why Eeva is excited to see what the mapping of the SAFE online course means. She immediately decides to try an afternoon shopping trip to look at her surroundings with different eyes, which places on the usual route seem uncomfortable or, on the other hand, appear attractive. On such an autumn day, the fallen leaves on the road have sometimes made the shopping center's steps slippery. On the other hand, the café in the square is indeed very attractive: how have they managed to make it so cozy and inviting? Eeva also notices that her safety experiences and sense of safety have now changed.

After getting to know the materials and talking with others on SAFE's social media channels, Eeva found many concrete tips on how to travel safely. She made a map for herself and Kaija to follow. These friends are enthusiastically and confidently looking forward to the upcoming European trip."

The following figure and the related story provide another point of comparison for the needs and use of online communities. It focuses on the world of experience of a neurotypical person.

FIGURE 8.6
Neurodivergent user profile



Source: SAFE project (2024).

Neurodivergent student story:

Ripa, 24, studies tourism at the University of Applied Sciences. Themes related to responsibility have indeed come up in his studies already. However, Ripa has longed to learn about the needs of different people for accessible areas and services to be more prominent. Ripa hears that a fellow student participated in the intensive course of the SAFE project. According to his friend, material is available on the project's website. Ripa found the online community because his friend shared the project's LinkedIn update.

Over the years, his path to school has been challenging; he is often restless and hyperactive. He sometimes has challenges regulating his senses and directing his own actions. In addition, it is challenging for him to interact with others. He experiences situations intensely, and at the moment of disappointment, it is difficult for him to regulate his emotions and how to act based on them. When he gets overloaded, his working memory does not work correctly. He has often missed the point in his studies. He might remember the first few things if people talk too long, but the rest will pass. Finally, as a young adult, Ripa received a neurodivergent diagnosis. After this, he received support for his studies.

The material of the online community is meaningful to Ripa, and he immerses himself in how many different perspectives the accessibility of different target groups can be looked at. Ripa realizes that the sensory stimuli he experienced on a full train have affected his sense of safety. He understands that neurotypicals must be active societal actors to promote their position. Ripa decides to find out if his hometown has an association to join. He would have something to offer as a mentor to, for example, a neurotypical young person starting university studies.

Ripa is satisfied that he can learn the material at his own pace and listen to the recordings in the online community at his own tempo. Concerning tasks, it is essential to him that they are clearly described. Their visuals should be clear to him and support the same message. In particular, Ripa likes that the materials and tasks provide a lot of maps and pictures that help him understand

the whole. It is important to him that he can process information at a pace and in quantities that suit him.

After studying in the online community, Ripa is encouraged to apply for an internship at the municipal tourism marketing unit. There, he wants to write his thesis on how special needs should be considered in tourism services.

These two examples show that the same materials and tasks can serve very different target groups. The design of the SAFE online community has taken into account the needs of special groups, such as tourists, residents, and learners.

5. Learning results of the learning process

The online course and learning materials in the online community have been developed to create awareness and learning. There are a number of different factors that need to be taken into consideration when creating learning materials and designing courses, especially when focusing on a wide variety of learners with different ages, backgrounds and needs.

Not only does universal design look holistically at the whole process including results, but also inclusive learning focuses on the totality. Inclusive learning should consider how all different learners can be supported in their learning journey. Thus, inclusivity is useful to all learners (Pesonen & Nieminen, 2021, p. 29). Inclusivity considers people's needs (Kasala & Smatanova, 2019, p. 1,7). Inclusivity is based on equality. It means that every learner has the right to participate in high-quality learning, which should be possible despite the needs the person has. Inclusive learning and teaching are useful for both the learner, study planner and implementer or teacher (Pesonen & Nieminen, 2021, p.16).

Regarding the course design, one needs to remember that the course in the online community is a self-study course in practice. However, the course including the materials can be utilized by any teacher who can teach the contents as well as incorporate more materials and teaching in addition to what is available in the online community. As a self-study course, the teaching is one-way delivered. This places demand on the quality and clarity of the learning materials. Since inclusive teaching means that the teaching takes all kinds of learners into consideration (Pesonen & Nieminen, 2021, p. 15), also the materials must do the same.

Learners are very different; their capacity to learn can differ, also the targets of their interests differ as well as their ways to learn. However, accessibility is useful for all learners (Baldwin & Ching, 2021, p. 740). The large variation concerning the scope of the need of support is an important aspect to be considered, meaning that the needs can vary significantly between different individuals (Pesonen & Nieminen, 2021, p. 40).

Today's students form a diverse group of learners. The central challenges related to learning include dyslexia, mental health issues, challenges with attention, autism spectrum disorder, hearing and visual impairment, stress and being on view (Pesonen & Nieminen, 2021, pp. 13, 45-51). Senior citizens can have different and complicated needs that are related to accessibility in their learning (Liyanagunawardena & Williams, 2016, p. 7).

Accessibility must be in the centre of designing online learning. The design needs to have a proactive approach and offer inclusive content for all learners. Accessibility requires collaboration between different actors (Baldwin & Ching, 2021, p. 740).

Baldwin & Ching (2021, p. 731) point out central principles which should be taken into account when considering accessibility. This is, for instance, content to be continuously available. The selection of colours and contrast must be considered so that colourblind individuals and those with vision impairment can access learning material. In addition, the graphics should use, for

example, alt texts, which pinpoint main parts. Transcriptions of voice and video files enable usability of materials for hearing impaired individuals.

According to the framework of universal design, learners should be able to find information individually and via tailored solutions. It is based on three perspectives: first of all, the presentations should favour versatile ways, secondly, participation should be accessible in a versatile manner, and thirdly, expression should implement different possible ways (Baldwin & Ching, 2021, p. 733)

When considering the accessibility of online learning, one focuses especially on how the learning material is planned and in what format it will be developed. It is worthwhile to assess multimedia content, colours, images and any other visual elements from the point of view of accessibility (Baldwin & Ching, 2021, p. 733).

Conclusions

The internet is full of platforms and websites. Every project with funding is required to actively disseminate their work, outcomes and activities. Interest groups are important for projects to reach the end-users of the services or products developed in these projects. Also SAFE has focused on targeting both interest groups and the general public in their dissemination activities, for it is vital that the outcomes of the project are used even after the project ends.

Considering the aims SAFE had for the online community, creating learning about accessibility has been key. In order to succeed in this, one needs to engage people to visit the online community. Therefore, SAFE has been active in social media to disseminate events and outcomes. The online community provides direct embedded links to the social media channels used by SAFE, which are Facebook, Instagram and LinkedIn. The purpose is to activate both visitors on the social media channels to visit the online community and participate in the learning course and use the materials as well as visitors in the online community to communicate on the SAFE social media channels.

Nothing grows old faster than material on the internet (Hardiman, 2024). Therefore, it is vital for SAFE partners to make sure that the materials in the online community are regularly checked and, if necessary, update them with fresh contents.

Furthermore, since the partners have plans to develop SAFE further after the project ends, it is important to stay on top of the development of accessibility in the European Union. The further developments of SAFE are, for example, to organize BIPs (Blended Intensive Programmes) together in the future. In addition, the University of Ljubljana, Slovenia has added the online course into their Master program for Urban Design. It is also in the curriculum of Laurea University of Applied Sciences, Finland.

To conclude, one needs to emphasize the fact that accessibility has not yet reached its full potential in the European Union. Therefore, more development projects are required to create awareness of the various special needs people have, both visible and invisible special needs. Awareness leads to actions and these, in turn, create new solutions and opportunities to make our environments safer, more accessible and inclusive for everyone to live and thrive in.

Bibliographical references

Alasalmi, T. (2021). Pedagoginen käsikirjoitus ja oppimismuotoilu. In S. Leiding & E. Tapio (Eds.), *Samassa verkossa: näkökulmia äidinkielen ja kirjallisuuden verkko-opetukseen*. Äidinkielenopettajain liitto.

- Baldwin, S. J., & Ching, Y. H. (2021). Accessibility in online courses: A review of national and statewide evaluation instruments. *TechTrends*, 65(6), 731–742. <https://doi.org/10.1007/s11528-021-00624-6>
- Boot, W., Charness, N., Czaja, S. J., & Rogers, W. A. (2020). *Designing for older adults: Case studies, methods, and tools*. CRC Press.
- Dolph, E. (2021). The developing definition of universal design. *Journal of Accessibility and Design for All*, 11(2), 178–194. <https://doi.org/10.17411/jacces.v11i2.263>
- European Commission. (2020). *European Skills Agenda*. https://employment-social-affairs.ec.europa.eu/policies-and-activities/skills-and-qualifications/european-skills-agenda_en
- Galey, A., & Ruecker, S. (2010). How a prototype argues. *Literary and Linguistic Computing*, 25(4), 405–424. <https://doi.org/10.1093/lilc/fqq021>
- Hardiman, M. (2024, March 14). *Personal communication*.
- Hart, C. (2012). Factors associated with student persistence in an online program of study: A review of the literature. *Journal of Interactive Online Learning*, 11(1).
- Henriksson, K., Mantere, P., & Mänty, I. (2021). Online community and Visit Toolkit. *VISIT Handbook*, 38.
- Henriksson, K., Mantere, P., & Mänty, I. (2022). Developing services with SMEs on European islands. In K. Jur et al. (Eds.), *Mediterranean impressions, concepts, stories*.
- Henriksson, K., & Mantere, P. (2023). Online community to a futures learning space. In J. A. Castañeda García et al. (Eds.), *MOTION HANDBOOK: From overtourism to innovating sustainable solutions in the EU*. University of Granada. <https://urn.fi/URN:NBN:fi-fe20230828111611>
- Kasala, V., & Smatanova, K. (2019). Community engagement as a sustainable tool in transforming mass housing urban structures: Case study of Petržalka estate, Bratislava, Slovakia. In *IOP Conference Series: Materials Science and Engineering*, 603(3), 032063. IOP Publishing.
- Kurtmollaiev, S., Fjuk, A., Pedersen, P. E., Clatworthy, S., & Kvale, K. (2018). Organisational transformation through service design: The institutional logics perspective. *Journal of Service Research*, 21(1), 59–74. <https://doi.org/10.1177/1094670517738>
- Liyanagunawardena, T. R., & Williams, S. A. (2016). Elderly learners and massive open online courses: A review. *Interactive Journal of Medical Research*, 5(1), e4937. [doi:10.2196/ijmr.4937](https://doi.org/10.2196/ijmr.4937)
- Mokski, E., Leal Filho, W., Sehnem, S., & Andrade Guerra, J. B. S. O. D. (2023). Education for sustainable development in higher education institutions: An approach for effective interdisciplinarity. *International Journal of Sustainability in Higher Education*, 24(1), 96–117. <https://doi.org/10.1108/IJSHE-07-2021-0306>
- Nori, H., Lyytinen, A., Juusola, H., Kohtamäki, V., & Kivistö, J. (2021). *Marginaaliryhmät korkeakoulutuksessa: Opiskelemaan hakeutuminen, opiskelukokemukset ja tulevaisuuden suunnitelmät*.
- Ojasalo, K., Moilanen, T., & Ritalahti, J. (2014). *Kehittämistyön menetelmät: Uudenlaista osaamista liiketoimintaan* (3rd rev. ed.). Sanoma Pro.
- Open Science. (2022). *How to account for the accessibility of OER?* Secretariat for the National Open Science and Research Coordination, Federation of Finnish Learned Societies. <https://avointiede.fi/en/open-science-expert-panels/open-education/how-account-accessibility-oer>

- Panigrahi, R., Srivastava, P. R., & Sharma, D. (2018). Online learning: Adoption, continuance, and learning outcome—A review of literature. *International Journal of Information Management*, 43, 1–14. <https://doi.org/10.1016/j.ijinfomgt.2018.05.005>
- Patton, M. Q. (2015). *Qualitative research and evaluation methods*. Sage Publications.
- Pearson, E. J., & Koppi, T. (2002). Inclusion and online learning opportunities: Designing for accessibility. *ALT-J*, 10(2), 17–28.
- Pesonen, H., & Nieminen, J. H. (2021). *Huomioi oppimisen esteet: Inklusiivinen opetus korkeakoulutuksessa*. PS-kustannus.
- Riazy, S., Weller, S. I., & Simbeck, K. (2020). Evaluation of low-threshold programming learning environments for the blind and partially sighted. In *CSEdu (2)* (pp. 366–373).
- Sangiorgi, D., Lima, F., Patrício, L., Joly, M. P., & Favini, C. (2019). A human-centred, multidisciplinary, and transformative approach to service science: A service design perspective. In P.P. Magio, C.A. Kieliszewski, J.C. Spohrer, K. Lyons, L. Patrício, & Y. Sawatani (Eds.), *Handbook of Service Science, Volume II* (pp. 147–181). Springer. https://doi.org/10.1007/978-3-319-98512-1_7
- da Silva Ferreira, J. C. (2019). *Live web prototypes from hand-drawn mockups*. Universidade do Porto.
- Steinfeld, E., & Maisel, J. (2012). *Universal design: Creating inclusive environments*. Wiley.
- Teixeira, J. G., de Pinho, N. F., & Patrício, L. (2019). Bringing service design to the development of health information systems: The case of the Portuguese national electronic health record. *International Journal of Medical Informatics*, 132, 103942. <https://doi.org/10.1016/j.ijmedinf.2019.08.002>
- Vetterli, C., & Scherrer, C. (2019). Service innovation by patient-centric innovation processes. In M.A. Pfannstiel, & C. Rasche (Eds.), *Service Design and Service Thinking in Healthcare and Hospital Management* (pp. 55–67). https://doi.org/10.1007/978-3-030-00749-2_4
- Yang, M., Lowell, V., Long, Y., & Farmer, T. (2023). Designing for accessibility in online learning: A design case. *Journal of Postsecondary Education & Disability*, 36(1).
- Yu, E., & Sangiorgi, D. (2018). Service design as an approach to implement the value cocreation perspective in new service development. *Journal of Service Research*, 21(1), 40–58. <https://doi.org/10.1177/1094670517709356>

CHAPTER 9. ASSESSMENT OF THE EXPERIENCE ON ACCESSIBILITY AND SAFETY OF OPEN SPACES AND SERVICES IN URBAN AREAS: ALTERNATIVE APPROACHES

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ABSTRACT

This chapter presents the Intensive Study Programmes (ISP) of the Erasmus Plus SAFE project, designed to improve accessibility and perceived safety in urban areas through an innovative approach. These programmes promote active learning and to raise awareness of the needs of vulnerable groups such as people with disabilities, the elderly, people with Asperger's Syndrome, migrant women, and families with young children. In addition, their impact on participants is evaluated, including their personal and professional development, highlighting the acquisition of technical and social skills, as well as their awareness of accessibility and safety issues. The results show a high rating of the methodologies used and the knowledge obtained, identifying certain areas for improvement. This chapter underlines the relevance of integrating multidisciplinary initiatives into university training plans, offering a replicable model to face the challenges of urban accessibility and contribute to a more inclusive and sustainable social development.

Keywords:

Accessibility, Perceived Safety, Active Methodologies, Designing Future Scenarios, Critical Mapping, Jane's Walk, Safety Walks

1. Introduction

Training in accessibility and perceived safety of urban spaces plays a crucial role in preparing future professionals and citizens capable of facing the challenges posed by European cities. The improvement of inclusive and safe urban environments not only responds to a social need, but also requires innovative educational approaches that integrate diverse disciplines, groups, and methodologies. In this context, the Erasmus+ SAFE project, through the Intensive Study Programmes (ISP), provides a pioneering training model, combining theoretical and applied learning to raise awareness and train participants in the design of accessible and safe solutions.

The originality of this programme lies in the combination of complementary methodologies, such as Jane's Walks, Safety Walks, Critical Mapping, role-playing games, and Future Scenario Design, which encourage active and student-centred learning. These methodologies not only enhance critical thinking and problem solving, but also facilitate direct interaction with urban environments and their users, including vulnerable groups such as people with disabilities, the elderly, people with Asperger's Syndrome, migrant women, and families with young children, promoting a deep understanding of their needs and challenges.

The overall objective of this chapter is to describe and analyse how a training programme based on a combination of innovative methodologies contributes to the development of technical, social, and ethical skills in the field of accessibility and urban safety. To this end, the chapter first presents and describes the designed training programme, which then analyses the results obtained from the participants' satisfaction with the organisation and the methodologies used in the programme, as well as evaluating the impact of the programme on the participants in terms of skills acquired, perception of its usefulness and impact on their personal and professional development, awareness of accessibility and safety issues and future behaviour.

2. Training plan and methodology for improving the accessibility and safety of urban areas and their services

The training programme described below has been proposed and designed in the ERASMUS PLUS SAFE Project. Firstly, there is a three-week preliminary learning period, followed by a one-week intensive programme or event, and then a one-week post-reflection period.

During the preliminary period, students work in groups with colleagues from their own university. They are provided with introductory material, which includes a description of the programme's objectives, the topics to be covered and the methodologies to be used. In addition, they are provided with reading material to familiarise themselves with and learn about accessibility, perceived safety, inclusion, and the vulnerable groups participating in the project (people with disabilities, the elderly, people with Asperger's syndrome, migrant women, and families with young children). The students have to prepare a presentation as a group and with a guided activity, will help students from other countries to understand and internalise the topics covered (such as a game or a guided discussion) that will be put into practice during the intensive programme.

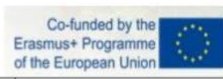
During the intensive week, there is a combination of lectures, visits to the areas of analysis, supervision, and group work. Figure 9.1 shows an example of the schedule that is followed (in this case referring to the intensive programme that took place in Slovenia in November 2023). Throughout the week, lectures are given on different topics in which the SAFE Project staff specialises (social work, safety, accessible tourism, gender studies, etc.), highlighting inequalities in accessibility in urban areas and city services in each of the participating countries (Slovenia, Finland, Germany, Spain, and Poland). This will give an idea of the similarities and differences between cities, countries, and regions, and will serve as an introduction to some of the

challenges facing European cities. On this basis, students will also be trained in each of the methodologies applied (Jane's Walks, Safety Walks, Critical Mapping, role play, Designing Future Scenarios, layout, and collaborative work).

During the week, they work in international groups of five, each group including one student of each nationality, constantly with the collaboration of teachers from the different universities and members of the vulnerable groups participating in the project. The visits and the development of Jane's Walks and Safety Walks will be organised by supervisors, teachers and collaborators, providing comments and discussions during the activities. In addition to the work group, each student has to produce an individual piece of work (specifically a learning diary which is handed in at the end of the week). On the last day of the intensive week, the students have to evaluate the programme, and during the week after the course, they have to submit their learning diary.

FIGURE 9.1
Example of an intensive programme timetable





Monday, 27 Nov. ACCESSIBILITY, URBAN DESIGN, SAFETY, DATA COLLECTION	Tuesday, 28 Nov. MAPPING, ACCESSIBLE TOURISM	Wednesday, 29 Nov. Society, GENDER, SOCIAL WORK, SURVEY RESULTS	Thursday, 30 Nov. SCENARIOS, SOCIAL POLICY	Friday, 1 Dec. PRESENTATION
8:00 Breakfast 9:00 Class 9:45 Coffee break 10:30 Jane's Walk 12:00 Lunch 13:00 Class 15:00 Coffee break 15:30 Class 16:00 Group work 18:00 Dinner You need: * good walking shoes * warm outdoor clothing * study equipment, camera, notepad	8:00 Breakfast 9:00 Class 9:45 Coffee break 10:15 Safety Walk 12:15 Lunch 13:00 Group work 14:00 Class 15:00 Coffee break 15:30 Group Work 18:00 Dinner You need: * good walking shoes * warm outdoor clothing * study equipment, camera, notepad	8:00 Breakfast 9:00 Class 10:30 Coffee break 10:45 Class 11:00 Group work 12:00 Lunch 13:30 City tour 16:00 Coffee break 16:30 Class 16:45 Group work 18:00 Dinner You need: * good walking shoes * warm outdoor clothing * study equipment	8:00 Breakfast 9:00 Class 10:00 Coffee break 10:15 Class 11:15 Group work 12:15 Lunch 13:00 Group work 15:30 Coffee break 16:00 Group work 18:00 Dinner You need: * study equipment	8:00 Breakfast 9:00 Class 9:30 Group work & coffee break 12:00 Lunch 13:00 Poster printing 14:00 Coffee break 14:30 Organisation of exhibition 15:00 Opening of exhibition, presentation 17:30 Closing event 18:00 Dinner You need: * good mood

3. Combination of teaching methodologies in the intensive programme

The objectives and groups targeted by the project SAFE lead to the selection of methodologies that together make it possible to raise awareness and learn about accessibility and perceived safety applied to the improvement of urban environments and services. Following the principles and premises of UDL (Universal Design for Learning), it is advisable for these methodologies to be varied and to allow for their development using multiple forms of involvement, representation and action and expression (Alba Pastor, 2018).

In addition, it must be considered that improving the accessibility and perceived safety in any environment in general is still a challenge, in which there has been progress, but for which a significant change in beliefs, attitudes and, therefore, realities is still required (Medina García,

2020). This initial situation means that it is necessary for students, once exposed to a study reality, to make transformative contributions to it. This determines that the Future Scenario Design methodology is chosen as the initial teaching methodology and that guides the development of the teaching-learning process.

Scenarios for the future describe future situations and define the course of events that lead from an initial situation to a future one. Future-Oriented Thinking is a teaching-learning methodology that helps students develop critical thinking, problem solving and decision-making skills to generate innovative solutions to new situations, (Gorbis, 2013), such as the proposal and evaluation of alternatives to improve accessibility and safety in the use of urban areas and their services that could take place in several years' time. In this project, students learn to think in a future-oriented way with the aim of improving accessibility and safety in the use of urban areas and their services, applied to five different cities (one for each participating country). This makes it essential to observe the behaviour of users when they use urban services or environments and, consequently, to use methodologies that contribute to the observation, recording, processing, and analysis of information, together with the consideration of various points of view. The selected methodologies that contribute to these ends are described below.

The study of individual behaviour of or groups of people in a given environment is of interest (Goličnik & Ward Thompson, 2012). The heterogeneity of environments makes it necessary and interesting to use mechanisms for analysing the behaviour of people in these environments, as this can provide clues as to how to improve them. One possible approach is **Behaviour Mapping**, which is an observation tool that allows the behaviour of a person or group of people to be defined and/or described using quantitative and visual parameters. At the same time, behaviour maps can also show the differences between the purpose for which a space was designed and its actual use. In the field of architecture, Proshansky et al. (1970) were already beginning to use space behaviour maps, which are also used in services (Mir et al., 2023). This technique involves manual mapping through the observation and recording of individual behaviour parameters related to a space.

The event known as **Jane's Walk**⁸ (Husar et al., 2020) is an urban walking event that brings people together to explore an area or neighbourhood on foot. On Jane's Walks, people walk with guides and learn about, for example, nearby cultural sites, architecture, history and, in general, both the built and natural environment. Anyone interested can participate in these walks as they are an easy and fun way to enable social and cultural activities. At the same time, this methodology improves interaction between different stakeholders and the feeling of belonging to that environment, inviting people to observe and discover public spaces and services.

On the other hand, we have **Safety Walks** (Evensen et al., 2021), whose fundamental principle is to bring together local users and visitors with agents responsible for the environment, to take a common walk where all participants can observe positive and negative safety-related findings that could affect the perceived safety, comfort and accessibility of both residents and visitors to the area. Given that the feeling of safety and comfort in each environment varies between different user groups (for example, depending on age, disability, gender, or origin), it is interesting to carry out these walks with groups with different profiles. In addition, different times of the day or night, or the seasons of the year, can offer different perspectives through this type of walk.

Critical mapping (Sobreiro Santos et al., 2018) is an approach that allows for the analysis and presentation of potential difficulties and inequalities in the area under analysis. Maps and plans

⁸ <https://janeswalk.org/>

are commonly used for presentations in the fields of urban planning and should be understood in their historical context, including the situation in which they were produced.

Role-playing games, meanwhile, give students the opportunity to assume the role of another person or to represent a given situation. Role-playing games involve students in real-life situations that can be 'stressful, unfamiliar, complex or controversial', requiring them to examine personal feelings towards others and their circumstances (Bonwell & Eison, 1991, p.47). The players are presented with challenges that require systematic thinking and encourage them to think 'outside the box' and help them develop new strategies for solving problems.

Taken together, the combination of these methodologies, together with the scope of application and the objectives pursued, is innovative. This combination of methodologies has been implemented in the five intensive programmes carried out during the SAFE project. Each programme has involved five students from each partner university (25 in total), at least two teachers from each university (10 in total) and at least one collaborator from each university representing each of the groups with which they work (5 in total).

During the intensive programme, the students work in local areas aimed at identifying accessibility and safety barriers based on direct experience with the environment through Jane's Walks and Safety Walks. Lectures and seminars given by representatives of the groups participating in the project, local agents and teachers are also important. During the walks, relevant information about the use of the spaces is shared by residents and visitors. The students use a notebook to record observations of each of the areas in relation to accessibility and safety (which facilitates Critical Mapping), as well as devices with which to collect observations in the form of images or routes. Figure 9.2 shows an example of the observation notebook.

Next, the students receive training in modelling, that is, in how to make models of the urban area they have been assigned on a map of the area to analyse. Afterwards, they are trained in the planning, development, and analysis of future scenarios, from which point they begin to work on future scenarios for the area analysed. In order to analyse current scenarios and future proposals, it is useful to consider the vision and needs of the groups with which they work, as well as those of the users of each area. To do this, a role-playing game is carried out that allows students to consider the positions of the members of the group in question, resident and visiting users, and those responsible for these areas and service providers. At this point they will be ready to analyse information and propose future scenarios with different time horizons, generally 5, 10 and 15 years. The future scenarios proposed are presented using different types of results such as a poster, a presentation, and a model. These results are displayed and explained in a public session to managers and users of the site, as well as to members of the groups considered. In Figure 9.3, examples of activities from the different editions of the training programme are shown.

FIGURE 9.2
Observation notebook



URBAN WALK

Legend of the symbols

----- Trail of the walk

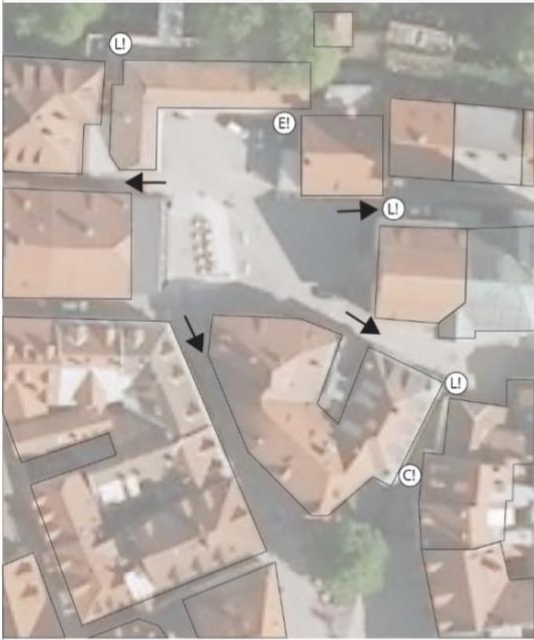
① ② Crucial points

Date, time: _____

Walk leader: _____

Indicate direction north

↑



SAFETY

Legend of the symbols

Ⓛ Danger zone - lighting

ⓔ Danger zone - entrapment

ⓗ Danger zone - human threat

ⓐ Danger zone - concealment

→ exit direction

Indicate direction north

↑



BEHAVIOUR OBSERVATION

Legend of the symbols

→ Walking

⇨ Running

⚙ Cycling

● Individual retention

●● Group retention

Indicate direction north

↑

IMAGES 9.1
ISP examples of activities and results



Seminars and conferences



Students presentations



Jane's walk



Safety walk



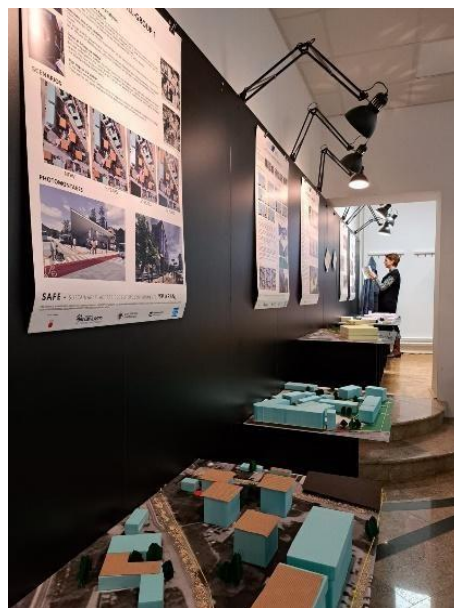
Role play



Creation of models



Posters and models



Presentation of the final results

4. Evaluation of the programme's results and the teaching methodology

The evaluation of the intensive programmes carried out considers the opinions of the students, as well as the project staff (teachers and associated partners) using five-point Likert-type items. The elements evaluated refer to the degree of satisfaction achieved with the management, the subject of study, the information shared, the relationships with others, the methodologies used, time management and the materials used, as well as the overall satisfaction with the intensive programme. Table 9.1 shows the questions asked to the participants.

TABLE 9.1

Questions asked to students and staff about the evaluation of the programme

How satisfied you were with event administration (1 = not satisfied, 5 = very satisfied)
How satisfied you were with the venue and facilities (1 = not satisfied, 5 = very satisfied)
How satisfied you were with event program (1 = not satisfied, 5 = very satisfied)
How satisfied you were with presentations (1 = not satisfied, 5 = very satisfied)
How satisfied you were with discussions (1 = not satisfied, 5 = very satisfied)
Please, mark your agreement (1 = strongly disagree, 5 = strongly agree) with the following statements:
Information shared during the event were new, clear, and useful
The event meets my expectations in terms of offered topics
Interaction with other participants was fruitful]
Distributed material is clear and useful
Discussions were relevant for the participants
Time management was fully satisfied
Working methods were appropriate
The overall organization was professional

Over the course of the five programmes, a total of 176 surveys were collected, 109 of which were from students, while the remaining 66 were from staff.

Firstly, the results of the surveys carried out on the **student participants** (Table 9.2 and Figure 9.2) show that the score for all the elements is considered positive, since the average ratings are always above the average value on the scale, which is 2.5. In this sense, the most highly aspect valued by students is the **interaction with other participants**, although **the material distributed, and the working methodologies used** were also highly valued. In terms of the lowest rated aspects, it is clear that **time management** is an aspect of the programme that needs to be improved, although it obtained an average score of 3.5, higher than the average on the scale. **The venue and facilities** also obtained an average score of below 4 (3.87).

TABLE 9.2

Assessment of student satisfaction

Item	Mean	Item	Mean
Event administration	4.08	Venue and facilities	3.87
Event program	4.02	Presentations	4.20
Discussions	4.24	Information shared	4.03
Offered topics	4.21	Interaction with other participants	4.34
Distributed material	4.32	Discussions	4.11
Time management	3.50	Working methods	4.28
Overall organization	4.18		

FIGURE 9.3
Assessment of student satisfaction

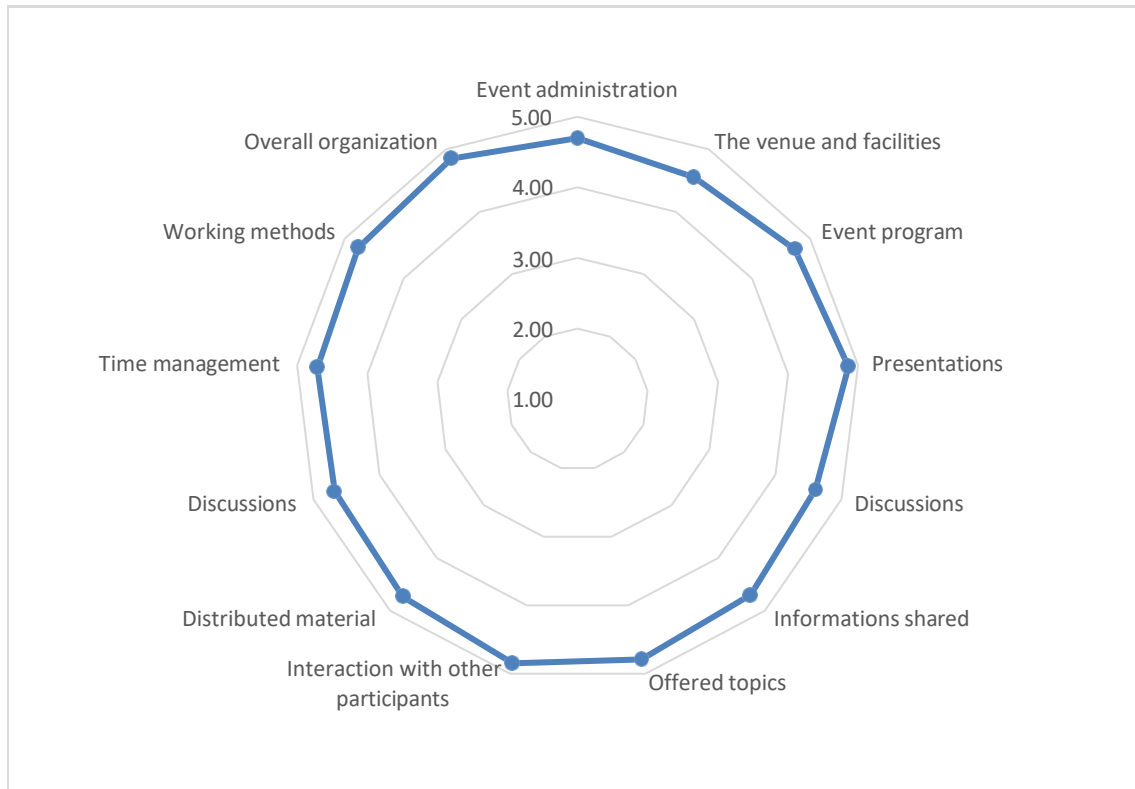


As for the results of the staff surveys (Table 9.3 and Figure 9.4), a very positive rating of all elements can be seen, always above 4. It should be noted that the **presentations, organisation, and interaction** with other participants have an average rating above 4.8. The lowest rated item is **the venue and facilities**, although its average rating is very high (4.55 out of 5).

TABLE 9.3
Assessment of student satisfaction

Item	Mean	Item	Mean
Event administration	4.70	Venue and facilities	4.55
Event program	4.74	Presentations	4.86
Discussions	4.61	Information shared	4.70
Offered topics	4.79	Interaction with other participants	4.85
Distributed material	4.73	Discussions	4.68
Time management	4.71	Working methods	4.77
Overall organization	4.85		

FIGURE 9.4
Assessment of staff satisfaction



On the other hand, the cross-disciplinary nature of the subject (new for many of the students) led them to being asked for their opinion on how this subject could contribute to their personal and professional development. To this end, a series of items were included to allow the students' opinion on the following aspects to be assessed using a Likert scale of 1-5 (Table 9.4):

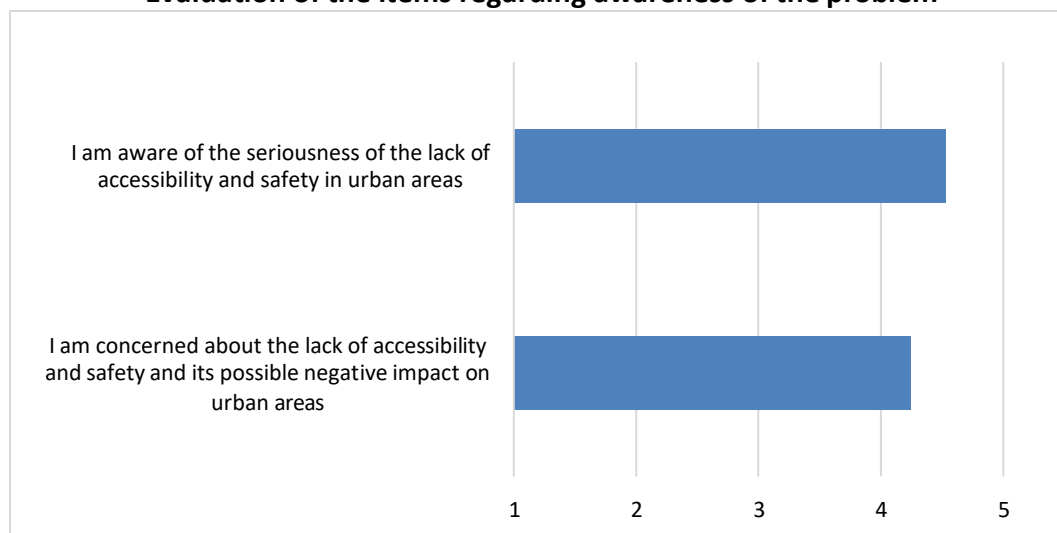
- **Awareness of the problem**, that is, the degree to which students, once the training programme is over, are aware of the accessibility and safety problems faced by urban areas.
- **Assignment of responsibility**, that is, the degree to which students, once they have completed the training programme, recognise the role they can play in improving the accessibility and safety problems of urban areas.
- **Intention of pro-social behaviour**, that is, the degree to which the knowledge acquired by the students in the programme that can be used in their personal and working lives.
- **Perceived usefulness**, that is, the degree to which the knowledge acquired by students in the programme will contribute to the development of their skills for future work, to the improvement of their CV and to their academic and professional development. Respondents were also asked about the suitability of this type of training being included more generally in university curricula.

TABLE 9.4
Questions asked of those about their awareness of the problem, their attribution of responsibility, their intention to behave in a pro-social manner and their perceived usefulness.

Awareness of the problem (Zhu et al., 2022)
I am concerned about the lack of accessibility and safety and its possible negative impact on urban areas.
I am aware of the seriousness of the lack of accessibility and safety in urban areas.
Ascription of responsibility (Zhu et al., 2022)
Every citizen is partially responsible for improving the accessibility and safety of urban areas.
Every citizen must take responsibility for improving the accessibility and safety of urban areas.
Pro-social behavioural intentions (Zhu et al., 2022)
I think I will use my knowledge on accessibility and safety in urban areas in my personal life.
I think I will use my knowledge on accessibility and safety in urban areas in my work life.
Perceived usefulness (Davis, 1989)
What I have learnt about accessibility and safety in urban areas will contribute to the development of my skills to perform a future job.
Having knowledge about accessibility and safety in urban areas will provide more quality to my resume.
Knowledge about accessibility and safety in urban areas should be achieved by all students for the development of their future job.
From this experience I have more information to incorporate accessibility and safety in urban areas in my academic and/or job development.

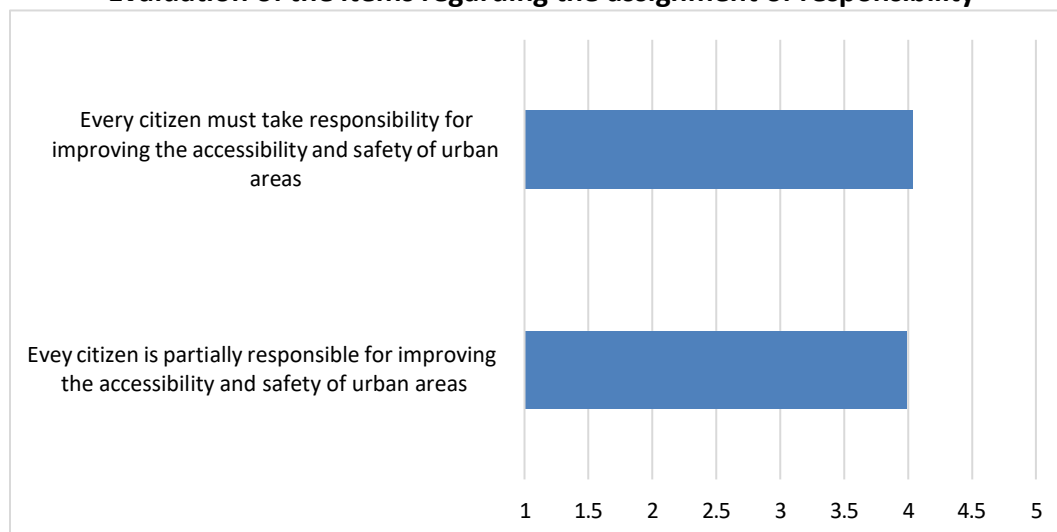
To begin with, the items on **awareness of the problem** (Figure 9.5) show very high average values, well above 4 (4.24 and 4.53), so it can be said that with thanks to the training programme, students are more aware of the seriousness of accessibility and safety problems in urban areas and the negative impact these problems have on them.

FIGURE 9.5
Evaluation of the items regarding awareness of the problem



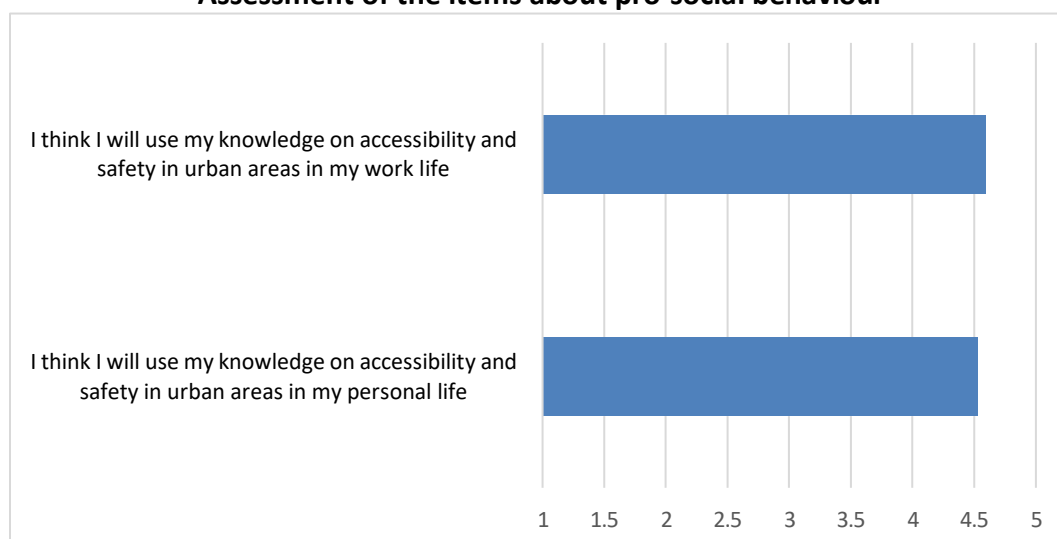
With regard to **the attribution of responsibility** (Figure 9.6), although the average values are high in this case, they are somewhat lower than those for awareness of the problem, standing at around 4 (3.99 and 4.04). In any case, these results show that the programme has helped participants become aware of the role that citizens can play in the accessibility and safety of urban areas.

FIGURE 9.6
Evaluation of the items regarding the assignment of responsibility



The items relating to the **intention to behave in a pro-social manner** (Figure 9.7) are those that show the highest average values (4.5 and 4.6), which shows that the students believe that what they have learnt during the training programme can be used both in their personal and working lives in order to help make urban spaces more accessible and safer.

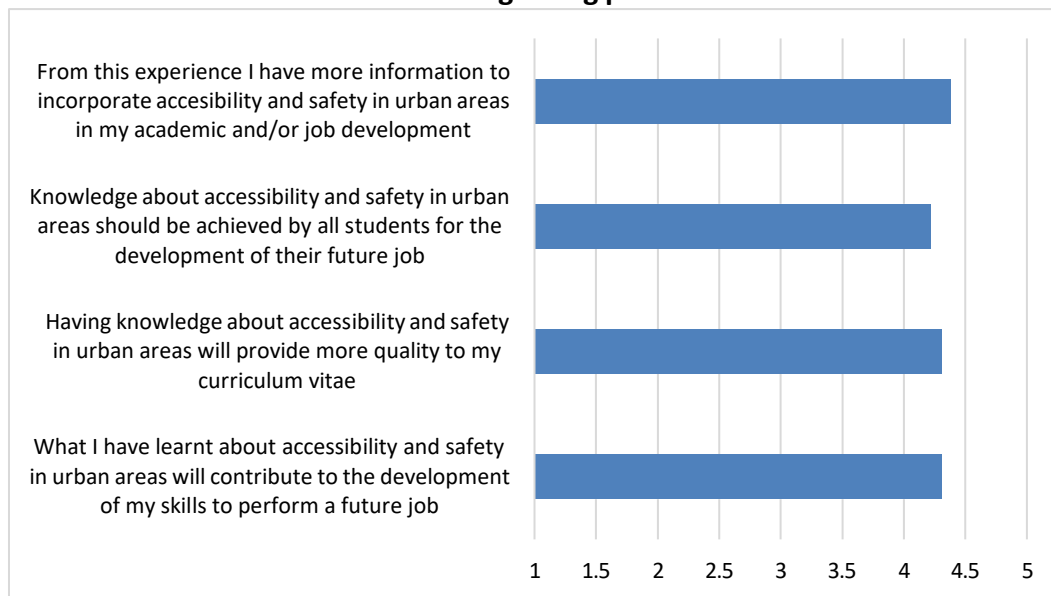
FIGURE 9.7
Assessment of the items about pro-social behaviour



Finally, the items about **perceived usefulness** (Figure 9.8) show the usefulness that the training programme has for the students, who consider that what they have learned during the

programme will contribute to developing their skills for a future job (average of 4.31), giving their curriculum vitae greater quality (average of 4.31), with the knowledge acquired during the week being key to their academic and professional development (average 4.38). Therefore, it is not surprising that students consider that the knowledge about accessibility and security acquired in training programmes such as the one developed in these programmes should be attained by all students for the development of their future work (average of 4.22).

FIGURE 9.8
Assessment of items regarding perceived usefulness



5. Conclusions

This chapter has allowed us to explain the operation of the Intensive Study Programmes (ISP) carried out within the framework of the Erasmus+ SAFE Project. In this sense, the different methodologies followed during the programmes have been discussed, such as Jane's Walks, Safety Walks, Critical Mapping, role-playing games, or Design of Future Scenarios, as well as the development of the programme in the various editions carried out.

On the other hand, the results obtained from the programme have been discussed based on the evaluations carried out by the students and staff of the project. Although the overall evaluation of the aspects evaluated is positive, it should be noted that both students and the project staff rate particularly positively the interactions that's taken place between the participants in the programmes, as well as other aspects such as the material distributed, the working methodology used, the presentations and the organisation of the training programmes. In terms of the aspects rated less positively, it is worth highlighting time management from the students' point of view and the venue and facilities from the point of view of both the students and the staff. Therefore, for future editions of programmes of this kind, it will be essential to monitor the timing of the activities carried out in detail and to ensure that the facilities in which they take place are suitable for a programme with such specific characteristics.

Finally, students were also asked about aspects such as their degree of awareness of accessibility and safety issues, the degree to which they recognise their role in improving accessibility and safety issues in urban areas and their intention to behave in a pro-social manner as a result of

their participation in the programme, as well as the perceived usefulness of the programme. The results obtained show that, thanks to their participation in the ISP, students:

- They are more aware of the problems of accessibility and safety faced by urban areas.
- They are more aware of the role they can play in achieving accessibility and safety in urban areas.
- They have gained knowledge that they will be able to use both in their personal and professional lives.
- They will include the training they have received on accessibility and safety in urban areas in their academic and professional development.
- They will improve their curriculum vitae.
- They have improved their skills for future employment.
- They consider that all students should receive training on accessibility and safety in urban areas for their future work.

In conclusion, the results obtained show that both students and staff are satisfied with the development of the training programmes. However, the most relevant aspect of the results obtained is that students perceive that, thanks to their participation in the programmes, they have a better understanding of the accessibility and security problems faced by urban areas in the European Union and have acquired a series of knowledge and skills that will be useful to them in their academic, professional and, above all, personal future.

Bibliographical references

- Alba Pastor, C. (2018). Universal design for learning: A didactic model to provide learning opportunities to all students. *Parents and Teachers / Journal of Parents and Teachers*, 374, 21–27.
- Bonwell, C. C., & Eison, J. A. (1991). *Active learning: Creating excitement in the classroom*. The George Washington University.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Evensen, K. H., Hemsett, G., & Nordh, H. (2021). Developing a place-sensitive tool for park-safety management: Experiences from green-space managers and female park users in Oslo. *Urban Forestry & Urban Greening*, 60, 127057. <https://doi.org/10.1016/j.ufug.2021.127057>
- Goličnik Marušić, B. (2015). Social behaviour as a basis for the design and development of green infrastructure. *Urbani Izziv*, 26, S130–S149.
- Gorbis, M. (2013). *The nature of the future: Dispatches from the social-structured world*. Simon and Schuster.
- Husar, M., Ondrejicka, V., & Scacchi, M. (2020). Involving citizens through walking: Urban walks as a tool for raising awareness in historic built areas. *IOP Conference Series: Materials Science and Engineering*, 960(2), 022087. <https://doi.org/10.1088/1757-899X/960/2/022087>
- Medina García, M. (2020). La universidad inclusiva: un reto de nuestro sistema educativo para garantizar el derecho a la educación. In: José J. Carrión Martínez, & L. Ortiz-Jiménez (Eds.), *Educación inclusiva: Abriendo puertas al futuro* (pp. 121-137). Dykinson.

Mir, M., Ashraf, R., Syed, T. A., Ali, S., & Nawaz, R. (2023). Mapping the service recovery research landscape: A bibliometric-based systematic review. *Psychology & Marketing*, 40(10), 2060–2087. <https://doi.org/10.1002/mar.21880>

Proshansky, H. M., Ittelson, W. H., & Rivlin, L. G. (1970). *Environmental psychology: Man and his physical setting*. Holt, Rinehart & Winston.

Sobreiro Santos, G., de Arantes Gomes, R., & dos Santos, E. A. (2018). PPGIS as an urban planning tool around airports. *Journal of Air Transport Management*, 69, 269–278. <https://doi.org/10.1016/j.jairtraman.2018.02.004>

Zhu, P., Chi, X., Ryu, H. B., Ariza-Montes, A., & Han, H. (2022). Traveller pro-social behaviours at heritage tourism sites. *Frontiers in Psychology*, 13, 901530. <https://doi.org/10.3389/fpsyg.2022.901530>

CHAPTER 10. POLICY RECOMMENDATIONS BASED ON THE EXPERIENCES OF SAFE PROJECT

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ABSTRACT

In this chapter, the main implications of the SAFE Project and this Handbook are presented. The implications reached correspond to the set of study perspectives considered (such as urban planning, social policies, gender, perceived safety, and tourism), as well as referring to the different lines of action developed (such as those based on analysis tools, fieldwork, educational and training experiences in situ and through online means). In addition, a series of suggestions are provided that may be of interest to public and private decision-makers to improve accessibility, perceived safety, and equity in urban environments. Emphasis is placed on universal design, the participation of citizens and vulnerable groups, the use of innovative methodologies, and intersectoral collaboration. Finally, knowledge transfer strategies are proposed for adaptation to other local contexts.

Keywords:

Accessibility, Safety, Equity, Vulnerable Collectives, Public policies

1. Introduction

Accessibility and safety in the urban spaces of the European Union is a key challenge for achieving inclusive and equitable societies. Despite progress made in recent years, barriers to equal access to public services and spaces persist. This situation may worsen in the coming years due to: (a) the growth of the group with access needs, ageing population, and the increase in the number of people with disabilities, which demonstrate the need to design cities that are more accessible and adapted to diverse abilities; (b) discrimination and social exclusion and the lack of accessibility, which have a negative impact on the integration of people with disabilities, migrants, older adults and other vulnerable groups, limiting their active participation in society; (c) the relevance of perceived safety and use of public space, the perception of safety in urban environments influences the mobility and well-being of citizens, especially women and the elderly, (d) the economic impact of inaccessibility, such as the exclusion of sectors of the population from the labour market and consumption due to architectural and social barriers, which affects the local economy and urban sustainability; and (e) challenges in policy implementation, since although European regulatory frameworks such as the European Pillar of Social Rights and the Strategy for the Rights of Persons with Disabilities 2021-2030 exist, their effective implementation varies between countries and cities.

The SAFE Project has generated knowledge on the accessibility and safety of urban open spaces and services in various European countries. Data from the SAFE Project indicates that many urban areas continue to present accessibility challenges for vulnerable populations. Concerns about safety, both in terms of infrastructure and perceived personal safety, also continue to be a significant problem. Addressing these issues is crucial to achieving the European Union's Sustainable Development Goals (SDGs), particularly SDG 11 on sustainable cities and inclusive communities.

This chapter presents policy recommendations based on the project's findings, with the aim of improving urban accessibility and perceived safety, promoting inclusive urban development from different perspectives and areas of knowledge. These recommendations are aimed at public entities, urban planners, and public and private services, as well as private sector stakeholders who wish to foster more equitable urban environments.

In this chapter, the main implications and lessons learnt throughout the development of the project and shared within this Handbook are identified and presented, in addition to the implications and recommendations identified which are aimed at improving the accessibility and perceived safety of urban environments. Finally, some lines of action are provided to enhance the transfer of these findings to different urban environments.

2. Main implications and lessons learnt for public institutions and other interested organisations

Achieving inclusive and safe societies is one of the main objectives of the European Union. The European Union's Urban Agenda has among its priorities, the achievement of cities in which all citizens, regardless of their origin, social status, gender, age, physical abilities, or economic situation, have equitable access to resources, opportunities, and services that the city offers (European Commission, n.d.a).

From the point of view of **Mapping accessibility tools applied to open spaces and services in urban areas (chapter two)**, the importance of open public spaces as key elements for social inclusion, quality of urban life and sustainable development has been conveyed. Based on their findings, the following implications are presented:

- **Universal Accessibility:** Public spaces should be designed with the diversity of users in mind, ensuring physical, cognitive, and sensory accessibility. The application of universal design is essential to guarantee the inclusion of people with disabilities and other vulnerable groups.
- **Citizen Participation:** Collaboration between authorities, experts and citizens is key to the co-creation of public spaces that reflect community needs. The 'Mapping' method used in SAFE has shown that active participation improves the understanding of spaces and their social impact.
- **Urban Safety:** Safety in public spaces is influenced by both structural design and users' perceptions. Strategies such as 'Jane's Walk' and 'Safety Walk' have shown that field evaluation allows for the identification of factors that affect perceived and real safety.
- **Environmental Impact and Sustainability:** Open public spaces play a fundamental role in mitigating climate change and improving urban well-being. Incorporating elements such as vegetation, water sources and resilient designs is essential to face environmental challenges.

Moving on to consider **accessibility and sense of safety (chapter three)**, the intrinsic relationship between accessibility and sense of safety in open urban environments has been shown. The perception of safety is subjective and varies depending on individual characteristics and contextual factors, but its consideration in the design of public spaces is fundamental for social inclusion and equitable mobility. The findings in this chapter allow us to identify the following implications:

- **Safety as a Pillar of Accessibility:** The feeling of safety has a direct influence on the accessibility of public spaces. Factors such as lighting, urban design and the presence of orientation elements are decisive in generating confidence in users.
- **Diversity of Experiences and Perceptions:** Safety is a subjective experience. Different groups, such as the elderly, children, and people with disabilities, perceive and experience safety in different ways. The inclusion of these perspectives in urban design is key to guaranteeing universal accessibility.
- **Impact of Citizen Participation:** Participatory methods, such as Safety Walks and Jane's Walks, allow for a better understanding of local needs and foster a sense of community belonging, improving perceived safety.
- **Urban Infrastructure and Technology:** The incorporation of smart technologies, such as automated lighting and community surveillance systems, contributes to improving security without compromising the inclusion or privacy of citizens.

From the area of **social policy and accessibility (Chapter 4)**, it can be seen that the importance of public open spaces in the social cohesion, well-being and sustainability of urban and rural communities has been highlighted. The effective management of these spaces requires a comprehensive approach that combines social, urban planning and environmental policies. The main implications of this study include:

- **Equity of access:** It is essential to ensure that open spaces are accessible to all social groups, including children, the elderly, and people with reduced mobility.
- **Citizen participation:** The management of these spaces must actively involve the community, allowing for the co-creation of solutions adapted to local needs.
- **Sustainability and resilience:** Design spaces that integrate nature-based solutions to improve environmental quality and reduce the effects of climate change.

- **Safety and well-being:** Effective urban design can reduce crime and foster healthy environments for recreation and social interaction.
- **Cross-sector collaboration:** Coordination between public, private and third sector entities is crucial to optimise resources and improve the management of open public spaces.

From **chapter five**, the incorporation of a **gender perspective in the urban planning of public spaces** is essential to guarantee more inclusive and equitable cities. The analysis carried out leads to several key implications:

- **Universal Accessibility:** Women and other gender diverse groups face specific barriers in accessing public spaces. Planning must consider safe, accessible, and well-lit routes.
- **Safety and Prevention of Gender-Based Violence:** Women perceive public spaces differently due to safety concerns. Improving lighting, surveillance and the design of spaces can reduce the risks of harassment and violence.
- **Equity in the Use of Spaces:** Cities have traditionally been designed from a male perspective, without considering the needs of women, children, and the elderly. The equitable distribution of urban resources and services must be prioritised.
- **Active participation in planning:** The inclusion of women and gender-diverse groups in decision-making is fundamental to creating more equitable and representative urban environments.
- **Impact on economic development:** The implementation of gender-focused urban planning favours economic growth by allowing more people to use urban spaces safely and effectively.

Accessible **Tourism (chapter six)** can be considered a key element for social inclusion and sustainability in the tourism sector, and therefore in different urban environments. Its implementation not only guarantees the right to leisure and culture for all people, but also presents economic and competitive benefits for destinations and companies. The main implications derived from the study include:

- **Universal Accessibility:** It is necessary to adopt Universal Design to guarantee environments, products, and services accessible to all people, regardless of their abilities.
- **Inclusion of 'invisible' disabilities (in addition to 'visible' ones):** The needs of people with sensory or cognitive disabilities or chronic conditions must be addressed in accessibility strategies.
- **Economic Benefit and Competitiveness:** Improving accessibility expands the potential tourist base, increasing demand and favouring the economic sustainability of the destination.
- **Co-design and Active Participation:** The inclusion of people with disabilities in the planning and development of infrastructure guarantees more effective and equitable solutions.
- **Regulatory Compliance and Quality Standards:** The application of international standards such as ISO 21902 allows the establishment of clear criteria for the management of accessible and quality tourism.

Meanwhile, **chapter 7** presents the main results of an original **study on accessibility and safety in open urban spaces within the European Union**, to identify areas for improvement in terms of making them more inclusive and safer. Based on the perception and experience of users in different European countries, several implications are identified:

- **Universal Design and Accessibility:** Accessibility should not be limited to the removal of physical barriers but should also include elements that facilitate the use of these spaces by all people, regardless of their abilities.
- **Perception of Safety and Use of Spaces:** Perceived safety directly influences the use of public spaces. Urban designs that incorporate good lighting, surveillance and open designs can encourage their safe use.
- **Mobility and Accessible Transport:** The lack of accessibility in public transport limits equal participation in urban life. It is essential to guarantee that all means of transport are inclusive and adapted to diverse needs.
- **Sustainability and Green Spaces:** The inclusion of more green spaces in urban design is a recurring demand from citizens and contributes to the physical and mental well-being of the population.
- **Impact of Gentrification and Tourism:** Increased tourism and gentrification can negatively affect the quality of life of local residents. It is necessary to balance economic development with the preservation of social inclusion.

The Handbook also discusses the development of an accessible online learning **community (chapter eight)**, as an opportunity to democratise access to education and training. Based on the experience of this project, several fundamental implications can be identified:

- **Inclusion and Equity in Learning:** Accessibility in virtual environments broadens educational opportunities for people with disabilities, the elderly and other groups with specific needs.
- **Universal Design and User Experience:** The application of Universal Design allows for the creation of intuitive and easily navigable digital environments for all types of users.
- **Reduction of geographical and economic barriers:** online learning platforms reduce transport costs and enable students from different regions to participate.
- **Sustainability and efficiency:** the digitisation of learning reduces the need for physical resources and contributes to environmental sustainability.
- **Adaptability and lifelong learning:** online learning environments must be flexible and enable the continuous updating of skills for an evolving labour market.

Finally, the Project offers an **evaluation of alternative approaches for increasing experience on accessibility and safety of open spaces and services in urban areas developed from intensive on-site training programmes (chapter nine)**. In these programmes, the study of perceived accessibility and safety, carried out in five European cities, highlights the suitability of the use of innovative methodologies to improve social inclusion and quality of life in European cities. Among the main implications are:

- **Awareness and Sensitisation:** Training in accessibility and safety must be a fundamental pillar in the education of urban professionals and citizens, promoting an understanding of the needs of vulnerable groups.
- **Active and Inclusive Methodologies:** The use of tools such as Jane's Walk, Safety's Walk and Critical Mapping facilitates the identification of barriers in the urban environment based on the direct experience of users.
- **Universal Design and Urban Planning:** The application of universal design principles allows for the creation of more accessible and safer spaces for all citizens, regardless of their abilities

- **Citizen Participation and Interdisciplinary Collaboration:** The integration of different actors, including citizens, administrations, and accessibility experts, which strengthens the co-creation of sustainable urban solutions.
- **Impact on Personal and Professional Development:** Training programmes in urban accessibility contribute to the acquisition of key competences in inclusion and safety, improving the employability of the participants.

3. Recommendations and guidelines to improve accessibility and perceived safety in urban spaces

Based on the experiences and findings of the SAFE Project, a series of recommendations are presented aimed at public entities and other organisations interested in improving accessibility and safety in urban spaces. These suggestions combine intervention strategies with guidelines for the transfer and adaptation of results to different urban contexts, promoting their application at local, national, and international levels.

Inclusive urban infrastructure and design:

- Apply Universal Design principles to public infrastructure and transport, ensuring physical and sensory accessibility.
- Implement accessible technologies such as braille signage, audio guides and assistance systems for people with disabilities.
- Incorporate accessible green spaces and recreational spaces, promoting the physical and mental well-being of citizens.
- Design spaces with adequate lighting, accessible furniture, and barrier-free mobility routes, guaranteeing the safety and comfort of all users.
- Create safe streets adapted for pedestrians, cyclists, and people with reduced mobility, prioritising sustainable and equitable mobility.

Citizen participation and inclusive governance:

- Actively involve vulnerable groups in urban planning decision-making, ensuring that their needs are considered.
- Establish platforms for dialogue between authorities, citizens, and companies for the co-creation of accessible and safe spaces.
- Institutionalise participatory methodologies such as Safety Walks and Jane's Walks, promoting the collaborative evaluation of the urban environment.
- Create urban observatories that facilitate the continuous evaluation of the accessibility and safety of cities, providing data for informed decision-making.

Awareness-raising and education on accessibility and diversity:

- Include educational programmes on accessibility at all levels of education, from basic education to university and vocational training.
- Promote awareness-raising campaigns on diversity and inclusion in urban environments, aimed at both citizens and the private sector.
- Train urban planners, architects, and public managers in inclusive design, ensuring that accessibility principles are part of urban planning.
- Integrate digital literacy into curricula, facilitating the use of accessibility technologies for greater autonomy of people with disabilities.

Safety and urban mobility:

- Incorporate safety as an essential criterion in urban design, guaranteeing well-lit spaces with good visibility to reduce the perception of risk.
- Implement participatory safety strategies and monitoring technologies, enabling the early detection of risks, and improving citizen confidence.
- Ensure that transport stops, stations and routes are safe and accessible, with adequate infrastructure for people with reduced mobility.
- Design specific infrastructure for vulnerable groups, including inclusive signage, assistance points and rest areas.

Transferability and expansion of results of the SAFE Project:

- Encourage the exchange of good practices through cooperation networks between cities and institutions, promoting successful strategies in accessibility and urban safety.
- Organise international forums and conferences to share experiences and knowledge on the management of accessible spaces.
- Implement joint projects that facilitate evaluation and improvement in diverse geographical and cultural contexts, adapting solutions to local needs.
- Develop flexible solutions that consider the socioeconomic, cultural, and legislative particularities of each region, guaranteeing their viability.
- Apply methodologies such as critical mapping and participatory evaluation to identify specific needs and design effective solutions.
- Integrate the gender perspective and the inclusion of vulnerable groups in urban design, ensuring an equitable and sustainable approach.

Continuous monitoring and evaluation:

- Establish accessibility and safety indicators to measure the impact of the policies and projects implemented.
- Carry out periodic audits in public spaces to guarantee the inclusion and safety of citizens.
- Create participatory feedback mechanisms, allowing for the evaluation of the effectiveness of the strategies adopted and their adjustment according to emerging needs.

International cooperation and global expansion:

- Promote alliances between European and global cities to strengthen the implementation of inclusive policies in different urban environments.
- Design training programmes in accessible digital education, urban mobility, and sustainable urban planning, improving the capacities of professionals in the sector.
- Adapt the principles and methodologies of the SAFE Project to regions outside the European Union with similar challenges in urban accessibility, expanding its global impact.

The application of these recommendations will guarantee the creation of more equitable, sustainable, and accessible urban environments for all citizens, strengthening social cohesion and inclusion.