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NEW CHALLENGES FOR XXI CENTURY CITIES

Global warming, ageing of population, reduction of energy consumption,
immigration flows, optimization of land use, technological innovation

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TeMA Journal was established with the primary objective of fostering and strengthening the integration between urban transformation studies and those focused on mobility governance, in all their aspects, with a view to environmental sustainability. The three issues of the 2024 volume of TeMA Journal propose articles that deal the effects of global warming, the ageing of population, the reduction of energy consumption from fossil fuels, the immigration flows from disadvantaged regions, the technological innovation and the optimization of land use.

TeMA is the Journal of Land Use, Mobility and Environment and offers papers with a unified approach to planning, mobility and environmental sustainability. With ANVUR resolution of April 2020, TeMA journal and the articles published from 2016 are included in the A category of scientific journals. The articles are included in main scientific database as Scopus (from 2023), Web of Science (from 2015) and the Directory of Open Access Journals (DOAJ). It is included in Sparc Europe Seal of Open Access Journals, and the Directory of Open Access Journals.

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1 (2024)

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Laboratory of Land Use, Mobility and Environment
DICEA - Department of Civil, Building and Environmental Engineering
University of Naples "Federico II"
Piazzale Tecchio, 80
80125 Naples

web: www.serena.unina.it/index.php/tema
e-mail: redazione.tema@unina.it

The cover image shows older people climbing Via Raffaele Morghen's stairs in Naples (Source: TeMA Journal Editorial Staff).

TeMA. Journal of Land Use, Mobility and Environment offers researches, applications and contributions with a unified approach to planning and mobility and publishes original inter-disciplinary papers on the interaction of transport, land use and environment. Domains include: engineering, planning, modeling, behavior, economics, geography, regional science, sociology, architecture and design, network science and complex systems.

With ANVUR resolution of April 2020, TeMA Journal and the articles published from 2016 are included in A category of scientific journals. The articles published on TeMA are included in main international scientific database as Scopus (form 2023), Web of Science (form 2015) and the *Directory of Open Access Journals* (DOAJ). TeMA Journal has also received the *Sparc Europe Seal* for Open Access Journals released by *Scholarly Publishing and Academic Resources Coalition* (SPARC Europe). TeMA is published under a Creative Commons Attribution 4.0 License and is blind peer reviewed at least by two referees selected among high-profile scientists. TeMA has been published since 2007 and is indexed in the main bibliographical databases and it is present in the catalogues of hundreds of academic and research libraries worldwide.

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REVIEW NOTES – Urban planning literature review

Exploring approaches and solutions for urban safety: a focus on women

Tonia Stiuso

Department of Civil, Building and

Environmental Engineering

University of Naples Federico II, Naples, Italy

e-mail: tonia.stiuso@unina.it

ORCID: <https://orcid.org/0009-0006-2474-8138>

Abstract

Starting from the relationship between urban planning and mobility management, TeMA has gradually expanded the view of the covered topics, always remaining in the groove of rigorous scientific in-depth analysis. This section of the Journal, Review Notes, is the expression of continuously updating emerging topics concerning relationships between urban planning, mobility, and environment, through a collection of short scientific papers written by young researchers. The Review Notes are made of five parts. Each section examines a specific aspect of the broader information storage within the main interests of TeMA Journal. In particular, the Urban planning literature review section presents recent books and journals on selected topics and issues within the global scientific panorama.

For the first issue of TeMA Journal volume no. 17, this section provides a comprehensive overview of the challenges and solutions related to women's safety in urban areas, using a variety of scientific sources and practical resources to illustrate effective approaches and innovative strategies. This contribution aims to examine these challenges and the solutions proposed in the scientific literature, specifically in books, journals, and reports.

Keywords

Urban safety; Urban planning; Literature review; Women

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1. Introduction

Today, 55% of the world's population lives in urban areas, equivalent to approximately 4.5 billion people. This percentage is expected to rise to 68% by 2050 (Rainmaking, 2020), generating opportunities for these territorial contexts but also enormous challenges in terms of social, environmental, and economic sustainability (Gaglione, 2023). Over half of the global urban population is composed of women (Ritchie & Roser, 2024), yet cities are not designed to meet their needs (Carpentieri et al., 2023). The built environment significantly impacts the quality of life of women; it can greatly limit their ability to move, be economically active, or simply enjoy the spaces in which they live (How Can Lighting Make Our Cities More Inclusive?, n.d.; Cardiracci, 2022). The women of diverse ages, gender identities, expressions, and socioeconomic conditions face numerous barriers and challenges throughout their lives in cities (UN-Habitat, 2021). Some of these stems from gender-based discrimination, resulting in higher levels of poverty, unemployment, unpaid care duties, difficulties in continuing education, experiences of violence and harassment, and ultimately exclusion or non-participation in decision-making processes in both public and private sectors. These issues are a global reality and are repeatedly highlighted by numerous studies and the media; it is enough to recall that according to an Engender analysis from 2022, women do not use outdoor public space as freely as men. So far, territorial governance has operated on the assumption of neutrality, but the historical and social context has inevitably led these strategies to have discriminatory or non-protective solutions for the most vulnerable members of society. The importance of designing with consideration for the diverse characteristics of users of urban spaces has been neglected; consequently, these spaces are not equally accessible to all, particularly to women. For example, since women are more likely to travel outside peak hours and since the infrastructure system is based on office hours, this makes them more dependent on low-frequency transport services (Cardiracci, 2022). Urban development undertaken within a framework of social inclusion involving all stakeholders and adopting approaches to participatory and inclusive urban planning provides approaches capable of ensuring walkability (Carra et al., 2022; D'Amico, 2023), sustainability, equality, and improvement of human rights (Andersdotter, 2021). On the other hand, it is important to emphasize that besides social and environmental factors, there are other factors to consider in an initial contextual analysis. In Italy, approximately 4,000 sexual assaults are reported each year. According to an ISTAT survey from 2015, six million 788 thousand women have experienced some form of physical or sexual violence in their lifetime, 31.5% of women between the ages of 16 and 70: 20.2% have experienced physical violence, 21% sexual violence, 5.4% more severe forms of sexual violence such as rape and attempted rape. Unfortunately, this number does not reflect reality; indeed, incidents of violence are much more numerous. In 88% of cases, women who have experienced sexual violence did not report it (the percentage rises to 95.6% if the perpetrator is Italian and drops to 75.3% if the perpetrator is foreign). Globally, it has emerged that in the United Kingdom, 97% of young women have experienced sexual harassment in public (UN Women, 2021); in Ireland, 55% of women feel unsafe traveling on public transport after dark (Cahill, 2020); in Brazil, 12% of transgender women have been attacked in public bathrooms (James et al., 2016).

2. Agreements and strategies developed at international level

Many authorities and global organizations are actively addressing the issue of gender inequalities within the context of sustainable development in urban settings. Across various locales, municipal administrations have crafted comprehensive blueprints aimed at fostering inclusivity and safety in urban landscapes (Sgambati & Stiuso, 2023), particularly ensuring women's security. In response to this imperative, extensive research and analysis has examined key agreements and methodologies formulated on a global scale to combat social inequalities, particularly in urban environments. These efforts emphasise a concerted effort to create equitable, safe and empowering urban environments that prioritise the well-being and dignity of all inhabitants, regardless of gender.

2.1 CEDAW (1979)

The CEDAW (Convention on the Elimination of all forms of Discrimination Against Women) is the most important legally binding international instrument regarding women's rights. The Convention outlines numerous measures to eliminate discrimination, and states that ratify the CEDAW commit not only to aligning their legislation with it, but also to eliminating any discrimination practiced by "individuals, entities, and organizations of any kind," as well as taking every appropriate measure to change discriminatory customary practices and traditions.

2.3 Sustainable Development Goals (2015)

In 2015, the United Nations promoted 17 goals for sustainable development, known as the Sustainable Development Goals (SDGs). These aim to safeguard the planet and the well-being of its inhabitants. They leverage a novel economic approach. The SDGs concerning gender equality and citizens' safety are three, specifically referring to their sub-goals:

- Goal 5: Achieve gender equality and empower all women:
 - Target 5c calls for adopting policies and legislation that promote gender equality;
- Goal 10: Reduce inequalities:
 - Target 10.3 is a sub-goal to ensure equal opportunities and reduce inequalities;
- Goal 11: Sustainable cities and communities:
 - Target 11.2 entails ensuring accessibility to transportation and safety on streets;
 - Target 11.7 aims to provide universal access to green and public spaces, making them accessible and safe for women, children, and the elderly.

For all sustainable development goals (SDGs), gender equality is both an enabling factor and an accelerator. Moreover, despite specifically addressing gender in the implementation of the 2030 Agenda for Sustainable Development, women's empowerment and gender equality are prerequisites underlying each of the 17 goals. Until we succeed in defending the rights of women and girls, we will never achieve justice and inclusion, as well as economies that work for all (Andersdotter, 2021).

2.4 New Urban Agenda (2016)

The New Urban Agenda (NUA) advocates for gender equality and the empowerment of all women and girls, emphasizing the need for a gender-sensitive approach in all aspects of sustainable urban development. The NUA also strategically supports the 2030 Agenda, ensuring that gender equality and women's empowerment are integrated into all social development goals. The NUA contributes to integrating a gender perspective into urban development and urbanization, recognizing women as important decision-makers and committing politically to addressing the specific gender challenges faced by women in urban settings (Andersdotter, 2021).

2.6 EU Gender Equality Strategy (2020-2025)

The Gender Equality Strategy 2022-2025 guides countries to accelerate advancements in gender equality and the empowerment of women over five years. It aims to surpass fragmented efforts and instead assist countries in decentralizing power and reforming economic, social, and political systems rooted in discrimination (EU Action for Equal Pay, 2021).

3. Best practices

To date, some countries around the world are developing and adopting solutions to enhance the safety and protection of women in their cities. However, it is crucial to focus on the outcomes and benefits these initiatives

are yielding to support their implementation, even though most ongoing projects lack a set of Key Performance Indicators (KPIs), which are indicators that allow monitoring and quantifying successes or failures. For instance, it is essential to highlight how cities that consider aspects of women's safety and protection within urban transformation governance enhance women's experiences and mobility within spaces, thereby improving their mental and physical well-being (Pelliccelli, 2022). Improving lighting and pedestrian mobility and creating multifunctional and multigenerational spaces can make cities safer, more accessible, and livable for all (United Nations Development Programme, 2016). This also boosts economic activity and creates new opportunities to generate income. The main solutions involve creating safer streets and public spaces based on physical characteristics; integrating and considering gender diversity in urban system strategies and plans; and preventing violence through law enforcement and increased awareness campaigns. Indeed, many campaigns encourage victims to report harassment through user-friendly mobile apps and online platforms, such as the campaign launched in London, 'Report it, stop it!'. Other solutions that deserve detailed description are outlined below.

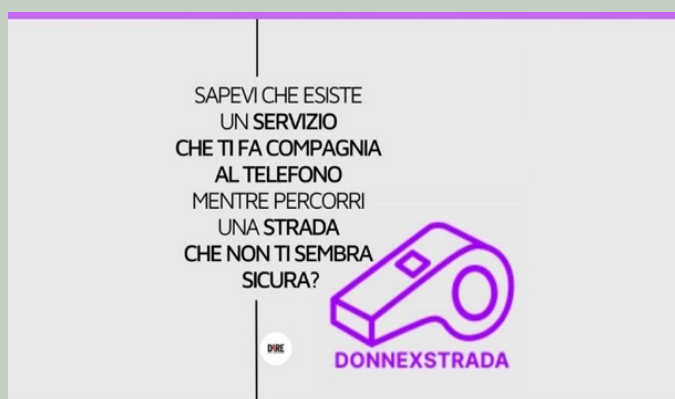
Wher – Mappe e città a misura di donna



'Wher' – is a safety reporting navigation app operated by Walk21 Foundation. Created in 2016 but actively on the market since January 2018, it is the first application that allows women to feel safer in unfamiliar cities by suggesting the best routes. It provides reviews on major Italian and European cities thanks to an all-female community. Once the app is downloaded, available for free on Google Android and iOS, users simply log in via their social networks. They input their mobility habits and select a city to start reading comments and descriptions posted by other women.

Each street is divided into three time frames (day, evening, and night), and already mapped streets are colored differently depending on the evaluation: green for safe areas, yellow for those to be traversed with caution, and magenta if they are best avoided. User judgments are based on perceived parameters such as lighting, crowd density, and personal feelings. The map also indicates useful services for women, such as public transport stops or pink parking spaces. To date, there are 20 mapped cities, including Turin, which was the starting city, Milan, Bologna, Rome, Palermo, Naples, and London (Lorenzini & Lorenzini, 2024).

Donnexstrada



Retrieved from: <https://donnaestrada.org/>

'Donnexstrada' is an Italian Association dedicated to addressing gender-based violence, particularly focusing on women's safety on the streets. Presently, the Association operates several services with the help of 80 volunteers and 100 professionals: "direttexstrada," which offers a 24-hour accompaniment service for individuals who feel unsafe on the streets, a counseling center providing specialized psychological support for women and gender-related issues, a platform for collecting testimonies to listen to and give

voice to those who have experienced harassment, abuse, or negative experiences on the streets or elsewhere, and a legal consultancy service for victims of gender-based violence. Additionally, through the so-called "Punti Viola" (Purple

Points), the Association aims to establish safe spaces for women in various commercial establishments (such as bars, restaurants, pharmacies, nightclubs, hair salons, and beauty centers), where staff will be sensitized and trained. Currently, the Instagram page has 165,000 followers.

'Safe City and Safe Public Spaces Report'



Authors/Editors: UN Women

Publisher: Nuria Felipe Soria and Andere Nieva, in collaboration with Laura Capobianco and Lizzette Soria, UN Women

Publication year: 2021

Retrieved from:

<https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2021/Safe-Cities-and-Safe-Public-Spaces-global-results-report-2017-2020-en.pdf>

Women's Global Flagship Programme Initiative Safe Cities and Safe Public Spaces, supported by over 15 donors from public and private sectors, is helping to increase the number of cities and public settings that have safe and empowering spaces for women and girls. The Initiative currently spans 27 cities from developed and developing countries. It focuses on the development of locally-owned human rights and evidence-based initiatives ending violence against women and girls, and supporting women's political participation and economic empowerment. The inaugural global report presents results across the initiative's "champion" cities – from Cairo to Kigali, Winnipeg to Quito, and New Delhi to Sakai. It stresses the need for comprehensive laws and policies that prevent and respond to sexual violence in public spaces, and highlights some of the encouraging initiatives that are already yielding results. The Safer Cities program is investing \$30 million over two years to help improve the perception of safety in our cities and countries, particularly for women, girls, and gender-diverse individuals. The program has three objectives, aligned with the UN's Safer Cities for Girls program:

- Enhancing the safety of women and girls and their access to public spaces.
- Allowing women and girls to move freely and independently within their communities.
- Increasing the involvement of women and girls in how the spaces around them are designed and managed.

The program engages women, girls, and gender-diverse individuals to understand their perspectives and co-design place-based approaches to enhance the perception of safety while walking to, through, and within public spaces, including our streets.

'Whose City? - An evaluation of urban safety for women in 10 countries' ActionAid 2017

Retrieved from: <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2021/Safe-Cities-and-Safe-Public-Spaces-global-results-report-2017-2020-en.pdf>

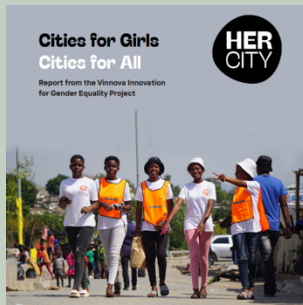


The report "Whose City?", released by ActionAid, reveals that women in several countries, including Bangladesh, Brazil, the Democratic Republic of Congo (DRC), Jordan, Liberia, Nepal, Nigeria, Senegal, South Africa, and Zimbabwe, continue to experience high levels of violence, harassment, and intimidation. The study employs a scoring system to evaluate countries based on the prevalence of physical and sexual violence against women, the existence of national legal frameworks and plans to address gender-based violence, and the integration of gender perspectives in urban planning, particularly concerning public transportation design.

While the scorecard does not cover all aspects of women's safety in cities, such as public services beyond transportation, it provides a preliminary assessment of key issues and challenges. The aim is to assist governments in recognizing areas where they fall short and prioritizing actions to enhance urban safety for women. Despite government commitments to ending gender-based violence through various rights instruments, national legislation, policy frameworks, and gender equality mainstreaming structures, the report underscores that women still do not fully enjoy their right to the city. Overall, women across these countries remain vulnerable to violence, harassment, and intimidation.

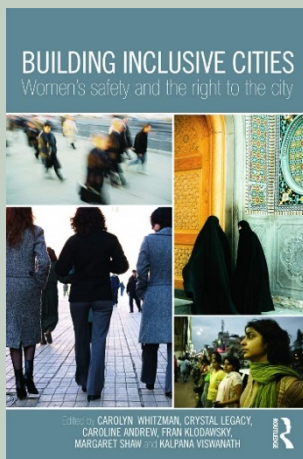
'Cities for Girls Cities for All - Report from the Vinnova Innovation for Gender Equality Project'
Her City – UN Habitat (2022)

Retrieved from: https://unhabitat.org/sites/default/files/2021/03/02032021_her_city_publication_low.pdf



'Her City' is a report published by UN-Habitat in collaboration with Vinnova Innovation for Gender Equality Project. The report focuses on promoting gender equality and inclusivity in urban environments. It likely includes research findings, case studies, and recommendations for creating cities that are safe, accessible, and accommodating for all residents, with a particular emphasis on the needs and experiences of women and girls. The report likely addresses issues such as transportation, urban planning, public spaces, and economic opportunities, aiming to inform policymakers and urban planners about the importance of gender-sensitive approaches in city development. Research shows that urban development, undertaken within a social inclusion framework involving all stakeholders and adopting inclusive urban planning approaches, provides the dynamics to deliver the pre-conditions for such shared urban prosperity: sustainability, equality, and improvements of human rights.

'Building Inclusive Cities: Women's Safety and the Right to the City' 1st Edition (Whitzman et al. 2013)



Editor: Carolyn Whitzman, Crystal Legacy, Caroline Andrew, Fran Klodawsky, Margaret Shaw, Kalpana Viswanath

Publisher: Routledge

Publication year: 2013

ISBN code: 978-0415628167

Expanding upon a growing movement across various regions, including Latin America, Africa, Asia-Pacific, Europe, and North America, this book explores advanced practices and constructs theories regarding a rights-based approach to ensuring women's safety amidst efforts for poverty reduction and social inclusion. Drawing from twenty years of research and grassroots initiatives focused on creating safer urban environments for women and all individuals, the book advocates for the right to inhabit an inclusive city.

The initial segment of the book outlines the myriad challenges women encounter concerning their access to vital services, housing stability, quality of life, and freedom of movement within urban spaces. In the subsequent section, the book critically

evaluates initiatives, projects, and concepts that aim to enhance urban safety.

"Building Inclusive Cities" adopts a cross-cultural learning perspective derived from action-oriented research conducted worldwide. It then translates these findings into theoretical frameworks to enrich the discourse on urban planning and management, applicable to both developing and developed nations. Ultimately, the book seeks to stimulate both contemplation and tangible efforts towards creating more inclusive urban environments.

'STEPUP – Walkability for women in Milan'

Retrieved from: <https://transformtransport.org/research/inclusive-mobility/step-up/>



The research project "STEP UP - Walkability for Women in Milan," which was submitted under the call for proposals "INEQUALITIES RESEARCH - Generating new knowledge to reduce inequalities" and funded by Fondazione Cariplo (Grant No. 2022-1643), concentrates on evaluating the walkability level for women in Milan, specifically focusing on their perceived safety at night. Transform Transport led the coordination of STEP UP from March 2023 to the end of February 2024, in collaboration with TeMA Lab - Università degli Studi di Napoli Federico II, Sex and the City, and Walk21 Foundation.

The objective of STEP UP is to assess the walkability level for women in Milan, with a particular emphasis on factors influencing their perception of safety while walking (refer to Figure 2). Initially, a thorough review of relevant literature was conducted to gather insights from scientific studies and policy guidelines on the subject. The findings of this literature review were then utilized to develop two main lines of analysis: (a) conducting surveys and focus group discussions in specific neighborhoods of Milan to gather additional insights from residents and city users, validating the results of the literature review and extending upon them; and (b) performing a GIS mapping analysis to examine how these findings manifest spatially. For constructing the GIS model, the outputs of the literature review were utilized to select pertinent geolocated datasets, which were sourced, organized, and refined from open data repositories and geoportals. This process aimed to investigate the relationship between factors influencing the perception of safety and women's reported perceptions of safety. Data pertaining to women's reported perceptions of safety while walking were gathered through 'Wher' - a safety reporting navigation app operated by the Walk21 Foundation. Subsequently, this data was analyzed via GIS techniques to develop a multi-layered map of Milan, focusing on areas that could be improved based on the most significant safety factors identified through a spatial regression model.

'Digital Data in Support of Innovation for Urban Practice: Women-Inclusive Walkable Cities—Naples, a Case Study.' (Carpentieri et al., 2023)

The present study advocates for increased investment in both qualitative and quantitative analysis. It proposes the utilization of Geographic Information System (GIS) methodology to gather data directly from women in urban areas, alongside other freely available location-based data. This approach aims to generate analyses that can assist policymakers in formulating policies related to walkability in urban settings, with a specific focus on gender inclusivity in urban planning. The contribution outlines the initial outcomes of a novel and replicable methodology applied to urban planning in Naples, Italy.

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Author's profile

Tonia Stiuso

She is an engineer and research fellow at the Department of Civil, Building and Environmental Engineering at the University of Naples Federico II. Her research currently focuses on the theme of urban sustainability, in particular the study of gender inequalities and adaptation to climate change.