*Article*

# Inclusion of Gender Views for the Evaluation and Mitigation of Urban Vulnerability: A Case Study in Castellón

Patricia Huedo [1,2], María José Ruá [1,2,3,*], Laura Florez-Perez [4] and Raquel Agost-Felip [3,5]

1   Department of Mechanical Engineering and Construction, School of Technology and Experimental Sciences, Jaume I University, Campus Riu Sec, 12071 Castelló de la Plana, Spain; huedo@uji.es
2   Universitary Institute of Feminist and Gender Studies, Jaume I University, Campus Riu Sec, 12071 Castelló de la Plana, Spain
3   Interuniversitary Institute of Local Development, Jaume I University, Campus Riu Sec 12071 Castelló de la Plana, Spain; ragost@uji.es
4   Bartlett School of Sustainable Construction, University College London, London WC1E 6BT, UK; l.florez@ucl.ac.uk
5   Departament of Developmental, Educational and Social Psychology and Methodology, Faculty of Humanities and Social Sciences, Jaume I University, Campus Riu Sec, 12071 Castelló de la Plana, Spain
*   Correspondence: rua@uji.es

**Abstract:** The inclusion of gender views in every field and, especially, in urbanism, has become crucial for urban planning. Considering both men's and women's interests in an integrated gender equality perspective provides better results that improve the quality of public spaces and engenders a more sustainable society. However, to realize such benefits, efforts are required not only to understand the needs and preferences of urban residents but also to shape policies and develop strategies to mitigate vulnerability with population involvement. In order to help decision makers at the urban level evaluate vulnerability with the inclusion of gender views, this study proposes a model that incorporates the specificities of urban fabric users that face adverse conditions. The model is based on a structured and standardized checklist of key topics that could be applied to any urban development. From this checklist, a list of categories, subcategories, and indicators were proposed and validated using the inter-judge agreement technique. To illustrate this model, this paper presents the case study of Castellón (Spain) in which deprived neighborhoods were analyzed, updating a previous model intended only to detect vulnerability. The results help link policy making to social vulnerability and indicate strategies to reach inclusive neighborhoods via a gender equality approach.

## 1. Introduction

According to the World Organization Prospects of 2018, Europe had nearly three-quarters of its population living in urban areas in 2018, and this is expected to reach 80% in 2040 and nearly 85% in 2050. The United Nations (UN) 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) adopted by UN Member States in 2015, embody a roadmap for progress that is sustainable and leaves no one behind. The 11th SDG focuses on sustainable communities and cities and calls for action to make cities and human settlements inclusive, safe, resilient, and sustainable. The 11th SDG also states that taking into account gender views is crucial to developing sustainable urban environments to minimize inequality. The 5th SDG, specifically centers on gender equality and calls for urgent action to eliminate the many root causes of discrimination that still limit women's rights in private and public spheres. These two goals are not the only ones that include gender equality as an integral part of inclusive and sustainable development. Achieving gender equality is transversally included in all 17 SDGs. The UN recognizes that only by ensuring gender equality, will there be justice and inclusion, economies that

work for all and leave no one behind, and a sustained and shared environment for present and future generations [1].

The New Urban Agenda (NUA) [2] is aligned with the SDGs and states that urbanization is a driving force for sustained and inclusive economic growth, social, and cultural development and protection of the environment. Consequently, special attention should be paid in urban areas to people in vulnerable situations (women, children, people with disabilities, and the elderly) by developing programs for regenerating distressed and inadequate areas such as slums. It is clear that urbanism in the 21st century needs to adapt to sustainable development, searching for inclusive and person-centered models, greener and more physically active areas, and spaces that are resilient to climate change through the reconfiguration of urban and transport structures [3–5]. Moreover, urban areas need to look for more social-oriented models promoting inclusion of vulnerable people and a commitment for gender equality, aligned with gender views.

Gender views are necessary for urban planning, as stated by the SDGs and NUA. However, the inclusion of gender views in urban planning policies (gender mainstreaming in urbanism, GMU) is limited [3]. Recently, it was found that, even in the Global North, the 5th and 11th SDGs have not been appropriately included in the urban planning of cities and towns. Specifically, government and private institutions (at all levels and processes) have not considered gender views from the urban population as well as gender experts. This needs to advance so that changes can last through time and can reach inclusive neighborhoods [6]. A strategy towards including GMU involves the integration of a gender perspective in the preparation and content of policies and an appropriate representation of gender across the decision-making process [3,7]. In addition to gender, other factors, such as age, mobility levels, socio-economic backgrounds, and social roles, must be taken into account [8]. Physical and social interaction must also be analyzed, for instance, how different social groups acquire public spaces and how they utilize them. Therefore, a more inclusive urban planning model could contribute to reduce inequalities by planning safer public spaces and adequate mobility chains, more facilities to support reproduction and care work, spatial structures that encourage new forms of collective self-organization, and safe and convenient transportation means among other factors [4,9–11]. This is especially relevant in areas where a higher index of vulnerable populations are concentrated. Urban vulnerability can be defined as the process produced by the combination of many disadvantaged dimensions in which any possibility of upward social mobility, and overcoming social condition exclusions, is extremely hard to achieve [12]. Usually, the more vulnerable and distressed areas lack basic services and have a higher number of obsolete buildings, unfavorable social characteristics, vulnerable people, and more prominent gender differences [12,13]. Since economic resources are limited, vulnerable areas should be prioritized to undertake urban interventions, as they have more problems and more urgent needs. In the 1960s, Henri Lefebvre highlighted that many urban processes had been a contributing source of inequality and injustice. This was due to the consideration of the space, such as a simple container of buildings and population, while he argued that space was constituted by social relations and that all groups should have a "right to the city". Since then, other authors have focused on this aspect, as it was analyzed by Susan Fainstein in [14]. Fainstein pointed out the role of urban policies to benefit disadvantaged social groups by implementing programs to enhance equity and to promote diversity, ending discriminatory zoning. GMU reflects all these issues perfectly and, as a result, a more inclusive model can be achieved by adopting this view [15–21]. The inclusion of GMU and gender mainstreaming in policy making is a transformative approach that has great potential for social development and change [22]. However, current literature in urban planning is scattered and lacks a standard method that may help decision makers evaluate vulnerability with a gender equality perspective, while, at the same time, looking at accommodating diversity, variation in geomorphological features, historical evolution, and particularities of urban environments.

This article proposes a model that improves urban planning for vulnerable areas with the inclusion of gender perspectives. The model is a set of indicators that help decision makers evaluate vulnerability in urban areas where residential and social unfavorable conditions concur. In addition, the indicators point out practical strategies that can be adapted by urban cities that aim to mitigate vulnerability and maximize gender inclusion in all aspects of a city.

To develop the indicators, an extensive list of structured and standardized key topics (extracted from the literature and complemented with real practices) was identified, which incorporate the gender perspective in urban planning. From this list, categories and subcategories were developed. The categories and subcategories are comprehensive and universal, so that any city that wants to include gender views can use these, ensuring that all aspects related to gender urban planning are included. From the categories and subcategories, a set of measurable indicators was proposed that help assess the extent of vulnerability in a city and the inclusion of gender. In this particular case, a set example of indicators was proposed for the city of Castellón (Spain). The set of indicators was reviewed and validated by experts with extensive experience in urbanism, architecture, and planning. Note that indicators are flexible and can be adapted to the specificities of any urban environment, while considering the availability of information. The ones proposed here can be a starting point for any city with similar conditions or re-adapted depending on the context of each city. The validated indicators were grouped into an Advanced and Inclusive Model (AIM) that helps decision makers evaluate vulnerability, include gender perspectives, and adopt measures with an integrated approach for sustainability in urban planning. To illustrate the operation of the AIM, the vulnerable areas in Castellón (Spain) were analyzed and discussed.

*Background*

Early studies in gender inclusion date back to the 1960s and contribute to visualizing the lack of attention paid so far to women's needs and requirements at the urban scale. In 1962, during a conference on urban planning in Berlin, Elena Arregui Cruz-López collected evidence related to housing and urban planning from the perspective of women in the report entitled "Participation of Women in Housing Problems" edited in 1964 by the Ministry of Housing [23]. Hayden (1980) identified the need to consider women's activities and how these fit into the environments of home, neighborhood, and city [24]. With this new perspective, in the 1980s and onwards, theoretical interest towards gender equality increased as scholars recognized that progress was slow and sector based. This work resulted in a relevant step to advance gender equality by increasing the social visibility of groups that had been particularly neglected during the planning process [25]. The concept of gender mainstreaming was first introduced at the 1985 Nairobi World Conference on Women (UN, 1985). It was established as a strategy in international gender equality policy through the Beijing Platform for Action, adopted at the 1995 Fourth United Nations World Conference on Women in Beijing, as a tool to promote gender equality at all levels (UN, 1995). In 1997, the United Nations Economic and Social Council (ECOSOC) defined gender mainstreaming as: "The process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. The ultimate goal is to achieve gender equality". In 1998, the Council of Europe defined gender mainstreaming as "The (re)organisation, improvement, development, and evaluation of policy processes, so that a gender equality perspective is incorporated in all processes by the actors normally involved in policy-making".

Following the efforts from the Council of Europe, the EU adopted the concept of gender mainstreaming in the Treaty of Amsterdam (1999) as a policy that placed the contribution of both men and women at the center of attention for development [19]. According to Valdivia, the first GMU studies [26] were crucial for increasing the theoretical interest in the connections between planning and gender and establishing the link between gender roles and spatial divisions. Greed emphasized the role of street layout, building

density, alongside the design of houses in social issues such as crime, security, childcare, traffic problems, and accessibility [27]. Larsson identified the imbalance between public–private, reproduction–production, and paid work–unpaid work in relation to the various levels of planning [28]. Carrasco analyzed the design of public space from the perspective of car users, resulting in a progressive loss of urban space for pedestrians and unsafe, congested, and noisy streets [29]. Sánchez de Madariaga argued that the care crisis entails a great opportunity to make a structural critique of the socioeconomic system and to incorporate gender as a central category of economic discourse [30]. Gender mainstreaming has now been widely recognized as a strategy that improves neighborhood and housing industry planning, creates suitable urban patterns, reliable transportation systems, and better structures of social services by increasing the participation of users, both men and women, in the planning and design of urban environments.

The Vienna City Council was a pioneer in gender mainstreaming applied to urban planning. In the 1990s, the Vienna Municipality introduced the gender perspective in public spaces and social housing and developed a set of actions resulting in many beneficial results [5,31]. By considering all users of public spaces, not only from a gender perspective but also from a social-, ethnic-, and health-related perspective, the city was able to better meet the needs and demands of all its citizens and thereby improve the quality of public services. Benefits included greater accessibility to cemeteries for the elderly, better lighting for increased safety in public spaces, and gender-sensitive education in day care centers to avoid traditional gender roles, among others. The Manual for Gender Mainstreaming in Urban Planning and Urban Development, published by Vienna's City Council in 2013, is a testament to this. It states that gender mainstreaming should be viewed as a "vertical issue" that supports the overall consideration of gender-sensitive aspects in all steps of the planning process to ensure high-quality planning [32]. Another successful implementation of gender mainstreaming into urban planning was the Women in Cities International work, initiated in Montreal in the early 1990s and widely adopted in gender-sensitive space design across Canada [33]. It aimed to increase the capacity of being seen in the public space by encouraging women's route choices within urban environments and an increase in activity in the streets [34]. Other successful examples of gender mainstreaming applied to urbanism include the cities of Dortmund in Germany [7], Thiva in Greece [35], Caracas in Venezuela [8], Bristol in the UK [36], and Blantyre in Malawi [37]. The inclusion of gender equality is an opportunity to find theoretical and political convergences between feminist economists and other schools of critical economists. Major structural changes in societies, such as the need for support services for families and dependent people, the recognition of care work for people, transportation and accessibility, and safer spaces, pose new challenges to urban planning, and GMU can practically guide these changes.

## 2. Materials and Methods

This research study was developed in various stages to answer the four research questions (RQ1 to RQ4) stated in Figure 1. Next to the research questions, the methodology employed in each stage is identified (seen in blue) as well as the main results obtained (seen in yellow).

The first stage was to build the theoretical framework to answer RQ1: what are the main gender issues in gender planning?

A literature review on gender views was undertaken to determine a structured and standardized list of key topics. The gender perspective derived from the review of academic sources was mainly linked to social sciences and health issues. An initial search in Scopus was performed using the keywords "Gender AND Urban Planning", and this led to 1584 references. The list was reduced to 175 references (including articles, books, and reviews) when the area of application was narrowed to urban studies. The same procedure in WOS resulted initially in 2035 references, and it was reduced to 110 references after the area of application was defined. Since there have been numerous studies around gender mainstreaming in urbanism within the Spanish context, the Spanish database Dialnet

was used, introducing the Spanish keywords "Perspectiva de Género y Urbanismo", and limiting the sample to journal articles, with an outcome of 541 references. These references were reduced by deleting those not directly connected to the topic. The review was supported by growing international policy-based literature (not reflected in the academic literature), which offered a good notion of the application of gender-sensitive practices to urban planning. Some general handbooks and guidelines from international organizations and from regional governments and municipalities, reflecting some successful practices and recommendations, were also reviewed. Particularly, the innovative examples of the cities of Montreal and Vienna. These two examples were useful sources on how to successfully integrate the gender perspective to urban planning and for considering that the city, or perhaps the neighborhood in bigger cities, can be the operative unit for urban planning.
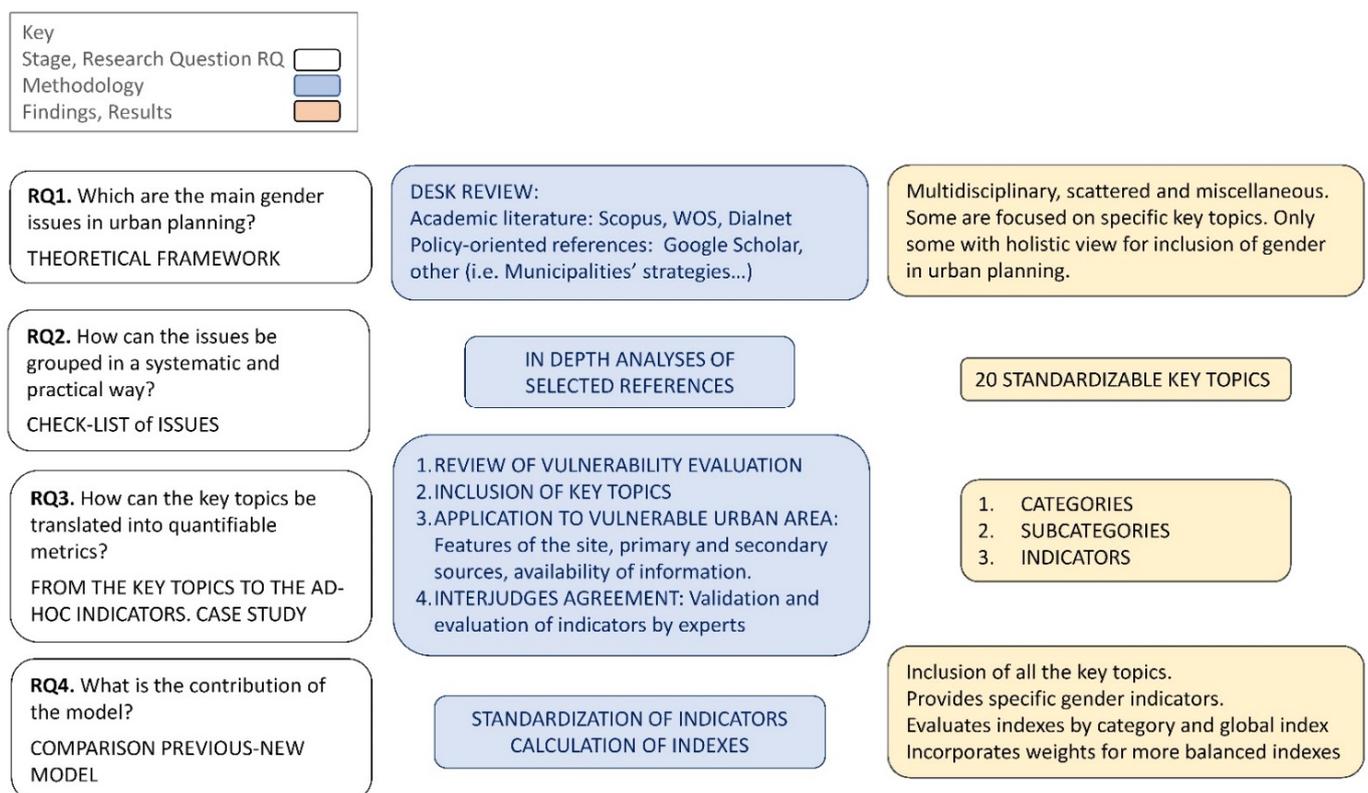
**Key**
Stage, Research Question RQ
Methodology
Findings, Results

**RQ1.** Which are the main gender issues in urban planning?
THEORETICAL FRAMEWORK

**RQ2.** How can the issues be grouped in a systematic and practical way?
CHECK-LIST of ISSUES

**RQ3.** How can the key topics be translated into quantifiable metrics?
FROM THE KEY TOPICS TO THE AD-HOC INDICATORS. CASE STUDY

**RQ4.** What is the contribution of the model?
COMPARISON PREVIOUS-NEW MODEL

DESK REVIEW:
Academic literature: Scopus, WOS, Dialnet
Policy-oriented references: Google Scholar, other (i.e. Municipalities' strategies…)

IN DEPTH ANALYSES OF SELECTED REFERENCES

1. REVIEW OF VULNERABILITY EVALUATION
2. INCLUSION OF KEY TOPICS
3. APPLICATION TO VULNERABLE URBAN AREA: Features of the site, primary and secondary sources, availability of information.
4. INTERJUDGES AGREEMENT: Validation and evaluation of indicators by experts

STANDARDIZATION OF INDICATORS
CALCULATION OF INDEXES

Multidisciplinary, scattered and miscellaneous. Some are focused on specific key topics. Only some with holistic view for inclusion of gender in urban planning.

20 STANDARDIZABLE KEY TOPICS

1. CATEGORIES
2. SUBCATEGORIES
3. INDICATORS

Inclusion of all the key topics.
Provides specific gender indicators.
Evaluates indexes by category and global index
Incorporates weights for more balanced indexes

**Figure 1.** Stages and methodology.

From the review, it was found that gender perspective in urban planning research has typically focused on safety [38–41], women's participation in urban planning [42–44], accessibility [45,46], care services [47], transport [48,49], and housing [50]. Research on site-specific problems has also considered its link to different views (in particular cultural contexts and environments) [39,51] but rarely included criteria of gender views in urban design with a holistic approach aimed at improving conditions in vulnerable areas. The latter was the basis to propose a model of indicators that include gender views in urban planning in distressed areas. Consideration of this holistic approach is important because a factor of vulnerability related to underrepresentation may be addressed by including gender aspects. In other words, efforts are required to understand the needs and preferences of urban residents, both men and women. Equally, one gender aspect may assist in developing another aspect, and this will help shape policies and develop strategies to mitigate vulnerability with population involvement. These considerations enrich research by offering insights into the interplay between vulnerability, gender, and urban planning.

The second stage was to develop a checklist with all of the key concepts identified in the review to systematically apply gender views into urban planning. This stage answers

RQ2: How can the issues be grouped in a systematic and practical way? Once the review was completed and the key topics were identified, these were organized into the categories of vulnerability (from the previous model) while considering research studies on vulnerability [52]. The categories were then divided into subcategories that matched the key topics in gender. The subcategories are comprehensive and universal, so that any city that wants to include gender views in the evaluation of vulnerability can use these.

As shown in Figure 1, from the review, 20 key topics for evaluating gender-sensitive urban design were identified. The key topics include gender views, are grounded, and standardized, that is, they are practical and can be systematically used in different urban contexts.

The third stage was the application of the categories and subcategories to evaluate gender views using a case study. This responds to RQ3: How can the key topics be translated into quantifiable metrics?

As urban planning is inevitably dependent on the specificities of the physical layout and the socio-economic features of each context, for clarity it was necessary to organize the key topics in categories and subcategories. From the categories and subcategories, measurable indicators were proposed that could be used to evaluate vulnerability with a gender perspective, especially in vulnerable areas. In order to validate the indicators, the initial list was subjected to an evaluation from experts. The purpose of the experts' assessment was to determine whether the set of indicators was comprehensive and in agreement with actual and local needs. The selection of the experts was based on the following criteria: independent, knowledge in gender perspective in the urban environment, similar educational and cultural background, and more than 10 years of experience in architecture, urbanism, and planning [53]. A group of nine experts evaluated the model through a survey in May 2021. The experts held the following positions (number of years of experience are in parenthesis): Head of the Valencian Institute of Building (25); Professor at University of Zaragoza and Director of "Cátedra Zaragoza Vivienda" in the School of Architecture funded by the Zaragoza Housing Municipal Society (22); Professor and expert in Gender Mainstreaming in University of Seville (20); President of the Professional Association of Architects in Castellón (21); Head of the Department of Social Services in the Municipality of Castellón (35); two PhD architects conducting research (Polytechnic University of Valencia (20) and University of Seville (12)); two architects–urbanists from professional studios (both with 15 of professional experience). Initially, there were 12 people in the group of experts, but three surveys were not included because the expertise did not exceed 10 years of professional career. The final group consisted of 7 women and 2 men, representing researchers and experts from the academic, professional, and institutional world in order to have a broader perspective. They were selected because of their knowledge with the topic and on the particularities of the case study.

The evaluation from the experts was performed in line with the inter-judge agreement technique [54,55]. This is an expert consultation technique based on the agreement among different people with similar expertise and knowledge in a particular field. The experts were asked to respond to a survey to evaluate the relevance of the proposed indicators, using a five-point Likert scale, (1—not important (NI), 2—slightly not important (SNI), 3—not important nor important (NNI), 4—important (I), and 5—very important (VI)). The survey also had open-ended questions, where experts were required to suggest new indicators not included in the initial list and to make suggestions for the model. With the responses from the experts, each indicator that reached a minimum level of 50% agreement value (from the experts) was accepted. As the level of agreement measured the perceived importance of the indicators, it was used as a weight factor of each indicator. The aggregated weights were used in order to obtain a global index.

To obtain the global index, the values of the indicators had to be standardized. To do so, the interval linear scaling technique was used to obtain synthetic indices with comparable levels among all the different indicators [56]. The standardized value $Ivul_i$ was calculated according to two scenarios:

Here is a direct relation between the index and the indicator. For example, the percentage of dwellings with lack of accessibility conditions is directly linked to the number of users. This is calculated using Equation (1):

$$Ivul_i = (vi - vi_{th})/(vi_{max} - vi_{th}) \tag{1}$$

In Equation (1), $Ivul_i$ = vulnerability for indicator i, vi = estimated value for indicator i, $vi_{th}$ = threshold value indicating vulnerability for indicator i, and $vi_{max}$ = maximum value observed for indicator i.

There is a reverse relation between the index and the indicator. For example, the greener area, the less vulnerability. The calculation is made using Equation (2):

$$Ivuli = (vi - vi_{th})/(vi_{th} - vi_{max}) \tag{2}$$

In Equation (1), Ivuli = vulnerability for indicator i, vi = estimated value for indicator i, $vi_{th}$ = threshold value indicating vulnerability for indicator i, and $vi_{min}$ = minimum value observed for indicator i.

This standardization resulted in dimensionless indicators, with values in the interval [0,1], where 0 represents no vulnerability, and 1 represents maximum vulnerability. In other words, the closer the indicator was to 1, the higher the vulnerability. As the number of indicators (n) can vary from one category to another, and in order to assign the same weight to each category, the index of vulnerability for each category $Ivul_j$ was calculated, using Equation (3):

$$Ivul_j = \sum f_i \times Ivul_i / n \tag{3}$$

In Equation (3), $Ivul_j$ = index for category, f = weight according to experts for indicator i, Ivuli = estimated value for indicator i, and n = number of indicators in category j.

The global index was then obtained, representing the sum of the indexes of all categories, which allowed for the detection of the highest vulnerability from an integrated view. The equation for the global index is the sum of all categories as defined by Equation (4):

$$IGvul = Ivulj / m \tag{4}$$

where IGvul is the global index of vulnerability, and $Ivul_j$ is the index of vulnerability for category j; m: number of categories.

This global index (see Equation (4)) is a combination of categories and indicators that are used to evaluate the gender view in any urban intervention. To illustrate the model, a case study of Castellón is presented below.

Since this model includes the vulnerability aspect (from the previous model) and the inclusion of gender views, the answer to RQ4 is stated, i.e., the contribution of this new model is described and stated in the Discussion and Conclusion sections.

## 3. Results

### 3.1. Key Topics for Gender-Sensitive Urban Design

From the desk review of the literature, 40 references were selected because these offered a comprehensive approach to achieving gender-sensitive urban design (see Table 1). From the references, 20 key topics for the applicability of gender views in urban planning were identified:
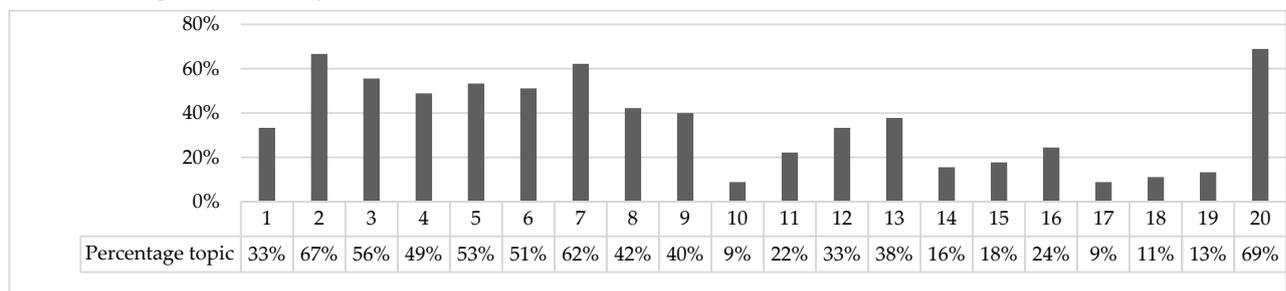
1.  Compactness is connected to the form and arrangement of urban areas including spatial design, distribution of land-use subcategories, and transportation networks. A compact city makes it considerably easier to reconcile the requirements of work and family life [57];

2.  Public open space includes parks and reserves; sport fields; riparian zones, such as streams and riverbanks; greenways and trails; community gardens; street trees; nature conservation areas [58]. These spaces are available for users and where the public life of the city plays out and civic identity is defined [59];

3.  Mobility and public transport is often framed as a vital component to developing sustainable cities [3,60]. A well-designed and citizen-friendly transportation system improves the compatibility of work life and daily tasks [61];

4.  The perception of safety in public spaces promotes the feeling of security in public spaces, and special attention must be paid to provide adequate lighting in walking paths for pedestrians and walls, fences, and stairs that create hidden corners with difficult accessibility. According to Chestnutt, linking buildings to outdoor spaces can create amenity value and ensure sufficient options for the appropriation of public spaces [62];

5.  Walkability and accessibility: The goal is to create infrastructure, urban spaces, and equipment tailored for people's needs in order to ease pedestrian and autonomous mobility. This refers to wide sidewalks, with differentiation of materials, colors, and textures, railings and ramps in sloped areas, differentiated pedestrian crossings with traffic lights, and benches with shadows. This not only supports people with reduced mobility but also facilitates people's lives with caregiving and family responsibilities [63];

6.  Mixed-use planning in terms of urban development where residential, commercial, cultural, institutional, or entertainment uses are physically and functionally integrated and provide pedestrian connections. The goal lies in preserving and/or developing a decentralized distribution of facilities based on measures that promote public service and infrastructure facilities close to public transport stops [64];

7.  Care facilities and equipment supply is expanded when society recognizes, assumes, and values work derived from gender roles. The goal is to create or improve access to care facilities for dependent people, the elderly, or children, ensuring accessible and affordable services. Additionally, it enables people with care responsibilities to balance these with their work activities;

8.  Visibility of women: Gendered stereotypes can have the effect of promoting fixed ideas about what women can become and their needs [65]. The aim is to make women visible in cities with measures such as placing names of prominent women in history to streets and squares in the city, promoting equal urban signs, and controlling discriminatory adverts;

9.  Housing design to improve affordability: Currently, there are different types of families, so housing must be designed according to the particular needs of each family. Various funding and development models as well as different types of housing all guarantee a high level of potential for assimilation of the diversity of user groups [62];

10. Energy-efficient housing: The deterioration and lack of insulation in many homes results in higher costs to keep them at a suitable temperature, which is not affordable. The urban agenda of the EU partnership on housing has found that women and, especially low-income and vulnerable groups of women, are more likely to experience energy poverty [66];

11. Accessible housing should be seen as a way to facilitate greater autonomy for dependent people, guaranteeing universal accessibility to and inside houses [67];

12.  Quality housing: Marginalized women are also likely to be impacted by the lack of quality housing. This results in temporary or precarious accommodation [68];
13.  Disaggregated statistical data by gender are of interest to sociologists and social workers to determine actual statistical results [69]. Information should be disaggregated based on sex to compare and contrast the situation that men and women, and boys and girls, experience in terms of accessibility, opportunities, roles, and responsibilities;
14.  Violence and security: Violence against women is a violation of human rights. Municipal plans could be revised to include steps to limit violence against women by providing shelter and refuge and support for organizations offering special assistance to women [3]. Security, related to the influence of police interventions on human safety and other factors contributing to the well-being of neighborhoods, should be incremented [70,71];
15.  Social housing involves ensuring allocation and other resources based on balanced social priorities. Women with low incomes are disproportionately represented, as they are often the head of households in single-parent families. Thus, poor women and single parents are more reliant on social housing than men [72];
16.  Paid and unpaid work: Urban planning strategies are often based on a unilateral vision of the economy; that is, it only measures the paid work of employed people who drive a car to get to work and during regular working hours. In most cases, care responsibilities or unpaid work are not taken into account. Plans should include aid for unpaid work [73];
17.  Social subsidies: Economic aid is available for basic needs (food, hygiene, and school canteens), housing expenses (rent, energy poverty, water, electricity, and gas supply), other expenses (nursery schools, glasses, appliances), and job training. Data regarding beneficiaries of social service aid inclusion indicate there is a vulnerable population of women who take care of dependent people and do not have access to these aid programs [66];
18.  Level of education: Urbanization involves major changes in the way people work and live. It offers opportunities for improved standards of living, higher life expectancy, and higher literacy levels [73]. Certain groups of women are particularly vulnerable, especially those with low levels of education and skills.
19.  Housing market: The cost of accommodation in inadequate and overcrowded housing takes up a disproportionate part of low-income people's earnings [73]. Housing is a major factor in urban poverty affecting women;
20.  Women's and men's participation in formal and informal decision making is uneven. Gender equality must be guaranteed at all levels, because women are underrepresented not only in the political scene but also in decision making within their villages, the private sector, and in civil society (OCDE, 2020).

Once the 20 key topics were identified, they were then grouped into categories and subcategories for the implementation of gender mainstreaming for urban planning. Table 1 presents the main references on gender and urban planning that were reviewed and synthetized, tagging the identified key topics. The last row in Table 1 presents the frequency (as a percentage) of each topic. Note that women's role in decision making (key topic 20) is present in most of the references (69%), followed by public open space (key topic 2) (67%), care facilities (key topic 7) (62%), and mobility–public transport (key topic 3) (56%). This is in contrast to two key topics, energy efficiency and social subsidies (key topics 10 and 17), which are named in only 9% of the references, followed, surprisingly, by women's level of education (key topic 11) (11%).

**Table 1.** Final selection of references from the desk review and identification of key topics.

| References, Year, Country, Type of Document | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Jacobs, 1961 [74], US, (B) | x | | | | x | | | | | | | | | | | | | | | |
| Hayden, 1980 [23], US, (A) | | | | | | | x | | x | | | | | | | x | | | | |
| Kennedy, 1981 [75], Germany, (A) | | x | | | | | | | x | | | | | | | | | | | |
| Sarmento and Pareja, 2002 [76], Brazil, (A) | | | | | | | | | | | | | | | | | | | | |
| Sánchez de Madariaga, 2004 [30], Spain, (A) | x | x | x | | x | x | x | | | | | | | | | | | | | x |
| Venturi and Scott, 2004 [77], US, (B) | | | | | | | | x | | | | | | | | | | | | |
| García-Ramón et al., 2004 [17], Spain, (A) | | | | | | | | | | | | | x | | | | | | | x |
| Federation Canadian Municipalities, 2004 [78], Canada, (R) | | x | | x | | x | | x | x | | | x | x | | | | | | | x |
| Sánchez de Madariaga et al., 2005 [68], Spain, (A) | x | x | x | | x | x | x | | | | | | | | | x | | | x | x |
| Cucurella et al., 2006 [79], Spain, (A) | | | | x | | | x | | | | | | x | x | | | | | | x |
| Amin 2006 [80], Afghanistan, Bahrain, Egypt, Iran, Iraq, Palestine (Gaza), Qatar, Syria, Uzbekistan (B) | | | | | | | | | | | | | x | | | | | | | |
| Sweet and Ortiz, 2010 [8], Mexico, US, (A) | | x | x | | x | | x | | x | | | | | x | | | | | | |
| Curran, 2010 [81], US, (A) | | | x | | | | x | | | | | x | | | x | x | | | | |
| Muxí and Giocoletto, 2011 [64], Spain, (A) | x | x | | x | x | | x | | x | | | | | | | | | | | x |
| Muxí et al., 2011 [82], Spain, (A) | | x | x | x | x | x | x | x | x | | | x | | | | | | | | |
| Turner, 2011 [83], UK, (A) | | x | x | | x | | | | | | | | | | | | | | | |
| Gutiérrez, 2011 [84], Spain, (A) | | x | x | | | | x | | x | | | | | | | | | | | x |
| Tacoli, 2012 [73], UK, (R) | | | | | | | x | | | | | x | | x | x | x | | | x | |
| Ciocoletto, 2012 [85], Spain (R) | x | | | | x | x | | | | | | | | | | | | | | x |
| Tummers, 2013 [86], Italy (A) | | | | | | | x | | | | | | | | x | | | | | |
| Kneeshaw & Norman, 2014 [65], US, (R) | | x | x | x | x | x | x | x | | x | x | x | x | x | | x | | | | x |
| Gregorio, 2014 [31], Spain, (A) | | | | x | | | | | | | | | | | | | | | | |
| Ciocoletto, 2014 [87], Spain, (DT) | | x | x | | x | | | | | | | | | | | | | | | x |
| Tummers, 2015 [88], France, (A) | x | x | x | | x | | | | x | | | x | | | | | x | | | x |
| Majedi, 2015 [89], India, (A) | x | | | | | | | | | | | | | x | | | | | | x |
| Sánchez de Madariaga and Neuman, 2016 [11], Spain, (A) | | x | | | x | | | | | | | | | | | | | | | x |
| González, 2016 [66], Spain, (R) | | | | | | | | | x | | | x | | | x | x | | | x | x |
| Schreiber and Carius, 2016 [90], Spain, (BC) | x | x | | | x | x | | | | | | | x | | x | | | x | | x |
| Mateo-Cecilia, 2016 [91], Spain, (A) | | | | | | | | x | | | | | | | | | | | | x |
| Jazmin, 2016 [92], Argentina, (A) | | | | | | | | | | | | | | | | | | | | x |
| Beebeejaun, 2017 [93], UK, (A) | | x | | x | | | | x | | | | | | | | | | | | x |
| Atehortua, 2017 [8], Venezuela, (BC) | | x | x | x | x | | | | | | | | | | | | | | | |
| Martin, 2017 [94], Spain (BC) | | | | | | | | | | | | | | | | | | | | x |
| Valdivia, 2018 [21], Spain A | | x | x | x | | x | | | x | | | x | x | | | | | | | x |
| Álvarez and Gómez, 2018 [69], Spain, (R) | x | x | x | x | x | x | x | x | x | | | | x | | | | | | | x |
| Arora, 2018 [95], Saudi Arabia, (R) | | x | x | x | x | | | x | | | x | x | x | | x | x | | x | | |
| Thi-Thanh-Hien, 2019 [96], Vietnam, (A) | | x | x | x | x | | | | | | | | | | | | | | | |
| Gargiulo et al., 2020 [38], Spain A | | | | x | | x | | | | | | | | | | | | | | |
| Arefian and Moeini, 2020 [97], Switzerland, (B) | | x | | x | | | | | | | | | | | | | | | | |
| Sepe, 2020 [10], Italy, (A) | x | x | x | x | x | | | | | | | | | | | | | | | |
| **Percentage topic** | 33% | 67% | 56% | 49% | 53% | 51% | 62% | 42% | 40% | 9% | 22% | 33% | 38% | 16% | 18% | 24% | 9% | 11% | 13% | 69% |

(A): Article; (B): book; (BC): book chapter; (R): report; (DT): PhD thesis.

### 3.2. Case Study

This case study was based on the city of Castellón, Spain. Castellón de la Plana is a medium-sized Mediterranean coastal city with approximately 170,000 inhabitants located in east Spain. A study undertaken by Alcañiz and Fuertes showed that, despite the advances implemented in the last few years to include vulnerable people in urban planning, women are still underrepresented. In fact, they point out that there is a clear feminization of poverty despite the fact that the city's population of women is approximately 50% [98]. The complexity of negative phenomena in poor neighborhoods overlaps with the already

multidimensional phenomenon [99]. The recently developed Urban Land Plan of Castellón identified vulnerable areas in the city and a previous model was used to assess vulnerability [52]. This previous model was validated by a user-assisted methodology (participatory processes), where ad hoc indicators were selected according to the features of the city and the information available. The previous model was organized into four categories: urban (U), building (B), socio-demographic (SD), and socio-economic (SE).

As Castellón continues to grow, there are still vulnerable people (and especially women) that are not included in urban planning. Vulnerable areas that could benefit from the inclusion of GMU were selected for this study. These areas are called renewal, regeneration, and rehabilitation (ARRU) according to Spanish regulations (LOTUP, 2014). Table 2 shows the ARRUs and Figure 2 presents their location. Note that the ARRU must be defined to prioritize the interventions to undertake the renovation and regeneration of the urban environment and to grant subsidies to citizens to improve their dwellings and to contribute to the city's sustainable development. The selection of these areas was based on the recently developed Land Plan of the city [100]. With the use of the categories and subcategories an initial set of indicators was developed. The validation of the initial set of indicators was conducted with the input from nine experts considering the specificities of the city of Castellón. Weights applied to the indicators were inferred from the inter-agreement technique and the experts' responses in order to obtain results that were more accurate. The validated set of indicators constitute the advanced and improved model (AIM). To showcase the capability of the AIM, the results from the analysis of the city are presented and discussed.

**Table 2.** The 17 ARRUs.

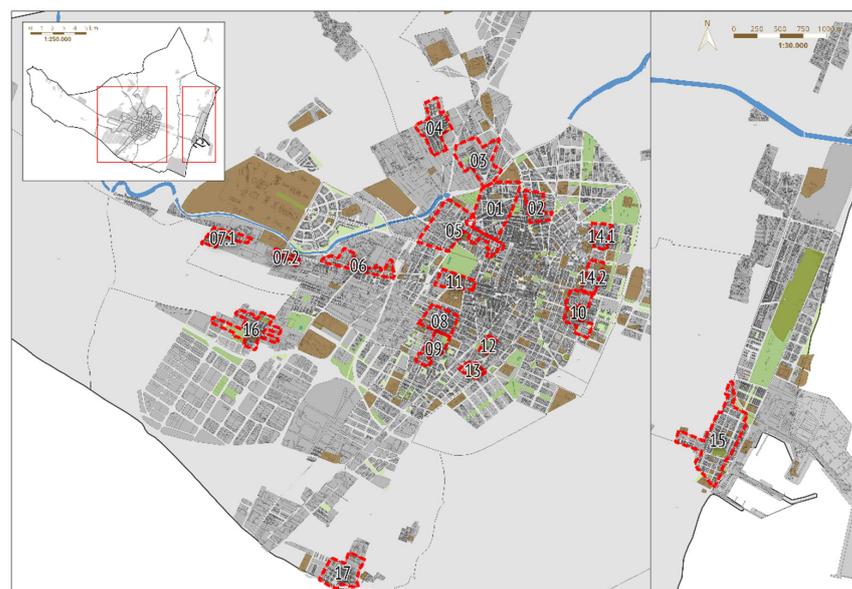| ARRU | Name | ARRU | Name |
|---|---|---|---|
| 1 | Castalia-La Guinea | 10 | Catorce junio-Grapa |
| 2 | Alcalde Tarrega | 11 | Plaza Toros |
| 3 | Tombatossals | 12 | Constitucion |
| 4 | San Agustin-San Marcos | 13 | Sequiol |
| 5 | Farola-Ravalet | 14 | Rafalafena |
| 6 | Cremor | 15 | Grao |
| 7 | Carretera la Alcora | 16 | San Lorenzo |
| 8 | Gran Via | 17 | Perpetuo Socorro-La Union |
| 9 | Parque del Oeste | | |



**Figure 2.** ARRUs in Castellón (according to the Land Plan).

To develop the AIM, the previously selected indicators [52] were reviewed, and a new structure of categories, subcategories, and indicators were proposed. Table 3 shows the proposed AIM. The columns on the left present the structure by categories, subcategories, and the indicators, with a brief definition, equation for their estimation, and source of information. The newly added items are highlighted in bold. The characteristics of the new model are presented below:

**Table 3.** Evolution from the previous model to the AIM, through desk review and inter-judge agreement validation.

| Category | Subcategory | Indicator | Definition; Calculation; Source | Judges Evaluation | | Agreement |
|---|---|---|---|---|---|---|
| | | | | Mean | σ | I+VI |
| U. Urban public space | U1. Compactness | 1. Building density | Dwellings per hectare on urban land; number of dwellings/total Has; (5) | 4.2 | 0.9 | 88.9% |
| | U2. Urban public space | 2. Green areas | Green areas per inhabitant on urban land; $m^2$ green areas/number inhabitants in area; (2, 5) | 4.6 | 0.5 | 100.0% |
| | | 3. Day sound level | Percentage of the population exposed to noise levels higher than 55 decibels for the day period. (Population exposed to >55 dBA/total population) × 100; (2) | 3.7 | 1.0 | 66.7% |
| | | 4. Night sound level | Percentage of the population exposed to noise levels higher than 45 decibels for the day period. (Population exposed to >45 dBA/total population) × 100; (2) | 4.0 | 1.0 | 66.7% |
| | | 5. Abandoned buildings | Buildings' potential buildability abandoned or in poor conditions; number of abandoned buildings; (3, 4) | 4.3 | 0.8 | 77.8% |
| | U3. Mobility– Public transport | 6. Proximity to public transport | Percentage of population with coverage to one or more public transport stops and a cyclist network (300 m to urban bus, tram, taxi, or bike stops); ($m^2$ of urban land without coverage/total area) × 100; (2, 4) | 4.8 | 0.4 | 100.0% |
| | U4. Perception of security | **7. Unsafe perceived sites** | Area of unsafe perceived sites due to the lack of lighting, vegetation density, or existence of hidden spots ($m^2$ of unsafe perceived sites/total area) × 100; (2, 3) | 4.8 | 0.4 | 100.0% |
| | | 8. Vacant lots | Percentage of total vacant lots of urban area; $m^2$ vacant lots/total area) × 100; (3, 4) | 4.2 | 0.7 | 77.8% |
| | U5. Accessibility | 9. Accessibility in public space | Percentage of accessible footpath, meaning width ≥ 1.80 m, in the area; (m non-accessible footpaths/m accessible footpaths) × 100; (2, 3) | 4.0 | 0.9 | 55.6% |
| | U6. Mixed-use planning | 10. Residential-commercial activity | Commercial units in relation to the total number of residential units in the area; (Commercial units/Residential units) × 100; (1) | 4.0 | 0.6 | 77.8% |
| | | **11. Balance of mixed-uses** | Balance among building uses; $Dm = \frac{1}{n} \sum_{i=1}^{n} |x_i - \bar{x}|$, being n: total number, i: $x_i$ value for building use i, and $\bar{x}$ mean value; (1) | 4.1 | 0.7 | 77.8% |
| | U7. Care facilities | **12. Children care facilities** | Number of vacancies for childcare for 2 year olds; number of vacancies in the area; (4) | 4.8 | 0.6 | 88.9% |
| | | **13. Elderly care facilities** | Number of vacancies in care centers for elderly people, number of vacancies in the area; (4) | 4.8 | 0.6 | 87.5% |
| | | **14. Disabled care facilities** | Number of vacancies in care center for disabled-dependent people; number of vacancies in the area; (4) | 4.7 | 0.6 | 88.9% |
| | U8. Visibility of women | **15. Women street names** | Percentage of gender imbalance in city street names; (Number of streets with women's names/Total streets in the area) × 100; (3, 4) | 3.2 | 1.1 | 33.3% |
| | | **16. Inclusive signage** | Percentage of inclusive signposting in the area; (Number of inclusive signposting/Total sign postings in the area) × 100; (3, 4) | 3.8 | 1.0 | 55.6% |

**Table 3.** *Cont.*

| Category | Subcategory | Indicator | Definition; Calculation; Source | Judges Evaluation | | Agreement |
|---|---|---|---|---|---|---|
| | | | | **Mean** | **σ** | **I+VI** |
| B. Buildings | B1. Housing design | **17. Housing variety** | Balance among housing typologies; $Dm = \frac{1}{n}\sum_{i=1}^{n}|x_i - \bar{x}|$, being n: total number, i: $x_i$ value for housing typology i, and $\bar{x}$ mean value; (2) | 3.6 | 0.9 | 44.4% |
| | B2. Energy efficiency | 18. Energy performance | Percentage of buildings with no thermal insulation in their thermal envelope; (Number of buildings built before 1979/Total number of buildings) × 100; (1, 8) | 4.0 | 1.2 | 66.7% |
| | | 19. Renewable energy | Percentage of buildings with no renewable energies; (Number of buildings built before 2006/Total number of buildings) × 100; (1, 8) | 3.3 | 1.3 | 44.4% |
| | B3. Accessibility in housing | 20. Building Accessibility | Percentage of buildings with no elevator; (Number of buildings 4–5 floors built before with no elevator/Total number of buildings) × 100; (1, 3, 8) | 4.9 | 0.3 | 100.0% |
| | | **21. Accessibility in housing** | Percentage of non-accessible dwellings (1) (Number of buildings built before 1991/Total number of buildings) × 100; (1, 8) | 4.3 | 0.6 | 88.9% |
| | B4. Quality housing | 22. Buildings conservation | Percentage of buildings in a ruinous and deficient state; (Number of buildings in a ruinous and deficient state/Total number of buildings) × 100; (1) | 3.9 | 0.8 | 77.8% |
| | | 23. Buildings constructive quality | Percentage of low-quality buildings; (Number of buildings with quality 7, 8, 9, according to Cadastre scale/Total number of buildings) × 100; (1) | 3.7 | 1.0 | 66.7% |
| | | 24. No acoustic quality | Percentage of buildings with no acoustic quality; (Number of buildings built before 1989/Total number of buildings) × 100; (1, 8) | 3.9 | 0.9 | 66.7% |
| | | 25. Overcrowding | Average number of inhabitants per dwelling; (Number of total inhabitants/Number of total dwellings); (5) | 4.3 | 0.8 | 77.8% |
| SD. Socio-demographic | SD1. Demographic data disaggregated by genre | 26. Population over 65 | Percentage of population aged over 65; (Number of inhabitants over 65 years of age/Number of total inhabitants) × 100; (5) | 4.4 | 0.6 | 88.9% |
| | | **27. Women over 65** | Percentage of women aged over 65; (Number of women over 65 years of age/Number of total inhabitants) × 100; (5) | 4.6 | 0.6 | 88.9% |
| | | 28. Immigrants | Percentage of immigrant population; (Number of immigrant/number of total inhabitants) × 100; (5) | 4.1 | 0.8 | 88.9% |
| | | **29. Women immigrant** | Percentage of immigrant women; (Number of immigrant women/Number of total inhabitants) × 100; (5) | 4.2 | 0.6 | 88.9% |
| | | 30. Population under 15 | Percentage of population aged under 15; (Number of inhabitants under 15 years of age/Number of total inhabitants) × 100; (5) | 4.1 | 0.9 | 87.5% |
| | | **31. Women under 15** | Percentage of women aged under 15; (Number of women under 15 years of age/Number of total inhabitants) × 100; (5) | 3.6 | 0.9 | 33.3% |
| | | 32. Aging 65/15 | Percentage of population ratio aged over 65 years and aged under 15 years; (Number of inhabitants aged over 65/Number of inhabitants younger than 15 years) × 100; (5) | 3.3 | 1.2 | 44.4% |
| | | **33. Women Aging 65/15** | Percentage of population ratio aged over 65 and aged under 15; (Number of women aged over 65 years/Number of women younger than 15 years) × 100; (5) | 3.3 | 1.2 | 44.4% |

**Table 3.** *Cont.*

| Category | Subcategory | Indicator | Definition; Calculation; Source | Judges Evaluation | | Agreement |
|---|---|---|---|---|---|---|
| | | | | **Mean** | **σ** | **I+VI** |
| SE. Socio-economic | SD2. Violence and security | **34. Gender violence** | Percentage of police interventions due to the fact of gender violence; (6) | 4.6 | 0.6 | 88.9% |
| | | 35. Police interventions in housing | Percentage of police interventions due to the fact of housing issues; (Interventions of police for Housing/100 inhabitants); (6) | 4.3 | 1.0 | 77.8% |
| | | 36. Police interventions in streets | Percentage of police interventions due to street issues; (Interventions of police in streets/100 inhabitants); (6) | 4.0 | 1.0 | 66.7% |
| | | 37. Police interventions in traffic | Percentage of police interventions due to the fact of traffic issues; (Interventions of police for traffic/ 100 inhabitants); (6) | 3.2 | 1.1 | 44.4% |
| | | 38. Police interventions others | Percentage of police interventions due to the fact of other issues; (Interventions of police for other/ 100 inhabitants); (6) | 2.9 | 1.2 | 33.3% |
| | | 39. Children vulnerability | Percentage of vulnerable children in the area; (Number of vulnerable children in the area/Number of children in the area) × 100; (4) | 4.6 | 0.6 | 88.9% |
| | | 40. Noise complaints | Percentage of police interventions due to the fact of noise issues; (Interventions of police for other/ 100 inhabitants); (6) | 3.4 | 0.9 | 66.7% |
| | SD3. Social housing | 41. Municipality's social Housing | Percentage social housing in the area property of the Municipality; (Number of social housing of the Municipality/Number of total housing units) × 100; (4) | 3.9 | 0.9 | 66.7% |
| | | 42. Government's social Housing | Percentage of social housing properties of the Regional Administration in the area; (Number of social housing of the of the Regional Administration/Number of total housing units) × 100; (7) | 3.9 | 0.9 | 66.7% |
| | SE1. Paid or unpaid work | 43. Unemployment rate | Percentage of unemployment in the area; (Number of unemployed people/Total population) × 100; (5) | 4.0 | 0.9 | 77.8% |
| | | **44. Women unemployment rate** | Percentage of unemployment of women in the area; (Number of unemployed women/tTotal population) × 100; (5) | 4.4 | 0.6 | 88.9% |
| | SE2. Social Subsidies and assistance | 45. Social subsidies | Percentage of social subsidies in the area; (Social subsidies/Number of inhabitants) × 100; (4) | 4.0 | 0.9 | 77.8% |
| | | 46. Dependence subsidies | Percentage of dependence subsidies; (Dependence subsidies/Number of inhabitants) × 100; (4) | 4.3 | 0.8 | 77.8% |
| | | 47. Social services assistance | Percentage of social services assistance; (Interventions of police for social service assistance/100 inhabitants); (7) | 4.3 | 1.0 | 77.8% |
| | SE3. Level of education | 48. Level of education | Percentage of illiterate population who did not complete primary education in the area; (Number of inhabitants with no studies/Number of total inhabitants) × 100; (5) | 4.0 | 0.9 | 77.8% |
| | | **49. Level of education in women** | Percentage of illiterate women who did not complete primary education in the area; (Number of women with no studies/Number of total inhabitants) × 100; (5) | 4.3 | 0.6 | 88.9% |
| | | 50. Absenteeism from school | Percentage of students registered for absenteeism from school in the area; (Number of cases of absenteeism from school/Number of inhabitants) × 100; (4) | 4.1 | 0.9 | 77.8% |
| | | 51. Children education | Percentage of interventions linked to children education; (Interventions of police for children education/100 inhabitants); (7) | 4.1 | 0.9 | 77.8% |
| | SE4. Housing market | 52. Tax base | Taxable base of the real estate tax; (€/built m$^2$, in the area); (1) | 3.6 | 1.2 | 66.7% |
| | | 53. Cadastral value | Property's cadastral value; (€/built m$^2$, in the area); (1) | 3.4 | 1.2 | 55.6% |

**Table 3.** *Cont.*

| Category | Subcategory | Indicator | Definition; Calculation; Source | Judges Evaluation | | Agreement |
|---|---|---|---|---|---|---|
| | | | | **Mean** | **σ** | **I+VI** |
| CC. Cross-curricula | CC1. Women's participation in decision making | **54. Women participation in urban planning** | Presence of women designing the Use Land Plan; (yes/no response); (4) | 4.1 | 0.9 | 77.8% |
| | | **55. Citizen's open participatory processes** | Existence of participatory processes for citizens in urban planning; (yes/no response); (4) | 4.4 | 0.9 | 88.9% |
| | | **56. Participatory process for vulnerable group of population** | Existence of participatory processes for vulnerable populations in urban planning; (yes/no response); (4) | 4.3 | 1.0 | 77.8% |

Sources: (1) Cadastral Office; (2) Land Use Plan; (3) visual inspection; (4) municipality; (5) National Statistics Office; (6) police; (7) regional government; (8) Regulations on Buildings.

Of the five categories, the previously defined urban (U) category was renamed as urban public space (U). The other three categories, building (B), socio-demographic (SD), and socio-economic (SE) categories, were kept with the same name. A new fifth category was added "cross-curricula" (CC). This new category aims to include the representation of women in the political scene and in decision making. This new category has three new indicators to ensure that women take part in decision making either in a systematic way or through practical implementation and involvement. These three indicators are binary; that is, the vulnerability value will be zero when the indicator is included and one if its absent. The key topics were introduced as either new categories or subcategories and the pre-existent indicators were reorganized accordingly. The indicators that already measured a subcategory in the previous model were maintained.

Answers to the survey are shown in Table 3. The columns present the average mark that each expert conferred to every indicator, from one to five. The agreement value was calculated by the percentage according to Cohen's Kappa coefficient [53,54], being: 0, poor; 0–20%, slight; 21–40%, fair; 41–60%, moderate; 61–80% substantial; 81–99.99% almost perfect; 100%, perfect. The selected indicators were those with an inter-rater agreement, for the sum of I and VI categories, of at least 50%. According to the experts, this sum ranged from 0.33 to 1, meaning that the inter-rater reliability of assessment varied from fair to perfect. The AIM has 48 indicators in total.

There are a few things to consider:

- Seventeen new quantifiable indicators (in bold) were added because no specific indicators considered gender explicitly in the previous model [52].
- Four new indicators were added ("unsafe perceived sites", "accessibility in housing", and "gender violence" in subcategories U4, U6, and B3 and SD2, respectively). These indicators, for instance, will help detect unsafe places due the lack of lighting, vegetation density, or hidden spots in public spaces.
- Six new indicators linked with demographic issues were added, because disaggregated data by genre were perceived as essential (indicators in subcategories SD1 and SE1 and SE3, accounting specifically for women (according to the key topic 1). For instance, "population over 65 years" was replaced with the new indicator "women over 65 years".
- Seven new specific gender-sensitive indicators were proposed to incorporate three subcategories that had not been included in the previous model [52]: U7, U8, and B1, (represented in 62%, 42%, and 40% in the analyzed literature, respectively). For instance, subcategory U7 "care facilities", includes the indicators "children care facilities", "elderly care facilities", and "disabled care facilities".

The level of agreement reached by the experts was accounted for as the perceived importance of the indicators. Only a level of agreement perceived I or VI over 50% was accepted. As a result of the evaluation of the experts:

- Eight indicators under 50% of agreement were rejected. These are highlighted in the shaded cells (see Table 2): U8.15. Women street names; B1.17 Housing variety; B2.19. Renewable energy; SD1.31. Women under 15; SD1.32. Aging rating 65/15; SD1.33. Women aging rating 65/15; SD2.37. Police interventions in traffic; SD2.38. Police interventions others. Indicator B1.17, representing the subcategory Housing design, was inferred from the literature but did not result in importance according to the experts.
- Some indicators reached a perfect agreement (100%): U2.2. Green areas; U3.6. Proximity to public transport; U4.7. Unsafe perceived sites; B3.20. Building accessibility.
- From the response to the open question, Judge number 7 suggested to include "Lighting". This aspect had already been included in subcategory U4. Perception of security, specifically in the indicator "Perception of unsafe sites".

### 3.3. Evaluating the Applicability of the Model

The standardization of the values of the indicators was performed with 45 out of the 48 proposed indicators. Three indicators were not included due to the unavailability, disaggregated, and/or unquantifiable data. For instance, information for indicator SD2.29—Gender violence was not obtained due to the fact of data protection considerations; information for SE1.36—Unemployment rate and SE1.37—Women unemployment rate were not available as information for these rates exist only for the whole city and are not disaggregated to the census section level. The evaluation of the index of vulnerability for each category is shown in Figure 3.



**Figure 3.** Evaluation of vulnerability by category in each ARRU in the AIM.

The results shown in Figure 3 allow for the comparison off the 17 ARRUs defined for the city of Castellón in the new AIM. Note that Figure 3 shows the differences in the evaluation of categories depending on the ARRU.

Figure 3 shows the evaluation of vulnerability using the proposed indicators, where AIM IvuIU indicates urban public space vulnerability, AIM IvuIB indicates building vulnerability, AIM IvuSD indicates socio-demographic vulnerability, AIM IvuSE indicates socio-economic vulnerability, and AIM IvuCC indicates cross-curricula vulnerability. The

model shows that the values for each category of vulnerability vary in each ARRU. For instance, the highest value of urban vulnerability was detected in ARRU 17, while the least level was detected for ARRU 1. This is an expected result given that ARRU 17 is in a peripheral zone which is far from the city center, while ARRU 1 is located in the northeast part of the city close to numerous roads that facilitate communication and transport.

Building vulnerability had the highest value in ARRU 3, given that ARRU 3 has obsolete buildings that were built more than 50 years ago. The minimum value in ARRU 14 was expected, as this zone has new completed projects, projects under development, and rehabilitation projects for social housing. In addition, note that socioeconomic vulnerability was non-existent in ARRU 8 and ARRU 10, and it reached the highest value in ARRU 4. This was due to the fact that in ARRU 4 there is less investment in social and women's programs and an elevated number of low cadastral values. This is the opposite case for ARRU 8 and ARRU 10. Sociodemographic vulnerability had the highest value in ARRU 12, given that there is a high number of elderly people and immigrants in addition to the number of reported incidents reported by police. The minimum value for this indicator was obtained for ARRU 10, which is a zone with predominantly young people and very few cases of school absenteeism. Lastly, for the cross-curricula category, no ARRU showed vulnerability, as was discussed previously. Furthermore, the results shown in Figure 3 indicate that the global vulnerability (the sum of all the categories) was the highest for ARRU 3 and the lowest for ARRU 15.

The comparison between the previous model and the new model (AIM) when categories, subcategories, and global indexes were calculated, shows some logical differences due to the presence of two main factors. Firstly, new gender indicators in each pre-existent category were included, which will enrich the decision-making process by considering women's and men's interests in an integrated gender equality perspective. This addition not only provides better results that improve the quality of public spaces but helps achieve a more sustainable society. Note that in developing the new model, the experts' opinions helped to refine the existing indicators and the new indicators by rejecting those for which the level of agreement did not reach at least 50%. Secondly, the inclusion of weights extracted from the experts' agreement shows a different scenario as can be observed in Figure 4.

The maximum difference of the level of vulnerability between the two models corresponds to ARRU 16, where global vulnerability increased by 35%. This result was mainly due to the urban public space category (U), where seven new indicators were added in the AIM. With this category, the urban public space vulnerability was 177% higher as a result of the values obtained with indicators such as "unperceived sites", "accessibility in public spaces", and "elderly care", among others. The level of vulnerability in the building category and socio-demographic category also increased because of the evaluation of indicators "accessibility in housing" and "level of education in women", respectively. ARRU 16 area is a peripheral neighborhood located in the southwest of the city (San Lorenzo) with predominantly low-income population and an itinerant way of life. This is aggravated by the high presence of immigrants and women that live in this area that are heads of households, with no education and many children, which makes them vulnerable. Note that with the AIM, only four out of the 17 ARRUs decreased their global index values compared to the values obtained in the previous model. This decrease, despite the inclusion of new indicators, was mainly due to the weights. The maximum level of decrease was reached in ARRU 4, with a global index value of 9% compared to the previous model. This was mainly due to the socio-economic category and the weights applied to the indicators that are linked with social housing.
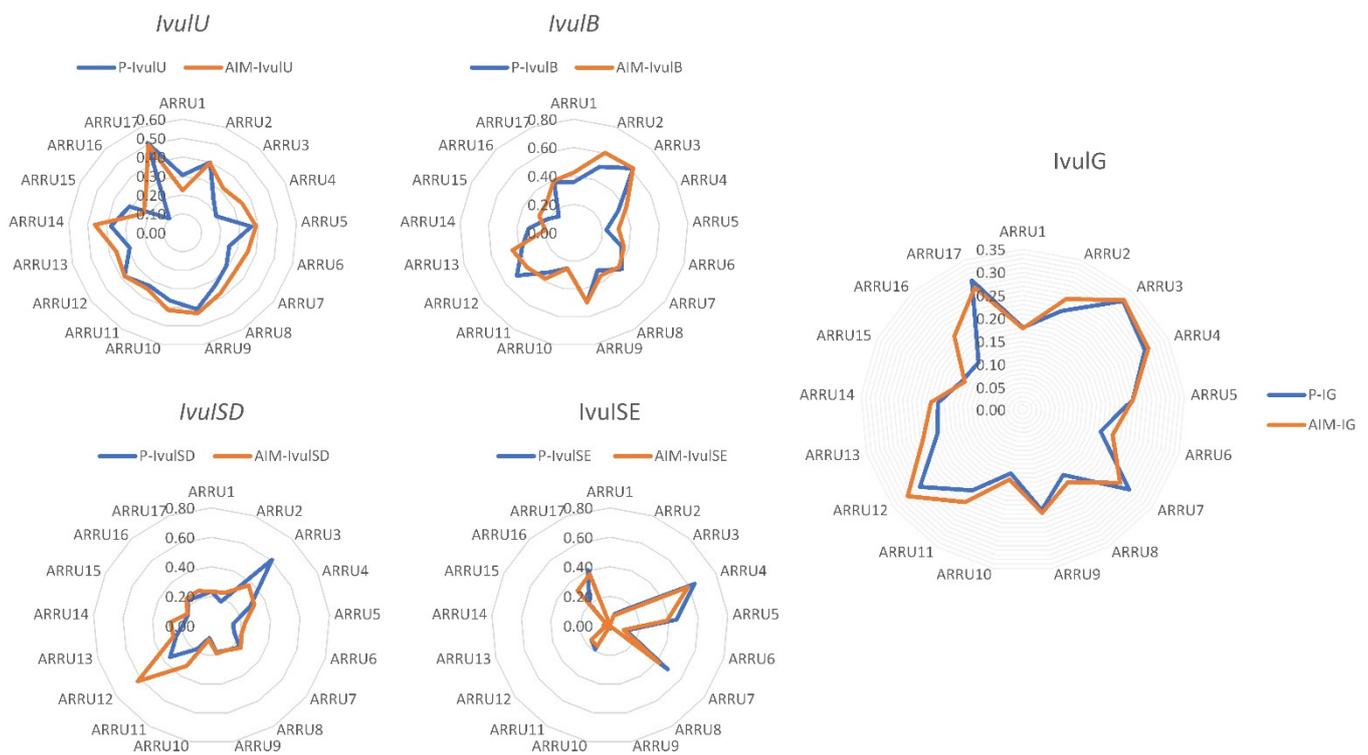
**Figure 4.** Comparison of previous model and the AIM.

The new AIM model confirmed the vulnerability of the ARRU areas defined in the Land Plan. Most importantly, the AIM improves the evaluation of vulnerability because it includes specific indicators related to gender that can be used to implement policies that include women (an underrepresented sector of the population). Additionally, these can further be used to apply economic, urban, and building regulations that consider a broader perspective on gender issues (this is the integrated focus of gender mainstreaming). Note that the assessment obtained with the indicators can be further extended with the values for categories and subcategories depending on the specific conditions of the intervention area. For instance, if there are funds available to regenerate buildings, these could be allocated to a zone that has a higher level of vulnerability in buildings (after the assessment) rather than a zone with no vulnerability in this category. Likewise, funds could be allocated to build a center for the elderly where there is a high level of vulnerability for the elderly or, similarly, funds could be allocated to build a police station in a zone that has high levels of violence. Even though the cross-curricula category did not show any level of vulnerability in the ARRUs (see Figure 3), these were included as the review showed these were needed for an integral analysis. The weight analysis was another important addition to the AIM. The weights help to determine the value of the indicators with more precise indices, according to the importance given by the experts. Lastly, the other addition to the AIM was the global index. This index allows for the comparison of vulnerable areas to support decision making when the council or the city is planning to make applied interventions.

## 4. Conclusions

The literature review conducted in this study allowed for the organization of the myriad of information that was scattered regarding GMU. More than 50% of the analyzed references included topics linked to public space, care facilities and transport, and women's participation in decision making. Aspects connected with thermal comfort and accessibility in the private space were not so frequent. Indicators connected to economic issues, such as social subsidies or level of education, were included in less than 10% of the references.

This is a comprehensive list that includes all the concepts found in the reviewed literature related to gender views in urban planning.

From the review of the references, key concepts were identified, and a list of categories, subcategories, and indicators were developed. The subcategories corresponded to the key topics, so they are comprehensive and universal; thus, any city that wants to make applied interventions and include gender can use these. The set of measurable indicators (outlined here for the specific case of Castellón) can be used to assess the extent of vulnerability in a city and the inclusion of gender. The indicators used in this study were adapted to the specific context of Castellón as well as the information that was available. Note that the indicators are flexible and can be adapted to the specificities of any urban environment while considering the availability of information. The ones proposed here can be a starting point for any city with similar conditions or can be readapted to another city, although it is advised that new indicators include the key topics proposed in this study. Equally, new indicators could be included in future studies if required. The group of indicators, which are the AIM, help decision makers evaluate vulnerability, include gender perspectives, and adopt measures with an integrated approach for sustainability in urban planning. They constitute a standard model that may help decision makers evaluate vulnerability with a gender equality perspective while, at the same time, looking at accommodating diversity, variation in geomorphological features, historical evolution, and particularities of urban environments. This makes the AIM comprehensive, as the indicators can be practically applied to urban plans where gender perspective needs to be included at the level of the neighborhood, municipality, or city.

The case study shows that the updated prior model, named AIM, is a more comprehensive model with an integrated approach that includes the gender perspective. The results showed the level of vulnerability in each ARRU according to each category and subcategory. The values of vulnerability (determined by the indicators) can also be used to prioritize strategies and policies that can be implemented in specific areas of the city to mitigate vulnerability. For the case of Castellón, the AIM can support authorities and the social services of the City Council to adopt measures that improve accessibility, transport systems, and the state of buildings (interior accessibility and conservation). Equally, the AIM can support urban environments to avoid population flows and improve the quality of life of people by compensating for existing inequalities in certain areas and transforming cities into inclusive urban spaces. This is aligned with the concept of the just city stated by Fainstein [14], as we consider the contribution of the political–economic processes and, specifically, how local policy decisions on housing, transport, public spaces, etc., could contribute to enhance the quality of life for people. In this sense, the AIM focuses on vulnerable neighborhoods in the city, where groups of disadvantaged people usually live, contributing to the social equality of citizens. The results of the case study showed the importance of accessibility and roads to minimize vulnerability. Likewise, the results showed that new developments and rehabilitation projects increase the well-being of people and must be implemented, especially in areas with low housing development. The case study also showed that interventions need to be prioritized, as the budget can determine the success of regeneration projects, many of which are abandoned due to the lack of sufficient funds or by tackling non-pressing needs. The results demonstrate that prioritizing areas with specific needs, such as social programs and women's programs, may lead to a significant decrease in vulnerability. Women have typically relied on the family structure for economic development and on less stable jobs; thus, including indicators that measure these aspects and point out areas where jobs for women can be increased may help mitigate vulnerability. One key consideration for any city intending to apply the AIM is to look at available information, specificities of the city, population, and vulnerable areas so that indicators can better reflect actual conditions. The inclusion of gender views is a transformative approach and has a great potential for social change, focusing on the circumstances that aggravate the situation of vulnerability.

Note that the structure of the categories and subcategories used to develop the AIM for Castellón can be applied to any urban context, but a previous detailed diagnosis must be performed in order to adequately incorporate gender mainstreaming and the needs and perspectives of the population.

## References

1. United Nations. Resolution Adopted by the General Assembly on 25 September 2015, A/RES/70/1: Transforming Our World: The 2030 Agenda for Sustainable Development. Available online: https://undocs.org/en/A/RES/70/1 (accessed on 30 June 2021).
2. United Nations. Resolution Adopted by the General Assembly on 23 December 2016, A/RES/71/256: New Urban Agenda. Available online: https://undocs.org/en/A/RES/71/256 (accessed on 30 June 2021).
3. Miralles-Guasch, C.; Martínez Melo, M.; Marquet, O. A gender analysis of everyday mobility in urban and rural territories: From challenges to sustainability. *Gend. Place Cult.* **2015**, *23*, 398–417. [CrossRef]
4. Huning, S. From feminist critique to gender mainstreaming—And back? The case of German urban planning. *Gend. Place Cult.* **2020**, *27*, 944–964. [CrossRef]
5. Irschik, E.; Kail, E. Vienna: Progress towards a fair shared city. In *Fair Shared City*; Taylor & Francis Group: London, UK, 2013; Chapter 12; p. 38. [CrossRef]
6. Sánchez de Madariaga, I.; Novella, I. Chapter 7: A new generation of gender mainstreaming in spatial and urban planning under the new international framework f policies for sustainable development. In *Gendered Approaches to Spatial Development in Europe. Perspectives, Similarities, Differences*; Zibell, B., Damyanovic, D., Sturm, U., Eds.; Routledge: Abingdon-on-Thames, UK, 2019; pp. 181–203.
7. Sweet, E.; Ortiz, S. Planning Responds to Gender Violence: Evidence from Spain, Mexico and the United States. *Urban Stud.* **2010**, *47*, 2129–2147. [CrossRef]
8. Sanchez de Madariaga, I.; Roberts, M. *Fair Shared Cities: The Impact of Gender Planning in Europe*; Routledge: Abingdon-on-Thames, UK, 2013. [CrossRef]
9. Atehortua, J.V. Barrio Women's Gendering Practices for Sustainable Urbanism in Caracas, Venezuela. Women, urbanization and sustainability: Practices of survival, adaptation and resistance. In *Gender Development and Social Change Series*; Lacey, A., Ed.; Palgrave Macmillan: London, UK, 2017; pp. 67–89. [CrossRef]
10. Sepe, M. Regenerating places sustainably: The healthy urban design. *Int. J. Sustain. Dev. Plan.* **2020**, *15*, 14–27. [CrossRef]
11. Sánchez de Madariaga, I.; Neuman, M. Mainstreaming Gender in the city. *Town Plan. Rev.* **2016**, *87*, 493–504. [CrossRef]
12. Alguacil, J. Instrumentos para el análisis y políticas para la acción. In Proceedings of the Foro de Debates: Ciudad y Territorio. Jornada La Vulnerabilidad Urbana en España, Madrid, Spain, 30 June 2011; Ministerio de Fomento: Madrid, Spain, 2011.
13. Antón, F.; Cortés, L.; Martínez, C.; Navarrete, J. La exclusión residencial en España. In *Políticas y Bienes Sociales. Procesos de Vulnerabilidad y Exclusión Social*; Arriba González, A., Ed.; Fundación Foessa: Madrid, Spain, 2008; pp. 219–229.
14. Fainstein, S. The just city. *Int. J. Urban Sci.* **2014**, *18*, 1–18. [CrossRef]
15. Scala, F.; Paterson, S. Stories from the Front Lines: Making Sense of Gender Mainstreaming in Canada. *Politics Gend.* **2018**, *14*, 208–234. [CrossRef]
16. Moser, C.; Levy, C. *A Theory and Methodology of Gender Planning: Meeting Women's Practical and Strategic Needs*; Development Planning Unit (DPU), University College: London, UK, 1986.
17. García-Ramón, M.D. Para no excluir del estudio a la mitad del género humano. Un desafío pendiente geografía humana. *Bol. Asoc. Geogr. Esp.* **1989**, *9*, 27–48.
18. Sabaté, A.; Rodríguez, J.; Díaz, M.A. *Mujeres, Espacio y Sociedad. Hacia Una Geografía del Género*; Síntesis: Madrid, Spain, 1995.
19. Mc Dowell, L. *Género, Identidad y Lugar. Un Estudio de las Geografías Feministas*; Cátedra: Madrid, Spain, 2000.

20. Bondi, L.; Rose, D. Constructing gender, constructing the urban: A review of Anglo-American feminist urban geography. *Gend. Place Cult.* **2003**, *10*, 229–245. [CrossRef]

21. Levy, C. Ciudad y género. Una ciudad más justa: El género y la planificación. In *La Ciudad Inclusiva*; Balbo, M., Jordán, R., Simioni, D., Eds.; Cuadernos de la CEPAL 88; Nacionales Unidas: Santiago de Chile, Chile, 2003; pp. 237–258. Available online: https://repositorio.cepal.org/bitstream/handle/11362/27814/S2003002_es.pdf;jsessionid=8341F69732A246CA61 (accessed on 2 December 2020).

22. Horelli, I. Engendering urban planning in different contexts–successes, constraints and consequences. *Eur. Plan. Stud.* **2017**, *25*, 1779–1796. [CrossRef]

23. Carreiro, M.; López, C. Parametrizar y Sistematizar, o cómo Incorporar la Perspectiva de Género en el Diseño Urbano. 2015. Available online: https://ruc.udc.es/dspace/bitstream/handle/2183/17452/mccl_IIIXUGX_150602.pdf?sequence=3&isAllowed=y (accessed on 2 December 2020).

24. Hayden, D. What would a non-sexist city be like? speculations on housing, urban design, and human work. *Signs* **1980**, *5*, 170–187. Available online: https://www.jstor.org/stable/3173814 (accessed on 2 December 2020). [CrossRef]

25. Carpio-Pinedo, J.; de Gregorio, S.; Sánchez de Madariaga, I. Gender mainstreaming in urban planning: The potential of geographic information systems and open data sources. *Plan. Theory Pract.* **2019**, *20*, 221–240. [CrossRef]

26. Valdivia, B. Del urbanismo androcéntrico a la ciudad cuidadora. *Habitat Soc.* **2018**, *11*, 65–84. [CrossRef]

27. Greed, C. Género y planificación del territorio¿Un mismo tema? In *Forúm Internacional de Planificación del Territorio Desde una Perspectiva de Género*; Fundació Maria Aurèlia Capmany: Barcelona, Spain, 1997.

28. Larsson, A. From equal opportunities to gender awareness in strategic spatial planning: Reflections based on Swedish experiences. *Town Plan. Rev.* **2006**, *77*, 507–530. [CrossRef]

29. Carrasco, C. *Estadístiques sota Sospita: Proposta de Nous Indicadors des de l'Experiència Femenina*; Institut Català de les Dones: Barcelona, Spain, 2007. Available online: https://dones.gencat.cat/web/.content/03_ambits/docs/publicacions_eines07.pdf (accessed on 2 February 2020).

30. Sánchez de Madariaga, I. Infraestructuras para la vida cotidiana y calidad de vida. *Ciudades* **2004**, *8*, 101–133. [CrossRef]

31. Gregorio, S. Factores relevantes en la introducción del urbanismo con perspectiva de género en Viena. In *La Ciudad Viva, Derecho a la Vivienda, Derecho a la Ciudad*; Consejeria de Fomento y Vivienda: Junta de Andalucía, Spain, 2014; Volume 7, pp. 17–35.

32. Damyanovic, D.; Reinwald, F.; Weikmann, A. *Gender Mainstreaming in Urban Planning and Urban Development*; Irschik, E., Kail, E., Klimmer-Pöllentzer, A., Nuss, A., Poscher, G., Schönfeld, M., Winkler, A., Eds.; Vienna City Council: Vienna, Austria, 2013. Available online: https://www.wien.gv.at/stadtentwicklung/studien/pdf/b008358.pdf (accessed on 29 June 2021).

33. Whitzman, C.; Canuto, M.; Binder, S. Women's Safety Awards 2004: A Compendium of Good Practices. Available online: www.femmesetvilles.org (accessed on 29 June 2021).

34. Nguyen, T.M.; van Nes, A. Identifying the spatial parameters for differences in gender behaviour in built environments: The flâneur and flâneuse of the 21st century. *TRIA* **2013**, *10*, 163–172. [CrossRef]

35. Christodoulou, A. Gender mainstreaming, urban planning and design processes in Greece. In *Engendering Cities: Designing Sustainable Spaces for All*; Sánchez de Madariaga, I., Neuman, M., Eds.; Routledge, Taylor and Francis Group: London, UK, 2020.

36. Davis, W. *What to Do about Women's Safety in Parks: From A to Y*; Greig, C., Ed.; Women's Design Service: London, UK, 2007.

37. Liam Riley, L. Malawian urbanism and urban poverty: Geographies of food access in Blantyre. *J. Urban. Int. Res. Placemaking Urban Sustain.* **2020**, *13*, 38–52. [CrossRef]

38. Gargiulo, I.; Garcia, X.; Benages-Albert, M.; Martinez, J.; Pfeffer, K.; Vall-Casas, P. Women's safety perception assessment in an urban stream corridor: Developing a safety map based on qualitative GIS. *Landsc. Urban Plan.* **2020**, *198*, 103779. [CrossRef]

39. Gutiérrez-Rivera, L. A safer housing agenda for women: Local urban planning knowledge and women's grassroots movements in Medellín, Colombia. *Int. J. Urban Reg. Res.* **2020**, 1–9. [CrossRef]

40. Sandberg, L.; Rönnblom, M. 'I don't think we'll ever be finished with this': Fear and safety in policy and practice. *Urban Stud.* **2015**, *52*, 2664–2679. [CrossRef]

41. Whitzman, C. Stuck at the front door: Gender, fear of crime and the challenge of creating safer space. *Environ. Plan. A* **2007**, *39*, 2715–2732. [CrossRef]

42. Ortiz Escalante, S.; Gutiérrez Valdivia, B. Planning from below: Using feminist participatory methods to increase women's participation in urban planning. *Gend. Dev.* **2015**, *23*, 113–126. [CrossRef]

43. Reeves, D.; Zombori, E. Engendering cities: International dimensions from Aotearoa, New Zealand. *Town Plan. Rev.* **2016**, *87*, 567–587. [CrossRef]

44. Bosman, C.; Grant-Smith, D.; Osborne, N. Women in planning in the twenty-first century. *Aust. Plan.* **2017**, *54*, 1–5. [CrossRef]

45. Greed, C.H. Planning for women and other disenabled groups, with reference to the provision of public toilets in Britain. *Environ. Plan. A* **1996**, *28*, 573–588. [CrossRef]

46. Milan, B.F.; Creutzig, F. Lifting peripheral fortunes: Upgrading transit improves spatial, income and gender equity in Medellin. *Cities* **2017**, *70*, 122–134. [CrossRef]

47. Moussié, R. Childcare services in cities: Challenges and emerging solutions for women informal workers and their children 21. *Environ. Urban.* **2021**. [CrossRef]

48. Mejía-Dorantes, L.; Soto Villagrán, P. A review on the influence of barriers on gender equality to access the city: A synthesis approach of Mexico City and its Metropolitan Area. *Cities* **2020**, *96*, 102439. [CrossRef]

49. Levy, C. Travel choice reframed: "deep distribution" and gender in urban. *Environ. Urban.* **2013**, *25*, 47–63. [CrossRef]
50. Vestbro, D.U.; Horelli, L. Design for gender equality: The history of co-housing ideas and realities. *Built Environ.* **2012**, *38*, 315–335. [CrossRef]
51. Zaman, M.F. Segregated from the City: Women's Spaces in Islamic Movements in Pakistan. *City Soc.* **2019**, *31*, 55–76. [CrossRef]
52. Ruá, M.J.; Huedo, P.; Civera, V.; Agost-Felip, R. A simplified model to assess vulnerable areas for urban regeneration. *Sustain. Cities Soc.* **2019**, *46*, 101440. [CrossRef]
53. Peter, J.; Lauf, E. Reliability in Cross-national Content Analysis. *J. Mass. Commun. Q.* **2002**, *79*, 815–832. [CrossRef]
54. Cremades, R. Validación de un instrumento para el análisis y evaluación de webs de bibliotecas escolares mediante el acuerdo interjueces. *Investig. Bibl.* **2017**, *31*, 127–149. [CrossRef]
55. Dubé, J.E. Evaluación del acuerdo interjueces en investigación clínica. Breve introducción a la confiabilidad interjueces. *Rev. Argent. Clin. Psicol.* **2008**, *1*, 75–80. Available online: https://www.redalyc.org/pdf/2819/281921796008.pdf (accessed on 29 June 2021).
56. Actis di Pasquale, E.; Balsa, J. Interval Linear Scaling Technique: Proposal for Standardization Applied to the Measurement of Social Well-Being Levels. *Rev. Métodos Cuantitativos Para Econ. Empresa* **2017**, *23*, 164–193. Available online: https://www.upo.es/revistas/index.php/RevMetCuant/article/view/269 (accessed on 2 December 2020).
57. Abdullahi, S.; Pradhan, B. Urban compactness assessment. In *Spatial Modeling and Assessment of Urban Form*; Springer: Cham, Switzerland, 2017; Chapter 5. [CrossRef]
58. Wolch, J.; Byrne, J.; Newell, J. Urban green space, public health, and environmental justice: The challenge of making cities 'just green enough. *Landsc. Urban Plan.* **2014**, *125*, 234–244. [CrossRef]
59. Haq, U.; Shah, A. Urban Green Spaces and an Integrative Approach to Sustainable Environment. *J. Environ. Prot.* **2011**, *2*, 601–608. [CrossRef]
60. Miller, P.; de Barros, A.G.; Kattan, L. Public transportation and sustainability: A review. *KSCE J. Civ. Eng.* **2016**, *20*, 1076–1083. [CrossRef]
61. Sánchez de Madariaga, I.; de Gregorio, S.; Novella, I. Perspectiva de Género en las Directrices de Ordenación Territorial (DOT) del País Vasco. Propuestas de Acción 2019. Departamento de Medio Ambiente y Política Territorial del Gobierno Vasco. Available online: https://www.euskadi.eus/contenidos/informacion/revision_dot/es_def/adjuntos/Perspectiva%20de%20G%C3%A9nero%20en%20las%20DOT%20(ISdM).pdf (accessed on 2 December 2020).
62. Chestnutt, R.; Ganssauge, K.; Willecke, B.; Baranek, E.; Bock, S.; Huning, S.; Schröder, A. *Gender Mainstreaming in Urban Development*; Christiane Droste: Berlin, Germany, 2011.
63. Muxí, Z.; Ciocoletto, A. La Ley de Barrios en Cataluña: La perspectiva de género como herramienta de planificación. *Feminismo/s.* **2011**, *17*, 131–153. [CrossRef]
64. Raman, R.; Kumar, U. Taxonomy of urban mixed land use planning. *Land Use Policy* **2019**, *88*, 102–104. [CrossRef]
65. Kneeshaw, S.; Norman, J. *Gender Equality Cities URBACT III*; URBAC: Paris, France, 2014.
66. González-Pijuán, I. *Desigualdad de Género y Pobreza Energética. Un Factor de Riesgo Olvidado*; L'Associació Catalana d'Enginyeria Sense Fronteres: Barcelona, Spain, 2016; Available online: https://esf-cat.org/wp-content/uploads/2017/09/ESFeres17-PobrezaEnergeticaiDesigualdadGenero.pdf (accessed on 15 December 2020).
67. Serrano, B. Género y Política Urbana. Available online: http://www.five.es/descargas/archivos/urbanismo/genero_y_politica_urbana_2017.pdf (accessed on 15 December 2020).
68. Sánchez de Madariaga, I.; Casado, E.; Gómez, C. *Los Desafíos de la Conciliación Entre Vida Laboral y Vida Familiar en el Siglo XXI*; Fundación Ortega y Gasset, Biblioteca Nueva: Madrid, Spain, 2005; pp. 261–268.
69. Álvarez, E.; Gómez, C.J. La incorporación de la perspectiva de género en el Plan General Estructural de Castelló: Objetivos, método, acciones y hallazgos. *Hábitat Soc.* **2018**, *11*, 201–219. [CrossRef]
70. Affleck, R.T.; Gardner, K.; Aytur, S.; Carlson, C.; Grimm, C.; Deeb, E. Sustainable Infrastructure in Conflict Zones: Police Facilities' Impact on Perception of Safety in Afghan Communities. *Sustainability* **2019**, *11*, 2113. [CrossRef]
71. Collectiu Punt 6. The Everyday Life of Women Nightshift Workers in the Barcelona Metropolitan Area. The Night Mobility in the Barcelona Metropolitan Area. Available online: http://www.punt6.org/wp-content/uploads/2016/08/Nocturnas (accessed on 27 June 2020).
72. Kneeshaw, S.; Norman, J. Gender Equal Cities. URBACT Knowledge Hub. 2019. Available online: https://urbact.eu/sites/default/files/urbact-genderequalcities-edition-pages-web.pdf (accessed on 29 June 2021).
73. Taccoli, C. Urbanisation, Gender and Urban Poverty. Paid Work and Unpaid Carework in the City. International Institute for Environment and Development 2012. (IIED, London) and United Nations Population Fund (UNPF, New York). Urbanization and Emerging Population Issues. Working Paper 7. Available online: http://pubs.iied.org/10614IIED.htmlInclusiveandsustainableUrbanplanning (accessed on 29 June 2021).
74. Jacobs, J. *Muerte y Vida en las Grandes Ciudades*, 2nd ed.; Capitán Swing: Madrid, Spain, 2011.
75. Kennedy, M. Towards a rediscovery of feminine principles in Architecture and Planning. *Womens Stud. Int. Quart.* **1981**, *4*, 75–81. [CrossRef]
76. Sarmento, D.P.G.; Bankhardt, F.A. Inclusive cities for women: From women's history to transformations in the city space. *NODO* **2002**, *14*, 86–102.

77. Venturi, R.; Scott Brown, D. *Architecture as Signs and Systems: For a Mannerist Time*; Belknap Press of Harvard University Press: Cambridge, MA, USA, 2014.

78. Federation of Canadian Municipalities (FCM) and the City of Montreal (Femmes et Ville Program). A City Tailored to Women. The Role of Municipal Governments in Achieving Gender Equality. 2004. Available online: https://fcm.ca/sites/default/files/ documents/resources/guide/a-city-tailored-to-women-the-role-of-municipal-governments-in-achieving-gender-equality-wilg.pdf (accessed on 27 June 2020).

79. Cucurella, A.; Garcia-Ramon, M.D.; Baylina, M. Gender, age and design in a new public space in a mediterranean town: The Parc dels Colors in Mollet del Valles (Barcelona). *Eur. Spat. Res. Policy* **2006**, *13*, 181–194.

80. Amin, A. The good city. *Urban Stud.* **2006**, *43*, 1009–1023. [CrossRef]

81. Curran, W.; Breitbach, C. Notes on women in the global city: Chicago. *Gend. Place Cult.* **2010**, *17*, 393–399. [CrossRef]

82. Muxí, Z.; Casanovas, R.; Ciocoletto, A.; Fonseca, M.; Gutiérrez, B. ¿Qué aporta la Perspectiva de Género al Urbanismo? *Feminismo/s* **2011**, *17*, 105–129. [CrossRef]

83. Turner, J. Urban mass transit, gender planning protocols and social sustainability. The case of Jakarta. *Res. Transp. Econ.* **2011**, *34*, 48–53. [CrossRef]

84. Gutiérrez-Mozo, M.E. *Arquitectura y el Urbanismo con Perspectiva de Género. Feminismo/s*; Universidad de Alicante: Alicante, Spain, 2011.

85. Ciocoletto, A. *Estudios Urbanos, Género y Feminismo. Teorías y Experiencias*; Generalitat de Catalunya, Institut Català de les Dones: Barcelona, Spain, 2012.

86. Tummers, L. Urbanism of proximity: Gender-expertise or shortsighted strategy? Re-introducing Gender Impact Assessments in spatial planning. *TRIA* **2013**, *6*. [CrossRef]

87. Ciocoletto, A. Urbanismo Para la Vida Cotidiana. Herramientas de Análisis y Evaluación Urbana a Escala de Barrio Desde la Perspectiva de Género. Ph.D. Thesis, Universitat Politècnica de Catalunya, Barcelona, Spain, 2014.

88. Tummers, L. Gender stereotypes in the practice of urbanism. *Trav. Genre Soc.* **2015**, *33*, 67–83. [CrossRef]

89. Majedi, H.M.; Alireza, A.; Mehrabi, Z.; Mosharzadeh, Z. Identifying effective factors of women's participation in urban development projects. *Bagh E Nazar* **2015**, *12*, 107–116.

90. Schreiber, F.; Carius, A. Ciudades inclusivas: Planeamiento urbano para la diversidad y la cohesión social. In *La Situación del Mundo 2016: Informe Anual del Worldwatch Institute sobre Progreso Hacia una Sociedad Sostenible*; Icaria Ediciones: Vilassar de Dalt, Spain, 2016; pp. 293–314.

91. Mateo-Cecilia, C.; Rubio-Garrido, A.; Serrano-Lanzarote, B. Some notes on how to introduce the gender perspective in urban policies. The case of the Valencian community (Spain). *TRIA* **2016**, *17*, 187–201. [CrossRef]

92. Jazmín, M. Metropolitan dynamics in the XXIst century: Some elements to think about gender and sexuality in urban spaces. *TRIA* **2015**, *16*, 135. [CrossRef]

93. Beebeejaun, Y. Gender, urban space, and the right to everyday life. *J. Urban Aff.* **2017**, *39*, 323–334. [CrossRef]

94. Martin, S.M. Human building. Settlements for and from People. Conclusions on Six Case-Studies. *Kultur* **2017**, *4*, 235–263. [CrossRef]

95. Arora, A. Mainstreaming Gender in Urban Planning Gender and Mobility, Velo-City, Access to Life. Kapsarc. 2018. Available online: https://ecf.com/sites/ecf.com/files/Arora_A._Mainstreaming_Gender_in_Urban_Planning.pdf (accessed on 2 December 2020).

96. Thi-Thanh-Hien, P.; Danielle Labbé, D.; Lachapelle, U.; Étienne Pelletier, E. Perception of park access and park use amongst youth in Hanoi: How cultural and local context matters. *Landsc. Urban Plan.* **2019**, *189*, 156–165. [CrossRef]

97. Arefian, F.F.; Moeini, S.H.I. *Urban Heritage Along the Silk Roads. A Contemporary Reading of Urban Transformation of Historic Cities in the Middle East and Beyond*; Springer: Cham, Switzerland, 2019. [CrossRef]

98. Alcañiz-Moscardó, M.; Fuertes, I. *La feminización de la pobreza*; Publicacions de la Universitat Jaume I: Castellón, Spain, 2020.

99. Grabowska, I. Quality of life in poor neighborhoods through the lenses of the capability approach—A case study of a deprived area of Łódź City centre. *Sustainability* **2021**, *13*, 7185. [CrossRef]

100. García-Bernal, D.; Huedo, P.; Babiloni, S.; Braulio, M.; Carrascosa, C.; Civera, V.; Ruá, M.J.; Agost-Felip, M.R. (INPRU-CS). Estudio y Propuesta de Áreas de Rehabilitación, Regeneración y Renovación Urbana, con Motivo de la Tramitación del Plan General Estructural de Castellón de la Plana. Available online: https://s3-eu-west-1.amazonaws.com/urbanismo/TOMO_I.pdf; https://s3-eu-west-1.amazonaws.com/urbanismo/TOMO_II.pdf; https://s3-eu-west-1.amazonaws.com/urbanismo/TOMO_III.pdf; https://s3-eu-west-1.amazonaws.com/urbanismo/TOMO_IV.pdf (accessed on 2 December 2020).